

Analysing Telangana State Finances: Elongation of Term to Maturity of Debt to Sustain Economic Growth

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Analysing Telangana State Finances: Elongation of Term to Maturity of Debt to Sustain Economic Growth

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Abstract

Telangana, the new State of India, was formed on June 2, 2014 as per Andhra Pradesh Reorganisation Act, 2014. As per the State Reorganization Act, all the outstanding liabilities on account of Public Debt and Public Account of the existing State of Andhra Pradesh needed to be “apportioned on the basis of population ratio” of the successor State Telangana. Given the development agenda of the new state, it is a formidable challenge to adhering to fiscal rules by containing the debt-GSDP ratio at 20 per cent, while maintaining the stipulated economic growth path of the State at 14-15 per cent, and even at the projected 20 per cent in the long run. Laudable the State’s efforts to maintain the high growth trajectory, however the macro-fiscal parameters of the State - especially deficit and debt- are not within the stipulated fiscal threshold ratio. Against this backdrop, Telangana has adopted a new debt strategy to go for elongation of maturity structure of outstanding debt, to over 40 years, to mitigate the roll-over risks and debt servicing costs. This resilient debt strategy of shift towards long term to maturity structure of public debt is particularly relevant when Telangana has ambitious projects like “*Rythu Bandhu*” scheme (income support to farmers) and the capital infrastructure projects for public irrigation and the comprehensive drinking water programme to all households termed “*Mission Bhagiratha*”. The tax buoyancy is above unity, though there are revenue uncertainties from GST and the intergovernmental fiscal transfers from Finance Commission. This can affect the State’s macro-fiscal projections. The fiscal marksmanship analysis shows that there are errors in fiscal forecasting, which calls for internal corrections within the Department of Finance in their forecasting models of revenue and expenditure.

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Analysing Telangana State Finances:

Elongation of Term to Maturity of Debt to Sustain Economic Growth

Telangana, since its formation on June 2, 2014, as per the Andhra Pradesh Reorganisation Act, 2014., is on the high growth trajectory and the economy is growing at a higher rate than national GDP growth. The state maintains a surplus revenue deficit. But Telangana has a fiscal deficit-GSDP ratio slightly higher than the FRBM-legislated threshold at 3%. The outstanding liability of the state is also above the FRBM stipulated ratio at 20%. Laudable are the achievements of the new state in terms of economic growth, but macro-fiscal fundamentals like fiscal deficit and outstanding debt not in concomitant with the FRBM targets. Therefore fiscal sustainability is a concern.

Telangana has formulated a medium-term fiscal framework to work towards stipulated threshold in debt-deficit dynamics. On the expenditure side, Telangana has ambitious projects. It was the first state to announce an income support scheme for farmers (Rythu Bandhu scheme), among the other five states in 2019-20. This is in the form of unconditional cash transfers to farmers, instead of providing them loans. Farmers' credit waiver has created "moral hazard" issues. The RBI State Finances report noted that these income support transfers are categorised as "Green Box payments" within the framework of the World Trade Organisation (WTO).

Telangana has given importance to capital infrastructure projects to sustain economic growth. The flagship capital projects in Telangana include public irrigation projects and a comprehensive drinking water programme termed "Mission Bhagiratha" to provide safe drinking water to all the households.

On the revenue side, given the uncertainties in GST revenue, taxes are buoyant. We will revisit this point later. The intergovernmental fiscal transfers from the 15th Finance Commission are a potential source of revenue to finance their ongoing capital projects. The 15th Finance Commission, during the commission's state visit, noted that though capital projects in Telangana have a multiplier effect on economic growth, the rising debt and deficit is a matter of concern. The state has echoed the concern that the potential significant weightage to "population 2011" in the forthcoming tax transfer formula of the 15th Finance Commission can plausibly reduce fiscal transfers to Telangana, unless the commission designs a transfer scheme to mitigate this potential loss to those states that have well managed demographic transition.

Chatterjee and Eyigungor (2012) noted that when the possibility of self-fulfilling rollover crises is taken into account, "long-term debt is superior to short-term debt." The other plausible benefit of long-term bond issuance is that it can fix the yield rate at current levels of interest rate scenario, and also act as "reference rates." The recent OECD Sovereign Borrowing Outlook report also showed that the share of long-term debt in the central government marketable debt reached 90% in 2015 in the OECD region, and is projected to rise gradually. This relatively high level of longer-term debt redemption profile in the OECD region is to limit the potential rollover risk and to make the debt portfolio resilient. The RBI State Finances report emphasised that, in India, the maturity structure of debt of the government of India

has been steadily increasing, with the tenure of the longest sovereign debt security being 40 years.

As noted by RBI, since 2015-16, 15 state governments including Telangana and the UT of Puducherry have issued longer tenor securities. Among these states, Telangana has the longest tenor for state government securities, with the debt maturity profile being 30 years. This is instructive, how a state within the framework of fiscal rules manages to keep aspirational choices to take itself to higher growth trajectory.

Against this backdrop, we analyse the State Finances of Telangana. Section I analyses the economic growth and its composition. Section II analyses the debt deficit dynamics. Section III deals with revenue receipts of Telangana, while Section IV analyses the public expenditure patterns. Section V explains the debt strategy. Section VI concludes.

I. Economic Growth

The GSDP growth rate of the State is around 13-14 per cent. Within GSDP, the State is marking significant growth in tertiary sector. The prime component of growth intra-service sector is real estate, ownership of dwelling and professional services (Directorate of Economics and Statistics, Government of Telangana, 2017). The State is channelizing a good amount of resources towards irrigation and flood control as part of economic service.

Table 1: Telangana - Sectoral Composition of GSDP (at current prices)

Sector	2014-15*	2014-15	2015-16SRE	2016-17FRE	2017-18AE
Primary	17.9	19.5	18.1	18.8	18.2
Secondary	25	19.2	18.3	17	16.4
Tertiary	57.1	61.3	63.6	64.2	65.2

Figures show percentage contribution.

SRE: second revised estimate; FRE: first revised estimate; AE: advanced estimate

Source: Directorate of Economics and Statistics, Government of Telangana, Hyderabad

*Ministry of Finance, Government of Telangana, <https://finance.telangana.gov.in>

II. Debt and Deficits

The effective debt management is very crucial for fiscal management. It provides support for better budget design consistent with medium term fiscal policy. The State has public debt apportioned as per the Andhra Pradesh State Reorganisation Act 2014. As per the State Reorganization Act, all the outstanding liabilities on account of Public Debt and Public Account of the existing State of Andhra Pradesh needed to be “apportioned on the basis of population ratio” of the successor State Telangana.

Table 2 :Debts and Deficits of the State Telangana (% of GSDP)

	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019RE	2019- 2020BE
Revenue Deficit	0.073	0.041	0.21	0.459	0.041	0.665
Fiscal Deficit	-1.86	-3.2	-5.35	-3.52	-3.36	-2.81
Outstanding liabilities	17.51	18.74	22.51	24.23	24.77	23.00

Source: Finance Account and Budget Document of Telangana, various years

Telangana has no revenue deficit since 2014-15 as like erstwhile undivided Andhra Pradesh. The State experienced 2.6 times increase in revenue receipts (as ratio of revenue receipt in 2014-15 to revenue receipts in 2019-20), while revenue expenditure increased by 2.5 times. In both 2018-19 and 2019-20 (proposed) revenue receipt is more than revenue expenditure. The inter-temporal growth rate of revenue surplus between 2014-15 and 2019-20 BE is shown as 16.8 per cent while at the aggregated sub-national level, revenue expenditure outpaced revenue receipts.

Telangana was able to maintain the fiscal deficit limit of 3 per cent only in 2014-15 when it was formed. Since then, fiscal deficit was more than 3 per cent in every year. Telangana experiences a rise in fiscal deficit from 3.2 per cent in 2015-16 to 5.35 per cent in 2016-17 and further to 3.52 per cent in the following year. As per the revised limit of fiscal deficit at 3.5 per cent by the new FRBM rule, Telangana was just at the threshold limit in 2018-19RE. The higher fiscal deficit (greater than 3 per cent) have been noticed which may take into account the recommendation of 14th FC allowing flexibility of 0.5 per cent over and above the annual fiscal deficit limit on fulfilling certain conditions.

In 2015, the 14th Finance Commission recommended that states continue to maintain a fiscal deficit at 3% of their GSDP. It suggested that the fiscal deficit limit be relaxed to a maximum of 3.5%, only if states were able to contain their debt and interest payments to specified levels. The relaxation would be allowed in the following cases:

- (i) 0.25% if the debt-GSDP ratio of the State was under 25% in the preceding year, and
- (ii) 0.25% if interest payments of the State were less than or equal to 10% of its revenue in the preceding year.

These above mentioned extra-borrowing powers can be availed by a State either separately or simultaneously only if, firstly, there is no revenue deficit in the year in which the borrowing limits are to be fixed and the immediately preceding year and secondly, a control over the fiscal deficit at its stipulated limit of 3 per cent.

Table 3: Ratio of Interest Payments to Revenue Receipts in Telangana (%)

Year	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019RE	2019-2020BE	Average
Interest payment/own revenue receipt (%)	14.63	13.90	14.80	16.84	16.07	15.38	15.27
Interest payment/Total revenue receipt (%)	10.24	9.93	10.40	12.20	9.80	10.55	10.52

Source: computed; data source: Finance Accounts and Budget Document of Telangana,

Telangana would not afford the extra borrowing benefit limit of 0.25 per cent in the current financial year as the last actual figure- of FY2017-18- puts in front the interest payment obligation out of total revenue receipt quite higher than 10 percent (tables 2 and 3). The revised figure of 2018-19 was resilient the interest obligation within the limit of 10 percent. Parallel to that, in the latest budget the State claims to reduce the deficit level at 2.81 per cent quite below than 3.25 per cent.

An analysis of fiscal marksmanship ratios reveal whether Telangana have the errors of overestimation or underestimation of macro-fiscal parameters. This newly formed State allowed us to compute the ratios based on three time points. The ratios are computed by considering the BE, RE and Actual figures for the year 2015-16, 2016-17 and 2017-18. Over estimation is explained by the magnitude of the ratios greater than 1. The far the ratio is from 1, signifies higher extent of overestimation. The underestimation is denoted by the values of the ratios less than 1.

From the table 4, it is quite clear that all the fiscal parameters are overestimated as per budget estimates except fiscal deficit. The highest over estimation is being observed for grants from centre. The RE/Actuals give an under stated values for own non-tax revenue, capital expenditure and revenue deficit. The best estimation is observed for tax devolution. On the other hand, fiscal deficit is thoroughly underestimated both on proposal and revision of budgets.

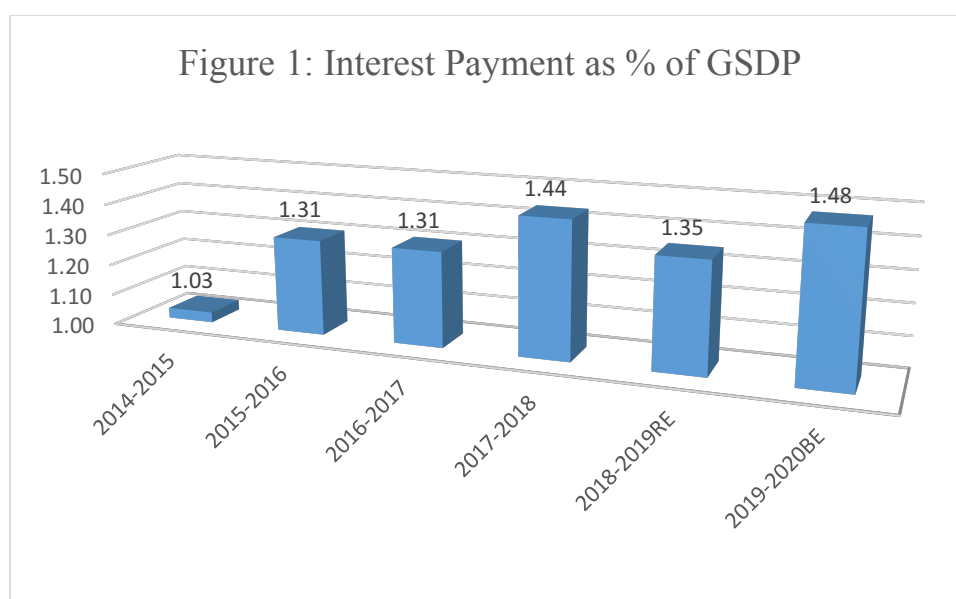
Table 4 : Fiscal Marksmanship in Telangana

Heads	BE/Actuals	RE/Actuals
Total Revenue Receipt	1.33	1.19
Own Tax Revenue	1.13	1.07
Own Non-tax Revenue	1.45	0.81
Share in central taxes	1.00	1.01
Grants from centre	1.98	1.83
Revenue Expenditure	1.23	1.12
Capital Expenditure	1.08	0.89
Revenue Deficit	1.74	0.36
Fiscal Deficit	0.82	0.63

Source: (Basic data), Finance accounts and Budget documents of various years, Government of Telangana

Telangana has fiscal deficit to GDP ratio higher than the rule-based numerical threshold in every year, which clearly defines the fiscal stress of the State in front of the challenge for fiscal consolidation. The expenditure on capital account is underestimated on revision of budget.

Over the years, the pressure of outstanding liabilities is increasing. The last four budgets mark outstanding liabilities higher than the stipulated limit by 14th Finance Commission. (table 2). In order to combat the situation, this State plays an important role by elongating the duration of debts issued by the State government more than 10 years up to a maximum limit of 30 years. The burden of interest payment given the ability of revenue raising capacity of the State indicates us the clear direction to measure debt sustainability of the State.



Source: CSO and Finance Accounts (various years)

Figure 1 depicts that the percentage of interest payments to GDP ratio in Telangana varies within the limit of 1.03 to 1.48 approximately over the period of last 6 years including the latest budget proposal. The ratio of interest payments to own (tax and non-tax) revenue indicates the strength of fiscal sustainability. It measures the ability of the government to meet past and present debt obligations out of its own resources. The average (interest payment/own revenue) per cent for 16 major states of India during 2015-16 was 21.54 per cent. We incorporate this ratio for Telangana for 6 fiscal years (table 3), which marginally above the stipulated limit at 10 per cent.

A consistent revenue surplus implies that the State is self-sufficient on the border line to meet its own expenses. The crucial challenge comes to hold the fiscal deficit at the limit of 3% because fiscal deficit accounts the total expenditure over total receipts clubbing together revenue account and capital account. And the fiscal deficit generates the State's inclination towards borrowings to fill the gap. It is a latest challenge to Telangana to hold the limit.

III Revenue Receipts

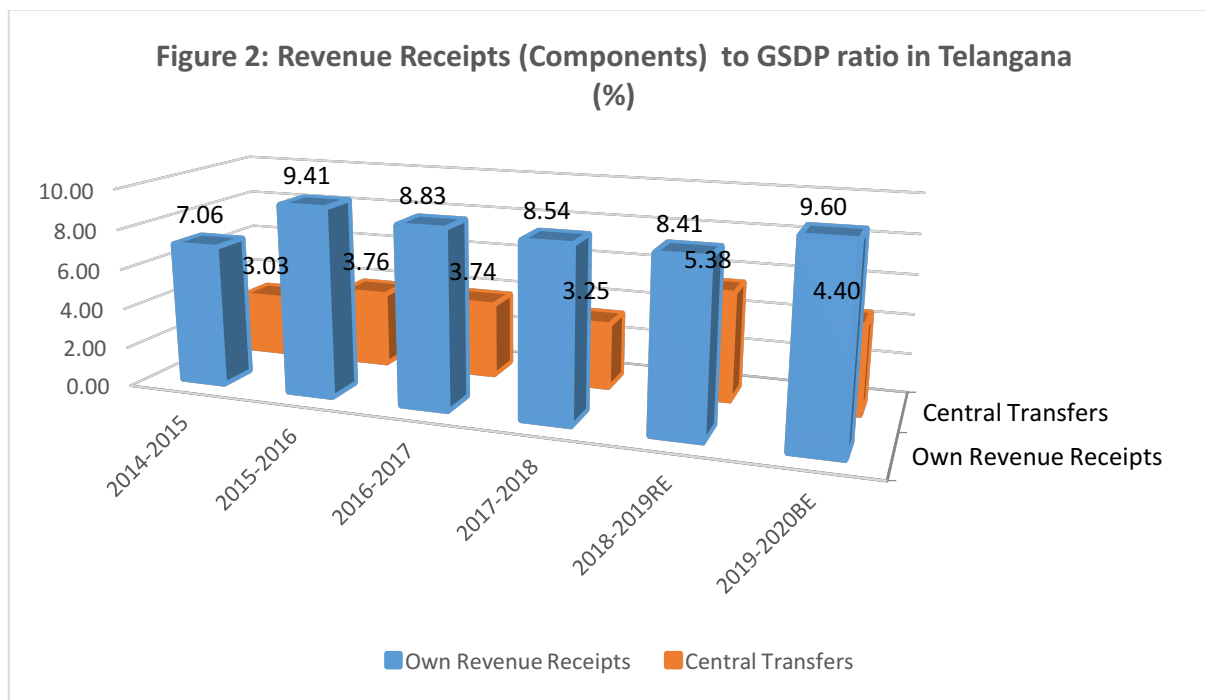
We observe that in 2017-18, Telangana achieved 11.78 % of GSDP as total receipt of revenue and in 2019-20, it is 13.99 % of GSDP. The growth rate of GSDP of Telangana in FY 2017-18 over its previous year was at double digit at 14.3%. In FY 2017-18, GSDP own revenue collection to GSDP ratio was 8.54% (table 5). When Telangana was formed in 2014-15, the share of own tax revenues to GSDP was only 5.79 %. In the 2019-20 BE, this is expected to be 8.59 %. This marks a growth of 48.35 % in the tax revenue over 6 years or to be precise, more than 8% average annual growth. The share of non-tax revenue to GSDP is continuously falling since 2015-16, but has improved in 2019-20 as per budget estimates. The figures for non-tax revenues were at peak of 2.49% in 2015-16. There was a dip in 2018-19, when non-tax revenue fell to 0.70%, as per revised budget estimates of that year.

Table 5: Revenue Receipts (as % of GSDP)

Budget Details (FY)	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019RE	2019- 2020BE
Total Revenue Receipts	10.09	13.17	12.57	11.78	13.79	13.99
Own Revenue Receipts	7.06	9.41	8.83	8.54	8.41	9.6
Own Tax Revenue	5.79	6.92	7.35	7.5	7.71	8.59
Own Non-tax Revenue	1.27	2.49	1.48	1.04	0.7	1.01
Central Transfers	3.03	3.76	3.74	3.25	5.38	4.4
Tax devolution	1.62	2.14	2.26	2.18	2.14	2.08
Grants-in-aid	1.41	1.63	1.48	1.07	3.24	2.31

Source: Finance Account and Budget Documents of Telangana and all GSDP data are taken from MOSPI site and the figures are in current prices.

Telangana experienced huge hike in the receipt of Central grants (figure 4). In fact, the fall in State's non-tax revenue was more than compensated by the increase in grants-in-aid.



Source: CSO and Finance Accounts (various years)

Telangana received higher tax devolution as percentage of GSDP than grant as percentage of GSDP till 2017-18. We know that as per the recommendations of the 14th FC, the States’ share in the net proceeds of the Union tax revenues would be 42% when compared to 32% as recommended by the 13th Finance Commission. Following the horizontal distribution criteria, the share of Telangana is worked out to be 2.44 % of total tax devolutions or total divisible pool of taxes. Among the two major components of central transfer, we observe that the contribution of tax devolution to the total revenue receipt of the State is quite stationary. It ranges from 16% to 18% as part of total revenue receipts of the State. The latest budget carries an indication of lower contribution of tax devolution (14.89%) to the total revenue of Telangana.

The State shows a grant to tax devolution ratio at 0.49 in 2017-18. It was the lowest ever ratio since the formation of the State. After 2017-18 the trend is changed, it has increased to 3.24 percent of GSDP in 2018-19. In 2019-20, the ratio of grant to tax devolution is 1.11 (Rs 2,058,305 lakh as grant and Rs. 2,283,530 lakhs as tax devolution). We decompose the sources of own tax revenues as percentage of GSDP. The own tax revenue as percentage of GSDP between 2014-15 and 2018-19 records a more than 30% growth. The latest budget proposes a continuing trend of growth in generation of own tax revenue.

Table 6: Decomposition of Revenue Receipts (as % of Total Revenue Receipt)

Budget Details	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019RE	2019- 2020BE
Own Revenue Receipts (1+2)	70.01	71.44	70.26	72.44	60.96	68.58
1. Own Tax Revenue	57.38	52.51	58.45	63.63	55.91	61.37
2. Own Non-tax Revenue	12.63	18.93	11.81	8.81	5.05	7.21
3. Central Transfers (i+ii)	29.99	28.56	29.74	27.56	39.04	31.42
i. Tax devolution	16.04	16.22	17.96	18.49	15.55	14.89
ii. Grants-in-aid	13.95	12.34	11.78	9.07	23.49	16.52

Source: Finance Account and Budget Documents of Telangana

In the year of formation, the ratio of own tax revenue to central transfer was 70:30 for Telangana. As per the last FY2018-19 RE, the ratio turns out as 60:40 approximately. On the other hand, at the aggregate level of 28 sub-national governments, in 2014-15, the own revenue receipt to central transfer ratio was 58:42 which comes down to 51:49 in 2018-19 as per budget estimates (RBI, 2019). Telangana is above average central transfer dependent state. Out of the two components of central transfer, tax devolution seems to be quite constant as percentage of total revenue receipts of Telangana. On the contrary, at the aggregated level of 28 sub-national governments, the percentage of revenue generation on divisible pool is increasing from 21 % of total revenue receipt to 29 %. An analysis of tax buoyancy indicates the elasticities of fiscal parameters with respect to GSDP.

Table 7: Regression Results on Tax Buoyancy

Method: Linear Regression			
Dependent Variable:	Intercept	Regression Coefficient	t-value
Tax revenue	-11.5	1.49*	16.68
Own revenue receipt	-6.9	1.24*	6.89
Non-tax Revenue	16.29	-0.14	-0.22
Central Transfer	-14.1	1.6*	5.53

Source: CSO and Finance Accounts (various years)

The coefficient of own-tax revenue receipt is 1.24. At the same time, it is to be noted that the coefficient for Central transfer is 1.6, which is more than that of tax buoyancy. It implies that a single percentage increase in GSDP keeps more impact on Central transfer.

Table 8: Own Tax Revenue – Minor Head (% of GSDP)

Budget Details	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019RE	2019- 2020BE
Own Tax Revenue	5.79	6.92	7.35	7.50	7.71	8.59
Taxes on Income	0.05	0.06	0.06	0.05	0.05	0.05
Taxes on Property and Capital Transactions	0.44	0.57	0.60	0.57	0.78	0.56
Stamps and registration fee	0.43	0.54	0.58	0.56	0.77	0.55
Taxes on Commodities and Services	5.29	6.29	6.69	6.87	6.88	7.97
State Goods & Service Tax (SGST)	0.00	0.00	0.00	1.73	2.57	3.04
State Excise	0.56	0.66	0.85	1.25	1.19	1.23
Sales Tax	4.37	5.16	5.19	3.33	2.56	3.19
Other Indirect taxes and duties	0.37	0.46	0.65	0.56	0.56	0.51

Source: Finance Account and Budget Document of Telangana (various years)

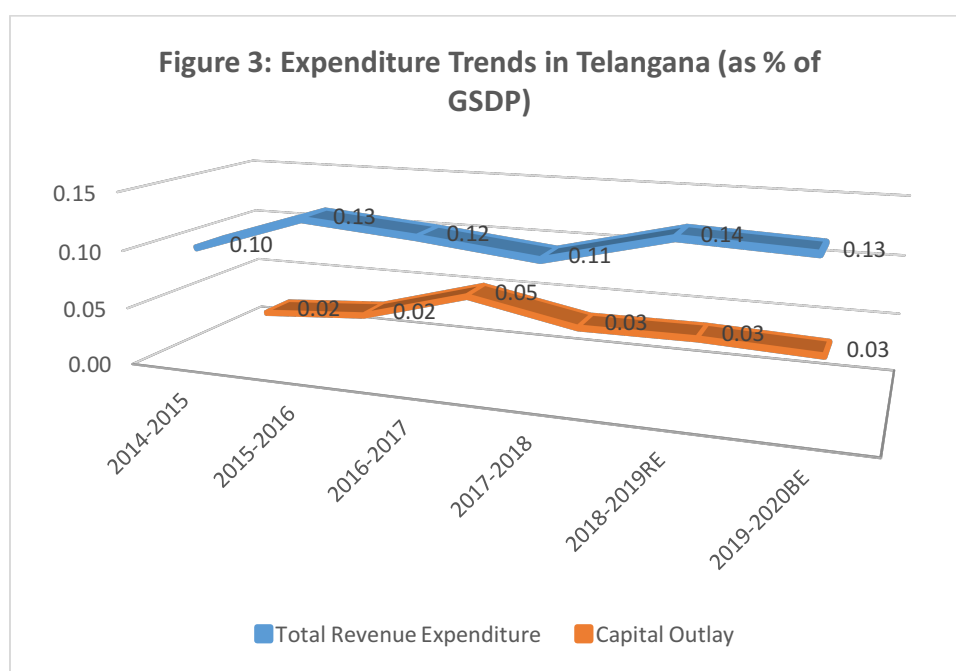
Telangana does not have any tax income from agriculture. A major tax head is property and capital transactions tax including land revenue, taxes on urban immovable property and stamps & registration fee. Out of total indirect taxes, sales tax is the main component of indirect taxes in FY2014-15. The share of sales tax to GSDP was 4.37% during the year Telangana was formed (table 8). It accounts for 83% contribution to the revenue collection in 2014-15. The predominance of sales tax is getting eroded. For 2019-20, the budget proposes that sales tax will be 40% of total taxes on commodities and services. State Goods and Service taxes (SGST) constituted 23%, 33% and 38% of own tax revenue collection of the State during 2017-18, 2018-19 and 2019-20BE respectively. SGST-GSDP ratio shows a clear increase over the last three years including the latest budget proposal.

The proportion of state excise tax to GSDP is increasing since 2014 with a slight fall in 2018-19 as per revised budget. In 2014-15, 9.5% of total own tax revenue collection was from State excise tax. It has increased to 16.6% in 2017-18. In the latest two years, the percentage of State excise tax to the State's own tax revenue decreased to 15% and 14% respectively. This may imply the need to expand manufacturing and industrial base. Overall, the observed buoyancy in tax revenue of Telangana indicates that the state is getting back into the path of fiscal consolidation over the medium term.

IV. Public Expenditure

The fiscal autonomy ratio which indicates the capability of the own tax revenue generation of the state to fulfil its burden of total expenditure is only about 52% in 2019-20. As an average over 6 years, Telangana is able to meet about 47.5% of its total expenditure from its own tax raised revenue collection.

The figure 5 depicts that Telangana has not shown an increase in capital expenditure as percentage to GSDP. The revenue expenditure follows an increasing trend from 11% GSDP in 2017-18 to 14% in 2018-19 RE and 13% in 2019-20BE. Capital outlay-GSDP percentage follows quite rigid path 2017-18 onwards at 3% of GSDP. It was highest (more than 5%) in 2016-17.



Source: CSO and Finance Accounts (various years)

Table 9: Trends in Expenditure (% of GSDP)

Components	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019RE	2019-2020BE
Total Revenue Expenditure	10.02	13.13	12.36	11.32	13.75	13.33
Total Capital Outlay/Capital Expenditure	1.66	2.35	5.06	3.17	3.24	3.32
Total Expenditure, of which	11.67	15.48	17.42	14.50	16.99	16.65
Economic service	4.88	5.75	7.68	5.00	6.32	7.05
Social service	3.89	5.64	5.83	5.32	6.73	6.04
Education, Sports, Art and Culture	1.38	1.83	1.85	1.66	1.46	1.21
Medical and Public Health	0.51	0.65	0.75	0.67	0.79	0.53

Interest Payments	1.03	1.31	1.31	1.44	1.35	1.48
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Source: Finance Account and Budget Document of Telangana

Table 9 shows that the share of total revenue expenditure to GSDP were 10.02 percent in 2014-15 and 13.33 percent in 2019-20 BE. The shares of total revenue receipt to GSDP were 10.09 % and 13.99 % for 2014-15 and 2019-20 BE respectively (table1). This indicates slight revenue surplus of the State.

Out of the total expenditure-GSDP percentages, the highest proportion accrues to economic service. When the state was formed in 2014-15, about 41.8% of total expenditure of the State went for economic service. In the latest budget proposal of 2019-20, 7.05 percent of GSDP is planned to be spent on economic service which accrues 42.3% of total expenditure. while 9.6 percent of GSDP was spent on social and general services (table 9). Telangana spent only 5% of GSDP on economic service in 2017-18. In that year, total expenditure to GSDP percent was also only 14.5 %, which was minimum expenditure as percentage of GSDP of the State. Interestingly, the growth of (total expenditure to GSDP percent) over 2014-15 to 2019-20 budget estimate is 42.6 %, while the growth of expenditure on (economic service over the same period to GSDP percent) is 44.4 %. The percentage increase in total expenditure on economic service is marginal. Both the growth and percentage increase figures notify us that the State is not very vibrant in improving expenditure on economic service.

Agriculture and allied services compounded with irrigation and flood control required 2.74% of GSDP in 2014-15. It implies that on agriculture and allied service with irrigation & flood control together, Telangana invests about 56% out of total expenditure dedicated to economic service (table 10). After 2014-15 expenses on agriculture and allied services to GSDP as percentage continued to decrease for next two years, while irrigation & flood control got more attention during that time in terms of a higher percentage share to GSDP. This trend was continued till 2017-18. In that year, Telangana experienced a decline in the share of expenses on economic service to GSDP. Irrigation and flood control attained more attention than agriculture and allied activities since 2013-14 till 2018-19RE. The latest budget somehow proposes to spend a higher percent of GSDP (2.12 per cent) on agriculture and allied activities, whereas the allocation on irrigation and flood control is 1.99 per cent of GSDP. In other way, 30% of total allocation on economic services goes to agriculture and allied activities whereas 28% goes to irrigation and flood control.

Table 10: Expenditure on Economic Services-Minor Heads (% of GSDP)

Budget Details	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019RE	2019-2020BE
Agriculture and Allied Services	1.16	1.15	1.03	0.94	1.92	2.12
Rural Development	0.71	0.88	1.01	0.62	0.75	0.64
Special Areas Programmes	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation & Flood Control	1.58	1.89	2.38	1.72	2.04	1.99
Energy	0.7	0.86	2.29	0.94	0.58	0.51
Industry and Minerals	0.14	0.15	0.07	0.12	0.16	0.05
Transport	0.46	0.54	0.57	0.37	0.38	0.16
Other Communication Services	0.00	0.00	0.00	0.00	0.00	0.00
Science Technology and Environment	0.00	0.00	0.00	0.00	0.00	0.00
General Economic Services	0.13	0.28	0.32	0.29	0.48	1.58
Economic Services	4.88	5.75	7.68	5.00	6.32	7.05

Source: Finance Account and Budget Document of Telangana

In 2014-15, energy constitutes 14.3% share of economic service as compared to irrigation and flood control at 32.44%, in terms of allocation of expenditure on economic services. There is no significant expenditure on science, technology and environment. The budget of 2019-20 allocates Rs. 836.81 lakhs only on science, technology and environment ground. Transport received 2.30 percent of GSDP in the latest budget proposal. The declining share of secondary sector to GSDP (table 1) supports this finding.

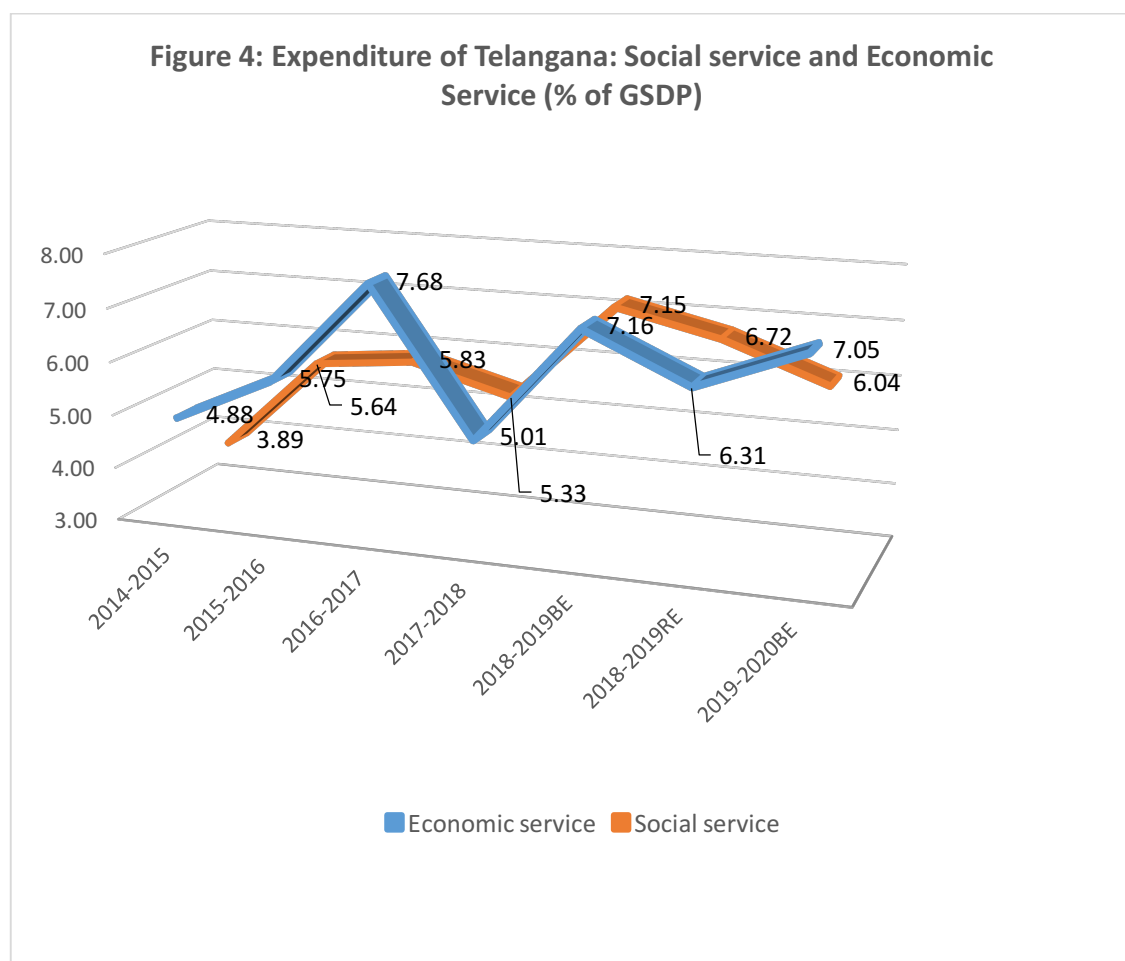
Table 11: Expenditure on Economic Services – Minor Heads (% of total Economic service)

Budget Details	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019RE	2019-2020BE
Agriculture and Allied Services	23.72	19.96	13.45	18.77	30.43	30.00
Rural Development	14.52	15.35	13.15	12.34	11.91	9.07
Special Areas Programmes	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation & Flood Control	32.44	32.93	31.03	34.48	32.29	28.27
Energy	14.30	14.95	29.83	18.87	9.21	7.21
Industry and Minerals	2.85	2.61	0.93	2.39	2.53	0.77
Transport	9.38	9.34	7.46	7.33	6.04	2.30
Other Communication Services	0.00	0.00	0.00	0.00	0.00	0.00
Science Technology and Environment	0.02	0.02	0.03	0.03	0.03	0.01

General Economic Services	2.76	4.85	4.12	5.79	7.56	22.37
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Source: Finance Account and Budget Document of Telangana (various years)

The figure depicts the relative weightage of economic service and social service in terms of the allocated expenditure to GSDP.



Source: Finance Account and Budget Document of Telangana (various years)

It is clear that between 2015-16 and 2017-18, economic service gets more shares of expenses than social series. After that, next two years, i.e., during 2018-19 to 2019-20RE, gained priority of public expenses. The analysis reveals that emphasis on rural development and irrigation and flood control sectors during 2015-16 till 2017-18 explains the sharp rise in expenses accruing to economic service (table 10).

The social service-GSDP percentage has increased from 3.89 % in 2014-15, to 5.32% in 2017-18 (table 12). The stated figures explain that Telangana needs to attend one third of its total expenditure on social service in 2014-15 which has been 36.27% in the last budget proposal. So, the extent of increase in expenditure for social service is higher than the

marginal increase in economic service allocation for over 6 years. After that in the last two consecutive budgets, the share of allocations for social service to GSDP has increased to more than 6%.

Table 12 : Expenditure on Social Services- Minor Heads % of GSDP)

Budget Details	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019RE	2019- 2020BE
Social Services	3.89	5.64	5.83	5.32	6.73	6.04
Education, Sports, Art and Culture	1.38	1.83	1.85	1.66	1.46	1.21
Medical and Public Health	0.51	0.65	0.75	0.67	0.79	0.53
Water Supply, Sanitation, Housing and Urban Development	0.46	0.81	0.72	0.64	1.33	1.07
Information & Broadcasting	0.01	0.04	0.05	0.04	0.04	0.02
Welfare of Scheduled Caste, Scheduled Tribes & Backward Classes	0.67	0.85	1.05	1.10	1.77	1.20
Labour and Employment	0.01	0.03	0.02	0.02	0.04	0.21
Social Welfare and Nutrition	0.84	1.39	1.38	1.18	1.28	1.78
Others	0.00	0.03	0.01	0.01	0.02	0.01

Source: Finance Account and Budget Document of Telangana (various years)

Table 13 : Expenditure on Social Services- Minor Heads % of Social Services)

Budget Details	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019RE	2019- 2020BE
Education, Sports, Art and Culture	35.58	32.51	31.73	31.15	21.73	20.02
Medical and Public Health	13.02	11.52	12.85	12.54	11.73	8.78
Water Supply, Sanitation, Housing and Urban Development	11.73	14.43	12.32	12.06	19.75	17.75
Information & Broadcasting	0.37	0.76	0.91	0.84	0.64	0.41
Welfare of Scheduled Caste, Scheduled Tribes & Backward Classes	17.12	15.02	17.97	20.62	26.22	19.94
Labour and Employment	0.38	0.59	0.38	0.44	0.61	3.43
Social Welfare and Nutrition	21.72	24.67	23.67	22.20	19.07	29.55
Others	0.08	0.50	0.16	0.16	0.25	0.12

Source: Finance Account and Budget Document of Telangana (various years)

The sectors like Education, sport, art and culture together received more than 35% of allocation out of all social services in 2014-15 (table 13). After FY 2015-16, the allocation for education as GSDP percent reduced over the years. The share of education to social service is just 20 percent in the latest budget proposal. The sector like water supply and sanitation service received 1.33% of GSDP as revised estimate of 2018-19 budget. This records the highest ever allocation towards this service as GSDP percentage. Allocation on social welfare and nutrition (out of total social service expenditure) is as high as 29.54% in 2019-2010 BE while the figure is 17.75% on water supply and sanitation. It is to note that during last 6 years, the average annual growth of the percentage share of water supply and sanitation to social service is 8.6%. The average annual growth on social welfare and nutrition is 6.1%.

V. Public Debt Strategy

What is required for the State is a public debt strategy to sustain the high growth path without public expenditure compression. The empirical evidence (Reinhart and Rogoff, 2008; Checherita and Rother, 2010; Woo and Kumar, 2010; Cecchetti, Mohanty and Zampolli, 2011) reveal that high levels of debt is not conducive to growth, rather it puts a dragging effect. However, Telangana is taking a bold step towards elongation of debt maturity. This strategy reveals successful impacts on G7 countries mostly. The long maturity period of about more than 10 to 30 years, what is applied in the State of Telangana, is expected to limit the rollover risk in the debt structure and resilient the debt portfolios. In addition, after several years, the debt could generate space for fiscal savings (Maravalle, A., and Rawdanowicz, L, 2018). In this respect, Telangana is playing the instructive role before other State governments by issuing securities with a maturity period of 30 years where the Government of India owns the longest sovereign debt security of 40 years (Table 14) . The impact is observed in an improvement of debt profile of Telangana with the weighted average maturity of market borrowings at 14.79 years at the end of March, 2019. The impact on fiscal savings is yet to be observed with a gap of few more years in future.

In recent years, signs of pressures on the fiscal position of states have re-emerged. The States are over-cautious in accepting liabilities in the form of creating loans directed towards capital expenditure. The States even with acquiring positive signals for enhancing extra 0.5% outstanding liabilities after satisfying the two prime criteria (i.e. at least zero balance in revenue account and a maximum limit of 3% in fiscal deficit) are expressing their apathy for extra investment towards capital led investment.

Table 14 : Maturity Profile of Outstanding state* govt. subsidies

(as % to total)

State/UT	Andhra Pradesh	Gujarat	Haryana	Maharashtra	Odisha	Telangana	Puducherry	All state and UTs
2019-20	7.6	5.7	2.8	6	3.6	--	9	5.3
2020-21	7.6	6.4	3.2	7.4	8.9	--	10.8	5.3
2021-22	8.3	9.8	7	10.9	12.4	--	9.6	7.3
2022-23	9.8	8.2	10.3	8.8	12.5	0.9	9.1	7.7
2023-24	11	8.1	12.2	9.3	13	0.9	9	8.3
2024-25	8.8	8.3	11.9	9.8	3.6	8.7	8.5	9.3
2025-26	8.9	8	13.7	12.7	7.1	14.2	8.1	11.5
2026-27	7.9	10.7	12.4	12.7	7.1	16.7	5	13.1
2027-28	5.5	13.4	11.8	6.2	1.8	0.9	7.2	11.8
2028-29	6.1	20.3	5.3	5.1	1.8	0.9	4.5	11.4
2029-30	4.1	-	--	5.5	3.6	0.9	4.1	1.3
2030-31	3.4	1.1	--	--	--	0.9	4.5	1
2031-32	3	-	--	2.1	8.6	4.4	10.4	0.9
2032-33	3.7	-	--	3.5	3.6	4.7	--	1.6
2033-34	2.5	-	1.4	--	1.8	--	--	1.4
2035-36	0.2	-	0.5	--	5.4	--	--	0.1
2036-49	1.7	-	7.5	--	5.4	46.2	--	2.9
TOTAL	100	100	100	100	100	100	100	100

* selected states (outstanding as on March 31, 2019)

Note: compensation bonds, loans not bearing interest and special bonds (UDY) are not included

Source: RBI records

The lack of inclination of the States towards drawing fresh loans for capital intensive investment could be explained in two ways. One reason may be the nature of capital investment itself as the quantity of initial investment is huge which awaits a long gestation period to fructify. Secondly, the debt burden therefore becomes consecutive year by year which pushes the States to the extra challenging zone to maintain the limit of outstanding liabilities within the safe premises. On the other hand, if the States follows the path of fiscal consolidation by curtailing the amount of capital investment, that may lead an adverse effect on economic growth in the long run. This is evident from the analysis of economic convergence in the context of India (Chakraborty and Chakraborty, 2019). In the light of above analysis, Telangana needs its continual effort for wider tax base to generate indigenous resource strength. This State is recommended to exercise the extra borrowing capacity for supporting capital investment to endure the long tailed effect of growth.

VI. Conclusion

Given the developmental aspiration of the new state to remain in high growth trajectory, investing in capital infrastructure projects is crucial. Telangana has revenue surplus, (no revenue deficit), but has high fiscal deficit to GSDP ratio than what is stipulated in the fiscal rules. The public debt-GSDP threshold ratio is at 20 per cent as per FRBM, while Telangana has higher debt-GSDP ratio for maintaining the stipulated economic growth path of the State at 14-15 per cent, and even at the projected 20 per cent in the long run.

The investment in capital projects though have multiplier effects on economic growth, the rising debt and deficits in Telangana is a matter of concern. The recently announced income support scheme for farmers – Rythu Bandhu – is also a concern in terms of maintaining debt deficit dynamics within fiscal rules.

Given this backdrop, the public debt strategy of Telangana to go for elongation of maturity structure of outstanding debt, to over 40 years, is a laudable step in this context. This can mitigate the plausible roll-over risks and debt servicing costs. This resilient debt strategy is particularly relevant when Telangana has ambitious projects like “Rythu Bandhu” scheme (income support to farmers) and the capital infrastructure projects for public irrigation and the comprehensive drinking water programme to all households termed “Mission Bhagiratha”.

We observe that the tax buoyancy - the responsiveness to tax to increase in GSDP - is above unity. However there are revenue uncertainties from GST and the tax transfers, which can affect the macro-fiscal projections of the State. Our budget credibility analysis shows that there are errors in fiscal forecasting in Telangana, which calls for conducting fiscal marksmanship exercise within the Department of Finance in the State of Telangana, and identify the sources of errors, whether it is due to random components or systematic bias of the policymaker, in their fiscal projections.

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