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Rode, Sanjay

Somaiya College, Mumbai University, India

28 November 2010

Online at https://mpra.ub.uni-muenchen.de/28836/ MPRA Paper No. 28836, posted 17 Feb 2011 18:22 UTC

# Fiscal Regulation and Expenditure Pattern in Maharashtra State

Sanjay Rode

Assistant Professor S.K. Somaiya College University of Mumbai Mumbai

Working paper -1/2010

This paper is present during the state level conference "Regional issues and perspectives in Maharashtra's Development: Retrospect, challenges and prospects" December 2010. Author is thankful to Dr. Abhay Pethe, Director, Department of Economics, university of Mumbai for suggestion and comments during the presentation.

# Fiscal Regulation and Expenditure Pattern in Maharashtra State

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#### **Abstract**

The Fiscal Responsibility and Budgetary Management Act of 2004 has improved state finances of Maharashtra, India. It has also reduced fiscal deficit for state. The sources of income from various state own tax revenue have increased except other taxes on income and expenditure. There is further scope for improving sources of state own tax revenue. After the FRBM Act, the development expenditure on irrigation and flood control, industry and mining has declined in the state. It is statistically significant and negatively co-related. The development expenditure on education sports, arts & culture, science, technology & environment, and transport & communication has significantly increased. In order to control the fiscal deficit, state government should apply strict methods to reduce the non development expenditure. It should increase development expenditure which has long term effect on overall economic development.

# Introduction

In India, Fiscal Responsibility and Budget Management (FRBM) Act has been approved and some states are following suit (Ricardo H.and Catriona P. 2004) Gross State Domestic Product (GSDP), of Maharashtra is ranked second after Haryana. Over the period of time, state government has spent more on capital and consumer goods, irrigation, power plants etc. It has not generated additional resources and deficit financing are utilised for the production of consumption goods. Therefore fiscal stress has increased the state indebtedness and cut back infrastructure spending (Rao. 2000). In terms of population, state is second largest after Uttar Pradesh. According to 2001 Census, population of Maharashtra is 9.69 crore. State has forty two percent populations which are living in urban area. It is highly industrialised and urbanised state in India and it has attracted higher foreign direct investment. Mumbai is a financial capital of country and most of the financial institutions are located in it. Mumbai Metropolitan Region is most developed area in the state. Similarly in the state, tertiary sector is contributing higher income as compare to the primary and secondary sector. The Western region in the state is highly developed whereas Vidharba region is under developed. The main source of livelihood is agriculture. At present, state is facing number of socio-economic, political, geographic problems. In the state, highest numbers of people are living in slum area. In the state, 40 percent of children are suffering from malnourishment. In Mumbai city, the incidence of malnourishment among below five age group children is at par with the rural tribal children of Thane district (Hatekar and Rode, 2003). A higher per capita income state should not have such higher incidence of malnourishment among children. As far as the women malnourishment is concern, then state is facing the problem of double burden of malnourishment (Rode S. 2009). State has second highest number of HIV/AIDS cases. There is higher inequality in the incidence of infant and child mortality rate. In the state, urban area has higher health infrastructure facilities but in the rural and tribal area, the health infrastructure and personnel are low. State government is spending on various

development and non development items but the expenditure is not consistent and priority sector oriented.

The first part of the paper explains about the state performance in terms of deficits. Second part of the paper explains about the revenue and capital expenditure pattern. Third part of the paper explains about the regression results of the own tax revenue and effects of the FRBM Act on the development and non development expenditure pattern. The last section of the paper explains about the conclusion and policy implication.

# **Data and Methodology:**

Data for this study is mainly taken from the economic surveys and state budgets of various years (i.e. 2000-01 to 2010-11). The RBI handbook of statistics and the state finances has been referred too.

We have used the term primary, fiscal and budgetary deficit. They are calculated as follows.

$$G - (T + T + T) + rB$$
 .....(1)

Where G<sub>t</sub> is government expenditure in the current period. Tt is tax revenue from direct and indirect sources; Tn is a non-tax revenue in the current period. Td is revenue from disinvestment. B<sub>t-1</sub> borrowing in the last period and r is the rate of interest on borrowing.

$$M_t - M_{t-1} + B_t - B_{t-1}$$
....(2)

Mt is a credit given by the central bank in current period. The Mt-1 is a credit given in the last period. Bt means a borrowing from the market sources in current period. Bt-1 is a borrowing in the last period. If we combine both equation (1) and equation (2), then we get the following equation. It is a budget constraint for government.

$$G - (T + T + T) + rB = M - M + B - B \dots (3)$$
  
 $t \quad t \quad n \quad d \quad t \quad t - 1 \quad t \quad t - 1$   
For Primary deficit, we get the following equation.

$$G_t - T_t = D_t \dots (4)$$

Dt is known as a primary deficit. It is a difference between current government expenditure and current revenue.

$$B_t - B_{t-1} = G_t - T_t + rB_t$$
....(5)

Left hand side of the equation (5) shows the fiscal deficit. Equation five also shows the primary deficit and interest paid by government on borrowings.

We have used ordinary least square (OLS) method to understand the factors responsible for higher growth of state own tax revenue over the period of time. Secondly, to understand the effect of FRBM acts on the expenditure pattern in the state.

#### **Performance of the state:**

Maharashtra is economically well developed state in India. But being a higher per capita income state it is suffering from the higher fiscal deficit. The revenue deficit is also observed higher in the state. In the year 2008-09, state has witnessed economic slowdown due to global recession. The industrial slowdown has reduced the state own tax revenue via sales tax. The revenue expenditure has also increased because of implementation of sixth pay commission to government employees. All these factors affected on the revenue and expenditure balance in the state. In 2005, the state government enacted the fiscal responsibility and budgetary management act to eliminate the revenue deficit by 2008-09 and it is also tried to reduce fiscal deficit to three percent of GSDP. Such efforts are important to improve the state finances. But it has different implication on expenditure side.

Table 1 Fiscal imbalance in the state

(Per cent)

		(1 01 00	
Year	Revenue	Budgetary	Fiscal
	deficit	deficit	deficit
Pre-FRBM			
2000-01	3.7	1.8	4.2
2001-02	3.5	1.9	4.7
2002-03	3.6	3.0	5.8
Post FRBM			
2003-04	2.4	0.1	5.3
2004-05	2.6	0.0	4.8
2005-06	0.9	-0.1	4.0
2006-07	-0.2	0	2.2
2007-08	-2.4	0.1	-0.5
2008-09	-0.6	0.1	2.3
2009-10	0.9	0.1	3.2

Source: Figures from the state budgets 2000-01 to 2009-10

In the year 2000-01, the revenue deficit was 3.7 percent of total gross state domestic product. In the year 2009-10, the revenue deficit has come down and it is 0.9 percent of the total gross state domestic product. Fiscal deficit was 4.2 percent in the 2000-01. In the 2002-03 it has observed as 5.8 percent of the total gross state domestic product. The budgetary deficit was -0.1 in the year 2005-06. In the same year fiscal deficit was 4.0 percent. Fiscal deficit was -0.5 percent in the year 2007-08. In the year 2009-10, it is observed as 3.2 percent of total gross state domestic product. Such decline has happened because FRBM act and its recommendation of 3 percent of the fiscal deficit. Again in the year 2009-10, fiscal deficit is observed as slightly higher than the FRBM act. Table-1

clearly shows that the revenue and budgetary deficit has declined and fiscal deficit is showing up and down from 2000-01 to 2009-10.

# Revenue receipts:

Total receipts are consists of revenue and capital receipts. The revenue receipts includes the own tax and non tax revenue. The state government has its own revenue sources. In the following table own tax revenue are explained.

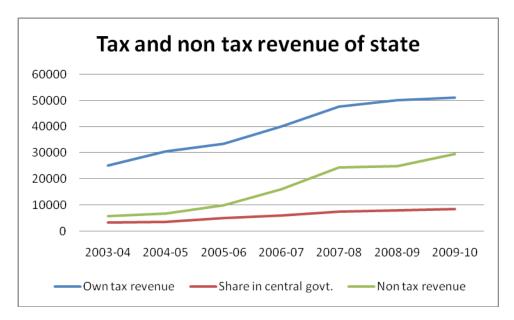
Table 2 Receipts on revenue account of the state (Per cent)

Items	2003-04	200	200	2006-	2007	2008	200
		4-05	5-06	07	-08	-09	9-10
Sales /VAT	60.8	61.4	58.6	60.18	56.28	56.77	52.9
tax		8	6				6
Stamps and							
registration fees	13.3	13.4	15.7	16.00	17.98	17.16	18.8
	1	4	0				2
State excise duties	9.22	7.25	8.42	8.23	8.33	8.58	9.41
Electricity duties	2.50	5.46	4.95	3.93	5.65	5.59	5.88
Other taxes on							
income and	4.04	3.51	3.44	3.10	3.13	2.89	3.13
expenditure							
Taxes on vehicles	4.79	3.84	3.90	4.59	4.50	4.39	5.09
Other taxes and							
duties on	2.89	2.40	2.12	2.18	2.19	1.95	1.85
commodities and							
services							
Tax on goods and			_	_			
passengers	0.92	1.39	1.50	0.55	0.81	1.23	1.30
Land revenue	1.42	1.17	1.27	1.20	1.07	1.39	1.51

Source: Computed from the state budgets

Sales tax was 60.8 percent of the total tax but it has declined in the state after 2006-07. In the current year (2009-10), it is 52.96 percent. Stamps and registration fees is increasing in the state. In the state urbanisation is higher and more people are attracting towards city. It also means that more people are taking house and other commercial property and paying the stamp duty and registration fees. State excise duty is same over the period of time. It has not changed much in the state. Taxes and duties on electricity are more than double from 2003-04 to 2009-10. Electricity is used for different purposes. Due to industrialisation and growth of the services sector, the use of the electricity has increased in the state. If government is providing more electricity, then it will get more revenue. Taxes on vehicles are same over the period of time. Other taxes and duties on commodities have declined over the period of time. Land revenue has slightly improved in the state over the period of time. State government can not impose tax on agricultural commodities. In the state, sometimes monsoon comes late or it is more than normal or it comes irregularly. It affect on the overall agricultural production. Above table shows that state revenue has not improved over the period of time. In the state, own tax revenues are increasing but they are increasing at slower rate. Over the period of time, non tax revenue has increased more as compare to the own tax revenue.

Graph 1 Tax and non-tax revenue receipts of the state (Rs.Crore)



Source: Figures from the state budgets

The above graph shows that the state's own tax revenue has increased from twenty five thousand crore from 2003-04 to more than fifty thousand crore in 2009-10. The non tax revenue has increased from ten thousand crore during 2003-04 to thirty thousand crore in 2009-10. The share of central government is same over the period of time. An average, it is 9 percent over the period. Own and non-tax revenue is increasing every year in the state.

# Revenue expenditure

Revenue expenditure is classified as development and non development expenditure. In the following table the development expenditure is mentioned along with different items.

Table 3 Development expenditure on different items (Per cent)

Table 3 Development expenditure on different items (Per cent)							
Items	2003-04	2004-05	05-06	06-07	07-	08-09	09-10
D	(0.66	(( 00	<b>50.04</b>	<b>5</b> 0.10	08		<b>5</b> 0.24
Revenue expenditure	60.66	66.98	72.24	78.19	78.81	75.97	78.34
Development	53.6	56.36	58.49	59.10	63.18	65.66	63.49
expenditure (a+b+c)							
a. Social services	37.0	34.37	38.09	38.37	41.32	41.66	31.45
Education, sports, art							
and culture	22.0	19.95	20.58	20.06	21.0	20.76	20.04
Health and family							
welfare	4.14	3.70	4.06	3.67	4.16	4.01	3.29
Water supply sanitation							
Housing, urban	4.43	4.87	4.40	5.80	7.78	7.00	2.95
development.							
Information &	0.05			0.03			
Broadcasting		0.05	0.04		0.04	0.04	0.37
Welfare of SC,ST,OBC	4.72	2.55	3.16	3.10	3.69	4.22	2.26
Labor welfare	0.45	0.43	0.52	0.51	0.62	0.74	0.51
Social welfare and							
nutrition	3.68	2.74	5.25	5.10	3.90	4.79	2.29
Others	0.07	0.06	0.06	0.07	0.06	0.07	0.06
b. Economic							
Sevices	13.78	20.33	17.81	19.06	20.43	22.54	30.98
Agriculture and allied							
activities	5.59	6.84	5.22	5.47	5.35	8.26	6.33
Rural development	4.83	4.38	3.86	4.21	1.63	2.92	16.87
Special area							0.01
programme	0.11	0.07	0.04	0.05	0.05	0.05	0.01
Irrigation and flood	0.11	0.07	0.0.	0.00	0.00	0.00	
control	0.83	1.59	2.52	2.46	2.54	2.56	1.84
Energy	0.02	1.09	2.02	2.10	2.5 .	2.00	1.01
Energy	0.82	5.84	3.81	4.23	5.26	3.94	2.48
Industry and minerals	0.47	0.59	0.87	0.92	1.61	0.87	0.66
Transport and	0.17	0.57	0.07	0.72	1.01	0.07	0.00
communication	0.61	0.43	1.06	1.13	3.47	3.46	2.22
Science, technology	0.01	0.15	1.00	1.13	3.11	3.10	2.22
and environment	0.03	0.01	0.02	0.04	0.04	0.05	0.06
General economic	0.03	0.01	0.02	0.04	0.04	0.03	0.00
services economic	0.45	0.56	0.39	0.51	0.45	0.39	0.49
c. Grants in aid and	0.73	0.50	0.33	0.51	0.43	0.33	U.#2
contributions to local	2.31	1.65	2.85	1.65	1.42	1.46	1.05
bodies and P.R	2.31	1.03	2.63	1.05	1.42	1.40	1.03
institutions	<u> </u>	<u> </u>					

Source: Computed from the state budgets

In the state, expenditure on the social services is continuously declining. It was 37 percent in the year 2003-04 but in the year 2009-10 it is 31.45 percent. Expenditure on education, sports and arts has not shown any improvement. Expenditure on the health and family welfare has declined in the 2009-10 but over the years it has not shown any improvement. Water supply, sanitation has received much attention in terms of expenditure but in recent years it has declined. Expenditure on the welfare of scheduled caste, scheduled tribe, other backward class has declined over the period of time. Central government has given more importance on health and nutrition in the budgets and in five year plans. But in the state budget, expenditure on the social welfare and nutrition has declined over the period of time.

As far as economic services are concerned then, the overall expenditure on all the economic services has increased. The expenditure on the agriculture and allied services has declined over the period of time. Expenditure on rural development is much higher in the present years. It is higher due to various village related schemes in the state. Irrigation and flood control and energy have received less expenditure in recent years. State is facing acute power shortage. Over the period of time local bodies and the P.R. institutions have grown significantly but the funds allotted have declined. It is inverse relation with the population growth in various local bodies. As far as all economic services are concern, then due to rural development the total expenditure has increased.

Table 4 Non development expenditure on different items (Per cent)

Items	2003-	2004-	2005-	2006-	2007-	2008-	2009-
	04	05	06	07	08	09	10
Non development	46.43						
expenditure (a+b)		43.62	41.50	40.89	36.81	34.33	36.50
a. General							
services	26.45	0.26	22.84	21.05	17.10	17.91	20.71
Organs of state							
_	0.91	1.17	0.83	0.75	0.83	0.88	1.25
Collection charges							
	1.28	5.84	1.46	0.65	1.14	1.63	1.0
Administrative							
Services	7.93	7.39	8.04	7.85	8.49	8.82	10.34
Pensions and							
miscellaneous	7.60	6.88	7.85	7.10	6.50	6.45	8.02
general services							
Transfers to							
reserve Funds	8.72	4.29	4.65	4.66	0.12	0.11	0.09
b. Interest							
payment	19.98	18.02	18.66	19.84	19.70	16.41	15.78

Source: Computed from the state budgets

In the state non development expenditure has declined. It was 46.43 percent in the year 2003-04 but in the year 2009-10, it has reported as 36.50 percent of total

expenditure. Expenditure on the general services has also declined. The state has increased the expenditure on the administrative services, organs of state etc. State has increased the expenditure on the pension and miscellaneous general services. Interest payment on different loans is declining in the state. In the year 2003-04, it was 19.98 percent and in 2009-10 it has reported as 15.78 percent.

In short, government has increased expenditure on general services, organs of state, administrative services, pensions and miscellaneous general services. Such expenditure is no development expenditure and it will affect on long term goal of economic development of state.

# Capital expenditure:

Capital expenditure comprises as the development and non development expenditure. In the following table, development and non development expenditure is explained in detail.

Table 5 Capital expenditure on various items (**Per cent**)

<b>-</b>		2001	2005	2006	•••		• • • • •
Items	2003-	2004-	2005-	2006-	2007-	2008-	2009-
	04	05	06	07	08	09	10
Capital	39.33	33.01	27.75	21.80	21.18	24.02	21.65
expenditure							
(1+2)							
1.Development	36.49	42.23	71.40	72.50	73.01	83.78	74.52
Expenditure							
Capital	29.62	31.30	50.18	58.95	65.98	78.39	70.79
expenditure							
Loans and							
advances by	6.87	10.93	21.22	13.56	7.06	5.39	3.73
state govt.							
2.Non dev							
expenditure	63.50	57.76	28.59	27.49	26.98	16.21	25.47
Internal debt							
of state govt.	35.16	20.46	25.97	25.13	24.61	14.52	23.85
Loans and							
advances from	28.33	37.29	2.61	2.35	2.37	1.69	1.62
central govt.							

Source: Computed from the state budgets

Capital expenditure is continuously declining in the state. It was 39.33 percent in the year 2003-04 but in the year 2009-10, it is 21.65 percent. Development capital expenditure is continuously increasing in the state. Loans and advances are declining in the state. Non development capital expenditure in the year 2002-03 was 63.50 percent. But in the year 2009-10, it is only 25.47 percent. It means the non development expenditure is declining in the state. Internal debt of the state government is more or less same over the period of time. Loans and advances was 28.33 percent in the year 2003-04 but in the year 2009-10 they are declined very sharply. It is now 1.62 percent of total expenditure.

# **Regression results**

We have used the ordinary least square regression (Greene, William H. 2003) to understand the sources of tax revenue. Government must increase the own and non tax revenue and reduce the non development expenditure. We have tried to find the new alternative to own tax revenue sources. We have also tried to find what a change in pattern of expenditure is after the introduction of FRBM act in the state. The results are explained as follows.

#### Own tax revenue:

State government gets tax from land, sale of commodities, other taxes, taxes on motor vehicles, taxes on goods and passengers, electricity duties, stamp duty and registration etc. After implementation of the FRBM act, such tax revenue should grow to reduce the fiscal deficit.

Table 6 Ordinary least square regression result

Variables	Co-efficient	Standard	T test			
		error				
Sales tax	0.75	0.08	8.70			
Stamps and registration fees	2.69	0.53	5.08			
Taxes and duties on	2.60	0.40	6.38			
Electricity						
Other taxes and duties on	-16.50	5.31	-3.10			
commodities and services						
Taxes on vehicle	3.22	0.80	4.0			
Dummy variable	954.89	357.12	2.67			
Constant	15092.25	4205-54	3.53			
R square=1.00 Adjusted R square=1.00						

,

Above table shows that state own tax revenue is positively co-related with sales tax, stamp duty and registration, electricity duty and taxes on vehicles. Own tax revenue is negatively co-related to the other taxes and duties on commodities and services. State government provides tax holidays to many good movies in the state. Similarly Marathi movies are getting subsidies for production and distribution. Due to such policies, there is decline in the other tax revenue and duties on commodities and services to state government. For the state, it is important to increase all the tax revenue from different sources. But it is difficult to increase direct taxes on different services. But we have used some proxy variables to improve the own tax revenue.

#### 1. Land revenue:

Taxable capacity of land depends on production of land. Economic survey provides net state domestic product from agriculture. There are other sources of the revenue on land. But data on agriculture taxes and productivity of the land is not available. In the state, taxes on the agriculture income are very low.

LR=0.00NSDPa +0.00TFA-669.35constant

$$(20.41)$$
  $(4.23)$   $(2.61)$ 

 $R_2 = 0.87$  Adjusted  $R_2 = 0.84$ 

All variables are significant at five percent.

Where

LR = Land revenue

NSDPa=Net state domestic product from Agriculture

TFA= Tax from Agriculture

Land revenue is positively correlated with net state domestic product from agriculture. Higher the net state domestic product from agriculture higher is the land revenue. State government cannot put more taxes on agriculture because agriculture is depending on the natural factors. Sometimes natural factors are favourable for agriculture production sometimes they are not. It finally affects on the income of farmers. Now government is regularly announcing economic package due to excess rain or deficit rain in the state.

#### Stamp Duty and Registration Fees:

State government gets revenue from the stamp duty and registration fee. Such fee is charged from persons when they transfer or register various financial instruments movable and immovable property to others. State government charges registration fee or stamp duty at different rates on different types of instruments. The base rate of the tax should be the market value of property brought or sold in the state. But there are some problems with this base rate. The base rate is very low. Secondly during registration people show less value of their owned property. Most of data on property is not available in regular basis. If we use stamp duty and registration data, then the tax potential will be under estimated.

SD/POP=0.00 PCINSDP+376.8POP+0.00DEN-0.00Con

$$(1.46)$$
  $(1.23)$   $(3.52)$ 

R 
$$_{2} = 0.97$$
 Adjusted R  $_{2} = 0.97$ 

All variables are significant at 10 percent.

The ratio of stamp duty to population is positively co-related with per capita net state domestic product, population, density of population etc. The stamp duty and registration is higher where there is higher per capita income. It is an economic ability of the individuals. Therefore higher per capita state domestic product is related to more stamp duty and registration. Poor people usually avoid the stamp duty or pay less stamp duty and registration. Higher is the population in the state, higher is the stamp duty and registration. More number of people required more housing and other immovable property. If the density of the population is higher then there is more stamp duty and registration.

#### 3. VAT/Sales tax:

State government gets maximum revenue from sales/VAT tax. Sales tax is replaced by VAT in the state. In general, the sales tax is levied on all sales and purchase in the state. It includes general sales tax, sales on motor sprit and lubricants, surcharge on sales tax, receipts of turnover tax, other receipts etc. Sales tax also includes part of the sales tax which state government gets in the form of share from the centre. It is a recommendation of finance commission to remove vertical imbalances. It is created to unequal division of resources and responsibilities between center and state. In the tenth finance commission, 10 percent and in 11th finance commission 5 percent and in 12th finance commission 7.5 percent weightage has given to the state tax effort while distributing central taxes depends on state's tax effort.

There are four rate of sales tax i.e 0, 4,8, and 12 per cent. Such rates are also introduced with VAT. The structure of sales tax for different commodities is different in the different states. Tax potential of sale tax depends on private final consumption of goods and non food expenditure on inputs. The petroleum products by manufacturing and non manufacturing sectors, expenditure on petroleum products and unclassified goods are excluded. Such data is not available for analysis.

Sales Tax/Pop=18.40 SCBB /Pop+0.00PCNSDP +0.00Const

$$(2.51)$$
  $(2.68)$   $(3.78)$ 

 $R_2 = 0.94$  Adjusted  $R_2 = 0.91$ 

All variables are significant at 5 percent.

Where

SCBB: scheduled bank branches

PCNSDP: Per capita Net state domestic product

Above equation shows that the ratio of the sales tax to population is positively co-related to scheduled bank branches in the state. More branches of scheduled commercial banks lead to higher contribution

of sales tax. The per capita net state domestic product is also positive because higher income individuals are paying more sales tax in the state.

#### 4. State excise duty:

State excise duty mainly levy by the state government on the alcoholic liquor for human consumption and opium. Indian hemp and other narcotic drugs and narcotics are including in the state excise but alcohol contains medical and toilet purchases is excluded. A major part of the excise duty comes from production and consumption of spiritual beverages. Alcohol is the most important component. Alcohol for consumption purposes is injurious to health. Nobody in the state is free to sale or trades this commodity. Those are involved in the trading has to take the license from the state. Such license and fee is included in state excise. State government has monopoly to decide the rate and number of persons to whom license should get issued. Revenue from such source is depends on state government policy. If state government adopts restriction policy on consumption of alcohol then excise duty will be low. But government of Maharashtra has opened wide excise tax revenue from alcohol and increased tax potential. In alcohol, Indian made foreign liquor and country liquor are important sources but data on such liquor is not available.

Excise duty=0.00PCSNDP-0.00CON

$$(10.12)$$
  $(11.97)$ 

$$R_2 = 0.95$$
 adjusted  $R_2 = 0.94$ 

All variables are significant at 1 percent.

Excise duty is positively co-related with per capita net state domestic product. Higher is the per capita net state domestic product then higher is the per capita consumption of the liquor. People with higher per capita income can buy costly drinks and pay high excise duty but is vis-à-vis against poor people. The state of Maharashtra has encouraged production wine from various fruits and food. Therefore the excise duty in the state may increase further.

#### 5. Motor vehicle tax and taxes on goods and passengers:

Motor vehicle tax is levied under the Indian motor vehicle act 1939, the registration of vehicle for obtaining driving licence, transferring ownership of vehicles, issuance of permit and certificates for the fitness of transport vehicles and issuance of trade certificate to manufactures and dealers. Tax rates are varying from one state to another state. The taxes for different vehicles are different (private motor car, taxes, stage carriage, contract carriage etc.) All the private motor vehicles are taxed at higher rate.

The tax is levied in the following categories of vehicles i.e. two and four wheelers, buses, trucks, taxes, tractors etc.

Passenger's goods tax is a levy on the movement of goods and persons from one place to another. In some states, the passenger and good tax is levies as percentage of the gross revenue from passenger fares and goods freight of transport companies. It is also levied as a lum sum tax calculated on the basis of scuttling capacity of the vehicles and length of the rotes.

The data is required of the transport companies, fares, freight charts, volume, passenger traffic etc. But such data does not exist.

MV=0.123 rtgs+1536.99cons

$$(2.13)$$
  $(3.29)$ 

R 
$$_{2} = 0.93$$
 adjusted R  $_{2} = 0.94$ 

All variables are significant at 5 percent.

Where

MVT=motor vehicle taxes

RTGS=revenue from taxes of goods and services

Motor vehicle taxes are positively co-related to total registered vehicles. Higher is the number of registered vehicles then motor vehicle tax increases. Total taxes on goods and services are an important component of the motor vehicle taxes.

# 6. Electricity duties

State government gets revenue from electricity. It imposes tariff duty on the consumption of electricity. Total consumers are divided as domestic, commercial and industrial etc. Electricity duty is depend on the tax potentials. Electricity duty for domestic purposes is very low. From total consumption, it is difficult to divide particular use. Data on different use of electricity is not available on continuous basis along with tariff. Therefore total consumption of electricity is used as an explanatory variable to estimate tax potential of electricity duty.

ED= 0.00 ele-2276.50 cons

$$(5.75)$$
  $(22.55)$ 

R 
$$_2$$
 =0.83 adjusted R  $_2$  =0.80

All variables are significant at 1 percent.

Where

ele= Electricity consumption by various components

Electricity duty is positively co-related with electricity consumption. Maharashtra state is highly urbanised state. Demand of electricity for industry, agriculture and services sector is higher. State is always facing the problem of electricity shortage/deficit. If government is increasing the total supply of electricity then electricity duties will also increase. Maharashtra is more power deficit sate and demand is continuously increasing.

#### 7. Other taxes:

Other taxes comprises as small taxes like betting taxes, receipts under the sugarcane (regulation) supply and purchase control act etc. Maharashtra government levies entertainment tax. This tax potentials depends on number of cinema halls, house racing venues, number of cable connections etc.

OT = 0.00 PCNSDP +0.000consta  
(2.36) (2.19)  
$$R_2 = 0.44$$
 Adjusted  $R_2 = 0.40$ 

All variables are significant at 5 percent.

In the state, entertainment tax is an important aspect of the other tax. Government is getting revenue because entertainment industry is located in Mumbai. Most of the films are produced in the state only. Secondly there are many cable connections in urban and rural area. Higher per capita income leads to higher entertainment and higher tax.

#### **Total expenditure and FRBM act:**

Total expenditure on various activities has affected after the introduction of FRBM act in the state. Earlier period of 2003, state government was spending on various non development items. But FRBM act has forced state government to reduce spending on non development sectors. Such reduction is positively co-related in the state.

Table 7 Ordinary regression results

Variables	Co-	Standard	T test		
	efficient	error			
Irrigation, flood control	-5.01	0.72	-7.01		
Industry and minerals	-17.59	1.87	-9.40		
Transport and	5.60	0.58	9.72		
communication					
Organs of state	12.58	2.67	4.70		
Science technology and	474.32	72.24	6.57		
environment					
Education sport, art and	1.80	0.54	3.36		
culture					
Constant	5442.93	35.50	15.33		
R square= 1.00 adjusted R square=0.99 F test=1752.93					

Above table shows that state's total expenditure is negatively co-related with irrigation and flood control, industry and minerals. After the FRBM act, expenditure on such items has reduced by the state government. The expenditure on transport and communication, organs of state, science, technology and environment, education, sport, art and culture has increased over the period of time. Central government's common minimum program has forced to state government to spend more on the education. Almost all states have spent more on the health and education in their budgets (RBI 2009).

# Policy and conclusion:

We have observed that after introduction of the FRBM act of July 5, 2004, the fiscal deficit has declined in the state. The own tax revenue for the state government has increased. But the other taxes on income and expenditure have declined in the state. There is further scope for increase in the own tax revenue in the state. As far as the total development expenditure is concerned, then the expenditure on the irrigation and flood control, transport and mining has declined in the state. The expenditure on the education and science, technology, environment has increased. The FRBM act has forced government to reduce the non development expenditure.. The organs of state which is a part of non development has received more priority in the budgets. The development sectors have received less priority in the budgets. Therefore government of Maharashtra should control non development expenditure and increase development expenditure. It is the right time to correct the development expenditure gap and reduce the future consequences in the state.

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