Grants from Centre and States' Fiscal Marksmanship

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Abstract

In this paper, we aim to establish the issues with fiscal marksmanship of states' revenue budgets. We particularly focus on the grants received from the Union government. Within grants, we find state plan schemes and centrally sponsored schemes to be the most volatile. Our analysis looks at three key stakeholders in the budget-making process and their role in poor fiscal marksmanship. These are the Centre, the states and the Finance Commission. The actuals could miss budget estimates due to the Centre misprojecting its revenues or expenditures, the states misprojecting their revenues, or the Finance Commission making errors while recommending grants. Poor estimation methods, weak capacity in drawing up budgets and implementing projects, specific conditionalities imposed either by the Centre or the Finance Commission and exogenous and random shocks that cannot be controlled for — all affect marksmanship of the states' revenue budgets.

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I. Introduction

The budgeting exercise is central to the promise of efficient and effective governance. If the errors in estimating revenue and expenditure are large, the implementation of programmes and policies of any government will suffer, affecting welfare outcomes. The accuracy of budget estimates is referred to as fiscal marksmanship[2].

This is directly dependent on the ability of the state to make accurate budget forecasts, which in turn is chiefly a function of the capacity available to engage with this process.

State budgets get little attention even though sub-national governments in India now collectively spend one and a half times more than the Central government (Reserve Bank of India State Finances, 2019). An increased share of taxes devolves to the states following the recommendations of the Fourteenth Finance Commission. Yet, state governments tend to do poorly on fiscal marksmanship. This intersects with the challenge of state capacity in two ways — it reflects an inadequate capacity to estimate revenues and spending and it limits the capacity of state governments to follow their policy agenda. Capacity constraints interpreted through the 3Ps of personnel, paperwork and process not only capture the issues neatly but also allude to solutions where this can be strengthened.

In this paper, we look at unpacking the nuances in state capacity, complicated by India's federal structure that affect the marksmanship of state budgets. The existing literature involving an analysis of states' budgets has found that errors in revenue receipts of states are more pronounced compared to their revenue expenditure (Chakraborty et al., 2019). The 2019 Reserve Bank of India (RBI) State Finances report also points out that states have been overestimating all sources of revenue. Further, it notes, the overestimation is exacerbated when it comes to grants received from the Centre[3]. States and their actual revenues are also particularly affected by the Centre itself being unable to get its forecasting methodologies right (Jena, 2006). In this paper, we look at the state budgets of the 28 states[4] in India by Gross Domestic Product (GDP). We limit our analysis to revenue receipts of states and marksmanship of grants from the Centre.

The paper is divided into two sections. The first section analyses the revenue receipts of states to establish that grants from the Centre form the problematic component. Within grants, state plan schemes and centrally sponsored schemes (CSS) show a greater variation of actuals from estimates. The second section details the reasons why fiscal estimation on grants is problematic and analyses the role of the states, the Centre and the Finance Commission. We then conclude the paper.

II. Analysing Fiscal Marksmanship of State Revenue Receipts

Analyses of state budget estimates and actuals from 2003-04 to 2017-18 show that the total revenue estimates for each state have a lot of variation and are overestimated in most cases. Grants from the Centre cause a large part of the overestimation. Within these grants, we find that the state plan and centrally sponsored scheme sub-heads are the categories causing variation. We look at these three trends in the subsections below.

1. Overestimation of Total Revenue

The overestimation of total revenues for states has been increasing since 2013-14 (see Table 1). The average overestimation across all states and all years was 10.79% and average underestimation was 10.32%. Further, in 2013-14, all 28 states overestimated their total revenues by an average of almost 10.41%, with the highest being 28.68% (Arunachal Pradesh) and the lowest being 3.56% (Rajasthan). Clearly, there is a problem in budget estimations if all states across all years are missing revenue marksmanship.

In Table 1, the analysis of overestimation of total revenues for states is broken into two categories: General Category states and Special Category states. This is because for special category states, such as Assam and Nagaland, their revenues are considerably low and they are heavily dependent on the Centre for their transfers. In 2013-14, Arunachal Pradesh and Meghalaya overestimated revenues by over 28.68 and 26.9 per cent respectively. The effects of these errors are much larger for these special category states.

However, the fiscal marksmanship problem is pervasive irrespective of category. States likes Kerala and Punjab of general category and Assam, a special category state have all overestimated their budgets for revenue receipts in almost all the years between 2003-04 and 2017-18 as shown in Figure 1. Kerala and Punjab overestimated their revenue in all 15 years by 7.14% and 11.17% respectively. Assam too overestimated its revenues in 14 out of 15 years by an average of a massive 18.18%. Considering that the three states differ in location, fiscal structures and size, scale and scope of the economies, this reflects a structural problem with revenue marksmanship.

An additional interesting trend to note is that the fiscal marksmanship of all states worsens in terms of overestimation of revenues beyond the years 2007-08. Of the years of study from 2003-04 to 2017-18, most states from 2003-04 to 2007-08 underestimated the revenues they would receive from the Centre (as seen in the left side of Table 1). Compared to later years, states such as Karnataka, Tamil Nadu, Haryana and Mizoram underestimated their revenues in all years in this period. Such underestimation is less of an issue compared to overestimation in the preceding years. This is because when the states underestimate revenues, better collections help in providing additional resources to departments but when they fall short, they have major implications in terms of cuts on capital expenditures and maintenance of capital assets.

Secondly, the underestimation in this period is primarily because there were significant increases in tax revenue collected by the Centre. Due to the introduction of the Tax Information Network (TIN), income tax collection increased by an average of 31 per cent. Service tax too increased sharply during the first period due to expansion of coverage. Given that in most states' the actual receipts were higher than estimated revenues during this period, one can conclude that in periods of high buoyancy of Central tax revenue, the States tend to underestimate their revenue from tax devolution. Thus, our analysis in this section, mainly shows that estimation errors, in general, are quite large, and the impact of underestimation of revenues are quite different compared to overestimation.

Table 1: Average Overestimation of Total Revenues by States over the Years 2003-04 to 2017-18

Over/Underestimation of Total Revenues for states (%)

		Year 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
General Category	KA	19.45	7.17	3.88	4.77	0.95	-8.36	1.58	8.52	-12.23	17.89	-8.62	-6.21	2.11	1.88	1.45
	MH	-10.24	2.13	-3.95	5.16	16.52	1.7	-2.41	9.09	-0.18	4.56	-3.95	-8.27	-6.66	-7.3	-0.03
	TN	4.59	14.76	12.26	5.63	6.71	6.87	-4.17	11.25	-0.56	-1.75	-8.89	-3.9	-9.58	-5.36	-8.21
	UP	-5.2	0.96	6.28	7.94	-7.22	-9.29	2.1	-0.39	-0.43	-8.15	-5.36	-14.57	-9.13	-8.77	-12.72
	AP	16.8	-10.66	-3.13	-0.19	-1.47	-11.38	-18.09	-10.65	-7.37	-11.09	-13.35	-1.53	-1.64	-9.44	-16.28
	KL	-6.96	-5.35	-8	-4.98	-1.58	-1.7	-7.26	-0.61	-3.59	-8.32	-15.3	-10.63	-10.84	-10.64	-11.29
	MP	-9.93	14.44	3.77	9.43	9.62	-2.4	3.59	19.36	8.33	0.73	-4.84	-14.35	-7.79	-2.21	-3.05
	RJ	-0.01	2.18	1.46	6.67	7.63	1.46	-7.53	8.16	9.03	5.96	-3.56	-13.94	-9.95	-11.54	-2.19
	GJ	-2.65	-2.64	7.97	17.96	8.27	1.04	-0.34	5.84	5.13	-0.89	-6.74	-10.75	-10.81	-5.61	-6.26
	WB	-3.33	-2.83	11.18	-3.27	-1.6	2.32	-12.74	-0.65	-10.77	-11.01	-17.56	-18.37	-2.98	-9.03	-7.97
	CT	-18.67	-1.58	12.15	6.04	3.06	0.04	-3.93	10.68	0.22	-5.74	-14.41	-22.04	-20.51	-12.6	-9.75
	GA	-34.38	-30.72	-24.51	-16.94	-12.95	0.53	-0.88	8.77	-1.53	-16.89	-11.73	-4.96	-13.94	-10.12	1.66
	HR	0.34	3.31	15.09	30.59	10.23	-14.95	-6.44	4.17	-4.56	-9.9	-13.18	-14.45	-9.09	-16.61	-8.89
	JH	-1.46	5.24	0	0	0	2.06	-88.94	0	-19.2	-23.61	-22.21	-27.34	-15.38	-15.61	-19.59
	BR	3.83	-3.8	-6.76	3.09	2.8	-1.7	-15.08	-5.72	-8.69	-12.46	-13.92	-23.07	-6.85	-15.25	-14.37
	OR	-4.11	3.38	10.96	16.6	12.84	5.76	-0.45	5.82	10.67	0.21	-4.59	-15.11	-2.82	-4.9	-4.19
	PB	-10.36	-11.93	-1.58	-16.19	-15.44	-10.95	-7.96	-3.53	-16.78	-15.75	-17.72	-13.08	-10.18	-4.38	-11.77
Special Category	HP	-1.27	9.27	12.22	20.15	25.13	-0.95	-1.26	9.68	3.19	-4.56	-11.24	8	-0.4	-0.02	-1.25
	MN	-5.01	15.83	1.2	2.53	27.01	6.48	-90.33	1.15	-3.89	-11.96	-15.51	-9.38	-4.36	-2.55	-6.65
	ML	8.53	-8.66	-11.55	-12.85	-24.69	-24.1	-9.43	-3.03	-16.92	-20.63	-26.99	-42.23	-16.18	-0.47	-17.79
	MZ	41.38	44.54	11.71	16.16	5.34	19.63	-1.52	3.71	7.03	-5.42	-5.45	-6.27	-6.95	-3.57	4.98
	NL	25.89	-5.9	3.29	2.08	-2.09	4.14	-4.86	-6.62	-0.45	-4.87	-10.93	-19.78	-9.54	-10.66	1.5
	AR	-	-95.33	25.42	29.61	28.81	-1.22	31.87	6.29	-7.44	-11.66	-28.68	4.09	-9.3	-7.79	-5.65
	AS	-18.11	-23.71	-9.53	-12.74	-9.79	-18.55	-13.78	-12.89	-16.12	-18.51	-21.97	-27.54	-25.6	-25.63	270.79
	SK	-36.16	-3.68	7.31	-33.57	-2.35	-0.67	8.87	-15	-12.26	-20.86	-13.4	-27.01	-21.19	-5.63	-2.13
	TR	-4.75	2.45	0.98	4.03	0.97	-4.5	21.81	-6.24	8.14	-1.59	-5.96	-14.41	-24.74	-25.15	-25.71

Source: Authors' Analysis; Data from RBI State Finances: A Study of Budgets of 2019-20

Note:

1) We calculate ((Actuals-Budget Estimates)/Budget Estimates)*100 to estimate overestimation/ underestimation. If the number is positive, then the budgets were underestimated and vice-versa.

2) Red indicates overestimations and green indicates underestimations.

Figure 1: Overestimation of Total Revenues by States
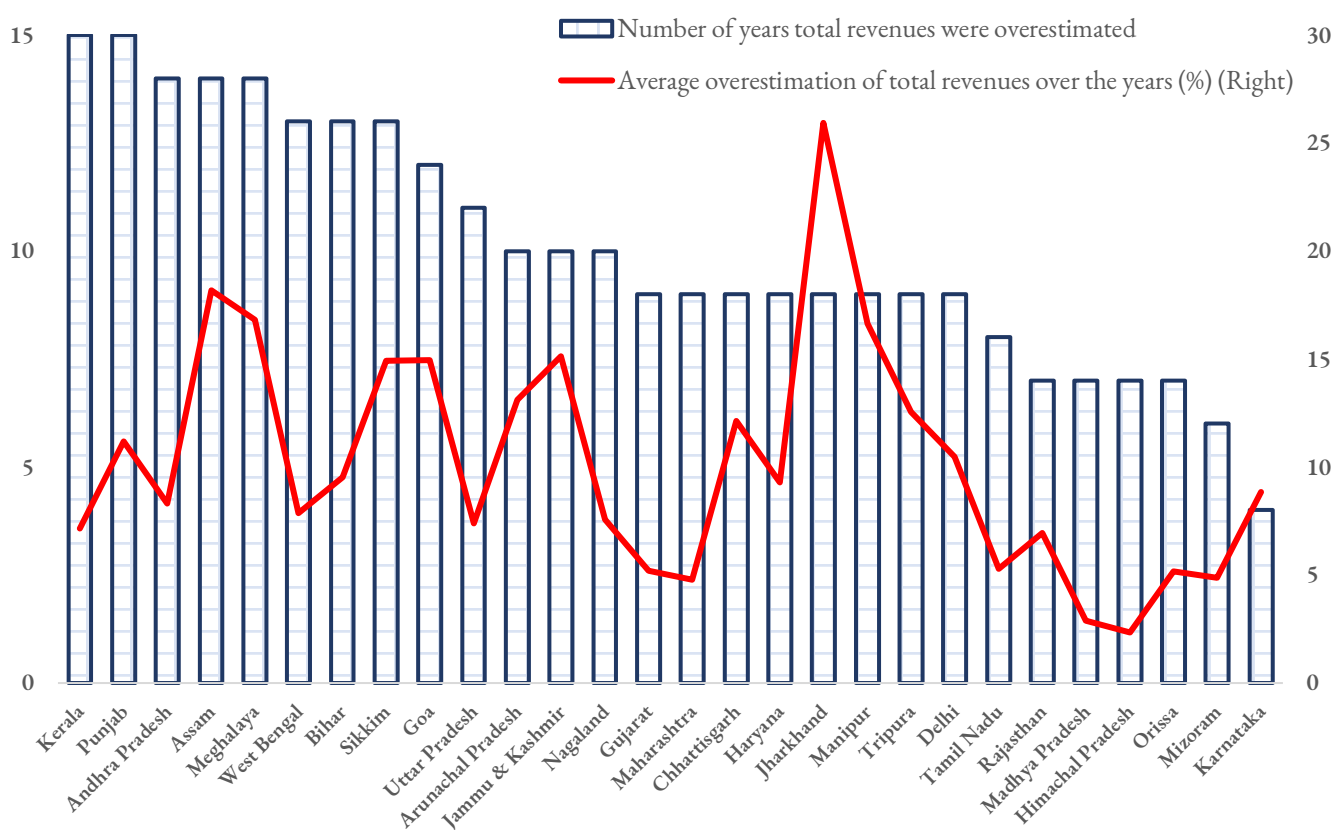
Source: Authors' Analysis; Data from RBI State Finances: A Study of Budgets of 2019-20

2. Grants from Centre Dominate Overestimation of Revenue

The total revenues of a state can be broadly divided into two components: the states' own revenues and central transfers.

1. States' own revenue refers to the revenue-raising capacity of a state through its tax and non-tax avenues. The state's own tax revenues are taxes levied specifically by the state, from entertainment tax to state sales tax (VAT). To a large extent, these have now been replaced by state goods and services tax (GST). The state's own non-tax revenues are from interest receipts on investments and loans to the provisioning of social and economic services.

2. Central transfers are primarily transfers of revenue collection by the Centre to fiscally support the states. They are divided into the following components: states' share of central taxes and grants from the Centre. The 'states share of central taxes' is the states' allocated component of the divisible pool of taxes which is the total tax revenue raised by the Centre and states, minus the cost of collection and excluding revenues from cesses and surcharges. Grants from Centre are transfers provided for states that need financial assistance for their plan and non-plan schemes, to primarily aid their revenue gap.

Our focus in this paper is on central transfers, and particularly on grants, for three reasons. We see that current literature has scrutinised the states' share of central taxes a fair bit but grants from Centre haven't received as much scholarship (Mohan and Shyjan, 2009; Bhanumurthy, Bose & Satija, 2019). Second, the RBI State Finances report, as well as other papers on fiscal marksmanship of states (Chakraborty et al., 2019), have pointed out that grants from Centre are the most problematic when it comes to estimation

errors[5]. Last, it is important to note that the tax devolution component of central transfers is governed by a fixed formula. However, the determination of grants by the Finance Commission is more discretionary as it is guided more by principles than a formula (Mann, 2018). Thus, analysis of this pillar of India's fiscal architecture is crucial.

The importance of grants has grown in state budgets. Figure 2 shows that average overestimation of states' own revenue is a lot less volatile than that of grants from Centre as well as the tax devolution to states (i.e states' share of central taxes). Also as seen in Figure 3, within the states' own revenues component, the estimation errors are much larger for the non-tax revenues than for tax revenues.

While the state's share of central taxes constitutes at least 40% of all central transfers, the extent of overestimation is low compared to grants from the Centre as well as the state's own tax revenues. The extent of overestimation of grants is large. At 11.02%, the mean overestimation of the grants component is more than double the mean overestimation of state own revenues (4.47%) and total revenues (6.02%). The standard deviation of overestimating total revenues and the states' own revenues is 10.71% and 7.9% respectively, compared to 24.67% for grants. This is despite the average allocation of grants increasing as a percentage of total revenues. In the 10 richest states, this increased from 12% in 2003-04 to 18% by 2017-18. It becomes clear from this that it is the grants from the Centre where the challenge of fiscal marksmanship for the states lies.

Figure 2: Average Overestimation of All Years of Grants, State Own Revenues, Tax devolution to states and Total Revenue by each state
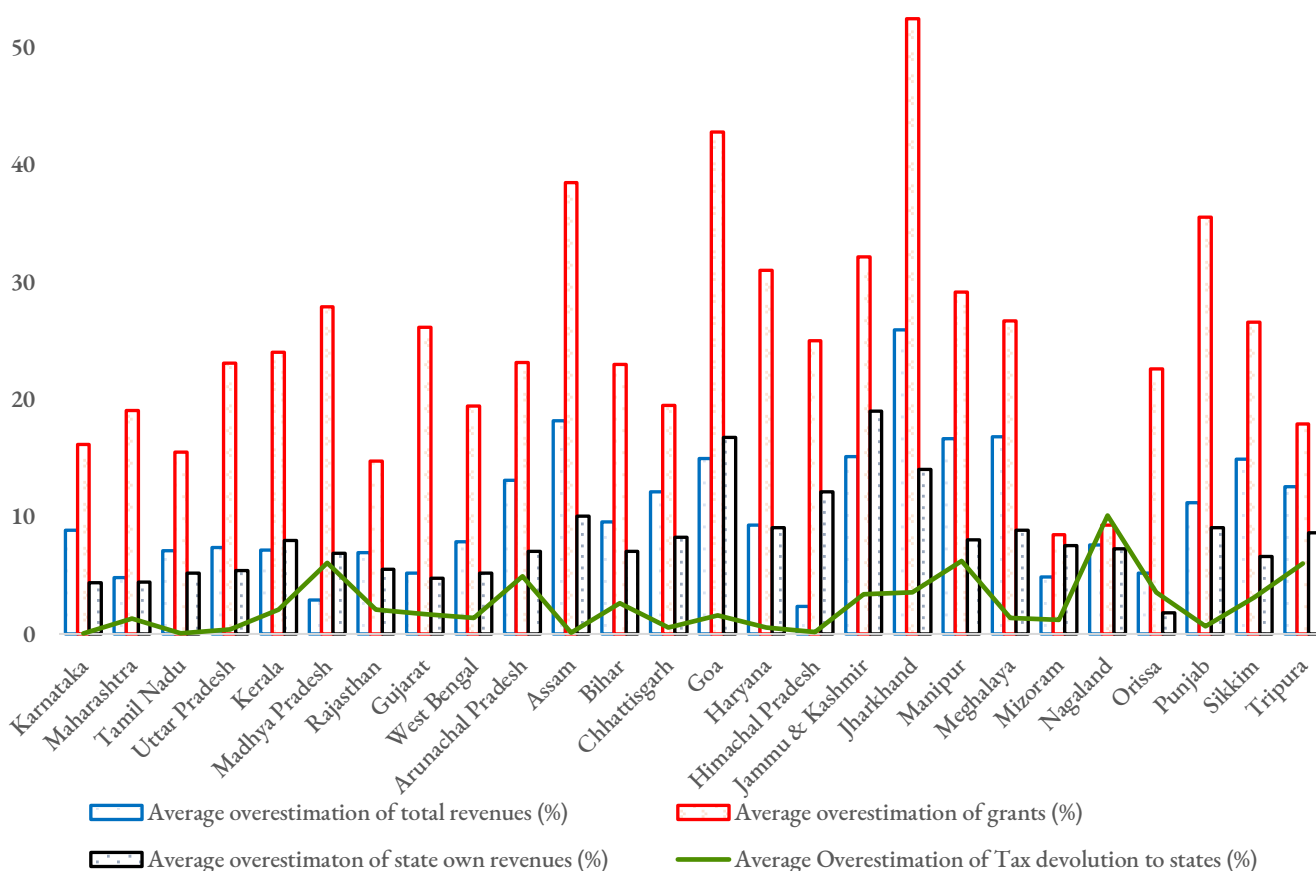
Source: Authors' Analysis; Data from: RBI State Finances: A Study of Budgets of 2019-20

Note: We removed the state of Andhra Pradesh from this figure as the state's overestimation of its own revenues was an extreme outlier: 2797 per cent in 2006-07. While we can't be completely sure, this could most likely be an input error which is reflected in some of the official estimates available.

Figure 3: Average Overestimation of State Own Revenues, (Tax and Non-Tax Revenue) by each State
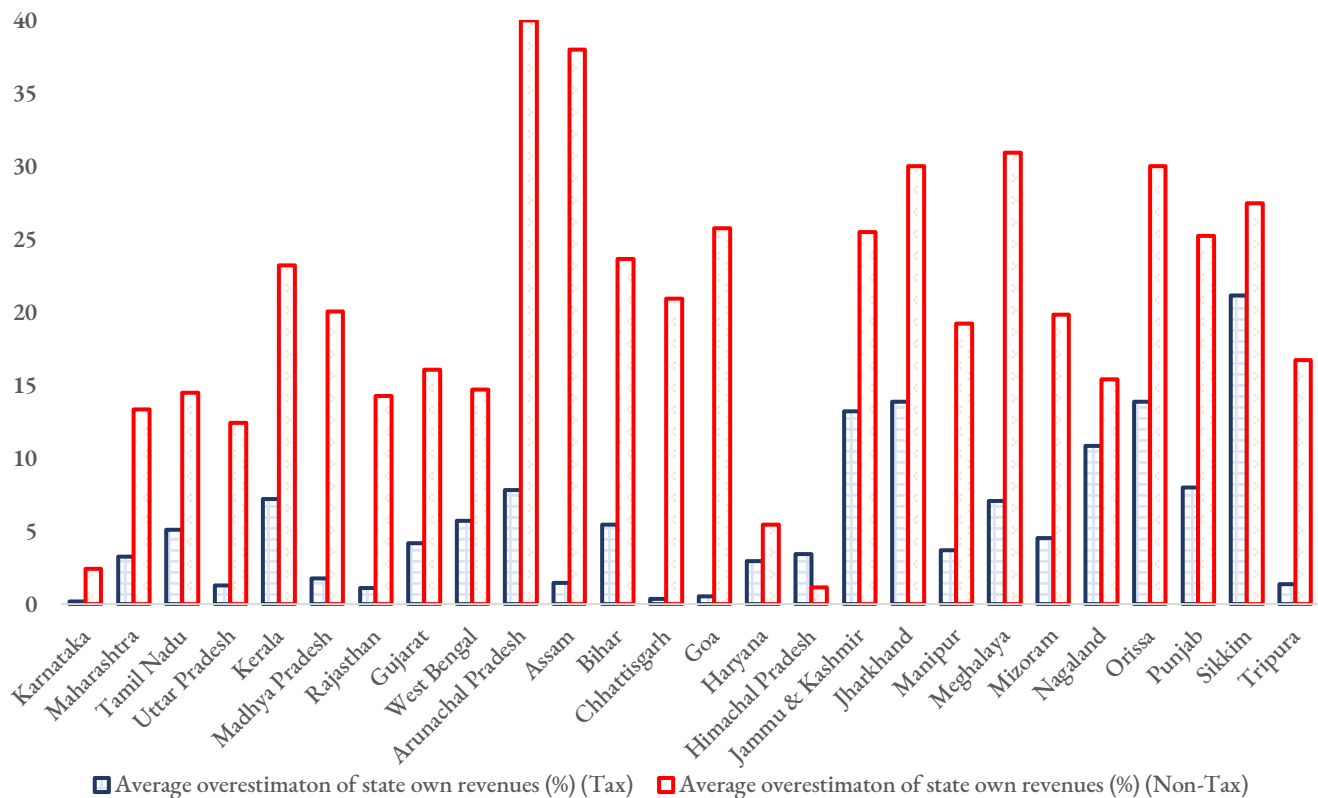
Source: Authors' Analysis; Data from: RBI State Finances: A Study of Budgets of 2019-20

3. State Plan and Centrally Sponsored Schemes Show Estimation Errors

Grants from Centre are transfers that are either recommended as general-purpose grants (untied in nature) to *enable* states to deliver services or as specific purpose transfers for areas such as health and education (primarily routed through centrally sponsored schemes) to *ensure* states deliver a minimal level of governance (Rao, 2017). Grants are further divided into two components: plan and non-plan grants. Plan grants further consist of state plan schemes, central plan schemes, centrally sponsored schemes and NEC/special plan schemes. We give the details of each of these schemes in the appendix of this paper. Two trends emerge in state plan schemes and centrally sponsored schemes as we analyse budget numbers for 28 states.

First, there is a huge disparity in the accuracy of the forecasts of state plan schemes. Table 3 shows the marksmanship of state plan schemes over the years 2003-04 to 2016-17. In the years 2012-13 and 2013-14, all states except three (Madhya Pradesh, Delhi and Tamil Nadu) overestimated state plan schemes. The average overestimation was a colossal 31% and 34.17% respectively. Some other data points are quite startling. In the year 2015-16, many states, from Maharashtra to Haryana and Jammu and Kashmir, underestimated their state plan schemes massively. Maharashtra underestimated its state plan scheme by 1268.76%. The next year was better but still at 692.81%. Haryana and Jammu Kashmir too

underestimated their state plans by a massive 576.26% and 626.28% respectively. On the other hand, Uttar Pradesh had an underestimation of 79.21% in 2015-16 but an overestimation the very next year of 538.59%.

The second trend that emerges is that errors in the forecasting of centrally sponsored schemes are frequent (see Table 4). As shown in Figure 4, Uttar Pradesh has overestimated the centrally sponsored schemes component of grants from the Centre for the most number of years -- 14 out of 15 years. The average overestimation of budget estimates of the schemes in these years was a high 32.45%. On the other hand, Tamil Nadu has underestimated the budget estimates of centrally sponsored schemes in 14 out of 15 years. The average underestimation for these years was a startling 74.9%. Sikkim too overestimated its centrally sponsored schemes in all 15 years. There is a huge variation even among the richest states and the most resource-intensive in getting their estimates of centrally sponsored schemes right. Moreover, the variations move in different directions, making the case for unpacking the marksmanship of these schemes. It is clear that marksmanship on the revenue side is quite poor. State plan schemes and centrally sponsored schemes contribute to this misjudgement more than the other components. We turn to the reasons for this in the next section.

### Table 3: Error in Forecasting of State Plan Schemes (%)

Year	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
KA	-39.68	8.08	-32.03	-30.48	-5.94	-1.83	29.57	17.85	3.02	-21.44	-9.16	-42.22	14.95	-20.04
MH	-43.59	-7.16	-18.22	78.38	4.35	1.89	-36.4	-30.42	-28.58	-43.83	-52.23	-76.16	1286.76	692.81
TN	-17.87	-2.58	-18.17	-3.46	4.9	19.06	-20.55	-25.86	-18.01	-9.22	0.74	290.24	7.19	-36.56
UP	-21.74	21.65	-16.07	4.45	-34.98	17.74	-0.97	-12.15	-9.89	-33.66	-9.63	-38.43	-79.21	538.59
AP	-16.37	-45.53	-37.14	-13.68	8.25	-21.03	-44.53	-57.02	-31.06	-45.04	-45.89	46.14		
KL	-36.61	-2.13	-23.61	-20.67	-5.36	-18.54	-42.74	-35.65	-32.61	-42.74	-53.03	-24.91	11.61	193.5
MP	-11.33	36.89	-9.04	26.14	6.54	-13.8	-93.03	-13.8	-28.15	38.5	-10.85	-61.2	-47.49	-5
RJ	24.09	9.99	-12.19	-12.26	40.04	49.94	-24.65	-0.97	-21.14	-30.01	-19.43	-33.16	-18.15	-29.07
GJ	-14.18	-10.23	-4.99	-26.46	0.67	-12.2	-46.95	-46.53	-41.39	-28.69	-45.93	62.14	-46.19	-3.04
WB	-23.89	1.1	-18.95	-9.06	-10.73	17.81	1.93	-8.23	46.89	-57.42	-55.24	-23.62	-39.36	40.86
CH	-26.97	5.45	-19.33	19.54	-18.08	-30.88	-15.43	39.71	-27.83	-20.08	-41.19	95.82	218.41	419.99
GA	-8.67	-15.28	-55.58	-62.53	14.55	-25.45	-57.25	-31.89	-67.02	-37.71	-29.26	-47.32	-80	-33.32
HR	104.76	17.04	91.95	91.86	54.62	62.21	-88.87	5.02	-53.23	-51.89	-46.48	143.64	576.26	59.81
HP	0.49	-11.47	-6.44	-59.12	466.4	-1.21	10.09	2.27	10.57	-1.55	-18.16	-15.09	-27.66	20.38
JK	2.27	6.57	0.28	-71.66	133.37	1.98	-1.38	-13.08	-23.77	-26.49	-39.8	-15.04	626.28	29.43
JH	0	0	-36.66	27.65	0	90.3	167.81	0	-57.88	-63.66	-69.64	-5.54	50.57	751.84
MN	10.59	49.2	-5.87	255.86	-82.18	4.55	-10.87	2.52	-6.66	-21.03	-28.59	-26.47	-11.4	-22.64
ML	23.39	-35.43	-16.79	-30.25	-44.25	-29.36	-9.32	-10.42	-26.81	-28.98	-25.32	-25.99	-51.35	-
MZ	84.18	146.29	-83.32	96.68	-14.22	1.11	18.34	-17.07	-1.5	-16.96	-22.28	-2.62	35.92	30
NL	39.28	-1.3	-28.93	16.35	3.72	10.34	1.94	-3.53	2.36	-13.97	-21.9	-38.36	-5.2	-88.95

AR	-16.37	-74.94	20.94	13.69	-0.89	19.91	4.8	7.94	-21.91	-6.64	-41.26	95.9	-	-
AS	-9.9	1.38	-23.89	-22.33	-19.82	-6.16	-7.52	-1.28	-31.79	-29.17	-35.62	-33.72	-55.97	-54.07
BR	43.09	14.49	-27.91	-12.04	-18.21	-21.14	-26.15	-7.59	-43.12	-43.46	-41.86	-48.31	-7.95	-51.52
OR	-38.39	-15.94	-21.08	-27.19	6.46	-1.66	-17.49	-15.82	-19.47	-26.77	-37.07	-37.87	-39.65	-19.99
PB	-38.38	-20.21	9.67	35.79	-26.25	-42.41	46.56	9.37	-64.38	-68.16	-84.12	-48.76	-41.42	-50.09
SK	4.04	-1.68	-21.09	-17.25	-21.69	6.4	10.97	-26.33	-23.44	-29.9	-15.08	-26.19	-61.76	53.27
TR	10.16	30.82	-0.6	6.58	-15.41	-5.9	-5.77	-6.96	9.04	-7.46	-5.91	-19.45	-58.67	-41.56
DL	12.57	8.22	-28.35	-68.71	-30.27	-34	46.2	47.1	-62.38	122.96	-17.53	-48.42	-40.52	-30.18

Source: Author's Analysis; RBI State Finances: A Study of Budgets of 2019-20

Note: The above table has data from 2003-04 to 2016-17. Data for Meghalaya and Nagaland are not available.

Figure 4: Estimation Error of Centrally Sponsored Schemes for Uttar Pradesh and Sikkim
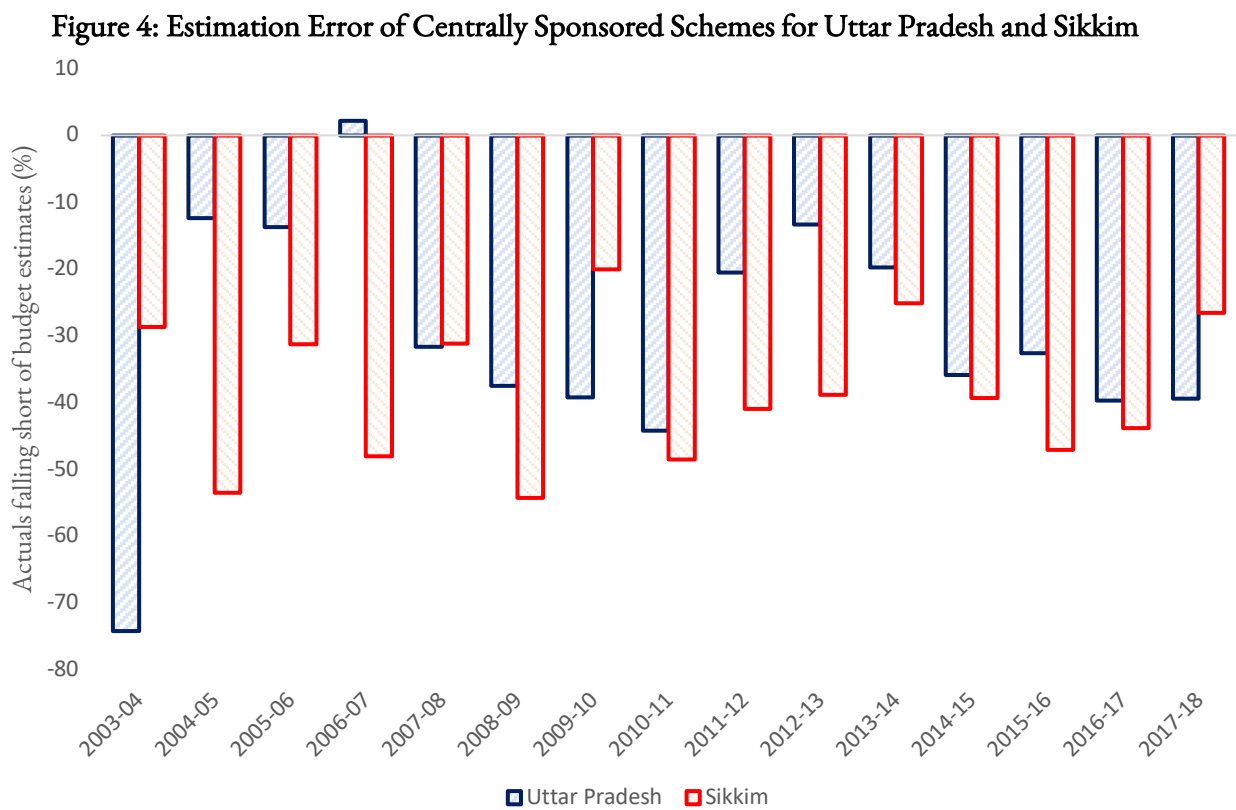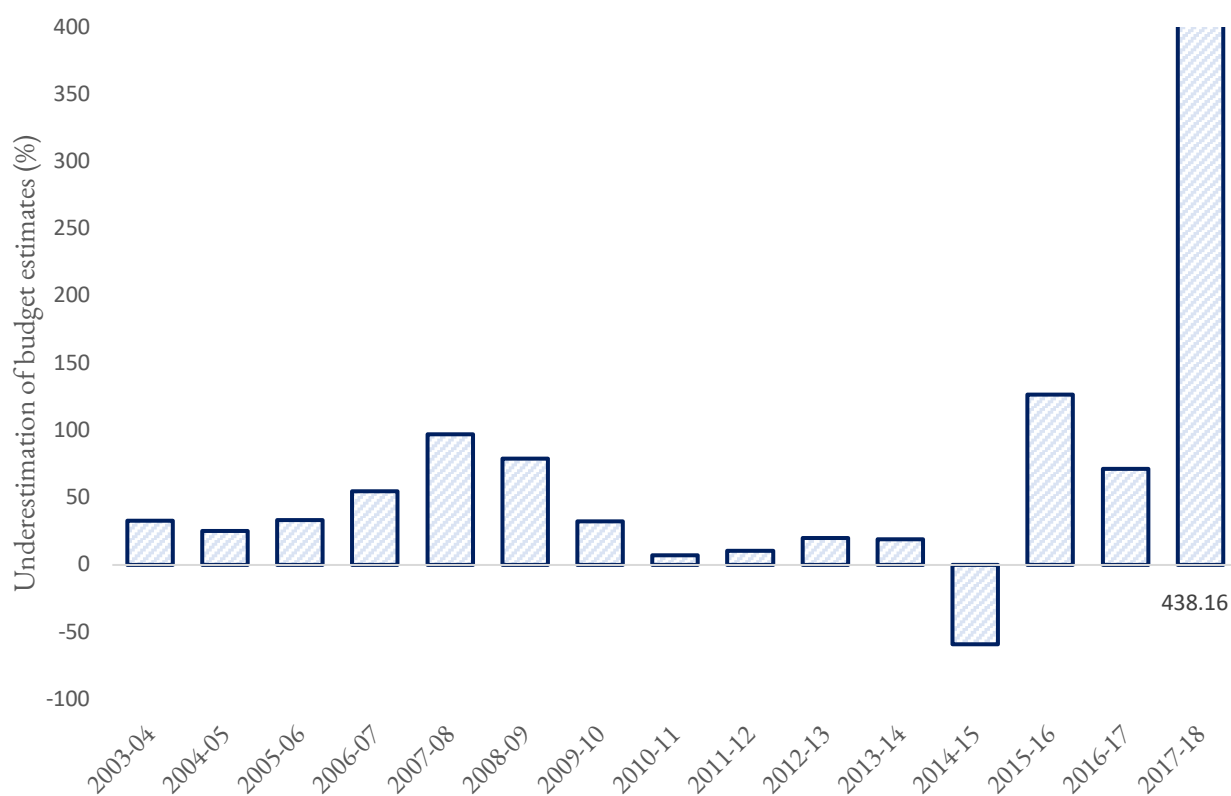
Source: Authors' Analysis

Data from RBI State Finances: A Study of Budgets of 2019-20

III. Reasons for Poor Fiscal Marksmanship

Poor fiscal marksmanship has many causes from poor planning and information assimilation to faulty execution of plans and schemes. However, the consistency in missing forecasts points towards at least a few structural problems that are germane to the budgeting process. In summary, the three main reasons for variations in actuals from projections for states are:(i) Centre's overestimation of its revenues resulting in variations in tax devolution and grants; (ii) Centre's wrong projection of its expenditures or unforeseen expenditures resulting in Centre cutting grants to the states; (iii) States' overestimation in projecting own revenue.

Before we get into the specifics, it is important to go over the process of estimating budgets. The grants are awarded based on the recommendations of the Finance Commission constituted once every five years. Plan grants were awarded by the Planning Commission till its abolishment, while the Finance Commission solely looked at non-plan grants. The basis on which the grants are recommended changes with each Finance Commission. For example, the First Finance Commission posited that the budgetary needs of the state, as well as the equitable allocation of resources, served as the governing principles for grant recommendations. The subsequent Commissions, while maintaining these broad principles, introduced additional criteria such as the fiscal burden of the Centre. The Fourth Finance Commission explicitly laid down the revenue gap-filling approach as a dominant principle. This approach estimates each state's revenue deficits post-tax devolutions from the Centre before recommending the grants. Since then, this has been accepted as the established principle to devolve grants to the states (Reddy & Reddy, 2016). Grants from the Centre are provided to states as a revenue gap-filling measure in cases where the

state's assessed expenditure exceeds the sum of its revenues. This process highlights two aspects that make fiscal marksmanship of grants from the Centre difficult.

1. The states' budgets are heavily dependent on the Centre's budget. The dependence of states on central transfers is high with relatively poor states depending on the Centre for nearly half their revenues (Jena, 2006). A misprojection or an unexpected revenue shortfall by the Centre means the states' finances get affected. This shortfall is more likely to be reflected in grants rather than say devolution of taxes because these are not based on a fixed formula. For example, as we pointed out earlier, the budgeting of state plan schemes has been consistently overestimated due to incorrect projections of transfers of devolved taxes by the Centre.

2. The budget reassessment exercise is a massively complex task given the number of budget heads and sub-components under various departments and schemes. To illustrate the scope of the problem, the government accounting system divides expenditure into six heads: major head, sub-major head, minor head, sub-minor head, detailed head and object head. Each state has 30-40 departments with one major head but numerous minor and sub-minor heads. A centrally sponsored scheme such as the National Health Mission could have countless sub-minor heads for the states to estimate and the Commission to evaluate. There would be numerous such schemes. Thus, we need to appreciate the complexity the Finance Commission faces when performing these calculations to meet the needs of the state while balancing the fiscal burden at the Centre.

We now investigate the issues faced by the states, Centre and the Finance Commission to outline some reasons for poor fiscal marksmanship of grants from the Centre.

1. States' Budgeting Exercise

The data bears out criticism of the accuracy of state budget forecasts. This is for numerous reasons. First, there is a lack of foresight and planning by departments while drawing out the budgetary estimates. State budgets are not well framed before drawing them and show little relationship between formulation and execution of policies (Jena, 2006). The true revenue gap assessment falters because of misestimation on both the revenue and expenditure side of the state budget. On the expenditure side, line departments have no expenditure ceilings to ensure their actuals are more in line with the estimates drawn. Drawing out forecasts without controls on spending therefore tends to veer away from the actuals.

To understand the process of budgeting more closely, we reached out to officials in government. In conversations with Secretaries and Under-Secretaries of the revenue departments of a state, we found that there is no rational way in which they project their estimates on expenditure. For some departments, they rely on information from the village/patwari level and aggregate that to project the estimates.[6] It is likely that the information provided is way off the mark. In certain cases, if they don't receive the information they have asked for, they ballpark the estimate based on previous year's estimates with an error band of +/- 10% and submit those to the Finance Commission. All of this adds to errors in estimating revenue gaps which then exacerbate the difference between budgets and actuals.

Second, the nature of funding of state plan schemes tends to cause issues with their projections.

These schemes are funded and executed by states for subjects that are specifically not on the Union list. As discussed earlier while outlining reasons for poor fiscal marksmanship, although state plan schemes are completely budgeted by the states, projection by states of their total revenues is still heavily dependent on the Centre and their tax devolution shares to states. A shortfall in tax devolution to the states leads to the budget for state plan schemes being cut as resources by the state would have to be diverted elsewhere.

Lastly, policy impact and exogenous shocks also affect projections. States may take policy decisions over the course of the five-year assessment period, such as introducing populist measures in an election year, that affect expenditure projections. A recent study of interim budgets shows that the budget estimates on expenditure are particularly biased in an election year, as governments undertake additional spending beyond what can be accounted for to appease vote banks (Pant, 2019). There are also policy decisions where the accounting of the expenditure is done after the policy announcement is made. For example, states, while announcing farm loan waivers, were yet to factor this into their expenditure budget of that year (Mishra & Singh, 2017). Exogenous shocks could also be due to a recessionary or inflationary environment, or a calamity or disaster that involves additional spending beyond what was stated in the Disaster Response Funds. Such shocks mostly result in random errors in estimating by states and make marksmanship difficult.

2. Getting Centre's Projections Right

Given the heavy dependence of the states on the Centre's budgets, Centre's projections play a huge role in the states' marksmanship. We studied the budgets of the Central government (Srinivasan, Misra and Rajadhyaksha, 2019) and found that the government had overestimated revenue in 18 out of 22 years and underestimated expenditure in 12 out of the 22 years, as shown in Table 5 below. The poor fiscal marksmanship was attributed primarily to errors in the forecasting of tax collections (also seen in Table 5). A similar study of the Centre's forecasts on revenues and expenditure reveals that forecasts are not rational in nature, and not all available information is factored correctly (Bhattacharya & Kumari, 1988). The sub-components of the plan grants from the Centre mostly involve funding for central sector schemes and centrally sponsored schemes.[7] Given this revenue dependence on the Centre, a shortfall in the Centre's revenue projections will ultimately result in the states receiving fewer grants.

The conditionalities imposed by the Centre contribute to the gap between the actuals and estimates of centrally sponsored schemes. Centrally sponsored schemes are broadly divided into 'core of the core', 'core' and 'optional' schemes with a prescribed model of revenue sharing.[8] This ratio of sharing between the Centre and the state is 70:30, 60:40 and 50:50 for General Category states and 90:10 for Special Category states. Further, centrally sponsored schemes are mandated by the Centre, and the actual grants released are tied to the state's actual performance with regard to the scheme (Garg, 2006). However, these guidelines are exacting and not geared toward better performance. For example, the National Health Mission lays down a population criterion for setting up a health facility, not considering that certain poor states may have low population density (Kapur, 2019).

In addition to this, the states need to raise and match the grants given by the Centre in the decided ratio. The actuals, in this case, differ from the estimates, if the states are unable to put up matching grants for a scheme. M. Govinda Rao, in his paper, elaborates on how a shortfall in grants from the Centre, results in states scaling back on capital expenditure rather than already committed revenue expenditure. This shortfall translates to reduced allocation for centrally sponsored schemes as well. Thus, if the states are unable to put up their end of the ratio, the grant from the Centre also falls through. On Sarva Shiksha Abhiyan, the poorer states couldn't access the grants given as they were unable to raise revenues of their own to match the grants due (Raghavan, 2014). The later instalments are only given after a state can fulfil extensive formalities (such as utilisation certificates) on the scheme in a very time-consuming process. In the time it takes to fulfil formalities, ground realities may change, and the Centre may introduce budget cuts (Rao, 2017). In cases where states are unable to utilize the initial tranche of grants, this too results in non-release or delay in transferring grants to the states (Jha et al., 2008). This invariably leads to

mismatched incentives on such schemes where the focus for states is on the utilisation of the money than on better implementation.

Table 5: Centre's Estimation Errors in Revenue and Expenditure over the Years 1997-98 to 2018-19

Year	% Difference in Actuals from Budget estimates		
	Revenue Receipts	Total Expenditure	Tax Revenue Receipts
1997-1998	-12.56	-0.05	-15.63
1998-1999	-7.71	4.27	-10.44
1999-2000	-0.73	5.00	-3.09
2000-2001	-5.42	-3.80	-6.36
2001-2002	-13.07	-3.40	-18.01
2002-2003	-5.45	0.94	-22.72
2003-2004	3.92	7.42	1.53
2004-2005	-1.07	4.15	-3.89
2005-2006	-1.06	-1.60	-1.17
2006-2007	7.66	3.44	7.33
2007-2008	11.40	4.72	8.83
2008-2009	-10.40	17.72	-11.98
2009-2010	-6.78	0.36	-2.58
2010-2011	15.58	7.99	6.22
2011-2012	-4.87	3.71	-4.64
2012-2013	-6.03	-5.40	-3.84
2013-2014	-3.94	-6.36	-7.86
2014-2015	-7.42	-7.31	-7.54
2015-2016	4.68	0.75	0.42
2016-2017	-0.20	-0.14	5.21
2017-2018	-5.31	-0.22	1.26
2018-2019	-10.01	-5.20	-11.04

Source: Authors' Analysis; Data from: Union Budgets of India

3 The Difficult Job of the Finance Commission

The Finance Commission makes recommendations on grants based on the estimates and forecasts of revenue and expenditure of the Centre and states. This data, as discussed earlier, is filled with errors. It is tasked with doing the necessary adjustments to make the state budgets' data comparable as well as the projections realistic (Reddy & Reddy, 2019). It also judges the revenue needs according to the norms laid down factoring in tax effort, the state's economy and expenditure before awarding grants. Despite these

efforts, there is a divergence between its projections and the actuals as shown in Table 6. Certainly, this divergence leads to issues with fiscal marksmanship at the states.

Table 6: Non-Plan Revenue Deficits, Projections and Actuals

Finance Commission	Finance Commission Projection	Actual	Variation (Actual over Projection)	Percentage Variation
Tenth (1995-2000)	7582	61831	54,249	715.5
Eleventh (2000-5)	35359	183997	148,638	420.4
Twelfth (2005-10)	56857	164964	108,107	190.1
Thirteenth (2010-15)	51799	139689	87,890	169.7

Source: Indian Fiscal Federalism by Y.V Reddy and G.R Reddy (Chapter 9, Page 141)

The above table suggests that the actual transfers were far greater than what the Finance Commission projected - possibly due to tax collections being better than projected. This will necessarily creep into marksmanship of states. There are many reasons for such a divergence to occur. First, the governing principles set by the Finance Commission on awarding grants give rise to perverse incentives. One of the dominant principles for the awarding of grants is the budgetary needs of the state accounted for through the revenue gap. But this principle gives rise to moral hazard providing an incentive to indulge in 'fiscal dentistry' - to underestimate their revenue projections and overestimate expenditure - in an attempt to receive more grants from the Centre (Rao, 2000). Further, there remains a perception amongst states that the Finance Commission scrutinises their revenues and expenditure according to much stricter norms and hence more states attempt to accordingly tailor their budgets (Reddy & Reddy, 2016). This, of course, doesn't explain why actuals are greater than projections but indicate why it will be hard for the Finance Commission to project correctly.

The Finance Commission not only has to reassess the revenue gap of the states but also has to see the fiscal room available from the Centre's coffers to bridge that gap. The 14th Finance Commission re-assessed the state's pre-devolution revenue gap as being Rs. 25.7 lakh crores or 2.7% of GDP between 2015-16 and 2019-20 compared to the Rs. 59.3 lakh or 6.21% of GDP gap projected by the states as seen in Table 7.

Table 7: State projections and Fourteenth Finance Commission Re-Assessment for 2015-16 to 2019-20

Item	States' Projections (Rs crore) (% of GDP)	Finance Commission Re-Assessment (Rs crore) (% of GDP)
Own Revenue Receipts	7041349 (7.36%)	8209352 (8.58%)
Revenue Expenditure	12980292(13.57%)	10632315 (11.12%)
Pre-Devolution Revenue Gap	5938943(-6.21%)	2577919 (-2.70%)

Source: Fourteenth Finance Commission Report

As stated earlier, specific purpose grants - such as grants for centrally sponsored schemes - are tied to more conditionalities. Sector-specific grants have been granted since the Third Finance Commission with the Sixth Finance commission the first to make large increases in sector-specific grants. The Seventh Finance Commission recommended grants to specific states which had underdeveloped administrative standards. The Eleventh Finance Commission mandated grants for special problems of states and to local bodies based on the 73rd and 74th Amendments to the constitution. These specific purpose grants such as the local body grants were given to augment the finances of municipalities and rural panchayats. But in cases where states did not comply with the norms for these specific purpose grants such as raising their share of the grant, the subsequent transfers were held back. This ultimately explained the variation of the budgetary estimates. It is only the 14th Finance Commission that, in a major deviation from the previous Commissions, did not recommend sector-specific or state-specific grants. Instead, it recommended more untied grants to the states, more in line with the spirit of cooperative federalism.

Last, the Finance Commissions make macroeconomic assumptions around the growth rate of the global economy, price level and interest rates etc to arrive at a projection closer to actual outcomes. Such unanticipated shocks are many and contribute to the random errors in deviation of actual outcomes from projections. Shocks from the global economy are hard to predict: recessions, oil spikes, domestic shocks such as increased financing of public and foreign debt due to inflation spikes, and slowing down of investment due to adverse policies. These impact revenue and expenditure projections. A bad drought or a natural disaster for which adequate funding has not been set aside, will also potentially throw off calculations. These are, however, largely random factors where it is difficult to achieve better fiscal marksmanship compared to the systemic biases in forecasting (Chakraborty & Sinha, 2018).

Conclusion

The above analysis makes it clear that fiscal marksmanship of the states has too many variables and too many actors for it to be precise. The volatility of fiscal transfers — both tax devolution and grants — has a detrimental impact on the functioning of the state. On the tax devolution front, the Goods and Services Tax (GST) and the compensation cess, defined by a formula by the Finance Commission should help to reduce volatility. The GST compensation cess for revenue losses should ideally help states budget their revenue estimates better and reduce uncertainty. However, it is hard to determine the impact of GST on fiscal marksmanship of fiscal transfers, given the limited number of years we have data for. On grants from Centre, which we have delved into, numerous forecasting issues are both pertaining to systemic issues germane to the institution involved, and random or unforeseen errors due to the contingent nature of public policy. While the latter is hard to control, more can be done to reduce errors in the former.

At the state level, problems that can be addressed are the poor estimation methods employed, the under-capacity of most finance departments in drawing out budgets and the better implementation of schemes and projects. In addition, governments would do well to stay clear of arbitrary policies that introduce unaccounted expenditure that stress public finances. The issues faced by the state hold for the Centre as well. It too employs poor estimation methods — for example, its estimates on tax collection are more like ambitious targeting than rational estimation. Given the dependence of the states on the Centre, it must fix its budgetary processes.

Last, impractical conditionalities — imposed either by the Centre or the Finance Commission — for grants for specific purposes have resulted in deviations from actuals. Beyond these issues are largely the

exogenous factors which cannot be foreseen or controlled. Thus, while estimates can never be exact, there is enough scope to minimise such errors.

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Notes

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[2] Fiscal marksmanship is calculated by assessing the difference between actuals and budget estimates, published by governments every year. We would like to point out that the percentage 'estimation' or 'forecasting' errors in this paper are calculated with respect to Budget Estimates and not Actuals. Thus, this paper estimates it as [(actual - budget estimate)/budget estimate].

[3] Grants from Centre are the same as Grants-in-Aid. For this paper, we refer to them as Grants from Centre. An additional caveat we would like to add here, highlighted by Govinda Rao, is that the

temporal study of grants is marked by discontinuity in grant policy. In the initial years, money was transferred through the state budgets but in the years post 2005-06, grants for many schemes were increasingly routed to the implementing agencies bypassing state budgets. In 2013, post recommendations of the High-Powered Committee on Public Expenditure Efficiency chaired by Dr Rangarajan, grants were rerouted through state budgets. We undertake this study despite these shifts in policy over the years.

[4] We restrict it to the 28 states due to availability of data for all 15 years we study from 2003-04 to 2017-

[5] The RBI State Finances 2019 report notes that 'While the extent of overestimation is growing steadily in case of states' own tax revenue (7.2 per cent in 2013-14 to 11.1 per cent in 2016-17), the over-estimation in total revenue is consistently dominated by grants from the Centre' (Annex II.1,pg 29).

[6] The established process both for Centre and states is: (i) issuance of budget circular in October every year to the spending departments along with assumption about the growth, inflation and other relevant macro parameters and indicative budget envelope for the department; (ii) the heads of departments forwarding the circulars and directions to the Drawing and Disbursement Officers to prepare their estimate of expenditures for the ensuing year and the latter are required to prepare their expenditure estimates based on the inputs they receive from their subordinates; (iii) Compilation by the heads of spending departments and communication of the estimates to the Finance Department; (iv) Discussion of each spending department with the Finance Department to match the expenditure estimates with projected revenues.

As detailed in the paper by Mishra (2014), 'the state's budget preparation begins with the submission of budgets by the Drawing and Disbursement Officers (DDOs) who are based at district and sub-district levels. These budgets are submitted to the state's Estimating Officer by the end of August each year. The Estimating and Controlling Officers scrutinize the budgets prepared at the district level and, after separation by department, send them to the heads of the respective departments of the state by mid-November.'

[7] Central sector schemes are completely funded as well as executed by the Central government and departments, on subjects on the Union list. Centrally sponsored schemes, while funded by both the Centre and the state governments, are implemented by states and their agencies.

[8] This classification came in only after 2015-16, based on a report by the NITI Ayog committee. This was in response to the Union government making the States contribute more to the schemes after the 14th Finance Commission increased the States' share in tax devolution.

Appendix

Concept	Definition
State plan schemes	State plan schemes are plans funded and executed by states for subjects that are specifically not on the Union list.
Central plan schemes	Central plan schemes are those that are directly funded as well as executed by the Central government and departments, on subjects on the Union list.
Centrally sponsored schemes	Centrally sponsored schemes are schemes while funded by both the Centre and the state governments, are implemented by states and their agencies. There is a prescribed model of revenue sharing between the Centre and the state with a greater share of the funding allocated to the Centre. This ratio of sharing between the Centre and the state is mostly - 50:50, 70:30, 75:25 or 90:10 - depending on the category of the state and scheme.
North-Eastern council or special plan schemes	North-Eastern Council or special plan schemes are schemes specifically designed for the development of the North-Eastern states, where the schemes are either funded completely by the Centre or funding is shared in a 90:10 ratio model between the Centre and states.
Non-plan grants	Non-plan grants are grants given to cover non-plan gaps on revenue accounts of the states.