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The Economics of Government Savings : A Note on Indian State-level Fiscal Restructuring

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Working Paper

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Sardar Patel Institute of Economic & Social Research
Thaltej Road, Near TV Tower, Ahmedabad - 380054.
Phone : (079) 26850598,26851428, Fax : +91-79-26851714
E-mail : info@spiesr.ac.in • Website : www.spiesr.ac.in

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The Economics of Government Savings: A Note on Indian State-level Fiscal Restructuring

Subrata Dutta*

Abstract:

Government saving in revenue account may lead to higher capital outlay which may in turn increase level of infrastructure in backward region. Backward region is thus empowered to attract private investment, thereby leaving scopes for an increase in demand for investment goods. Demand for consumption goods is also expected to rise as a spillover effect. However, creation of government saving may -- at least, in the short run -- lead to shrinkage in government consumption (revenue) expenditure. This paper with the help of the Indian state-level budget data attempts to examine these propositions (the fiscal ones).

Keywords : Fiscal restructuring, Government saving in revenue account, Capital outlay, Infrastructure.

JEL Classifications : H62, H54

Associate Professor, **SPIESR** : e-mail : subratacalcutta@hotmail.com

The Economics of Government Savings: A Note on Indian State-level Fiscal Restructuring

1. Government Saving and Higher Demand for Investment Goods

Government dissaving (in revenue account) has several adverse effects on an economy: (1) Growth of rural India is often diagnosed as having inhibited by supply-side bottlenecks such as inadequate irrigation system, inadequate power supply, poor or limited roads (in other words, poor links between production centres and markets), inadequate growth centres (markets), limited storage, inadequate small-industrial clusters, poor transportation system, poor communication, etc. Poor rural region suffers from crunch in investment on infrastructure and thus the policy of decentralization of infrastructure (including basic urban amenities) in backward regions is grossly hindered by limited flow of capital outlay. (2) Thus, poor infrastructure in rural areas fails to attract further (private) investment, on the one hand, and to stimulate local, rural economic activities, on the other. Many scholars argue that the production (and use) of infrastructure is hampered if decisions are left exclusively to the private sector (see, for example, Dasgupta 1993). The reason is that the cost of production is too high whereas (at least) the immediate return from the infrastructure built in rural areas may be too low. This would not encourage a private producer to invest in such projects, which constitutes the classical reason for public investment in the production of infrastructure in rural, backward regions. (3) Even for urban infrastructure, the government has to depend on private savings and, in consequence, the latter may crowd-in in the urban infrastructure, thereby hampering the production sector.

To raise private investment level, the central government can make use of both the

fiscal and monetary instruments as preferred (for example, at low inflationary pressure, central bank can lower rate of interest, alongside other fiscal measures taken by government, and thus can attempt to foster private investment), whereas a state government (provincial government) does not have access to the monetary provision. From the point of view of central government, low fiscal deficit (sometimes, resulting in revenue surplus) is expected to boost private investment such that low borrowing target of the government helps to keep the interest rate low, thereby keeping private borrowing less expensive. Let us now take a look at the issue through the lens of a state or provincial government.

A region or state might require private investment and consequently invite industries to its territory, but a barefoot/backward (in terms of infrastructure) region may hardly be successful in attracting private investment, unless it is otherwise rich (e.g. rich in natural resources). Basic minimum infrastructure is the primary requirement and this can be provided through public investment. However, a high-deficit-stricken government (i.e. state government) may find it difficult to generate/mobilize funds for gross capital expenditure. Private business investment has a general tendency to move to places where the basic physical infrastructure is in relatively good condition as compared to other regions or places (Banerjee *et al*., 2002). To improve infrastructure in the backward region, the state government has to increase capital outlay. This may be done by further borrowing, but existing debt burden is already heavy for states. Surplus in revenue account can widen the outlet of capital account and allow infrastructure to be developed through public initiatives. Hence, in the context of a poor region, higher government saving in revenue account broadens the scope for affording higher capital outlay. And if the higher capital expenditure

improves infrastructure [1] (impact 1) in the backward region then such region would in turn be in a position to attract private business investment (impact 2), as a result of which (i.e. double impact) demand for investment goods will rise. Consequently, a positive spillover effect on private consumption expenditure is inevitable (through infrastructure-induced greater economic activities in rural backward region), although government consumption expenditure (i.e. revenue expenditure) may experience a fall as a result of maintaining revenue saving exercise. However, the impact 1 via public investment undertaken by the state/provincial government may, as it is often argued, appear to be the driving force of regional growth.

2. A Simple Theoretical Approach

The proposition that government saving in revenue account can create higher demand for investment goods (capital goods) through higher capital outlay (even if private saving has stagnated) can be supported by a simple diagrammatic presentation with the help of the IS-LM curves (Figure 1).[2] An upward shift of the demand curve for investment goods (from D_0 to D_1) on the $[p,y^1]$ plane is the result of the shift of the IS curve to the right (from I_0S_0 to I_1S_1) in the [r,y] plane. So, the effect in the one case is the increase in both total output (y) and rate of interest (r), and in the other case the increase in output of investment goods (y^1) and relative price of investment goods (p). As output rises, employment in the investment goods sector also rises (Allen, 1967).

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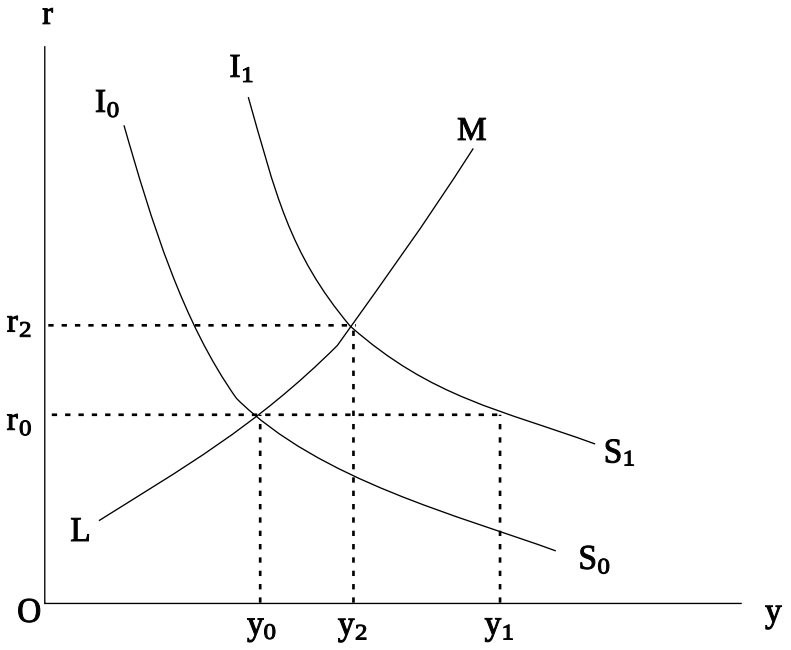
[1] Infrastructure is capital good. They are not consumed directly; rather, in combination with labour, and possibly other inputs, they provide services (Prud'homme, 2004). For further details, see Appendix 1.

[2] The IS curve (negatively sloped) represents the pairs of r and y that will keep the product market in equilibrium, in the sense that planned investment plus government purchases equals planned saving plus tax revenue at that level of income. The LM curve (positively sloped) represents the pairs of r and y that will keep the money market in equilibrium with a given level of the money supply and a given price level.


r
I1
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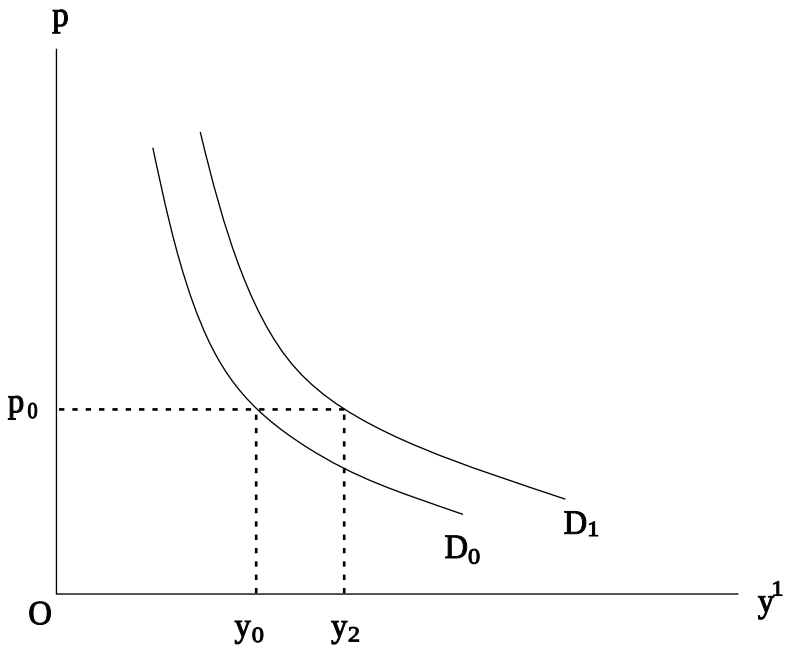
y0
y2
y1
y


p
p0
D1
D0
O
y0
y2
y1

One flaw involved in this approach, as presented in the diagram, is the rise in the rate of interest which may finally crowd-out private investment (although the central government can handle such a situation by increasing money supply which would result in reduction in the rate of interest). But, let us make it clear that this would generally happen when the government would finance its spending -- in our case, higher capital outlay -- by (further) borrowing. Thus, the hypothetical situation is as follows : Higher borrowing would increase the amount of bonds the government sells. To sell more bonds (i.e. to buy more money to finance the higher capital outlay) the government must raise the interest rate it would pay. In general, the increase in bond supply results in the rise in interest rate in the bond market which would be finally expressed as an increase in the rate of interest in the money market (Branson, 2005). Now, the thing which is to be noted here is that the above theory does not fully apply to our case -- especially the part that finds the interest rate to rise -- as we are not advocating for higher capital outlay by borrowing, but by restructuring of government expenditure pattern, i.e. by generating surplus/saving in the revenue account. So, this just requires a readjustment, duly backed by supportive policy.

Let us now try to understand the phenomenon relating to the government saving through the simple national income identity between product side and income side accounts. First, let us start with the well-known equation as follows:

$Y = C + I + G + (X - M)$ .....(1)

where Y is total output, C is total consumption expenditure, I is total investment expenditure on plant, machinery etc., G is total government expenditure, X is total export, and M is total import. For a closed economy (e.g., hypothetically, a state/ province in India), it can be written as :

$y = c + i + g$ .....(2)

Equation (2) is the *real* value expression of equation (1) where $Y = P.y$ (when P is a price component and y is a real output component) and so on. While total output (y) consists of the product side (expenditure side) components in equation (2), the income side components are expressed in equation (3):

$y = c + s + t$ .....(3)

where s denotes total private saving and t denotes tax revenue. From (2) and (3), we obtain an expression for the saving-investment balance:

$i = s + (t - g)$ .....(4)

In the national income account, total investment (i) is equal to the sum of total private saving (s) and government surplus (in other words, government saving, as expressed by ($t - g$)). This means, the higher the government deficit the lower the total investment, if s remains unchanged. Moreover, even an increase in s may not yield a desired effect on i due to an increase in government deficit (or, decrease in government surplus). Now, the proposition that government saving in revenue account helps grow capital outlay to a significant extent can be examined by the Indian state-level budget data (Table 1). In this case, government saving is expressed as $r - g$ instead of $t - g$, where r represents the sum of tax receipts, non-tax receipts and all transfers from the Centre to states, and g represents govenment revenue expenditure. Thus, government deficit is expressed as $g - r$ and this expression has been used in Table 1.

3. Empirical Observations: What Happens to Capital Outlay?

In Table 1, a comparison has been drawn of the proportional shares of different components of gross fiscal deficit (GFD) between 2003-04 and 2007-08. The rationale for selecting these two fiscal years is that the former precedes the enactment

Table 1: Revenue Deficit, Capital Outlay, Net Lending and Non-debt Capital Receipt as Percentage of Gross Fiscal Deficit, 2003-04 and 2007-08

	2003-04				2007-08				
A. Non-special Category States	**Revenue Deficit *(g-r)***	**Capital Outlay**	**Net Lending**	**Gross Fiscal Deficit**	**Revenue Deficit *(g-r)***	**Capital Outlay**	**Net Lending**	**Non-debt Capital Receipt**	**Gross Fiscal Deficit**
1	2	3	4	5 = [2+3+4]	6	7	8	9	10 = [6+7+8-9]
Andhra Pradesh	39.76 (2,962)	57.06 (4,251)	3.19 (238)	100 (7,450)	-1.81 (-159)	145.37 (12,774)	31.07 (2,730)	74.63 (6,558)	100 (8,787)
Bihar	26.96 (1,107)	45.30 (1,860)	27.74 (1,139)	100 (4,107)	-272.43 (-4,645)	358.01 (6,104)	14.49 (247)	0	100 (1,705)
Chhattisgarh	29.10 (641)	46.07 (1,015)	24.83 (547)	100 (2,204)	-2,374.22 (-3,039)	2,446.09 (3,131)	49.22 (63)	21.09 (27)	100 (128)
Goa	31.53 (140)	67.79 (301)	0.68 (3)	100 (445)	-30.68 (-166)	127.36 (689)	3.33 (18)	0	100 (541)
Gujarat	40.47 (3,707)	35.05 (3,211)	24.48 (2,243)	100 (9,161)	-45.06 (-2,150)	142.55 (6,801)	4.51 (215)	1.99 (95)	100 (4,771)
Haryana	9.34 (274)	13.16 (386)	77.53 (2,274)	100 (2,933)	-175.95 (-2,224)	271.04 (3,426)	5.70 (72)	0.79 (10)	100 (1,264)
Jharkhand	-8.56 (-142)	92.16 (1,528)	16.41 (272)	100 (1,658)	23.87 (1,484)	60.29 (3,748)	15.84 (985)	0	100 (6,217)
Karnataka	11.66 (525)	67.30 (3,029)	21.04 (947)	100 (4,501)	-70.83 (-3,776)	162.24 (8,649)	13.22 (705)	4.61 (246)	100 (5,331)
Kerala	66.44 (3,680)	11.55 (640)	22.01 (1,219)	100 (5,539)	62.05 (3,785)	24.18 (1,475)	13.90 (848)	0.13 (8)	100 (6,100)
Madhya Pradesh	61.12 (4,476)	36.58 (2,679)	2.31 (169)	100 (7,323)	-182.76 (-5,088)	245.44 (6,833)	37.72 (1,050)	0.40 (11)	100 (2,784)
Maharashtra	46.35 (8,310)	45.73 (8,199)	7.92 (1,420)	100 (17,929)	-524.74 (-14,803)	407.30 (11,490)	17.48 (493)	0	(-)100 (-2,821)
Orissa	39.77 (1,421)	23.87 (853)	36.36 (1,299)	100 (3,573)	-320.79 (-4,244)	214.89 (2,843)	5.82 (77)	0	(-)100 (-1,323)
Punjab	73.01 (3,563)	13.63 (665)	13.36 (652)	100 (4,880)	83.04 (3,823)	47.61 (2,192)	-30.65 (-1,411)	0	100 (4,604)
Rajasthan	46.45 (3,424)	43.15 (3,181)	10.39 (766)	100 (7,372)	-48.50 (-1,653)	192.37 (6,556)	-43.81 (-1,493)	0.03 (1)	100 (3,408)

Tamil Nadu	27.99	64.21	7.80	100	-123.30	202.44	20.86	0	100
	(1,565)	(3,590)	(436)	(5,591)	(-4,545)	(7,462)	(769)		(3,686)
Uttar Pradesh	111.62	55.98	-67.61	100	-25.00	122.88	2.12	0	100
	(18,583)	(9,320)	(-11,255)	(16,648)	(-3,449)	(16,950)	(293)		(13,794)
West Bengal	71.09	5.87	23.04	100	71.46	23.58	4.96	0	100
	(9,149)	(756)	(2,965)	(12,870)	(8,147)	(2,688)	(565)		(11,400)

	2003-04				**2007-08**				
B. Special Category States	**Revenue Deficit *(g-r)***	**Capital Outlay**	**Net Lending**	**Gross Fiscal Deficit**	**Revenue Deficit *(g-r)***	**Capital Outlay**	**Net Lending**	**Non-debt Capital Receipt**	**Gross Fiscal Deficit**
1	2	3	4	5 = [2+3+4]	6	7	8	9	10 = [6+7+8-9]
Arunachal Pradesh	-73.60	173.20	0.40	100	-4,953.33	4,846.67	6.67	0	(-)100
	(-184)	(433)	(1)	(250)	(-743)	(727)	(1)		(-15)
Assam	49.14	44.62	6.24	100	-326.71	213.67	13.04	0	(-)100
	(685)	(622)	(87)	(1394)	(-2,581)	(1,688)	(103)		(-790)
Himachal Pradesh	67.41	32.93	-0.34	100	-153.99	255.98	-2.17	0	100
	(1,607)	(785)	(-8)	(2,384)	(-850)	(1,413)	(-12)		(552)
Jammu and Kashmir	-11,235.29	10,817.65	317.65	(-)100	-84.94	183.40	1.49	0	100
	(-1,910)	(1,839)	(54)	(-17)	(-2,216)	(4,785)	(39)		(2,609)
Manipur	15.44	84.21	0.35	100	-1,192.16	1,086.27	5.88	0	(-)100
	(44)	(240)	(1)	(286)	(-1,216)	(1,108)	(6)		(-102)
Meghalaya	-42.08	116.34	25.74	100	-87.85	183.18	4.67	0	100
	(-85)	(235)	(52)	(202)	(-188)	(392)	(10)		(214)
Mizoram	-27.12	121.57	5.56	100	-33.42	138.78	-5.36	0	100
	(-83)	(372)	(17)	(306)	(-131)	(544)	(-21)		(392)
Nagaland	-346.20	247.47	-1.27	(-)100	-106.80	206.80	0	0	100
	(-547)	(391)	(-2)	(-157)	(-424)	(821)			(397)
Sikkim	-320.00	422.00	-2.00	100	-548.44	648.44	0	0	100
	(-160)	(211)	(-1)	(50)	(-351)	(415)			(64)
Tripura	-31.09	130.50	0.59	100	-5,317.65	5,435.29	-17.65	0	100
	(-106)	(445)	(2)	(341)	(-904)	(924)	(-3)		(17)
Uttarakhand	54.09	37.88	8.03	100	-36.57	128.30	8.27	0	100
	(761)	(533)	(113)	(1,407)	(-637)	(2,235)	(144)		(1,742)

Notes: (1) Figures in parentheses are expressed as Rupees in crore at current price; (2) Figures with negative sign (-) indicate surplus/saving. Moreover, there are several 100s with negative sign in columns 5 and 10. For simple arithmetic reason, this sign has been attached to them, meaning only 'gross fiscal surplus' (rather than deficit) and nothing else; (3) Figures for Jammu and Kashmir and Jharkhand for the years 2003-04 and 2007-08 relate to revised estimates (RE). Figures for Bihar in 2003-04 relate to RE. (4) West Bengal and Sikkim have enacted the FRBM legislation only recently (i.e. in the fiscal year of 2010-11), while most of the other states did it in and around 2005.
Source: RBI publication entitled *State Finances: A Study of Budgets* (2005-06 and 2009-10).

of the FRBMA (Fiscal Responsibility and Budget Management Act) while the latter is considered to manifest as the latest outcome of the fiscal consolidation policies just prior to (or just at the beginning of) the recession. Additionally, we have presented the absolute values of the GFD components in parentheses as well. The 2007-08 figures as compared to that of 2003-04 would help us understand better the contribution of the surplus revenue in capital outlay. In 2003-04, only Jharkhand was able to generate some surplus revenue among the non-special category states. But the 2007-08 data illustrate remarkable improvements on this account as we see that a number of states such as Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu, and Uttar Pradesh could afford capital outlay of more than 100 per cent, meaning more than the size of their respective GFDs (GFD being fixed at 100 for each state). Such a thing has been possible due to the amount of surplus generated by the states out of their revenue accounts. Andhra Pradesh also has had capital outlay of more than the size of its GFD, but the case differs from the other revenue surplus states in respect of the fact that it was actually high non-debt capital receipt (see Table 1) that grossly contributed to the state's capital outlay. As regards special category states, seven out of eleven states were found to be revenue surplus states in 2003-04 whereas in 2007-08 all states have been found to be in the surplus group. Fiscal corrections observed in the special category states were largely attributed to greater transfers (both tax devolution and grant) from the union government. We will come back to this point later again.

4. Empirical Observations: What Happens to Revenue Expenditure ?

One of the objectives of the fiscal consolidation policies is to eliminate revenue

deficit, or even to generate revenue surplus (Government of India, 2004). In the process of achieving so, as hinted earlier, revenue expenditure may experience an adverse impact. For example, efforts to generate surplus in revenue account may lead to shrinkage in revenue expenditure. Thus, many scholars fear that consumption expenditures of governments in general and development related activities (welfare related expenditures) in particular may be adversely affected due to such efforts (see, for example, Rakshit, 2005). However, it is often argued and also observed that a number of developmental schemes are financed through plan budgets, while a large chunk of establishment costs (salary, wage, office rent, car rent, hospitality, etc.) and a very small portion of development expenditures constitute non-plan budgets (or expenditures). Therefore, a favourable situation can take place when the ratio of non-plan revenue expenditure-to-GSDP (hereinafter called NPRE/GSDP ratio) is under control, but the ratio of plan revenue expenditure-to-GSDP [3] (hereinafter called PRE/GSDP ratio) is on the increase (although salary component has gone through hikes from time to time as a result of the recommendations of the several central and state-level pay commissions). When we say this we have to be extremely cautious since salary paid to teachers and doctors, among many others, can hardly be treated as mere part of unproductive expenditures; rather it constitutes pure development expenditure. Moreover, expenditures for social protection schemes like "Widow Pension Scheme" are borne by the state governments through their non-plan revenue budget. Reduction in these types of expenditures would severely hamper development process or welfare of the poor, whereas some cuts in non-developmental expenditures may be desirable to correct state fiscal imbalances. Rakshit (2006: 4551) argues that although "there is not much scope of reducing

[3] GSDP stands for *gross 'state' domestic product* for a state or province.

public consumption expenditure" (i.e. revenue expenditure), cutbacks in various forms of subsidies, in his opinion, may be allowed since much of them are enjoyed by the rich. As regards the distinction between plan and non-plan expenditures, there is another view as well. According to this view, preference for creation of new assets or undertaking new schemes being part of the plan, while sacrificing maintenance of already created assets, demonstrates inefficient approach (Government of India, 2004). However, against the backdrop of these views, let us now observe the trends of revenue expenditures of the states to examine the effects of fiscal consolidation on them.

If we look at Table 2, we get a glimpse of the impacts of both fiscal consolidation strategy and economic downturn on revenue expenditure at two different phases during the study period. Let us first consider the non-special category states. The average ratio of total revenue expenditure-to-GSDP (hereinafter called TRE/GSDP ratio) has shown consistent decrease from 2003-04 to 2006-07 and then remained unchanged in 2007-08 as against 2006-07, and increased thereafter. Therefore, negative impact of revenue saving on revenue expenditure becomes evident (though long-term impacts have not been tested yet). The falling trends of average TRE/GSDP ratio emerged as an effect of the measures of fiscal consolidation (more specifically, due to saving in revenue account), whereas during economic downturn this average rose up due to either demand stimulating policy of the governments or a fall in aggregate demand or as an effect of both. As regards the two other average ratios (i.e. the average PRE/GSDP ratio and the average NPRE/GSDP ratio), the former showed, as preferred by a group of policymakers, consistent upward trends while the downward trends of the average NPRE/GSDP ratio were observed till 2007-08 and thereafter it rose up as a response to the economic slowdown.

The states need to be individually examined as well. To capture the effects of fiscal consolidation on consumption expenditure of individual states we will focus on just two ratios -- TRE/GSDP ratio and PRE/GSDP ratio. Since these two trends will be explained in detail, further explanation of the trends of NPRE/GSDP ratio may not be additionally needed.

Let us first concentrate on the TRE/GSDP ratio (Table 2). Most of the states among the non-special category have experienced, as expected, downfall in TRE/GSDP ratio in 2007-08 as against 2003-04. Only two states have not experienced such a fall; they include Jharkhand and Andhra Pradesh. Surprisingly, Jharkhand was not found to be a surplus generating state in 2007-08 whereas it had produced some surplus in 2003-04. Hence, the hike in its TRE/GSDP ratio in 2007-08 as against 2003-04 is consistent with the finding observed in Table 1. Andhra Pradesh has not been able to accumulate large revenue surplus in 2007-08; rather hike in its capital outlay in that year is found to be substantially funded by its non-debt capital receipt. So, like Jharkhand, Andhra Pradesh also does not show any inconsistency as far as the impact of revenue saving on revenue expenditure is concerned. However, the cases of three states -- viz. Kerala, West Bengal and Punjab -- portray completely different illustrations. Observe that their TRE/GSDP ratios went down in 2007-08 (as against 2003-04) while they failed to generate revenue surplus in the same year. This means that even the fall in their revenue expenditure did not help them yield revenue surplus. Special attention needs to be paid to these states as they show symptoms of chronic fiscal stress. Thus, our success in separately specifying the crisis of these three states justifies our attempt to analyse the cases of the individual states, going beyond the analysis of the non-special category averages only.

Table 2: Revenue Expenditure (Plan, Non-plan and Total) as Percentage of GSDP

I. Non-special category states	2003-04			2004-05			2005-06			2006-07		
	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP
Andhra Pradesh	3.6	12.1	15.7	3.2	11.6	14.8	2.7	11.9	14.6	3.4	11.5	14.9
Bihar	2.0	20.2	22.1	1.7	18.2	19.9	3.1	19.3	22.4	3.3	17.4	20.7
Chhattisgarh	4.0	13.0	17.0	3.7	12.6	16.3	3.9	10.7	14.6	4.0	9.6	13.6
Goa	3.0	15.9	19.0	3.2	13.7	16.9	3.1	13.4	16.5	3.2	13.0	16.2
Gujarat	2.0	11.1	13.1	2.2	10.6	12.9	1.7	9.5	11.2	2.0	9.1	11.1
Haryana	1.4	10.9	12.2	1.6	10.6	12.2	1.9	10.0	11.9	1.9	10.7	12.6
Jharkhand	5.9	11.3	17.2	6.2	10.2	16.4	6.1	11.7	17.8	6.6	11.2	17.8
Karnataka	2.7	13.5	16.2	3.3	12.7	16.0	2.8	12.5	15.2	3.8	12.4	16.2
Kerala	2.5	13.5	16.0	2.9	12.7	15.6	2.6	12.1	14.7	1.6	12.8	14.4
Madhya Pradesh	2.7	15.5	18.2	3.0	13.9	16.9	3.6	14.0	17.6	4.2	13.0	17.1
Maharashtra	1.1	11.5	12.5	1.2	12.0	13.2	1.2	10.7	11.9	1.6	10.5	12.1
Orissa	2.7	15.1	17.8	2.7	14.5	17.3	2.7	14.6	17.3	2.9	13.7	16.6
Punjab	0.7	16.7	17.4	0.5	17.3	17.8	0.9	15.9	16.8	0.8	14.5	15.3
Rajasthan	2.0	14.9	16.9	2.3	14.6	17.0	2.4	14.3	16.7	2.5	13.8	16.3
Tamil Nadu	2.5	11.9	14.4	1.9	12.5	14.4	2.2	11.4	13.6	2.6	11.2	13.8
Uttar Pradesh	1.4	20.7	22.1	2.0	15.9	17.9	2.3	14.5	16.8	3.1	14.8	18.0
W. Bengal	1.0	12.6	13.6	1.3	12.2	13.4	1.9	11.7	13.6	1.8	11.1	12.9
Non-special category average	**2.4**	**14.1**	**16.6**	**2.5**	**13.3**	**15.8**	**2.7**	**12.8**	**15.5**	**2.9**	**12.4**	**15.3**

Table 2 continued

II. Special category states	2003-04			2004-05			2005-06			2006-07		
	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP
Arunachal Pradesh	23.3	35.5	58.8	20.3	32.6	52.9	24.8	32.3	57.1	23.8	31.8	55.6
Assam	3.0	14.8	17.9	3.9	15.6	19.5	3.7	14.5	18.2	3.0	14.8	17.8
Himachal Pradesh	4.1	22.9	27.0	4.1	21.0	25.1	4.6	20.6	25.2	4.5	22.2	26.7
Jammu and Kashmir	4.3	25.5	29.7	4.5	29.2	33.7	4.3	32.3	36.6	2.7	31.9	34.7
Manipur	4.8	31.9	36.8	5.6	30.6	36.1	7.8	31.8	39.6	7.8	36.9	44.7
Meghalaya	5.9	19.0	24.9	8.2	19.3	27.5	7.6	18.4	26.0	7.7	18.3	26.0
Mizoram	16.0	39.4	55.4	16.8	40.0	56.8	19.8	38.5	58.4	20.1	37.2	57.3
Nagaland	7.4	30.3	37.7	5.7	27.1	32.8	7.7	29.8	37.5	7.5	29.7	37.2
Sikkim	17.2	65.4	82.6	14.9	92.7	107.6	16.1	80.5	96.6	16.5	76.1	92.6
Tripura	4.4	22.9	27.3	4.1	22.2	26.3	4.4	21.1	25.5	4.7	19.3	24.1
Uttarakhand	5.3	16.1	21.3	4.8	16.4	21.2	5.3	16.1	21.4	5.0	15.6	20.6
Special category average	**8.7**	**29.4**	**38.1**	**8.4**	**31.5**	**40.0**	**9.6**	**30.5**	**40.2**	**9.4**	**30.3**	**39.8**
All states average	**4.9**	**20.2**	**25.0**	**4.8**	**20.4**	**25.3**	**5.4**	**19.8**	**25.2**	**5.5**	**19.4**	**24.9**

Table 2 continued

I. Non-special category states	2007-08			2008-09			2009-10 (RE)			2010-11 (BE)		
	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP
Andhra Pradesh	4.3	12.3	16.5	5.0	11.4	16.4	4.7	13.7	18.4	5.4	14.5	19.9
Bihar	5.3	15.2	20.6	4.3	15.7	20.0	5.0	19.3	24.3	6.1	18.0	24.2
Chhattisgarh	4.5	9.1	13.6	5.7	8.8	14.5	7.6	9.8	17.4	8.1	10.5	18.6
Goa	3.3	12.8	16.1	3.1	14.2	17.3	4.1	16.0	20.1	4.3	15.2	19.5
Gujarat	2.5	8.5	10.9	3.1	8.4	11.5	3.7	8.9	12.6	3.8	8.6	12.4
Haryana	2.1	9.3	11.4	2.1	9.1	11.2	3.1	9.6	12.7	2.8	8.8	11.6
Jharkhand	6.5	12.4	18.9	7.1	13.4	20.4	6.5	14.3	20.8	6.8	11.4	18.2
Karnataka	3.5	12.2	15.7	3.9	11.5	15.4	4.2	11.1	15.4	4.6	11.6	16.2
Kerala	1.4	13.6	15.0	1.7	13.2	14.9	1.9	12.4	14.3	2.2	12.0	14.2
Madhya	4.8	13.2	18.0	4.4	12.8	17.2	5.9	13.7	19.5	6.3	14.6	20.9
Maharashtra	1.7	9.2	11.0	1.8	9.1	10.9	2.5	9.7	12.2	2.5	9.3	11.8
Orissa	3.4	11.5	14.9	4.0	11.9	15.9	4.6	14.8	19.4	4.8	14.3	19.1
Punjab	0.8	15.2	16.0	0.9	14.0	14.8	1.0	14.4	15.4	1.3	14.2	15.4
Rajasthan	2.9	13.6	16.5	2.9	14.2	17.0	3.1	15.6	18.7	3.2	14.8	18.0
Tamil Nadu	2.7	11.4	14.1	3.1	12.7	15.8	3.4	12.2	15.6	3.2	12.1	15.3
Uttar Pradesh	3.4	15.5	18.9	4.2	14.2	18.4	3.5	11.9	15.5	4.5	17.2	21.7
West Bengal	2.2	10.2	12.4	2.3	12.3	14.6	2.9	12.3	15.2	2.7	10.5	13.2
Non-special category average	**3.3**	**12.1**	**15.3**	**3.5**	**12.2**	**15.7**	**4.0**	**12.9**	**16.9**	**4.3**	**12.8**	**17.1**

Table 2 continued

II. Special category states	2007-08			2008-09			2009-10 (RE)			2010-11 (BE)		
	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP	PRE/ GSDP	NPRE/ GSDP	TRE/ GSDP
Arunachal Pradesh	26.8	31.3	58.1	23.1	40.2	63.3	25.9	50.4	76.2	21.7	33.3	55.0
Assam	2.8	15.0	17.8	3.9	14.1	18.0	7.6	26.3	33.9	9.4	23.4	32.9
Himachal Pradesh	3.7	22.0	25.7	2.4	23.2	25.6	2.8	22.5	25.3	2.5	22.7	25.2
Jammu and Kashmir	1.7	35.1	36.8	1.3	34.4	35.7	1.8	37.6	39.4	2.3	38.8	41.1
Manipur	8.2	31.0	39.2	7.7	33.6	41.4	11.9	35.6	47.5	14.0	35.9	49.9
Meghalaya	8.5	18.1	26.6	10.4	17.5	27.9	14.2	18.5	32.7	14.8	17.5	32.3
Mizoram	19.6	38.1	57.7	19.4	41.3	60.8	24.1	45.2	69.3	20.3	40.7	60.9
Nagaland	6.7	29.0	35.7	7.8	33.2	40.9	11.3	34.8	46.0	12.7	39.6	52.3
Sikkim	18.3	83.9	102.2	19.8	68.0	87.9	21.6	75.3	96.9	24.7	67.2	91.9
Tripura	5.3	20.5	25.8	5.5	20.9	26.4	7.3	27.8	35.1	6.8	27.6	34.4
Uttarakhand	5.2	15.2	20.4	5.4	15.5	20.9	5.9	19.8	25.7	5.6	16.8	22.4
Special category average	**9.7**	**30.8**	**40.6**	**9.7**	**31.1**	**40.8**	**12.2**	**35.8**	**48.0**	**12.3**	**33.1**	**45.3**
All states average	**5.8**	**19.4**	**25.2**	**5.9**	**19.6**	**25.5**	**7.2**	**21.9**	**29.1**	**7.4**	**20.8**	**28.2**

Note: PRE = Plan revenue expenditure; NPRE = Non-plan revenue expenditure; TRE = Total revenue expenditure; GSDP = Gross 'state' domestic product; RE = Revised estimate; BE = Budget estimate.
Source: Estimated from the Reserve Bank of India (RBI) budget data and the Central Statistical Organisation (CSO) GSDP data.

Now, let us take a look at the trends of the PRE/GSDP ratios for individual states (Table 2). It has already been clear (as we have observed earlier) from the consistently increasing trends of the *average* PRE/GSDP ratio (non-special category states) that the individual states have done well on this front. Taking into consideration the two points-in-time figures -- i.e. the figures of 2003-04 and 2010-11 (BE)[4] -- only Kerala is found to have slipped from its earlier position. So, Kerala needs to pay special attention to address its critical position as plan expenditure consists of a number of development schemes. If we look from another perspective, we see that the states like West Bengal, Rajasthan, Punjab, Maharashtra, Haryana, and Gujarat have consistently been in below-average position (in terms of non-special category average) from 2003-04 till 2010-11 (BE). Tamil Nadu and Kerala have joined the group little later -- from 2004-05 and 2005-06, respectively. Especially, according to the 2010-11 (BE) figures, five states -- viz. Kerala, West Bengal, Punjab, Maharashtra and Haryana -- are required to improve their position as they are found to have not even reached the 3 per cent level. Conversely, Bihar and Uttar Pradesh are the only two states which have managed to improve their PRE/GSDP ratio over the years quite impressively when compared to the non-special category averages over the years. Both the states in terms of this ratio had remained below the non-special category average in 2003-04. But, by 2010-11 (BE), the ratio for Bihar is seen to be much above the corresponding average; and Uttar Pradesh has also improved its position after 2005-06 (only except for 2009-10 RE)[5]. The states such as Andhra Pradesh, Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh, and Orissa have maintained consistently good position as compared with the

[4] BE stands for 'budget estimate'.
[5] RE stands for 'revised estimate'.

corresponding non-special category averages over the years throughout the reference period. By and large, trends for Goa do not look unsatisfactory. We conclude that the states that have been undergoing revenue saving exercise along with faster improvement in their plan expenditure level are in a better position than the others.

Before we discuss these issues in relation to the special category states, let us first have a brief understanding about why they are called special category states. The Reserve Bank of India (2011) helps us in classifying them as special category states in the following utterances:

> "Special category States account for nearly one-tenth of the total size, measured in terms of aggregate expenditure, of all State governments. The typical features of a special category State, i.e., hilly terrain, sparsely populated habitation and high transport costs, etc. lead to high cost of delivering public services. With the relatively lower level of economic activity in most special category States, their tax base is limited vis-à-vis non-special category States. These States, to a large extent, depend on transfers from the Centre (comprising grants and tax devolutions) for their resource needs. The fiscal correction observed in special category States during 2004-05 to 2007-08 was largely on account of higher devolution and transfers from the Centre, while there was some improvement in own revenue receipts as well" (Reserve Bank of India, 2011: 36-7).

It is evident from the above note by the Reserve Bank of India that substantial transfers from the union government to the special category states have helped the latter remain fiscally correct. So, in this regard, the contribution through the central funds outweighs these states' own fiscal policy measures and performances. On this note, we do not intend to go for an elaborated analysis of the revenue expenditures of these states. Three states -- viz. Sikkim, Mizoram and Arunachal Pradesh -- are seen to be maintaining very high TRE/GSDP ratio as compared to the other special category states as well as the special category averages over the years. For Sikkim, TRE is found to be even higher than the GSDP in two fiscal years -- i.e. in 2004-05 and 2007-08 (TRE/GSDP ratio being greater than 100 per cent in these two years).

Exorbitant NPRE/GSDP ratio of the state has grossly contributed to its high TRE/GSDP ratio.

5. Conclusion

Government saving in revenue account may lead to higher capital outlay which may in turn increase level of infrastructure in backward region. Backward region is thus empowered to attract private investment, thereby leaving scopes for higher demand for investment goods. Demand for consumption goods is also expected to rise as a spillover effect. However, creation of government saving may -- at least, in the short run -- lead to shrinkage in government consumption (revenue) expenditure. In this paper, with the help of Indian state-level budget data, we have made an attempt to support these propositions (the fiscal ones).

Appendix 1: Infrastructure and Associated Services

Infrastructure	Service provided
Roads, bridges, tunnels, rail tracks, harbours, etc.	Transportation
Dams, reservoirs, pipes, treatment plants, etc.	Water supply
Sewers, used water treatment plants, etc.	Water disposal
Dams, canals	Irrigation
Dumps, incinerators, compost units	Garbage disposal
Telephone exchanges, telephone lines, etc.	Telecommunication
Power plants, transmission & distribution lines, etc.	Power

Source: Prud'homme (2004)

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