Chapter-6
Management of Gujarat Fiscal Deficit

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This chapter analyzes the management of the Gujarat State finances with reference to the restructuring of the major weakness which is reflected in the fiscal deficit. It analyzes the behavior, composition, financing and determinants of fiscal deficit. It also deals with various aspects of fiscal health which are under the statement of the Gujarat Fiscal Responsibility Act 2005.

The analysis shows that there has been a steep deterioration in the Gujarat State finances. It began with the year 1985-86. All the important indicators of the fiscal balances were in the rise during the eighties and the nineties. The revenue, capital and the primary deficit in proportion to gross SDP ranged between 1 to 5 percent. However, some improvement is witnessed in the present decade of two thousand as most of the parameters of deficit show a declining trend. The revenue deficit declines from 5.7 to 0.2 percent, primary deficit from 4.4 percent to 0.1 and capital deficit from 5.4 to 1.6 percent in proportion to gross SDP from 2000 to 2005. Though there is a decline in trend of deficits in the years of two thousand the fiscal deficit which is considered as a true measure of fiscal health is still a reason to worry because it is financed through borrowings.

Economists always favored the concept of balanced budget or fiscal balance at zero deficits. Despite some initial beneficial effects of fiscal deficit, many studies have highlighted the adverse impact on the economy. Experts view that fiscal deficit set in motion a vicious cycle of rising debt, rising interest payment and fall in the growth rate of development expenditure. Analysis of Gujarat State finances showed that the state is experiencing all the above effects of fiscal deficit. Through out the late eighties and the nineties Gujarat fiscal deficit is around 3-7 percent of gross SDP.

The Keynesian theory opined that fiscal deficit should be maintained up to that level at which the adverse impact on the system is minimal. However, the Keynesian theory does not clearly specify how the deficit was to be financed and therefore, what impact of the mode of financing would be on the system. Recently coexistence of revenue surplus with
fiscal deficit indicates a suspicion about the correct size of fiscal deficit and so on. Borrowing requirement.

Broadly speaking there are two factors which are relevant for determining the appropriate level of fiscal deficit, first is its growth rate during the period of time and second its elasticity with respect to gross SDP.

Before we analyze the fiscal deficit with respect to these two factors let’s have a brief look on the measures of fiscal deficit adopted by the Gujarat State and the Reserve Bank of India.

6.1 Measures of Fiscal Deficit

Fiscal deficit is an economic phenomenon, where the Government expenditure exceeds the revenue generated. Generally, it measures the difference between spending and revenue over a very long term period, as a percentage of GDP. The Keynesian economies defines fiscal deficit as an increasing government debt over a period of time.

In India, measurement of fiscal deficit differs both at the central and the state level. Secondly, there is a difference in net fiscal deficit and gross fiscal deficit. The concept of net fiscal deficit is relevant for calculating the combined fiscal deficit for the centre and the state. While the concept of gross fiscal deficit used internationally as a measure of macro-economic imbalances.

Dholakia [2005] in his article ‘Measurement Issues in Comparing Fiscal performance of States’ mentioned that the Gujarat Government like several other state governments calculates fiscal deficit as:

Government of Gujarat
FD [GOG] = RD + Capital exp. – Recovery of Loans and Advances- Repayment of Public debt-other exp. on capital account.

While the Reserve Bank of India definition includes
The author suggested that the difference between the two definitions:

\[ \text{FD [GOG]} - \text{FD [RBI]} = \text{other receipts on capital account} - \text{other expenditure on capital account} \]

The difference between the two lies in the inclusion of privatization receipts. The Government of Gujarat does not consider these receipts for calculating its fiscal deficit whereas RBI includes the net privatization proceeds on capital account.

Similar concerns were expressed by Dholakia and Karan [2005] in the paper ‘Consistent Measurement of Fiscal Deficit and Debt of State’. They argued that there is disparity in calculating the GFD and Debt liabilities approach measured by the Reserve Bank of India and the office of Comptroller and Auditor General of India and the Eleventh Finance Commission. It has been argued that inclusion and exclusion is not consistent across all the states, and this could be erroneous sometimes to a large extent. For correct diagnosis and credible solutions, it is necessary to examine the behavior of fiscal deficit at the state level and then derive a consistent policy of fiscal sustainability.

Experts are of the view that at the national level, fiscal deficit at 5 percent of GSDP is considered to be a good sign for economic development and it is one of the essential prerequisites for macro economic management. While at sub-national level it should be 3 percent of gross SDP. Recently, Economic adviser to GOI, Virmani [2009] suggested that fiscal deficit of about 5 percent of GSDP is expected to be revised to 6 percent as it would act as an ‘automatic stabilizer’ for the Indian economy.

6.2 Behavior of Fiscal Deficit

One of the most important development on the economic front since the 1980’s has been the threat to macro-economic stability due to emergence of fiscal crisis at the centre and at the state level. The growing fiscal instability reflects the structural constraints faced by the state government in mobilizing resources for economic development. Hence it is imperative to know the behavior of fiscal deficit as it is the most important priority on the states economic agenda during the nineties and the years of two thousand.
Behavior of fiscal deficit is analyzed in three ways:–

a) Trend as percentage of gross SDP

b) Trend in growth rates of Fiscal Deficit

c) Fiscal Deficit elasticity with respect to SDP.

a) **Trend as percentage of gross SDP:**

   (i) Trend of fiscal deficit fully reflects the total indebtedness of the state. If it is sustainable for a very long period it will place undue pressure on the domestic financial system and capital markets. A long trend of fiscal deficits also implies high interest rates and low investment and growth.

   Table VI-1: Trend in Fiscal Deficit as percent of Gross SDP

<table>
<thead>
<tr>
<th>Year</th>
<th>% of SDP</th>
<th>Year</th>
<th>% of SDP</th>
<th>Year</th>
<th>% of SDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>3.2</td>
<td>1991</td>
<td>6.1</td>
<td>2001</td>
<td>4.6</td>
</tr>
<tr>
<td>1981</td>
<td>3.3</td>
<td>1992</td>
<td>2.9</td>
<td>2002</td>
<td>6.3</td>
</tr>
<tr>
<td>1982</td>
<td>2.7</td>
<td>1993</td>
<td>1.1</td>
<td>2003</td>
<td>5.0</td>
</tr>
<tr>
<td>1983</td>
<td>3.8</td>
<td>1994</td>
<td>2.1</td>
<td>2004</td>
<td>2.4</td>
</tr>
<tr>
<td>1984</td>
<td>3.1</td>
<td>1995</td>
<td>2.6</td>
<td>2005</td>
<td>2.9</td>
</tr>
<tr>
<td>1985</td>
<td>3.9</td>
<td>1996</td>
<td>3.0</td>
<td>2006</td>
<td>2.5</td>
</tr>
<tr>
<td>1986</td>
<td>3.6</td>
<td>1997</td>
<td>3.6</td>
<td>2007</td>
<td>2.1</td>
</tr>
<tr>
<td>1987</td>
<td>5.9</td>
<td>1998</td>
<td>5.3</td>
<td>2008</td>
<td>2.9</td>
</tr>
<tr>
<td>1988</td>
<td>3.2</td>
<td>1999</td>
<td>6.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>3.8</td>
<td>2000</td>
<td>6.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>6.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Source: RBI Report [2004], Handbook of Statistics on Government Finances, Various Report of State Finance; A study of Budget, RBI

(ii) Table VI-1 evinces that fiscal deficit was around 3 percent of SDP in the year 1980-85. After 1985 it started rising from 3.9 percent (1985) to 5.9 percent (1987) and 6.4 percent (1990). Therefore, the fiscal deficit started growing after the mid-eighties.

(iii) In the nineties fluctuating trends were observed. Fiscal Deficit as percentage of gross SDP was as high as 6 percent in the early nineties then declined to 1.1 percent in 1993 and in subsequent years, it continuously increased to 6.4 percent. (i.e., in the end of the nineties).
(iv) In the beginning of the year two thousand, a high fiscal deficit of around 6 percent and 5 percent in the year 2002 and 2003 was observed respectively. After 2004, there was a continuous decline in fiscal deficit in proportion to SDP.

(v) Thus during the period 1980-2008, a definite pattern in the behavior of fiscal deficit was not seen. It all the sub-periods, 2 – 3 percent variation is observed in its trend between the lowest and highest value as proportion to gross SDP.

b) Trend in Growth Rate of Fiscal Deficit:

In order to know the trends in the growth rate of fiscal deficit, we analyzed the fiscal deficit as the function of time period through linear log equation \( \ln (FD) = b_0 + b_1 t + u_i \) for the period 1980 to 2008 and decade-wise. Where FD is fiscal deficit as dependent variable, \( b_0 \) and \( b_1 \) are coefficient and \( u_i \) is the error term.

\[
\ln (FD) = f(t)\\
\ln (FD) = b_0 + b_1 t + u_i \quad \quad (1)
\]

1980-2008
\[
\ln (FD) = 5.699 + 0.1308t \quad \quad \quad \quad \text{(1.1)}\\
(37.672)^* (14.107)^*\\
R^2 = 0.8805
\]

1980-1990
\[
\ln (FD) = 5.482 + 0.1779t \quad \quad \quad \quad \text{(1.2)}\\
(50.580)^* (9.711)^*\\
R^2 = 0.9128
\]

1991-2000
\[
\ln (FD) = 4.004 + 0.2434t \quad \quad \quad \quad \text{(1.3)}\\
(4.863)^* (4.661)^*\\
R^2 = 0.7309
\]

2001-2008
\[
\ln (FD) = 9.234 - 0.0169t \quad \quad \quad \quad \text{(1.4)}\\
(11.009)^* (-0.495)\\
R^2 = 0.0393
\]

*significance at 1 percent level, ** 5 percent level, *** 10 percent level

The equation 1.1, 1.2, 1.3 and 1.4 evinces a good value of \( R^2 \) for the period 1980 to 2008 which is significant at 1 percent level. Decade wise analysis also seems to have high \( R^2 \) except in the period of two thousand where equation shows very low \( R^2 \) value of 0.03 with coefficient significant at 1 percent level.
c) Fiscal Deficit Elasticity with respect to SDP

Theoretically it is believed that a high growth of income would reduce the fiscal deficit in the future period. Though there is no single indicator which can measure adequately the fiscal health of a country. In recent years, however fiscal deficit as a proportion of GDP has emerged as a key indicator.

In order to examine the influence of deficit on the economy of Gujarat, we analyzed the equation $\ln (FD) = b_0 + b_1 \ln (SDP) + u_i$. Where FD is fiscal deficit of Gujarat, SDP is the gross state domestic product of Gujarat and $u_i$ error term. This equation measures the elasticity value through double log as SDP an independent variable and fiscal deficit as the dependent variables.

$$\ln(FD) = b_0 + b_1 \ln(SDP) + u_i$$

(2)

1980-2008

$$\ln(FD) = -2.879 + 0.961 \ln(SDP)$$

(3.719)* (13.521)*

$R^2 = 0.871$  \quad F = 182.823  \quad DW = 0.743$

1980-1990

$$\ln(FD) = -6.714 + 1.364 \ln(SDP)$$

(3.758)* (7.331)*

$R^2 = 0.856$  \quad F = 53.752  \quad DW = 2.137$

1991-2000

$$\ln(FD) = -9.484 + 1.554 \ln(SDP)$$

(-2.071)*** (3.772)*

$R^2 = 0.640$  \quad F = 14.229  \quad DW = 0.906$

2001-2008

$$\ln(FD) = 10.294 - 0.121 \ln(SDP)$$

(3.333)* (-0.477)

$R^2 = 0.036$  \quad F = 0.227  \quad DW = 1.669$

*significance at 1 % level, ** 5% level, *** 10 % level

The growth rate of SDP shows positive impact on fiscal deficit. The equations 2.1, 2.2, 2.3, 2.4 evince a good value of $R^2=0.87$ for the period 1980 to 2008 which is significant at 1 percent level. Decade wise analysis also seems to have high $R^2$ except the decade of
The following inferences can be drawn from the above analysis

Table VI-2 Fiscal Deficit Growth Rate and its Elasticity with respect to SDP

<table>
<thead>
<tr>
<th>Period</th>
<th>Growth Trend</th>
<th>Elasticity Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-2008</td>
<td>0.13</td>
<td>0.96</td>
</tr>
<tr>
<td>1980-1990</td>
<td>0.17</td>
<td>1.36</td>
</tr>
<tr>
<td>1991-2000</td>
<td>0.24</td>
<td>1.55</td>
</tr>
<tr>
<td>2001-2008</td>
<td>0.01</td>
<td>-0.12</td>
</tr>
</tbody>
</table>

(i) It seems from Table VI-2 that the Gujarat fiscal situation deteriorated sharply in the eighties and the nineties. The continuous compound growth rate during the eighties was around 17.79 percent. The deteriorating trend started from the mid-eighties because the revenue surplus vanished from the year 1984 and the government was too optimistic about the revenue and expenditure estimates while estimating the fiscal deficit of the late eighties. However, a positive relationship is witnessed with SDP as it shows unity elasticity value. This predicts that one percent increase in SDP reduce the fiscal deficit by 1.36 percent.

(ii) During nineties the state witnessed an increase in fiscal deficit with growth rate of 24 percent. Early nineties witnessed a decline in revenue deficit due to the result of control of capital expenditure but in the subsequent years when capital expenditure started rising, the fiscal deficit also increased. Thus, the fiscal adjustment during the early 90’s helped the deficit to reduce from by one to two percent. After the year 1996-97, there was a continuous increase in deficit following the impact of pay revision. Fiscal deficit increased above 5 percent which evinced that borrowed funds were used to finance current expenditure. The income elasticity was quite high with 1.55 percent.

(iii) With respect to decade of two thousand, however, we noticed a decline in its growth rate to 1.69 percent. However, we noticed the impact of pay revision in the
early years of two thousand also, as fiscal deficit was at 6 percent in 2002 and 5 percent in 2003. Analysis shows that in early years of two thousand, revenue non-plan expenditure of Gujarat government increased upto 60 percent of total expenditure. The government started the process of fiscal adjustment after 2004. The enactment of Fiscal Responsibility Management Bill [2005] and tightening of expenditure reduced the fiscal deficit to 2 percent of SDP in the year 2007-2008.

Thus, the trend in the decade of two thousand clearly indicates an improvement in the fiscal deficit. It evinces that the state government has taken initiative of fiscal discipline through fiscal consolidation. The process of fiscal consolidation means that revenue receipts should grow at a faster rate than the total expenditure in general and revenue expenditure in particular. The state government had recorded a revenue surplus for the year 2006-07, 2007-08 and the budget estimate of 2008-09 also shows estimation of zero revenue deficits. Experts believed that there is scope for further improvement in fiscal deficit considering the growth of gross SDP and large contribution of tertiary sector to the overall economic growth of the Gujarat state.

Thus, the growth rate of SDP shows a positive impact on fiscal deficit. However, Fiscal deficit impacts the economy in many ways. The impact is both direct and indirect which may be felt in the short as well as in the long run through the pattern and level of expenditure and by which resources are raised. It is important to note that the impact of fiscal deficit will vary on the composition of fiscal deficit and the way in which deficit is financed.

6.3 Composition of Gross Fiscal Deficit

The fiscal deficit captures the entire shortfall in the government's fiscal operations that is expected to be covered by undertaking all borrowing operations or running down cash balances. It reckons the total resource gap in terms of excess of total government expenditure over revenue receipts, grants and loans. Analysis suggests that it is a complete failure on the part of the Government in the eighties and the nineties to increase the revenue receipts and curb the unproductive expenditure. There has been alarming rise in the ratio of interest payments and so the fiscal deficit. Theoretically, fiscal deficit composed of three items-Revenue deficit, Capital outlay and net lending.
(i) **Revenue Deficit** - Revenue deficit refers to the gap between the total revenue expenditure and revenue receipts which include the tax and non-tax revenue. The gap is filled by the surplus in the capital account i.e through different types of borrowings referred to in fiscal deficit. In the year 1980, Gujarat had a revenue surplus of Rs.122 Cr. After 1985, Table VI-3 evinces that the share of revenue deficit in fiscal deficit continuously increased up to the year 2005. The share of revenue deficit was 13 percent in 1985, increased to 39 percent in 1990 i.e by 26 percent. Analysis shows that the reason for the growing revenue deficit in the late eighties was the increase in the unit cost of public services and increase in the interest liability of the Gujarat State government. This has increased not only the revenue expenditure but it is also accompanied by the capital expenditure.

The revenue deficit contributed 78 percent of fiscal deficit in the decade of two thousand. Analysis shows that there are several reasons which have contributed to the growth of revenue deficit in the late nineties and early years of two thousand. The major reasons are the following:-

a. Tax-SDP ratio was stagnant to 13 percent. The Gujarat own tax revenue-SDP ratio was 7-8 percent
b. The non-tax revenue was very low. It was 3.1 percent of SDP in the late nineties. This further declined to 2.6 percent in early years of two thousand.
c. The revenue expenditure- SDP ratio was around 15 percent in the late nineties and it had further increased to 18 and 19 percent in the early years of two thousand.
d. Thus fiscal stance of the state to some extent was made dependent on the central for current expenditure.

For moderating the growth of revenue deficits, the Gujarat government has taken various expenditure based consolidation strategies and measures to increase its own tax revenue such as the implementation of VAT in 2005. The Government also enacted the Gujarat Fiscal Responsibility Act 2005 and Medium Term Fiscal Policy in order to correct the revenue deficit. The Table VI-3 evinces that due to the above mentioned measures the revenue account turned into surplus after 2005. In the year 2008 budget estimates shows a revenue surplus of 0.18 percent of SDP.
With the negative growth rate of revenue deficit the Gross Fiscal deficit decreased from 5 percent in 2005 to 2.6 percent in 2006-07 and 2.3 percent in 2007-08. It is now the negligible source of fiscal deficit.

(ii) **Capital Outlay** - The capital outlay includes the expenditure on development and non-development activity which mainly consists of expenditure on economic and social services. The capital outlay accounted 82.19 percent of fiscal deficit in the year 1980-81. It declined to 52 percent in 1985 and further to 39 percent in 1990. Thus, a continuous decline in capital outlay is observed during the period 1980 – 1990.

### Table VI-3 Composition of Fiscal Deficit (in percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue Deficit</th>
<th>Capital outlay</th>
<th>Net Lending</th>
<th>Gross Fiscal Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>-49.49</td>
<td>82.19</td>
<td>67.30</td>
<td>246.5</td>
</tr>
<tr>
<td>1985</td>
<td>13.61</td>
<td>52.91</td>
<td>33.46</td>
<td>514</td>
</tr>
<tr>
<td>1990</td>
<td>39.07</td>
<td>39.63</td>
<td>21.28</td>
<td>1798.2</td>
</tr>
<tr>
<td>1995</td>
<td>12.72</td>
<td>72.22</td>
<td>15.05</td>
<td>1745.6</td>
</tr>
<tr>
<td>2000</td>
<td>78.89</td>
<td>37.49</td>
<td>-16.39</td>
<td>7987.6</td>
</tr>
<tr>
<td>2005*</td>
<td>6.36</td>
<td>110.98</td>
<td>-17.20</td>
<td>6270</td>
</tr>
<tr>
<td>2008*</td>
<td>-31.35</td>
<td>138.97</td>
<td>-7.51</td>
<td>5645</td>
</tr>
</tbody>
</table>

*Source:* RBI Report [2004], Handbook of Statistics on Government Finances, Various Report of State Finance; A study of Budget, RBI

Note- '-' indicate surplus

* indicate GFD is adjusted for non-debt capital receipts of RS. 8Cr.(2005) and Rs. 3 Cr(2008).

The decline in capital outlay indicates a deteriorating quality of expenditure. Although the governments' interest is to ensure that the correction in fiscal deficit is not at the cost of reduction in development expenditure. In view of the importance of this aspect, the World Bank, the Twelfth Finance Commission and the Thirteen Finance Commission, for the first time, stressed the effectiveness of expenditure so the sizeable part of non-development expenditure including interest payment, wages and salaries pension obligation and administrative services could be reduced to minimum level. However, in the year 1995, capital outlay increased from 39- 72 percent indicating an increase of more than 50 percent. The capital outlay which was less than 1 percent of SDP in the nineties increased to 2.5 percent of SDP in 2006-2008 years of two thousand. With respect to fiscal deficit the share increased from 110.98 percent in 2005 to 138.97 percent in 2008.
Net Lending - The third component of fiscal deficit is net lending, which shows a continuous declining trend. It accounted 67.30 percent of fiscal deficit in 1980, declined to 21 percent in nineties and became negative during the years of two thousand. Thus, the importance of net lending as the component of fiscal deficit became negligible in the years of two thousand.

It reveals from the above that the share of revenue deficit and net lending in fiscal deficit was negative while the share of capital outlay increased during the period 1980 to 2008. Falling share of revenue deficit however does not indicate the appropriate size of fiscal deficit that the state has achieved at varying levels of revenue and expenditure. The right size of fiscal deficit relative to GDP depends on how the borrowed resources are used and the manner in which it is financed.

6.4 Financing of Fiscal Deficit

The trends in fiscal deficit indicate that revenue deficit was wiped out in the years of two thousand and total fiscal deficit consisted of capital outlay. The zero revenue deficit and presence of fiscal deficit indicates the importance and purpose of financing the fiscal deficit. The financing of fiscal deficit is done by three component viz, central loans, net market borrowings and others sources. In order to know the trends in financing of we analyze the:

(i) Financing trends of each component.

(ii) Effects of Financing Sources on Fiscal Deficit.

(i) Financing Trends of each Component: - At sub-national levels, the financing of fiscal deficit is generally done to mobilize resources for financing economic plans and meet enormous expenditure which can raise social justice and reduce inequalities. It is also done to overcome the shortage of capital, as rapid rate of capital formation and capital accumulation is highly desirable to improve the states income.

a. Central Loan: - A central loan occupied a dominant position in financing the fiscal deficit. During the eighties, it used to finance the 47 percent of overall borrowing requirement which declined to 41 percent in the nineties. Its importance further declined in the years of two thousand as Table VI-4 evinces that total financing of
fiscal deficit was done through market borrowings and 'other' components of financing. The major factor attributed to decline in central loan in financing fiscal deficit was the new policy of the central government recommended by the Twelfth Finance Commission. According to this scheme, the centre should release only the grant portion i.e 30 percent of central assistance for state plan and the remaining 70 percent to be left to the state from 'other' source. The policy refers that the central government should not act as an intermediary for future lending and allow to states to approach the market directly.

### Table VI-4. Financing of Fiscal Deficit (Rs. Cr.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Net loans from Centre</th>
<th>Net market Borrowing</th>
<th>Others</th>
<th>GFD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>118.1 (47.87)</td>
<td>13.7 (5.55)</td>
<td>114.7 (46.62)</td>
<td>246.5 (100)</td>
</tr>
<tr>
<td>1985</td>
<td>245 (47.11)</td>
<td>31.4 (6.03)</td>
<td>243.9 (46.88)</td>
<td>520.2 (100)</td>
</tr>
<tr>
<td>1990</td>
<td>741.6 (41.24)</td>
<td>84.2 (4.68)</td>
<td>972.4 (54.07)</td>
<td>1798.2 (100)</td>
</tr>
<tr>
<td>1995</td>
<td>1026.3 (58.79)</td>
<td>237.1 (13.58)</td>
<td>482.2 (27.63)</td>
<td>1745.6 (100)</td>
</tr>
<tr>
<td>2000</td>
<td>936.7 (11.72)</td>
<td>522.6 (6.54)</td>
<td>6528.4 (81.73)</td>
<td>7987.6 (100)</td>
</tr>
<tr>
<td>2005</td>
<td>207 (3.30)</td>
<td>-364 (-5.80)</td>
<td>5817* (92.77)</td>
<td>6270 (100)</td>
</tr>
<tr>
<td>2008 (B.E)</td>
<td>-137 (-1.76)</td>
<td>7150 (92.05)</td>
<td>605 (7.78)</td>
<td>7767 (100)</td>
</tr>
</tbody>
</table>

Source: RBI Report [2004], Handbook of Statistics on Government Finances, Various Report of State Finance; A study of Budget, RBI

Note: (1)* Refer to small savings
(2) Figures in bracket indicate the percent of Fiscal Deficit

b. Market Borrowings: Fiscal deficit of states can be financed through market borrowings mainly through banks. The financial pattern of fiscal deficit indicates a substantial increase in market borrowings. In the eighties, it used to finance only 5.55 percent of fiscal deficit which increased to 13.65 in mid-nineties and in the year's of two thousand it finance 92.05 percent of fiscal deficit. The major increase in demand of market borrowings is firstly attributed to the central Government policy to move towards the system of auctioning of state loans. Since 1999, the state governments have been allowed to raise 5-35 percent of the allocated borrowings through auctions along with the flexibility of the timing. Secondly, the downward trend in the interest rates on market borrowings also contributed its increase to finance fiscal deficit. The interest rate on government
securities declined from 10.99 percent in 2000 to 8.04 percent in 2008. However, the weighed average interest rate on it has increased from 7.49 percent in 2003 from 8.25 percent in 2008. Thirdly, greater reliance in market borrowing in 2008 was due to decline in collections under NSSF.

c. 'Others' Sources of Financing Fiscal Deficit:- It includes loans from financial institution, provident fund, reserve funds, deposits and advances, special securities issued to NSSF from the year 1999-2000. The share of 'others' in financing the fiscal deficit has also increased from 46 percent in the eighties to 81 percent in the nineties and in the year 2005 it is 92.77 percent. The 'other' source of financing in 2005 reflects the predominance of small savings. Over 92 percent of fiscal deficit is financed by small savings collections through the securities issued to NSSF. However, this is considered as exogenous source of financing as the quantum and the cost of borrowing are decided by the Central Government. In the year 2008, due to fall in the NSSF the share of other source of financing declined to 7 percent.

(ii) Effects of Financing Sources on Fiscal Deficit:- The extent of influence of fiscal deficit on different financing components has been estimated through the equation (3) for the period 1980 to 2008. Where FD is fiscal deficit, NLC represents net loans from centre, NMB represents net market borrowing and OTHS is 'others' as explanatory variables.

\[
FD = f (NLC, NMB, OTHS)
\]

\[
\ln(FD) = b_0 + b_1 \ln(NLC) + b_2 \ln(NMB) + b_3 \ln(OTHS) + u_i \tag{3}
\]

\[
\begin{align*}
\ln(FD) & = 2.443 + 0.107 \ln(NLC) + 0.49 \ln(NMB) + 0.288 \ln(OTHS) \\
& \text{(3.285)* (0.601) (5.149)* (4.532)*} \\
R^2 & = 0.948 \quad F = 116.451 \\
& \text{* significant at 1% level}
\end{align*}
\]

The equation (3.1) holds that a one percent increase in fiscal deficit is due to 0.10 percent of net loans from Centre, 0.49 percent of net market borrowing and 0.28 percent of other financing facility respectively. From the above equation (3.1) following inferences can be made:
(i) Financing sources of fiscal deficit has a positive effect on the deficit of the Gujarat state.

(ii) During the period 1980-2008, the net market borrowing influenced the fiscal deficit the most. This means that one percent increase in deficit led to 0.49 percent increase in market borrowing.

(iii) Net Loan from centre seems to be not a very dependable source of financing as a source of financing the fiscal deficit.

(iv) Due to increase in the market borrowing share, it can be concluded that the cost of financing the gross fiscal deficit will be costlier in future.

Thus, we conclude that the relative importance of financing pattern of fiscal deficit changed during the period 1980 to 2008. As stated above, it can be said that the central loan policy made an important impact in reducing the central loan as source of financing. Besides, the interest rate policy and decline in the collections under NSSF made market borrowings an important source of financing the fiscal deficit. Apart from the changes regarding financing of fiscal deficits, failure on the part of the government to increase tax base and curb unproductive expenditure resulted in the problem of debt crisis. More fiscal prudence is required in future to pull the government out of the problem. In order to spend more on productive areas with long term benefits, the Gujarat government has to take initiative to manage the fiscal deficit in the right direction.

6.5 Management of Fiscal Deficit

The growing gap between the resources, debt accumulation, increase in market borrowing, excessive use of guarantees evince a critical stage that Gujarat state is passing through. Though trend evinced a decline in fiscal deficit in the years of two thousand, primarily management of it is of vital importance especially in the era of decentralized planning. In order to achieve the marksmanship, transparency, flexibility, sustainability in state finances, Government has to pursue prudent policies relating to revenue generation and control of expenditure. The efficient operations promised by the state government for financing their plans and the actual mobilization of resources is an evidence that Gujarat State finance is a delicate matter and if not properly nurtured it may aggravate the whole economic malaise marked by high continuous deficits.
In order to estimate the variables which determine the fiscal deficit, a double log linear equation has been fitted. The estimated equation assumes explanatory variables as:

(i) Revenue receipts -SDP ratio (RR)
(ii) Tax revenue -SDP ratio (TR)
(iii) Expenditure-SDP ratio (TE)
(iv) Revenue expenditure-SDP ratio (RE)
(v) Capital expenditure-SDP ratio (CE)

RR, TR, TE, RE and CE considered as independent variables and fiscal deficit as dependent variable. Similar kind of model was applied by Bhowmik and Mukherjee [2006] for West Bengal for the period 1990-2001. The estimated equations are:

\[ FD = f(RR, TR, TE) \]  
\[ FD = f(RR, RE, CE) \]  
\[ FD = f(RR, TR, RE) \]  
\[ FD = f(RR, TR, RE, CE) \]

\[ \ln(FD) = b_0 + b_1 \ln RR + b_2 \ln TR + b_3 \ln TE + u_i. \]  
\[ \ln(FD) = b_0 + b_1 \ln RR + b_2 \ln TR + b_3 \ln RE + u_i. \]  
\[ \ln(FD) = b_0 + b_1 \ln RR + b_2 \ln RE + b_3 \ln CE + u_i. \]  
\[ \ln(FD) = b_0 + b_1 \ln RR + b_2 \ln TR + b_3 \ln RE + b_4 \ln CE + u_i. \]

The estimated equations 4,5,6,7 assert fiscal deficit has strong and inverse relationship with revenue receipts-SDP ratio as shown in Table VI-5. Similarly a positive relationship is evinced with total expenditure-SDP and revenue expenditure-SDP ratio. While Tax-SDP and Capital expenditure-SDP shows a weak relationship. The value of \( R^2 \) seems to be good which is significant at one percent level.
### Table VI-5 Determinants of Fiscal Deficit

<table>
<thead>
<tr>
<th>Equation No.</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependant Variable</td>
<td>F.D</td>
<td>F.D</td>
<td>F.D</td>
<td>F.D</td>
</tr>
<tr>
<td>Intercept</td>
<td>-3.909</td>
<td>-0.967</td>
<td>-6.328</td>
<td>-4.436</td>
</tr>
<tr>
<td>[t-values]</td>
<td>[-0.683]</td>
<td>[0.244]</td>
<td>[-1.915]**</td>
<td>[0.977]</td>
</tr>
<tr>
<td>Co-efficients of independent Variable and [t-values]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[t-values]</td>
<td>[-1.341]</td>
<td>[-3.924]*</td>
<td>[-6.323]*</td>
<td>[-3.668]*</td>
</tr>
<tr>
<td>Tax Revenue-SDP[TR]</td>
<td>-1.483</td>
<td>2.962</td>
<td>-</td>
<td>1.984</td>
</tr>
<tr>
<td>[t-values]</td>
<td>[-0.342]</td>
<td>[0.921]</td>
<td></td>
<td>[0.616]</td>
</tr>
<tr>
<td>Total Expenditure-SDP[TE]</td>
<td>2.185</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>[t-values]</td>
<td>[1.212]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Expend.-SDP[RE]</td>
<td>-</td>
<td>6.197</td>
<td>5.280</td>
<td>5.671</td>
</tr>
<tr>
<td>[t-values]</td>
<td></td>
<td>[4.750]*</td>
<td>[4.592]*</td>
<td>[4.277]*</td>
</tr>
<tr>
<td>Capital Expend-SDP[CE]</td>
<td>-</td>
<td>-</td>
<td>0.721</td>
<td>0.663</td>
</tr>
<tr>
<td>[t-values]</td>
<td></td>
<td></td>
<td>[-1.645]</td>
<td>[-1.461]</td>
</tr>
<tr>
<td>R²</td>
<td>0.315</td>
<td>0.619</td>
<td>0.644</td>
<td>0.650</td>
</tr>
<tr>
<td>F</td>
<td>3.849</td>
<td>13.557</td>
<td>15.132</td>
<td>11.163</td>
</tr>
<tr>
<td>DW</td>
<td>0.320</td>
<td>0.898</td>
<td>1.087</td>
<td>0.148</td>
</tr>
</tbody>
</table>

Following inferences can be observed from the Table VI-5

(i) Fiscal deficit is highly responsive to state revenue receipts-SDP ratio (RR). Table VI-5 evinces that one percent decrease in RR/SDP ratio leads to 5.70 percent increase in fiscal deficit from equation (4), 13.62 from equation (5), 10.63 from equation (6) and equation (7) predict 12.68 with significance level at 1 percent.

(ii) The Tax-SDP (TR) ratios evince that it has inversely influenced the fiscal deficit as shown by equation (4), i.e. one percent increase in this ratio leads to 1.48 percent decrease in fiscal deficit. However, the equation (5) shows a positive relationship between the tax-SDP and fiscal deficit. The equation (5) predicts that increase in tax-SDP ratio by 2.96 percent increases the fiscal deficit by one percent.

(iii) With respect to total expenditure-SDP (TE) ratio, the equation (4) holds that it has positive influence on fiscal deficit. One percent increase in TE/SDP ratio leads to 2.18 percent increase in fiscal deficit with 1 percent significance level.
Similarly, the RE-SDP (RE) ratio evinces that one percent increase in the ratio leads to increase in fiscal deficit by 6.19% from equation (5) and 5.28% from equation (6) respectively.

Capital expenditure-SDP ratio evinces an inverse relationship with fiscal deficit. Equation (6) explains that one percent increase in fiscal deficit decrease the capital expenditure by 0.71 percent.

Thus, from the above we can conclude that fiscal deficit is significantly influenced by the RR-SDP ratio (RR) and RE-SDP ratio (RE). The TR-SDP (TR) and CE-SDP (CE) evince a very low influence on fiscal deficit. From this the following inferences can be made:

(i) The ratio of RR-SDP should be increased in order to reduce deficit in future.

(ii) Since the ratio of TR-SDP showing a mixed trend, it seems that in order to increase revenue receipts, Gujarat should resort to increase in non tax revenue.

(iii) The total expenditure influenced positively the fiscal deficit. But, it is the RE-SDP ratio which should be reduced rather than CE-SDP ratio, to decrease the size of deficit.

(iv) The difference between the RR-SDP and RE-SDP is the revenue deficit or surplus. So the elimination of revenue deficit is the precondition to control fiscal deficit.

We know that fiscal deficit has no direct relation with the state domestic product i.e. increase in SDP could not assure a decrease in fiscal deficit. In order to know exactly the influence of structural variable of budget on fiscal deficit, we conducted a Co-integration test on some variables.

**Cointegration Test**

Cointegration of two or more time series suggests that there exists a long run relationship between the variables which are to be estimated. This test is based on the unit root test of stationarity. As pointed by Damodar Gujarati [2003],
Suppose

\[ Y_t = Y_{t-1} + u_t \]  \hspace{1cm} (1)

Where \( u_t \) is the stochastic error term with zero mean, constant variance and is non auto correlated. Now, if the coefficient of \( Y_{t-1} \) is equal to one, then the series is called to have a unit root problem, i.e. a non stationary situation. Therefore, if we run the regression

\[ Y_t = \rho Y_{t-1} + u_t \]  \hspace{1cm} (2)

and actually find that \( \rho = 1 \), then we say that the stochastic variable \( Y_t \) has a Unit root. In econometrics, a time series that has a unit root is known as a random walk. Now, the equation 2 can be expressed as

\[ Y_t = (\rho - 1) Y_{t-1} + u_t \]
\[ = \delta Y_{t-1} + u_t \]  \hspace{1cm} (3)

Where \( \delta = (\rho - 1) \). The random walk series is known to be series of integrated of order 1, denoted by I(1). The null hypothesis of such series is \( H_0: \delta = 0 \), or \( H_1: \delta < 0 \). The null hypothesis is tested for critical values. These critical values have been tabulated by Dickey and Fuller [DF] on the basis of Monte Carlo simulation which is known as MacKinnon DF critical values. If the computed absolute value of the statistics exceeds the MacKinnon DF critical values, then the null hypothesis is accepted that the given time series is non stationary If, on the other hand, it is less than the critical value, the null hypothesis is rejected and the time series is considered stationary, i.e. if the regression is run in the form of the estimated statistics it has a negative sign. Therefore a large negative value is generally an indication of stationarity.

The variables which are assumed to influence the fiscal deficit of Gujarat are:-

(i) \( a_1 = \) Own tax revenue/Own non tax revenue
(ii) \( a_2 = \) Development expenditure/ Non development expenditure
(iii) \( a_3 = \) Plan expenditure/ Non plan expenditure
(iv) \( a_4 = \) State share in Central taxes
(v) \( a_5 = \) grants from Centre
(vi) \( a_6 = \) Gross interest payment
(vii) \( a_7 = \) net market borrowing
(viii) \( a_8 = \) gross interest payment.
This test was conducted on the basis of the Bhowmik and Mukherjee [2006] model applied on the state of West Bengal. All the variables are in log. Table IV-6 displays the estimated results, where we assume:

The conventional test for the ADF test is:-

\[ H_0: \delta = 0 \] \[ \text{[p = 1] the } Y_t \text{ series is integrated of order one or non stationary} \]

\[ H_1: \delta < 0 \] \[ \text{[p < 1] the } Y_t \text{ series is integrated of order zero or stationary} \]

**Table: VI-6 - Dickey Fuller Test of Stationarity on Fiscal Deficit.**

Dependent Variable: ln(FD)
Method: Least Squares
Augmented Dicky-Fuller Test Equation
Sample: 1980 - 2008
Included observations: 29

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.985528</td>
<td>0.587524</td>
<td>1.677427</td>
<td>0.1090</td>
</tr>
<tr>
<td>lna1</td>
<td>-0.354011</td>
<td>0.306680</td>
<td>-1.154335</td>
<td>0.2620</td>
</tr>
<tr>
<td>lna2</td>
<td>-0.340080</td>
<td>0.502326</td>
<td>-0.677009</td>
<td>0.5062</td>
</tr>
<tr>
<td>lna3</td>
<td>1.019054</td>
<td>0.287570</td>
<td>3.543669</td>
<td>0.0020</td>
</tr>
<tr>
<td>lna4</td>
<td>-0.312561</td>
<td>0.182894</td>
<td>-1.708975</td>
<td>0.1029</td>
</tr>
<tr>
<td>lna5</td>
<td>0.211303</td>
<td>0.233769</td>
<td>0.903895</td>
<td>0.3768</td>
</tr>
<tr>
<td>lna6</td>
<td>0.517829</td>
<td>0.151048</td>
<td>3.428243</td>
<td>0.0027</td>
</tr>
<tr>
<td>lna7</td>
<td>0.215613</td>
<td>0.130201</td>
<td>1.656001</td>
<td>0.1133</td>
</tr>
<tr>
<td>lna8</td>
<td>0.449908</td>
<td>0.259392</td>
<td>1.734473</td>
<td>0.0982</td>
</tr>
</tbody>
</table>

R-squared 0.954986, S.D. dependent var 0.936980, Akaike info criterion 0.129468, Schwarz criterion 0.335240, F-statistic 23.52374, Prob(F-statistic) 1.199887, Durbin-Watson stat 1.199887

\[
\ln(FD) = 0.985 - 0.354 \ln a1 - 0.340 \ln a2 + 1.019 \ln a3 - 0.312 \ln a4 + 0.211 \ln a5 \\
(1.677)***(1.154) (-0.677) (3.543)* (-1.708)***(0.903) \\
+ 0.517 \ln a6 + 0.215 \ln a7 + 0.449 \ln a8 + \text{ui} \\
(3.428)* (1.656) (1.734)***
\]

Adj R2 = 0.936, F = 53.037, DW = 1.199, Reliability Co-efficient a = 0.37,

ADF = -1.433202*, 1% Critical Value* -3.6959
5% Critical Value -2.975
10% Critical Value -2.6265

* Mackinnon critical values for rejection of hypothesis of a unit root.
The computed value of $Y_t$ is greater than the tabulated critical value, implying there by that the co-integrating regression are co-integrated. The variables share a relationship with dependent variable i.e. Fiscal Deficit.

Since the purpose is to know the sensitivity of independent variable with the dependent variable, the vector autoregression estimation (Error Correction Mechanism, ECM) is not estimated. The ECM developed by Engle and Granger is a means of reconciling the short-run behavior of an economic variable with its long run behavior.

The analysis shows that the co-integration test reliability value is 37 percent with high value of $R^2$ and F. The t-value is significant for the ratio of plan and non-plan expenditure ($a_3$), state share in central taxes ($a_4$), gross loan from the centre ($a_6$) and the gross interest payment ($a_8$) respectively. The test suggests that one percent increase in the ratio of plan and non-plan expenditure, gross loan from the Centre, and gross interest payment will increase the fiscal deficit by 1.01 percent, 0.51 percent and 0.21 percent per year respectively. Similarly, the test also suggests that one percent increase in the state share in central taxes induced a decrease in fiscal deficit by 0.31% during the period 1980-2008.

On the basis of the co-integration test, following inferences can be made:-

(i) To decrease the size of fiscal deficit
- there should be a decrease in non plan expenditure compare to plan expenditure.
- State share of central taxes should be increased
- Gross loan from the centre should be reduced.
- State should decrease the gross interest payment

(ii) Ratio of tax and non tax revenue and ratio of development and non-development expenditure affect negatively the fiscal deficit. This means that both tax revenue and development expenditure should be increased to decrease the deficit.

(iii) Net market borrowing has increased during the period 1980-2008, and it is creating a positive effect on fiscal deficit. This means that state should cut down the net market borrowings in order to reduce fiscal deficit.
A grant from the centre has declined during the period 1980-2008 and the decrease in its caused fiscal deficit. It should be increased to reduce fiscal deficit. However the coefficient is not significant.

Given the fact that deficit is caused by the revenue falling short of expenditure, fiscal consolidation on the other hand takes place through revenue enhancement or expenditure management. The Twelfth Finance Commission has recommended a multi-dimensional restructuring program of state finances aimed at both, the qualitative and quantitative aspects of managing the finance. The government had introduced a Fiscal Responsibility and Budget Management Bill in the Lok Sabha in December 2000. This legislation provides a legal and institutional framework to eliminate revenue deficit, bring down the fiscal deficit and stabilize debt in proportion to SDP. The Gujarat Fiscal Responsibility Act 2005 is one such measure the Government of Gujarat has undertaken.

6.6 The Gujarat Fiscal Responsibility Act 2005

Management of fiscal deficit has been a matter of great concern as analysis show that the finances of Gujarat Government have been deteriorating continuously. Analysis reveals that during the later half of the eighties and in nineties, the state witnessed a persistent expansion of revenue deficit and Gross Fiscal Deficit on account of operational weakness as reflected in growing debt burden. Besides this, we notice a sluggish growth in the states own tax revenue, deterioration in the state own non-tax revenue and a persistent increase in the revenue expenditure, particularly, in respect to the non-development component such as interest payment, pensions, and administrative services. Off-budget liabilities also grew rapidly during the period under study.

The Twelfth Finance Commission has also examined with respect to Gujarat the below five key fiscal trends and are a cause of serious concern.

1. Decline in tax/SDP ratio
2. Large preventive claims of interest claims of interest payments relative to revenue receipts
3. High revenue deficit to SDP ratio
4. Large and Unsustainable fiscal deficit to SDP
5. Falling levels of Capital expenditure relative to GDP

In order to overcome this, the Gujarat Government undertook fiscal reforms aimed at fiscal correction and consolidation. One such measure was the implementation of Fiscal Responsibility Legislation Act in the state of Gujarat which is backed by Twelfth Finance Commission in the year 2004.

The state enacted the Gujarat Fiscal Responsibility Act, 2005 in the month of March 2005 and it came into force with effect from 1<sup>st</sup> May, 2005. The Major operative provisos of this Act are:

- Eliminate revenue deficit within a period of three years from 2005 to 2008 and maintain it at that level or generate revenue surplus thereafter.
- Reduce revenue deficit in each of the financial year commencing from the 1<sup>st</sup> April 2005.
- Reduce fiscal deficit not more than 3 percent of gross SDP within a period of four year commencing from April 2005 to March 2009.
- Capping public debt at 30 percent of the estimated gross SDP by 2008.
- Capping outstanding guarantees within the limit provided in the Gujarat State Guarantees Act, 1963.

In order to achieve the targets set out by the Act, a fiscal correction path has been drawn up through Medium Term Fiscal Policy Statement.

(i) Medium Term Fiscal Policy Statement i.e. form A-1 indicates a target for the year 2007 and 2008. The targets set for the given year is given in the TableVI-1

Assumptions underlying the fiscal indicators are

a. The capital receipts, include mainly loans and advances from centre as government has stopped giving plan loans to the state from the year 2005-06 and thus for the later years the loans and advances from the centre include only loans for on going EAP[Extemally Aided Project]. It also includes the special securities issued to the NSSF.
b. **Total expenditure**, which includes major subsidies such as power, salaries and pensions.

c. **GSDP Growth**, because it determines the taxable capacity of the state and thus largely determines the size of the budget. The Medium Term Fiscal Policy Statement has taken 12.8 and 13.9 percent growth of the advanced estimate GSDP for the year 2007 and 2008 provided by the Directorate of Economics and Statistic.

d. **Assessment of Sustainability.** – The Act stressed that in order to achieve the revenue deficit and fiscal deficit target envisaged it is necessary for the revenue receipts to grow at a faster rate than the total expenditure in general and revenue expenditure in particular. The contingent liabilities will be kept in the limits set by the Act. Similarly a limit to debt is set through borrowing in order to control fiscal deficit. Capital receipts are used for generating productive assets and pension liabilities are being worked out on actuarial basis.

(ii) **The Fiscal Policy Strategy Statement form A-2** suggests that for the increase in the capital expenditure to ensure higher investment in social and fiscal infrastructure.

- For this, following measures were taken:

  a. The state government endeavors to increase the tax revenue without increasing the tax rates or levying any new tax. The state wants to undertake major tax reforms, widen the tax base, increase tax compliance and make tax administration more efficient so that it can contribute to higher tax GSDP ratio. It includes rationalization of electricity duty, stamp duty, entertainment, luxury, motor vehicle tax structure.

  b. Reliance on borrowings will be reduced.

  c. Initiatives were taken to control the non-plan revenue expenditure. The measures include abolition of vacant post, redeployment of existing staff so as to avoid filling up the vacant posts, recruitment of essential staff on fixed pay and implementation of defined contribution pension schemes for employees.
joining service on or after 1.4.05. The government also makes attempt to improve the quality of expenditure and link release of grants to their performance.

d. The state will resort to more borrowings from the market at the lowest possible cost rather than from the centre.

One can come to conclusion that the state has been in need for fiscal consolidation. For this, the state has to make budget documents more transparent, so that the actual performance and necessary corrections can be done.

6.7 Appraisal of the FRBM Act, 2005

With the enactment of this Act, there is a significant improvement in the recent years. The fiscal deficit in proportion to gross SDP has declined from 5.44 in 2003-04 to 2.22 in 2006-07 and 2.69 in 2008. The state has been generating revenue surplus from the year 2006-07 and the fiscal consolidation process is being carried forward. The primary deficit was wiped out in the year 2006-07 and generated a higher primary surplus of Rs.1499 Cr in the year 2008.

Table VI-7 Fiscal Indicators- Rolling Targets

<table>
<thead>
<tr>
<th>Item</th>
<th>Revenue deficit as percent of GSDP</th>
<th>Fiscal deficit as percent of GSDP</th>
<th>Public debt as percent of GSDP</th>
<th>Govt. guarantee outstanding (RsCr.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target set for 2007</td>
<td>Zero</td>
<td>2.8</td>
<td>30.43</td>
<td>16000</td>
</tr>
<tr>
<td>Actual Achieved</td>
<td>(+)1.18</td>
<td>1.74</td>
<td>26.98</td>
<td>11701</td>
</tr>
<tr>
<td>Target set for 2008</td>
<td>(+)2.56</td>
<td>2.26</td>
<td>29.12</td>
<td>16000</td>
</tr>
<tr>
<td>Actual Achieved</td>
<td>(+)0.01</td>
<td>2.69</td>
<td>25.77</td>
<td>10339</td>
</tr>
</tbody>
</table>


The public debt in proportion to gross SDP in the year 2007 improved by 4 percent, as the actual budget achievement showed 26.98 percent as compared to target at 30.43 percent. The outstanding Government Guarantees as on March 31, 2008-09 stood at Rs. 10339.89 Cr against the targeted Rs.16000 Cr. Thus, on fiscal front, Gujarat finance showed drastic improvement. The all round performance in fiscal discipline could be attributed to higher growth in economy at 6.66, 7.02 percent during the year 2006-07and 2007-08.
Despite correction in the revenue account, the revenue receipts of the Gujarat Govt. are not showing encouraging results after the implementation of FRLMA -2005. Table VI-8 evinces that annual growth rate of tax revenue is 11.31 percent in 2008-09. The highest growth rate recorded in the year 2005 was 26.65 percent, compared to 15.51 percent in 2004.

Table VI-8 Growth Rate of Revenue Receipts before and after the Enactment of FRLMA-2005

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax revenue</td>
<td>20.72</td>
<td>15.51</td>
<td>26.65</td>
<td>20.03</td>
<td>16.57</td>
<td>11.31</td>
</tr>
<tr>
<td>Own Tax-Revenue</td>
<td>17.36</td>
<td>15.97</td>
<td>21.15</td>
<td>17.62</td>
<td>16.29</td>
<td>10.14</td>
</tr>
<tr>
<td>Own Non-tax revenue</td>
<td>-18.11</td>
<td>-5.55</td>
<td>8.51</td>
<td>47.58</td>
<td>-9.00</td>
<td>-0.99</td>
</tr>
<tr>
<td>Total transfer from centre</td>
<td>6.90</td>
<td>27.00</td>
<td>-2.57</td>
<td>23.25</td>
<td>28.85</td>
<td>16.71</td>
</tr>
</tbody>
</table>

Source: - RBI report [2004], Handbook of Statistics on Government Finances, Various Report of State Finance; A study of Budget, RBI

Though the state’s own tax revenue has also evinces a declining growth trend after 2005. But the implementation of Value Added Tax in 2004 has registered a growth of 2 percent compared to sales tax. It has made the highest contribution of 71.64 percent among the total tax revenue collected by the state. Land revenue, Stamps and Registration and Motor Vehicles tax have also showing a good contribution, it evinces that the government has undertaken a series of steps to rationalize various taxes. This may led to better compliance and buoyancy in the tax collection in future.

The non-tax revenue though increased in absolute terms in recent years has marginally declined in relative terms in the year 2006-07. The revised estimate of 2007-08 also predicting the lower trend because of lower cost recovery from publicly provided economic and social services and unrealistic rate of royalty on crude oil, natural gas and lignite. The state has to take measures in order to increase the income of non-tax revenue by making upward revision in user charges.
The government has made a stringent effort to control the expenditure. Revenue expenditure is an area where state government is focusing its attention to curtail its growth so that resources can be optimally utilized for developmental purposes. Revenue expenditure where the state has curtailed its expenditure is salaries, pension and interest on public debt.

Table VI-9 The Revenue Expenditure before and after the Enactment of FRLMA-2005

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007 (R.E)</th>
<th>2008 (B.E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE (Rs. Cr.)</td>
<td>21954</td>
<td>24302</td>
<td>25465</td>
<td>29232</td>
<td>32640</td>
<td>38225</td>
</tr>
<tr>
<td>Salaries</td>
<td>28.65</td>
<td>26.30</td>
<td>8.25</td>
<td>23.28</td>
<td>21.27</td>
<td>23.41</td>
</tr>
<tr>
<td>Pension</td>
<td>7.89</td>
<td>7.78</td>
<td>8.25</td>
<td>8.10</td>
<td>7.87</td>
<td>7.97</td>
</tr>
<tr>
<td>Interest on public debt</td>
<td>23.41</td>
<td>22.36</td>
<td>20.60</td>
<td>21.18</td>
<td>20.22</td>
<td>22.65</td>
</tr>
</tbody>
</table>

Source: RBI report [2004], Handbook of Statistics on Government Finances, Various Report of State Finance; A study of Budget, RBI

The aggregate expenditure of the Gujarat Government as percentage of gross SDP has declined from 20.11 percent (2004) to 14.4 percent (2008). In the total expenditure the share of capital outlay was around 17.1 percent out of which the share of development expenditure is 63.6 percent and expenditure on social sector was around 34.4 percent. RBI report [2008-09, pg 52] mentioned that Gujarat and Punjab are the only states where per capita capital outlay is higher among all the states. With the decline in the total expenditure, the above components of expenditure as percent of gross SDP decline by 0.9-0.3 percent approximately.

Table VI-9 evinces that out of the total revenue expenditure, the expenditure on salaries has declined from 26 percent (2004) to 21.27 percent (2008). The expenditure on pension also shows a declining trend while the expenditure on interest on public debt is maintained at around 20 percent. It is important to notice that fiscal correction and consolidation process of the Gujarat state is not at the cost of expenditure directed towards development and social sectors. Though, there is a marginal fall in this expenditure as percent of SDP, but looking at the fall in total expenditure it is at a convenient position. For instances, the development expenditure declined from 10 percent

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to 9.1 percent, the social sector expenditure from 5.2 to 5.0 and capital outlay from 2.8 to 2.5 during the period 2004 to 2007.

Table VI-10 Fiscal Indicators- Plan and Non-Plan Expenditure

<table>
<thead>
<tr>
<th>Year</th>
<th>Plan exp. as % of total exp.</th>
<th>GR. of plan Exp</th>
<th>GR. Of Nonplan Exp</th>
<th>Plan EBR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>16.60 [6.29]</td>
<td>52.95</td>
<td>-11.69</td>
<td>870</td>
</tr>
<tr>
<td>2004</td>
<td>21.54 [4.94]</td>
<td>37.55</td>
<td>-11.43</td>
<td>1069</td>
</tr>
<tr>
<td>2006</td>
<td>32.37 [0.88]</td>
<td>31.22</td>
<td>-8.88</td>
<td>1551</td>
</tr>
<tr>
<td>2007(R.E)</td>
<td>35.30 [2.93]</td>
<td>27.89</td>
<td>-6.54</td>
<td>1000</td>
</tr>
<tr>
<td>2008(B.E)</td>
<td>36.07 [0.77]</td>
<td>14.59</td>
<td>17.5</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Various Report of State Finance; A study of Budget, RBI

Similarly, analysis evinces that in the late eighties and the nineties, plan expenditure has been continuously falling in comparison to non-plan expenditure. After the enactment of the Act, the contribution of plan expenditure has increased from 10.32 percent in 2002 to 36.07 percent in 2008. With respect to growth rate, plan expenditure has been continuously growing at an average annual growth rate of 14.59 percent in 2008, while the growth rate of non-plan expenditure is negative in the year 2007.

The debt- gross SDP ratio has also showed improvement as it has declined after the FRMLA-2005. The debt- gross SDP ratio was 37.3 percent in the years 2004-07 declined to 33.1 percent in the year 2008. The only worry of the fiscal health was the increase in the share of NSSF in the year 2007. As NSSF is the most expensive source of financing and in the total debt it is increasing at the rate of 6 percent and constitutes 57 percent of the outstanding debt. However, in the recent budget document, market loans emerged as the most important source of financing the fiscal deficit of Gujarat state government.

To sum up that in the post-FRL period, there has been a considerable fall in the revenue expenditure of Gujarat state while revenue receipts witnessed that the state is able to maintain its own tax revenue. The State has also not been able to step up the developmental component of expenditure, though capital outlay as a ratio to SDP has shown an upward trend. In view of this, the Thirteen Finance Commission has made it mandatory to consider “the need to improve the quality of public expenditure to obtain better outputs and outcomes”. The Twelfth Finance commission has also emphasized the significance of improving outputs and outcomes by expenditure restructuring.
The debt consolidation and relief facility program put forward by TFC and the FRLMA linked to fiscal correction with a view to provide incentive for achievement of revenue balance seems to be successful in Gujarat state. Though there is not much improvement in debt – gross SDP ratio but it has not increased and is maintained at 20 percent level.

The data reveals that both revenue and primary deficit have been wiped out in the year 2006-07, 2007-08 and experts view that this is the first positive sign of fiscal correction enacted by FRLMA Act. The fiscal deficit is also less then 3 percent of gross SDP evinces fiscal correction is in a true perspective.

However, many development economists like C.P Chandrasekar and Jayati Ghose [2005] were not in favour of maintaining low fiscal deficit. They argued that if the fiscal deficit is dominantly in the form of capital expenditure, it contributes to future growth through demand in the economy that private investment may crowd –in to supplement autonomous investment. There is nothing wrong in maintaining large fiscal deficits if resorting to public debt is made only to meet investment requirements as long as their social rate of return is higher than the rate of interest. Deficit, per se, is not bad as the internal debt is concerned as the Indian economy is a demand constrained economy.

Many experts view that the government aims to eliminate revenue deficit at the Centre and the states by 2008, will adversely affect the all round development of the country and further aggravate the fiscal situation. Elimination of revenue deficit requires a balance in revenue account which can be done by reducing the revenue expenditure drastically. Since interest payment takes 30 percent of expenditure (this can not reduce in the short run) it only requires a reduction in economic and social services which may be fatal in the long run.

Similarly, on the receipts side, dividend and profits of the state government is less likely to grow in view of various exceptions, poor user charges and poor disinvestment policies that the State Government is pursuing towards the public sector enterprise, the curtailment in expenditure will definitely effect the long run growth of the economy. Mohanty [2009] opined that the optimism expressed in FRBM Act towards eliminating the revenue deficit is only a mismoner. In experts view our state needs a policy for fiscal prudence, not the FRBM Act.
Srivasan G [2009] argued in his paper on 'Review approach to Fiscal Responsibility Act' that inclusion of revenue deficit target might restrain the government spending on welfare programs. Business Line [20 July 2009] mentioned that all the state governments and Union territories while making a final report of the approach paper to the 11th Five Year plan (2007-12) have expressed their concerns towards a special problem posed by the FRBM Act. States Plan Panel argued that shift in plan expenditure towards the social sectors has meant that a large proportion of the expenditure undertaken would be revenue expenditure as per the budgetary definition. This means that a situation where the fiscal deficit targets are met but the revenue deficit targets are not because of the high revenue component of plan expenditure.

Shastri P [2009] in her paper 'States to Face Tough Challenges on Deficits if they Follow Centre' argued that the recommendations of the Sixth Pay Commission would lead to increase in borrowings of the State Government because of high payout ratio (2.5-3 times high that of the centre).

However, RBI Report [2008-09 pg 89] mentioned that a large number of states have made considerable progress in achieving the targets stipulated under the FRLs. An important issue is that sustaining the gains of fiscal consolidation process has been basically revenue-led with considerably less focus on expenditure management. It would be appropriate for the states to design appropriate post-FRL fiscal program that would keep the deficit levels low in view of a persisting high debt-SDP ratio.

With Fiscal Responsibility Legislation (FRLs) there are other fiscal consolidation programs initiated in the state budget in order to improve the fiscal accountability. These programs are known as Fiscal reforms, Institutional reforms and Sectoral reforms programs. The Institutional reform programs were initiated in the state budgets essentially to facilitate the fiscal consolidation process. The important areas of focus in this regard relate to improvements in governance and pursuit of decentralization. The main focus is to address the issues relating to financial and managerial restructuring programs such as setting up of State Board to review the functioning of state public sector undertaking, participatory irrigation management program, to open up various educational and health centers etc. Sectoral Reforms programs are imitated to strengthen the basic infrastructure sectors, such as setting up software technology parks, setting up Hi-tech city, export promotion industrial parks etc. In the agriculture sector, initiative includes strengthening
farm mechanization, expenditure wasteland development and forest afforestation program.

The Government of Gujarat has also taken up various Fiscal, Institutional and Sectoral measures in the post-FRL period, as shown in Table VI-11.

**Table VI-11 Major policy initiatives taken by GOG of the state budget after FRBM Act, 2005**

<table>
<thead>
<tr>
<th>Fiscal</th>
<th>Institutional</th>
<th>Sectoral</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08*To promote relief to the poor and marginalized people in rural areas and to promote educational activities in such areas, *Reduce the rate of electricity duty 1-residence, recognized educational institutions and hostels in the rural areas from 15 percent to 10 percent. 2-for residence and recognize educational institutions in the urban areas for consumption of more than 40 units from 30 percent to 20 percent. 3-Auditorium, theatre and hotel and restaurant from 30 percent to 25 percent in order to encourage the entertainment and tourism industries. *Redesigning of the motor vehicle tax structure to reduce the present 67 tax rates to mere 18. *Reduction in the rates of luxury tax.</td>
<td>Cover further one lakh hectare command area under Participatory irrigation Management, Co-operatives and organization associated with use of water, have been entrusted the management of irrigation facilities. • Start “Bal Bhog” scheme to provide nutritious food to ten lakh children, below 3 years of age through ‘Anganwadis’ • Start Women Employment Exchanges in two metropolitan cities on experimenting basis</td>
<td>Outline a package of Rs. 15,000 Cr. for tribal development • Cover an additional area of 1 lakh hectare under micro irrigation such as drip and sprinkle irrigation • Start 10 new it is having the capacity of 4,500 seats • Start 2,695 additional ‘Anganwadis’.</td>
</tr>
<tr>
<td>2008-09 Delegate powers to local bodies to levy, collect and retain the professional tax. Impose an additional tax, in addition to the existing value added tax (VAT), on the sale of goods in the state. There will be an addition of one paisa in the rupee, in the tax rate of goods, which are being taxed at the rate of four paisa in the rupee presently under the VAT Act. Similarly there will be an addition of 2.5 paisa in the rupee in the existing tax rates of other taxable goods.</td>
<td>*Open 203 Secondary and 222 Higher secondary schools in the State *Constitute Gujarat State Health Infrastructure Development Corporation to maintain the level of excellence in infrastructural construction, repairs and maintenance of health institutions.</td>
<td>* Develop modern and scientific methods of cultivation that reduce the cost of production *workout a new schemes for establishment of industrial estate through PPP.</td>
</tr>
</tbody>
</table>

Source-RBI report [2007,08], Annual report on State Finance: A study of Budgets of 2007-08, 2008-09 RBI
The above measure depicts that state is making continuous efforts towards ensuring the resources to meet the development needs in line with the priorities laid down in the Eleventh Five Year Plan, while initiating steps towards fiscal consolidation.

Conclusion

i. The major problem of Gujarat state is the increasing and persistent budgetary deficits that resulted in the high level of public debt during the period 1980-2008. Despite various measures undertaken at the state level, the financing of fiscal deficit is still a problem of fiscal stress. The pattern of financing has shifted from low cost borrowing to high cost borrowing due to increase in the share of market borrowing in financing the fiscal deficit. Though the government showed some improvement in their fiscal performance in the years of two thousand, especially from the year 2005, the outstanding liabilities with Government guaranties still show no sign of improvement.

ii. The progress of the State Government in achieving the quantitative targets of FRBM [2005] Act has been satisfactory. The key factors that have enabled the improvement in fiscal position of the Gujarat state are:-
   a) Step-wise process of fiscal correction and consolidation adopted under the FRL
   b) Simplification /rationalization of tax structure
   c) Tax buoyancy of VAT
   d) Prudent expenditure management
   e) Containment of non-plan expenditure
   f) The Twelfth Finance Commission Recommendation to determine the borrowing limits of state
   g) Political stability and strength in overall macroeconomic conditions
   h) Various institutional, sectoral and fiscal measures taken by state

iii. The co-integration test shows that there is a need to improve the non tax revenue, as the low growth of non tax revenue is related to the insufficient cost recovery through user charges and is responsible for the rising bill of ‘implicit’ subsidies. Improved quality of service is a prerequisite for any adjustment of charges.
iv. There is a need to improve the growth rate of tax revenue. Since there is a little scope for raising tax rates, this can be done by reducing the number of tax exemptions and by making the tax administration efficient, so that minimum tax evasion is possible.

v. There is a need to cut the non plan expenditure than the plan expenditure. But, too much cut may be critical for restructuring fiscal policies and to accelerate growth with macro stability. Expenditure management program must therefore focus on changing the composition of expenditure. Capital expenditure needs to be focused more on those areas where private investment improves the quality of capital.

vi. Net market borrowing needs to be reduced on a year to year basis by reducing the rate of interest on it, in an appropriate manner. So that total outstanding liabilities both internally and externally are adjusted with the surplus in near future.
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