Outcome Evaluation Study of State Finances for Madhya Pradesh

For Fifteenth Finance Commission

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Executive Summary

This Study has been carried out to examine the State Finances of Madhya Pradesh for the period of 2005-06 to 2015-16. The study is based on the data from CAG reports, Reserve Bank of India's Study on State Finances (2017-18), and budget documents of Madhya Pradesh government. At many places, Madhya Pradesh's performance has been compared with erstwhile General Category States (henceforth GCS) and All States. Here, the term All States covers 28 states of India (with Andhra Pradesh and Telangana taken together). The GSDP data for the period are available in two separate series, namely with the base year 2004-05 and 2011-12. Hence, GSDP figures for 2004-05 to 2010-11 are used with the base year of 2004-05. Data for subsequent years are taken with the base year 2011-12. The GSDP estimates of the two series are not strictly comparable, and their implications are discussed in chapter 1. There are six chapters in the report, each dealing with a specific aspects of the state finances. A summary of the analysis and major findings, based on each of the chapters, is provided below:

1. Revenue Resources

Being a poorer state, transfers from the centre in terms of share in central taxes, grants, and funds for CSS forms an important part of revenue resources for Madhya Pradesh. The state relied more on the CSS bypassing the state budgets during 2006-10 compared to other states. However, the share of CSS funds continued to decline over the years, and which are now routed through state budgets from 2014-15 onward. While the award of the 14th Finance Commission increased the tax devolution for Madhya Pradesh by 1.7 percentage point of GSDP during 2015-16 compared to 2010-14, the state suffered a net loss of central resource flow of 0.53 percentage point of GSDP when all CSS and central grants are considered along with tax devolution. Against this, GCS gained 0.13 percentage point of GSDP in their revenue receipts from centre when tax devolution and all other central transfers are considered together. Clearly, the recent changes in the federal transfer system have hurt Madhya Pradesh, while benefiting GCS taken together.

In terms of own-revenue resources, Madhya Pradesh makes a higher tax effort than GCS, with tax-GSDP ratio of the state being around 1.1 to 1.15 times the tax-GSDP ratio for GCS taken together. Despite this, its tax effort for sales tax/VAT (excluding petroleum products) amounted to around 0.75 times tax-GSDP ratio for GCS. In 2015-16, state excise, sales tax on petroleum products, and electricity duty accounted for 45 percent of own-tax revenues for Madhya Pradesh as against 33 percent for GCS. Compared to other states, Madhya Pradesh incurs substantially higher tax efforts for sales tax on petroleum products, state excise, electricity duty, taxes on vehicle and passengers, etc. These taxes more than compensate for lower tax effort on the VAT, thus translating into an overall tax-GSDP ratio higher than GCS average. Incidentally, the items where Madhya Pradesh levies higher tax effort compared to other states are not covered under GST; hence the state should be able to leverage its advantage in collecting greater revenue from these sources in future. On the other hand, Madhya Pradesh has a greater share of agriculture and a lower share of manufacturing compared to other states in its GDSP. This sectoral composition of the economy of Madhya Pradesh could contribute to its lower tax-GSDP ratio for VAT (excluding petroleum products).

Taxes subsumed under GST accounted for 38.12 percent of the total own-tax revenues for Madhya Pradesh compared with nearly 45 percent of the own-tax revenues for General Category/All States during 2015-16. Since, transfers from centre and non-tax revenue account for nearly 62 percent of the state's revenue resources, taxes subsumed under GST accounted for only 14.53 percent of the overall revenue receipts of the state. Given lower share of manufacturing in state income, it is quite likely that Madhya Pradesh is a net importing state of taxable commodities. Madhya Pradesh ranks 6th among General Category States on importing state index based on share of IGST settlement revenues as a share of SGST. Thus, destination based Goods and Service Tax is likely to benefit Madhya Pradesh compared to existing origin-based state VAT. However, the data on GST revenues does not support this, as the state is incurring a high revenue shortfall compared to the protected revenue target under GST regime. The shortfall for Madhya Pradesh at 26.08 percent is at much higher level compared to GCS (15.08 percent) or All States average (16.04 percent), which is a cause of concern for the state. Benchmarking this shortfall to 2015-16 revenue base would equate to a shortfall of 3.79 percent of the overall revenue resources/receipts for the state and 0.74 percent of the GSDP.

The state ranked 5th among 18 General Category States in terms of revenue shortfall as a share of revenue protected under GST Compensation to States Act (2017). There can be many reasons behind this. Post-GST, most of the origin based statutory duties (like VAT, market fee, mandi fee, APMC cess, etc.) on food-grains which are produced in Madhya Pradesh and consumed across country have been abolished. Food-grains are exempted from GST, hence there is no counterpart tax replacing the 5 percent VAT in the pre-GST regime. VAT alone would have amounted to 557 crores in 2015-16, at 3.6 percent of the total revenue collected under taxes subsumed in GST. With the introduction of GST, services have been included in the tax base of SGST, which did not form the part of state/local taxes subsumed under GST for measuring tax base of states in 2015-16. States like Maharashtra, Tamil Nadu, Kerala, Telangana, may have gained on service tax front on tourism, financial, and IT related services. Madhya Pradesh may not have a comparable tax base in services. Thus, it will be challenging for the state post-July 2022, when the compensation for the GST revenue shortfall against protected revenues will cease to exist.

2. Expenditure by the state

During 2005-10, the expenditure towards social services was comparable to All States average when measured as a percentage of GSDP. On the other hand, the state has been consistently spending nearly 1.5 times share of its GSDP on economic services when compared with All States. Thus, the state appears to prioritise the expenditure on economic services, while not spending enough on social services. However, the expenditure on social services has improved from 2010-11 onward. Since 2014-15 onward, when the CSS spending was merged with the state budget, state's expenditure on social services as a share of its GSDP reached around 1.3 times the levels observed for All States. This suggests another possibility that the inclusion of CSS in the state budget could be the reason for higher budgetary spending by the state in the recent years. Madhya Pradesh spends a roughly equal share of its GSDP towards general services compared to All States, except for fiscal services, where even the per capita expenditure is nearly twice the All States average. This could be because of the composition of the tax base being exploited by the state.

Unlike other states, Madhya Pradesh did not respond much to the financial crisis by expanding its revenue expenditure or capital outlay. The fiscal consolidation efforts of the centre during 2010-14 translated into reduced flows under CSS to the states. Madhya Pradesh countered the reduction in flows under CSS through a rise in its own revenue expenditure to maintain overall expenditure levels. The year 2014-15 has been harsh for the states, particularly so for Madhya Pradesh. The fall of the CSS was not matched by an equal rise in the grants from the centre. The own account primary expenditure by the state remained exactly at the same level of 2010-14, despite counting the CSS as its own-account expenditure. This leads to a fall in the aggregate primary expenditure by an amount equivalent to CSS funds during 2010-

14. The generous recommendations by the 14th Finance Commission, helped Madhya Pradesh to somewhat regain the previous levels of the overall expenditure in 2015-16.

3. Deficits and Public Debt

Madhya Pradesh consistently maintained revenue surpluses during last decade, though the magnitude of the surplus has declined in the recent years. Further, declines in the revenue surplus were in general accompanied by a reduction in capital expenditure and a rise in fiscal deficit. On the other hand, the rise in fiscal deficits was not accompanied by a rise in capital expenditure (except for 2009-10, and a minor rise in capital expenditure during 2014-15 and 2015-16 owing to henceforth inclusion of capital expenditure under CSS in the state budget). In sum, it can be concluded that at the aggregate level, fiscal deficits were used to finance the capital expenditure, and revenue surpluses further contributed to raise the capital expenditure. However, a detailed examination suggests that fiscal deficits were generally raised to address the fall in revenue surpluses rather than to increase the capital expenditure. On the other hand, fall in revenue surpluses led to curtailment of capital expenditure, as fiscal deficits were not raised by the same amount.

It is interesting to note that Madhya Pradesh consistently exceeded its FRBM targets during the 2005-16 period. Yet wherever the revenue surpluses declined, the state chose to cut the capital expenditure rather than passing the full burden to the fiscal deficit. Interestingly, when this issue is examined for All States at an aggregate level, Madhya Pradesh fare relatively better in terms of providing resources for capital formation. In 2010-11 and 2011-12, the revenue surpluses for GCS improved yet the states continued to curtail capital expenditure, even though the fiscal deficit remained below 2.1 percent of the GSDP. This points to an unwillingness of the states to incur capital expenditure. To some extent, this is a cause of concern because the time period being discussed belongs to post-GFC accompanied by domestic troubles translating into a decline in investment activities. In such circumstances, states could play some role in addressing the investment slowdown by using their fiscal space to raise capital expenditure.

The experience of the state in meeting the FRBM targets has been reasonably well. The fiscal deficit, revenue deficit, and debt –GSDP ratio have remained within the stipulated limits. However, there was a general trend of reduction in fiscal deficit and rise of revenue surplus till 2012 (with 2009 being an outlier), after which there seems to be a period of decline in revenue surpluses and rise of fiscal deficit. Concurrently, the rate of fall in the debt-GSDP ratio started decelerating, and debt-GSDP ratio eventually started rising from 2014-15 onward. Fiscal consolidation during 2005-08 was solely because of the rising flow of central transfers and favourable macroeconomic environment, though the state also contained its revenue expenditure to some extent. Fall in state's own revenue expenditure could also be because of the rise in the CSS, which permitted states to replace their own spending by the central resources, since the functional domain of CSS overlaps with the states' jurisdiction. In the wake of the global financial crisis, the resource flows from the centre declined. The state weathered this challenge largely by raising own revenue efforts aided by a decline in interest burden which in turn was caused by fiscal consolidation and debt restructuring undertaken in the previous years. Since 2012 onward, there has been a decline in the state's own revenue effort coupled with a decline in the central resource flows, leading to some fiscal slippage.

While the overall fiscal deficit still remains in the limits prescribed under Madhya Pradesh's FRBM Act, there is some cause for concerns. The primary fiscal deficit has been rising in the recent years, mainly because the fall in interest burden has been partially matched by the rise in non-interest expenditure. Thus, revenue and fiscal deficit numbers may remain stable in the short run, due to fiscal space provided by the falling interest burden. However, the falling interest burden has its origin in the events of the previous decade, namely, debt consolidation under DSS and DCRF (including debt write-off). Further, the previous decade was also characterised by lower interest rate macro-environment in which market borrowings emerged as the main channel to finance the fiscal deficit. Once the full gain of debt consolidation and lower interest rate are realized, there may not be any further fall in the interest burden, creating a need for compression of growth of non-interest expenditure or increase in the revenue receipts. In fact, the interest rates have started rising again, which may eventually lead to a reverse of the cycle observed during the past decade. There is a clear need to keep vigilance on the primary fiscal deficit.

In light of the recent macro-economic developments on growth, inflation targeting, and implementation of GST, the state should target a fiscal deficit of 2.5 percent during the period of 2020-25, which would be comparable to current levels of fiscal deficit for the state. This will keep the debt-GSDP ratio stable at the current levels of around 23.8 percent. Under this approach, in the medium-run there would be space to run a primary fiscal deficit of around 1 percent of GDP compared to terminal equilibrium of 0.7 percent. State may use this fiscal space to strengthen balance sheets of Public Sector Undertakings, particularly of the power sector to avoid future fiscal burden on this account.

4. Local Bodies

Pursuant to 73rd and 74th constitutional amendments, rural and urban local bodies were set in the state. Major sources of funding for the local bodies are resources received from the Union and State Finance Commissions. The State has constituted State Finance Commission from time to time. However, there have been delays in preparation of the report by the Fourth State Finance Commission, and implementations of its recommendations. Most recently, the Fifth State Finance Commission was constituted in March 2017, which is scheduled to submit its report by 31st January 2019. The recommendations of the Fourth State Finance Commission would remain in force only for two-year period of 2018-20, and the recommendations of the Fifth Finance Commission would coincide with award period of the 15th Union Finance Commission. The Third State Finance Commission recommended to devolve four and one percent of divisible tax revenue to PRIs and ULBs respectively. Divisible fund refers to previous year own tax revenue minus 10 percent of expenditure for tax collection minus deductions of assigned revenue to PRIs and ULBs. In addition, certain duties are also assigned to local bodies. Local bodies also received funds for implementing the CSS along with matching grants provided by the state. However, both PRIs and ULBs were not able to spend the entire amount and thus have savings ranging from six to 30%.

CAG along with Ministry of Panchayati Raj developed an accounting framework – Model Panchayati Accounting System (MPAS) to be adopted by PRIs. Analogously, National Municipal Accounting Manual (NMAM) was developed for ULBs. This was one of the conditions to avail the performance grant. However, test check of 1132 PRIs by the CAG unveils that all the PRIs were maintaining their accounts as per previous accounting framework and hence did not adopt the MPAS. Also, only four out of 63 tested ULBs were using NMAM framework for the preparation of the final accounts. The situation of the annual budget was equally worse. Out of 1132 tested PRIs, 253 did not prepare their budgets, and out of 63 tested ULBs, only 34 prepared their budget, but 22 of them did not send their budget estimates to state government.

For useful understanding of the operations of the local bodies, data on their budgets need to maintained at the state level. With the test data on ULBs, the CAG found that own revenue receipts accounts for 21 to 68 percent of the overall revenue receipts for various ULBs. However, the data analysed by the CAG also shows that grants-in-aid from the state government for compensation in lieu of octroi and passenger tax accounted for nearly half of the own revenue receipts of the ULBs. No such comparable results are available from the CAG reports on rural local bodies. The Third State Finance Commission in its analysis showed that own revenues constituted ₹16.11 per person in 2004-05 accounting for 13.57 percent of the total revenue resources of the PRIs. No recent data are available in this regard. Clearly, there is a need to strengthen the database on the budgets of local bodies.

5. State PSUs

The total number of state PSUs in the state of Madhya Pradesh has increased from 44 to 67 in the last ten years. The overall losses incurred by working PSUs has increased dramatically from 2007-2008 (₹ 1668.65 crores) to 2015-2016 (₹ 4592.58 crores). However, latest year (2015-2016) has seen a fall in the amount of loss as compared to 2014-2015. PSUs' turnover share to Gross State Domestic Product increased marginally from 10.91% to 13.86% during the last ten years. The investment in the state PSUs has increased 3.40 times in the last ten years. This increase is mainly attributed to Power Sector. Both, capital and long-term loans have significantly increased. Also, the investment in the non-working companies is although stagnant but still substantial and hence represents the wastage of resources. The share of grants/subsidy in total outgo has increased dramatically from 2006-2007 (20%) to 2015-2016 (83%). The differences in the amounts of equity, loans, guarantees outstanding as per state finance accounts vis-à-vis records of PSUs is quite substantial in the last few years. However, the latest year (2015-2016) has witnessed the decrease in the amount of difference. On an average, every year, 30 working PSUs experienced arrears in their respective financial accounts.

Our analysis of financial performance of state PSUs and its impact on State Government reveals the dark side of PSUs where they are incurring heavy losses year after year with marginal improvement in their contribution to state GDP. Despite the poor performance, the State Government is investing exorbitantly in the form of capital and long-term loans. The proportion of grants/subsidies in the budgetary outgo has exponentially increased in the last ten years. Besides, the problem of delay in the finalization of accounts and differences in the figures related to equity, loans, and guarantee as per state finance accounts and PSUs are a matter of great concern as they increase the chances of fraught and fraud.

6. Power Sector

The power sector in MP was unbundled in 2002 into separate generation, transmission and distribution companies. Much of the reforms in Power sector like delicensing and competitive bidding have happened in Generation, fewer in Transmission, while Distribution continues to be the weakest link in the entire power sector value chain with issues like unsustainably low tariffs and high Aggregate Technical and Commercial (AT & C) Losses. As Distribution segment is mostly run by State Utilities, the losses on account of Distribution are thus a burden on the State Finances. The AT & C losses for Madhya Pradesh (MP) are in the range of 30 percent. After the introduction of Ujjwal DISCOM Assurance Yojana (UDAY) Scheme in MP, the AT & C losses have come down in 2016-17 to 28.12 percent. However, under UDAY, the state governments are required to reduce the AT & C losses to 15% by 2018-19. For Madhya Pradesh, the tariff hikes for 2011-12, 2012-13 and 2013-14 were 6%, 7%, and 1% respectively. Although tariff hikes were timely and periodic, but not commensurate with the increasing cost of power which has adversely affected the financial health of the State utilities. Under UDAY, the difference between the average cost of Supply (ACS) per unit of power and per unit average revenue realised (ARR) has to be brought to nil by 2018-19. MP has shown rapid progress in Feeder segregation post-UDAY compared to the pre-UDAY scenario. As per the UDAY Portal, as on June 2018, 96% of feeder segregation work in MP has been completed. The aggregate losses for MP State Utilities have reduced significantly in 2016-17, primarily due to the reduction in interest expenses under the Ujjwal DISCOM Assurance Yojana (UDAY) Scheme. The future health of power sector would depend upon whether the state can use feeder separation to effectively target the agricultural subsidy, and reduce leakages to other sectors in the form of AT&C losses and diversion of electricity from agricultural lines to non-agricultural purposes.

Content

Chapter 1

Revenue Resources of the State

1. Introduction

Madhya Pradesh is among the poorer states of the country with per capita income at two-third of per capita income for erstwhile General Category States (henceforth GCS) as well as of All States. Only five states, namely, Bihar, Uttar Pradesh, Manipur, Jharkhand, and Assam had per capita income lower than Madhya Pradesh in 2015-16 (RBI, 2018). Given the smaller tax base (per capita income being the proxy of the tax base) of the state, it cannot generate own-tax revenues comparable to All States average at comparable tax effort, thus deepening the dependence of the state on central transfers to provide public services at levels comparable to other states. Contours of the central transfers have changed substantially since 2014. Firstly, the Planning Commission was abolished and in its place a think-tank namely NITI Ayog was created. However, unlike the Planning Commission, the NITI Ayog does not have powers to allocate funds. Secondly, the abolishment of the Planning Commission along with the wider TOR paved the way for the Fourteenth Finance Commission (FFC) to take comprehensive account of revenue requirements (both plan and non-plan) of the states. Thirdly, since 2014-15, the centre stopped the practice of bypassing the state budgets while funding Centrally Sponsored Schemes (CSS); earlier these funds were directly provided to the implementing agencies. These funds are now routed through the state budgets. An additional development is the implementation of GST from July 2017 onward. These developments are bound to influence the overall composition of the *revenue resources* for All States including Madhya Pradesh.

2. Composition of the Revenue Resources

Table 1.1 provides the composition of revenue resources of the state. To provide a benchmark, composition of revenue resources for All States average and GCS are also shown in table 1.2 and 1.3 respectively. Four categories of revenue receipts by the state governments, namely, state's own-tax revenues, share in central taxes (tax devolution), state's own non-tax revenues, and grants from the centre are covered. Additionally, a fifth category of Centrally Sponsored Schemes (CSS) bypassing state budgets is also covered. From 2003-04 onward, the central government started the practice of transferring funds directly to the implementing agencies, leaving the states with no control over the schemes even while requiring them to make matching contributions. However, based on the recommendation of the High-Level Committee on Efficient Management of Public Expenditure (chaired by Dr. C. Rangarajan), the Central government resumed channelling these grants through the consolidated funds of the states from 2014-15 onward. Given that the expenditure domain for these funds fall either in the state list or the concurrent list, and from 2014-15 these funds are part of the states' *revenue resources,* it is desirable to include them for the pre-2014-15 period in the *revenue resources* available to the states. Thus, *revenue resources* for states are defined as revenue receipts plus CSS funds bypassing the state budgets.

The time-frame of 2005-06 to 2015-16 can be divided into five parts. The first part, years 2005-06 to 2007-08, covers the 12th Finance Commission's award period prior to the Global Financial Crisis (GFC). The second part, covers years 2008-09 and 2009-10, which are the remaining years of the award period of the 12th Finance Commission. The third part, 2010-11 to 2013-14 covers the first four years of the award period of the 13th Finance Commission. The annual average figures for these three time periods are shown separately in table 1.3. The fourth and fifth part refer to 2014-15 and 2015-16 individually. The former, despite being a part of the award period of the 13th Finance Commission, can be considered separately so as to understand the implications of the rerouting of the CSS through the state budgets. Year 2015-

16 is the first year of the award period of the 14th Finance Commission, which made recommendations to raise the share of states in the divisible pool of central taxes from 32 percent by its predecessor to 42 percent. To understand the implications of these changes, this year has been presented separately. Given the importance of central transfers in the state finances, the above scheme of classification of the time period 2005-06 to 2015-16 is followed in subsequent chapters as well.

As shown in table 1, own-tax receipts formed 39.3 percent of the revenue resources for Madhya Pradesh in 2005-06, which declined to around 33 percent for the next three years. This decline was largely compensated by the rise in the grants from the centre through the state budget and Centrally Sponsored Schemes (CSS) bypassing the state budget. A similar trend of decline in the contribution of states' own-tax receipts in the total revenue resources is also visible for All States, though the share of CSS continued to rise for All States (also for GCS) till 2010-11 (table 1.2 and 1.3 respectively). Madhya Pradesh, being a poorer state, is expected to have a greater reliance on the share in central taxes for its revenue resources. The state derived around 26.4 percent of its revenue resources from this channel in the 2005-15 period. Against this, the All States average was 21 percent during this period (21.7 percent for GCS). The year 2015-16, being the first year of the award period of the 14th Finance Commission, shows a departure from the previous trend for the size of states' share in central taxes out of total revenue resources. For Madhya Pradesh, the share of this component increased from 27.2 percent to 36.4 in 2015-16 over the previous year. Similarly, All States also witnessed the contribution of share in central taxes in their revenue resources rising from 21.2 percent to 27.62 percent during this period. GCS experienced rise in contribution of central taxes from 21.3 percent to 27.1 percent of the total revenue resources.

Table 1.1: Composition of Revenue Resources (% of Total Resources) for Madhya Pradesh

S. No.	Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
1	State's Own-tax Revenue	39.30	34.12	32.91	33.20	35.11	35.50	38.05	40.31	39.92	41.25	38.11
2	Share in Central Taxes	27.34	26.35	27.94	26.25	22.51	25.92	25.70	27.43	27.03	27.20	36.39
3	State's Own Non-Tax Revenue	9.52	8.66	7.50	8.15	12.97	9.48	10.56	9.23	9.17	11.70	8.12
4	Grants from the Centre	12.64	14.58	15.69	14.27	13.54	15.05	14.01	15.87	14.01	19.85	17.37
5	Centrally Sponsored Schemes bypassing State Budgets	11.20	16.29	15.96	18.13	15.87	14.05	11.68	7.16	9.86	0.00	0.00
	Total	100	100	100	100	100	100	100	100	100	100	100

Source: Basis data RBI (2018) and Finance Account (2015-16) for Madhya Pradesh

Table 1.2: Composition of Revenue Resources (% of Total Resources) for All States

S. No.	Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
1	State's Own-tax Revenue	45.45	43.98	42.23	41.39	42.29	43.71	46.16	48.24	48.08	48.96	46.22
2	Share in Central Taxes	20.13	20.95	22.32	20.71	19.22	20.83	21.17	21.49	21.48	21.23	27.62
3	State's Own Non-Tax Revenue	10.26	11.02	11.38	10.51	10.38	8.70	8.21	8.64	8.94	9.03	8.38
4	Grants from the Centre	16.43	16.45	16.01	16.70	17.58	15.51	15.44	13.91	13.90	20.78	17.78
5	Centrally Sponsored Schemes bypassing State Budgets	7.74	7.62	8.06	10.69	10.53	11.25	9.03	7.73	7.60	0.00	0.00
	Total	100	100	100	100	100	100	100	100	100	100	100

Source: Basis data RBI (2018)

Table 1.3: Composition of Revenue Resources (% of Total Resources) for General Category States

S. No.	Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
1	State's Own-tax Revenue	49.98	47.79	45.96	45.16	46.39	47.98	49.97	51.96	51.61	51.88	48.84
2	Share in Central Taxes	21.23	21.86	23.29	21.68	20.29	21.62	21.72	21.93	21.87	21.32	27.12
3	State's Own Non-Tax Revenue	10.51	11.22	11.50	10.69	10.68	9.04	8.31	8.90	9.19	9.31	8.57
4	Grants from the Centre	11.90	12.41	12.41	13.23	13.77	12.11	12.24	10.52	10.91	17.49	15.47
5	Centrally Sponsored Schemes bypassing State Budgets	6.38	6.72	6.84	9.23	8.87	9.25	7.76	6.69	6.42	0.00	0.00
	Total	100	100	100	100	100	100	100	100	100	100	100

Table 1.4: Composition of Revenue Resources (% of Total Resources)

S. No.	Item	Madhya Pradesh			All States			General Category States		
		2005-08	2008-10	2010-14	2005-08	2008-10	2010-14	2005-08	2008-10	2010-14
1	State's Own-tax Revenue	35.44	34.15	38.45	43.89	41.84	46.55	47.91	45.78	50.38
2	Share in Central Taxes	27.21	24.38	26.52	21.13	19.96	21.24	22.13	20.98	21.79
3	State's Own Non-Tax Revenue	8.56	10.56	9.61	10.88	10.44	8.62	11.08	10.68	8.86
4	Grants from the Centre	14.30	13.91	14.73	16.30	17.14	14.69	12.24	13.50	11.45
5	Centrally Sponsored Schemes bypassing State Budgets	14.49	17.00	10.69	7.81	10.61	8.90	6.65	9.05	7.53
	Total	100	100	100	100	100	100	100	100	100

Source: Table 1.1, 1.2, and 1.3

Impact of the global financial crisis is visible on the share of central taxes (central tax devolution recommended by the Finance Commission) in overall revenue composition for Madhya Pradesh and All States. The share of this component in the total revenue resources rose till 2007-08, but then subsequently declined in the next two years. In response to the GFC and consequent decline in the tax revenues, the central government assisted the states to step up their expenditure through central grants and CSS.

From 2014-15, the CSS bypassing the state budgets hitherto were routed through the state budgets as grants from the centre. This translated into a rise in the share of grants in 2014-15 compared to previous years, since the CSS funds were now treated as central grants to the state governments. For Madhya Pradesh, grants from the centre accounted for 14 percent of the overall revenue resources in 2013-14, which increased to 19.85 percent in 2014-15, before falling to 17.37 percent in the next year. Similarly, for All States, grants from the centre accounted for 13.9 percent of the overall revenue resources in 2013-14, which increased to 20.8 percent in 2014-15, before falling to 19.8 percent in the next year. Clearly, the rise in the share of grants from the centre 5.84 percentage points (19.85-14.01) for Madhya Pradesh and 6.88 percentage points (20.78-13.9) for All States, observed in 2014-15 compared to previous year was much smaller than the share of CSS at 9.86 and 7.6 percent respectively observed during 2013-14.[1] However, this observation is not true in case of GCS where the share of central grants in total revenue resources increased by 6.58 percentage point compared to CSS amounting for 6.42 percent of total revenue resources in 2013-14. Thus, compared to other states, Madhya Pradesh have lost CSS of much greater size than the compensatory rise in the central grants. To explore these issues, components of revenue resources are explored as percentage of GSDP.

[1] The observation, that the fall in the share of CSS was sharper than the rise in the share of central grants, holds true even for comparison of 2014-15 over the four-year average of 2010-14.

Table 2.1: Composition of Revenue Resources for Madhya Pradesh (as % of GSDP)

S. No.	Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
1	State's Own-tax Revenue	7.33	7.24	7.44	6.90	7.59	8.13	8.55	8.03	7.63	7.62	7.41
2	Share in Central Taxes	5.10	5.59	6.32	5.46	4.87	5.94	5.77	5.46	5.17	5.02	7.07
3	State's Own Non-Tax Revenue	1.78	1.84	1.70	1.69	2.80	2.17	2.37	1.84	1.75	2.16	1.58
4	Grants from the Centre	2.36	3.09	3.55	2.97	2.93	3.45	3.15	3.16	2.68	3.67	3.38
5	Centrally Sponsored Schemes bypassing State Budgets	2.09	3.46	3.61	3.77	3.43	3.22	2.62	1.43	1.89	0.00	0.00
	Total	18.66	21.23	22.62	20.79	21.62	22.90	22.46	19.92	19.12	18.47	19.44

Source: Basis data RBI (2018) for the absolute amount of revenues, and mospi.nic.infor the GSDP data. Finance Account (2015-16) for Madhya Pradesh.

Table 2.2: Composition of Revenue Resources for All States (as % of GSDP)

S. No.	Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
1	State's Own-tax Revenue	6.92	7.03	6.85	6.69	6.56	6.95	6.76	6.97	6.69	6.67	6.52
2	Share in Central Taxes	3.07	3.35	3.62	3.35	2.98	3.31	3.10	3.10	2.99	2.89	3.89
3	State's Own Non-Tax Revenue	1.56	1.76	1.85	1.70	1.61	1.38	1.20	1.25	1.24	1.23	1.18
4	Grants from the Centre	2.50	2.63	2.60	2.70	2.73	2.46	2.26	2.01	1.93	2.83	2.51
5	Centrally Sponsored Schemes bypassing State Budgets	1.18	1.22	1.31	1.73	1.63	1.79	1.32	1.12	1.06	0.00	0.00
	Total	15.24	15.99	16.23	16.16	15.51	15.89	14.64	14.45	13.92	13.62	14.10

Source: Basis data RBI (2018) for the absolute amount of revenues, and mospi.nic.in for the GSDP data.

Table 2.3: Composition of Revenue Resources for General Category States (as % of GSDP)

S. No.	Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
1	State's Own-tax Revenue	7.05	7.15	6.97	6.80	6.67	7.06	6.87	7.09	6.80	6.78	6.62
2	Share in Central Taxes	2.99	3.27	3.53	3.26	2.92	3.18	2.99	2.99	2.88	2.78	3.68
3	State's Own Non-Tax Revenue	1.48	1.68	1.74	1.61	1.53	1.33	1.14	1.21	1.21	1.22	1.16
4	Grants from the Centre	1.68	1.86	1.88	1.99	1.98	1.78	1.68	1.44	1.44	2.28	2.10
5	Centrally Sponsored Schemes bypassing State Budgets	0.90	1.00	1.04	1.39	1.28	1.36	1.07	0.91	0.85	0.00	0.00
	Total	14.10	14.95	15.16	15.05	14.37	14.72	13.75	13.65	13.18	13.06	13.56

Table 2.4: Composition of Revenue Resources for Madhya Pradesh (as % of GSDP)

S. No.	Item	Madhya Pradesh			All States			General Category States		
		2005-08	2008-10	2010-14	2005-08	2008-10	2010-14	2005-08	2008-10	2010-14
1	State's Own-tax Revenue	7.34	7.25	8.09	6.94	6.63	6.84	7.05	6.73	6.96
2	Share in Central Taxes	5.67	5.16	5.59	3.35	3.16	3.13	3.26	3.09	3.01
3	State's Own Non-Tax Revenue	1.77	2.25	2.03	1.72	1.65	1.27	1.63	1.57	1.22
4	Grants from the Centre	3.00	2.95	3.11	2.58	2.71	2.17	1.80	1.99	1.58
5	Centrally Sponsored Schemes bypassing State Budgets	3.05	3.60	2.29	1.24	1.68	1.32	0.98	1.33	1.05
	Total	20.84	21.21	21.10	15.82	15.84	14.72	14.74	14.71	13.82

Source: Table 1.1 and 1.2

Table 2 provides the composition of revenue resources of the state as a percentage of the GSDP. It can be observed that Madhya Pradesh incurs greater tax effort compared to all states average. The tax GSDP ratio for the state was 7.3 percent in 2006-10 period, which increased to 8.24 percent in the triennium of 2010-11 to 2012-13, before falling back to 7.55 percent in the subsequent three years. All States average or GCS states show relatively stable tax effort during 2005-13 at 6.84 and 6.93 percent of GSDP recpectively, which declined by around 0.2 percentage point for each category to 6.63 and 6.73 percent respectively during the triennium of 2013-16. Thus, in contrast to relatively stable tax effort over time by other states, there seems to be an inverse U-shaped tax effort for Madhya Pradesh peaking at 8.55 percent of GSDP in 2011-12. A deeper analysis suggests that the high tax GSDP of 8.1 percent for Madhya Pradesh, unaccompanied by similar spike for All States is partially a result of statistical transition and partially result of improved tax effort by the state.

The Central Statistical Organization (CSO) adopted a new series of GDP with base year of 2011-12. Subsequently, states have also released their GSDP series with the same base year. However, there were upward revisions in the estimates of the GSDP in the new series compared to old series.[2] The upward revision for the common years during the two base year series (2011-12 to 2014-15) was around 3.3 percent for Madhya Pradesh and 8.8 percent for All States taken together (8.5 percent for GCS). Thus, a higher revision in the GSDP estimates contribute to the denominator and brings down the tax GSDP ratio. For 2011-12 to 2013-14, with the old series GSDP figures as the denominator, the tax GSDP ratio for the triennium would work out at 8.3 percent for Madhya Pradesh but 7.4 percent for All States taken together. As against this, the tax-GSDP ratio for the triennium with new GSDP data as denominator would work out at 8.1 percent for Madhya Pradesh but 6.8 percent for All States taken together. Thus, the change in

[2] The upward revision is mainly because the earlier series provided GSDP at factor cost while newer series captures GSDP at market prices (which equals GSDP at factor cost plus indirect taxes net of subsidies).

the base year led to a sharper fall in the tax-GSDP ratio for All States compared to Madhya Pradesh. Further, improved tax effort during 2010-11 to 2012-13 is a phenomenon across states, which has been suppressed by the GSDP revision. Having said that, it should be noted that Madhya Pradesh’s own-tax revenues in nominal terms have grown at a faster rate (17.7 percent) compared to All States average (16.3 percent) over the 2005-06 to 2013-14.

Madhya Pradesh has a per capita income at the two-thirds level of All States average. Thus, per capita central transfer of an amount equal to All States average would translate into transfer/GSDP ratio of 1.5 times compared to all state average. Horizontal fiscal equalization would require an even higher level of transfers to compensate for the lower own-tax capacity of the state. This is visible in row 2, where state's share was in the range of 5 to 6 percent during the award period of the 12th and 13th Finance Commission, as against All States average hovering around 3 percent of the GSDP. The impact of the global financial crisis is also visible on the states’ share in central taxes. For Madhya Pradesh, the state’s share in central taxes declined from an average of 5.7 percent of the GSDP during the triennium of 2005-06 to 2007-08 to 5.2 percent during the next two years, with a recovery of 0.4 percentage point for the next four years. The share of All States in central taxes declined from 3.3 percent of their GSDP to 3.2 percent over same time period, but without recovery in the subsequent years (as discussed earlier in case of tax-GSDP ratio, stagnant numbers for All States for central tax devolution as ratio of GSDP could partially be due to higher upward revision of the GSDP data for them used in the numerator). Further, it appears that Madhya Pradesh has been responding to the fluctuations in central tax devolution in a countercyclical manner with a lag of around 2 years. The fall of central tax devolution - GSDP ratio during 2008 to 2010 were followed by a subsequent rise in the own-tax effort by the state in next three years. However, the rise in central taxes during 2010-11 and 2011-12 were followed by a decline in the own-tax effort from 2013 onward. On the other hand, no such trend is visible for GCS or All States taken together.

The decline in the overall central resource flows to the states post rerouting of the CSS through state budget can be examined from table 2. In 2014-15, compared to the average figures for 2010-14, tax devolution to Madhya Pradesh as a share of GSDP declined by 0.6 percentage point (5.6-5), as against 0.2 (3.1 – 2.9) percentage point for All States. Further, for Madhya Pradesh, CSS funds bypassing the state budget at 2.3 percent of the GSDP during 2010-14 were replaced by a rise in the central grants of only 0.6 percentage point (3.7 -3.1) in 2014-15, an overall loss of 1.7 percentage points of the GSDP (2.3- 0.6). Against this, for All States, a comparative decline in CSS bypassing the state budgets at 1.3 percent was replaced by 0.6 percentage point (2.8 -2.2) rise in the central grants through state budgets, an overall loss of only 0.7 percentage point of the GSDP (1.3 – 0.6). Thus, the overall loss for Madhya Pradesh compared to other states amounted an extra one percentage point of the GSDP (1.7- 0.7) during 2014-15 over the 2010-14 period. The loss of Madhya Pradesh, compared to GCS is even more starker, where the CSS for later accounting for 1 percent of GSDP during 2010-14 period compensated by rise in central grant of 0.7 (2.28-1.6) percent of the GSDP in 2014-15 over the average figure for pervious 4 years, causing a revenue loss of only 0.3 percent of the GSDP.

It appears that 2014-15 was an exceptional year in terms of lower central transfers to states. Hence, while analysing the implications of the award of 14th Finance Commission, it may be better to benchmark numbers against 2010-14 average. Award of the 14th Finance Commission provided greater revenues to Madhya Pradesh compared to All States average. Tax devolution in 2015-16, over the average for 2010-14, increased by 1.49 percentage points (7.07 -5.6) of GSDP for Madhya Pradesh compared to 0.77 percentage point for All States and 0.67 percentage point for GCS. However, central grants to Madhya Pradesh were only 0.27 percentage point (3.38-3.1) higher than the levels in 2010-14. Thus, against the loss of 2.3 percent of revenue resources under CSS, the state received 1.76 percent through the Finance Commission and central grants (1.49 + 0.27), resulting in a net loss of around 0.53 percent of the GSDP. Compared to this, All States received a rise in central grants at 0.34 percentage point (2.51-2.17), while GCS received a rise in central grants at 0.51 percent of GSDP (2.1-1.6). Thus, against the loss of 1.32 percent of revenue resources under CSS, the All States received 1.11 percent through the Finance Commission and central grants, resulting in a net loss of around 0.21 percent of the GSDP. Relative loss for Madhya Pradesh in central transfers is even starker when compared with GCS. These states gained 1.18 percent of GSDP (0.67+0.51) through Finance Commission and central grants, against a loss of 1.05 percent in the CSS, leading to a net gain of 0.13 percent of the GSDP. Clearly, the recent changes in the federal transfer system have favoured All States on average, while Madhya Pradesh incurred a net revenue loss.

A greater effort made by Madhya Pradesh for generating non-tax revenues is visible in row 3. The 11-year average for non-tax revenues as a share of GSDP for Madhya Pradesh was 1.97 percent compared to 1.45 percent for All States average. However, the numbers have fallen substantially to 1.6 percent in 2016. Overall revenue resources of the state are around 20 percent of GSDP compared to All States average of 15 percent. Thus, the ratio turns out to be roughly 1.33 times, somewhat lower than 1.5 times which would be required for full revenue equalization given lower per capita income levels of the state.

Row 1 to 5 of table 3 shows nominal revenue resources for Madhya Pradesh as a share of the nominal amount for GCS. Row 6 and 7 shows the revenue effort for Madhya Pradesh as a ratio of revenue effort for GCS. The last column shows the weights of various components of revenue resources for GCS during 11-years (annual averages). It can be observed that as against a per capita income of around 66 percent of the GCS average, Madhya Pradesh derives higher own-tax revenues at around 75 percent of the per capita levels for GCS. Correspondingly, the row 6 shows that the state puts a higher tax effort compared to GCS.

Further, Madhya Pradesh's revenue effort compared to GCS has been improving over the years, rising from 1.04 times the revenue effort for GCS in the triennium of 2005-08 to 1.16 times during 2010-15 before falling to 1.12 times in the next two years. In case of non-tax revenues, Madhya Pradesh's revenue effort compared to GCS is even higher where during the period of 2010-15, Madhya Pradesh collected more revenues compared to GCS even on per capita basis (row 3). This points to a substantially higher non-tax revenue effort by the state in row 7. The table also shows that while the share in central taxes and CSS provide the state greater revenues compared to other states, this is partially cancelled by the grants from the centre where the state receives less amount than GCS average. Taking all revenue sources into account, per capita revenue resources amounted to around 96 percent of GCS average, peaking during 2010-14 at 99 percent of the GCS average. The fall in the subsequent years can be attributed to a fall in own revenues and grants from the centre, which was partially countered by a rise in the transfers by the 14th Finance Commission.

Table 3: Per Capita Revenue Resources for Madhya Pradesh as a Ratio of GCS Average

S. No.	Item	2005-08	2008-10	2010-14	2014-15	2015-16	Weights
1	State's Own-tax Revenue	0.68	0.73	0.76	0.75	0.76	48.9
2	Share in Central Taxes	1.14	1.12	1.21	1.20	1.30	22.2
3	State's Own Non-Tax Revenue	0.70	0.98	1.07	1.18	0.92	9.8
4	Grants from the Centre	1.10	1.00	1.28	1.07	1.09	13.0
5	CSS bypassing State Budgets	2.06	1.82	1.40	NA	NA	6.2
	Total	0.93	0.97	0.99	0.94	0.97	100
	Revenue Effort as Ratio of GCS Revenue Effort						
6	State's Own-tax Revenue	1.04	1.08	1.16	1.12	1.12	
7	State's Own Non-Tax Revenue	1.08	1.43	1.66	1.78	1.36	

Source: Basis data RBI (2018) for the absolute amount of revenues, and Census Data for the population, with interpolation and extrapolation based on 2001 and 2011 Census for years other than 2011. Finance Account (2015-16) for Madhya Pradesh.

3. The composition of Own-tax Revenues

Table 4 clearly shows that Madhya Pradesh makes a higher tax effort compared to GCS average. Further, the gap between state's own-tax revenue effort, compared to GCS, has widened from around 0.0.29 percentage point in the 2006-08 period to around 1.24 percentage point in 2010-14 before falling to 0.78 percentage point in 2015-16. Clearly, during this 4-year period (2010-14), Madhya Pradesh made substantially higher tax effort compared to GCS average. Despite the higher own-tax effort at an aggregate level, interestingly, Madhya Pradesh has a lower tax effort on the part of sales tax/VAT (inclusive of Central Sales Tax) which contributes around 50 percent of the state's own-tax revenues as against 61 percent for GCS average. This is despite the fact that petroleum products, a part of states' sales tax/VAT, contribute higher tax-GSDP ratio for Madhya Pradesh compared to GCS average.

Table 5 provides component-wise tax-effort for Madhya Pradesh along with All States and GCS. During 2005-08, Madhya Pradesh collected 1.09 times the GCS average tax-GSDP ratio for petroleum products, which further increased to 1.27 times during 2015-16. This rise is mainly due to a fall in the tax-GSDP ratio (petroleum products) for GCS from 1.44 percent in 2005-08 to 1.15 percent during 2015-16. Against this, Madhya Pradesh had a smaller decline in the tax-GSDP ratio (for petroleum products) during this period, from 1.58 percent to 1.46 percent. Concurrent with the higher collection of taxes on petroleum products by Madhya Pradesh, its tax-GSDP ratio for VAT on items other than petroleum products is poorer than GCS, though this has shown signs of improvements in the recent years. During 2005-08, Madhya Pradesh collected 2.09 percent of the GSDP which increased to 2.54 percent by 2014-15, before falling to 2.19 percent in the next year. Madhya Pradesh collected 0.74 times the tax-GSDP ratio for GCS under this head during 2005-08, which improved to 0.82 times in 2014-15, before falling to 0.74 times during 2015-16. The last paragraph of this section contextualizes lower VAT tax effort by Madhya Pradesh to the sectoral composition of the state economy and explore possible implications on the GST revenues.

Table 4: Composition of Tax Revenues (As % of GSDP)

S. No.	Item	Madhya Pradesh					All States					General Category States				
		2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
1	Sales Tax/VAT (including CST)	3.67	3.43	3.89	3.78	3.65	4.21	4.05	4.24	4.23	4.06	4.26	4.10	4.29	4.28	4.11
	of which: Petroleum products	1.58	1.40	1.43	1.24	1.46	1.42	1.20	1.19	1.16	1.13	1.44	1.22	1.21	1.18	1.15
	VAT other than on petroleum products	2.09	2.03	2.46	2.54	2.19	2.79	2.86	3.05	3.07	2.94	2.82	2.89	3.07	3.10	2.96
2	Taxes on Property and Capital Transactions	0.95	0.89	1.21	0.99	0.87	0.97	0.84	0.88	0.81	0.81	1.00	0.87	0.92	0.85	0.84
3	State Excise	1.11	1.23	1.35	1.40	1.46	0.82	0.86	0.85	0.77	0.78	0.83	0.88	0.87	0.78	0.79
4	Taxes on Vehicles	0.44	0.40	0.41	0.38	0.36	0.37	0.34	0.35	0.35	0.35	0.38	0.35	0.36	0.36	0.36
5	Taxes on Goods and Passengers	0.52	0.63	0.63	0.56	0.57	0.19	0.18	0.16	0.17	0.18	0.19	0.17	0.16	0.17	0.18
6	Taxes and Duties on Electricity	0.52	0.56	0.49	0.42	0.42	0.23	0.21	0.23	0.22	0.24	0.24	0.22	0.24	0.23	0.25
7	Others (Professional tax and Entertainment Tax)	0.13	0.10	0.10	0.09	0.09	0.15	0.14	0.12	0.11	0.11	0.15	0.14	0.12	0.11	0.11
	Total	7.34	7.25	8.09	7.62	7.41	6.94	6.63	6.84	6.67	6.52	7.05	6.73	6.96	6.78	6.62

Source: Basis data RBI (2018) for the absolute amount of revenues, and mospi.nic.in for the GSDP data. Finance Account (2015-16) for Madhya Pradesh.

Table 5: Tax Effort by Madhya Pradesh as Ratio of All States Tax Effort

S. No.	Item	MP/ All States					MP/ General Category States				
		2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
1	Sales Tax/VAT (including CST)	0.87	0.85	0.92	0.89	0.90	0.86	0.84	0.91	0.88	0.89
	of which: Petroleum products	1.11	1.17	1.21	1.07	1.30	1.09	1.15	1.18	1.05	1.27
	VAT other than on petroleum products	0.75	0.71	0.81	0.83	0.74	0.74	0.70	0.80	0.82	0.74
2	Taxes on Property and Capital Transactions	0.99	1.07	1.37	1.23	1.08	0.95	1.02	1.31	1.18	1.03
3	State Excise	1.36	1.43	1.59	1.80	1.88	1.33	1.40	1.56	1.78	1.85
4	Taxes on Vehicles	1.18	1.16	1.17	1.07	1.03	1.15	1.13	1.14	1.04	1.00
5	Taxes on Goods and Passengers	2.75	3.55	3.84	3.34	3.16	2.74	3.66	3.91	3.36	3.19
6	Taxes and Duties on Electricity	2.23	2.67	2.13	1.90	1.73	2.16	2.58	2.07	1.85	1.69
7	Others (Professional tax and Entertainment Tax)	0.88	0.74	0.85	0.82	0.85	0.89	0.75	0.87	0.82	0.85
	Total	1.06	1.09	1.18	1.14	1.14	1.04	1.08	1.16	1.12	1.12

Source: Table 4

The sources of greater own-tax effort for Madhya Pradesh are state excise, taxes on goods and passengers, and duties on electricity, etc. Additionally, there was a surge in taxes on property and capital transactions during the 2011-15 period. Examination of the Finance Account showed an entry of ₹ 1,079 crores in 2011-12 for Taxes on Immovable Property while this item has yielded practically nothing in the previous years, and around 40 to 16 Crores in the next three years. The reason for this extraordinary receipt is not given in the Finance Accounts, which attributes it to "mainly due to increase in receipt under ordinary collections."

Electricity duty is used as a tool to raise resources for cross-subsidizing different categories of consumers. For the collection of taxes and duties on electricity, Madhya Pradesh Government has framed Madhya Pradesh Electricity Duty Act, 1949 (MPEDA), Madhya Pradesh Vidyut Shulk Adhiniyam, (MPVSA) 2012. Every distributor/distribution licensee (DISCOMs)/franchisee, every generating company, captive power generating plant, and producer of electrical energy are required to pay a duty calculated at the specified rate, on the units of electrical energy sold or supplied to a consumer or consumed by himself for his own purposes during the preceding month. The duty ranges between 9-15 percent of the applicable or imputed (in case of open access from other states or captive generation) tariff.

Table 6 shows the per capita electricity duty collected by Madhya Pradesh along with All States and GCS average. The state collects higher per capita duty in absolute terms compared to All States and GCS average. This is even more important given that Madhya Pradesh has per capita income only two-third of the GCS average, translating into electricity duty-GSDP ratio at roughly double the level of All States average. Even when the tax base is taken into account, Madhya Pradesh has per capita consumption at around 80 percent of All States average. Thus, assuming the same tax effort on the tax base of electricity consumption, Madhya Pradesh should have collected ₹ 200.7 in 2015-16 as against GCS average of ₹ 250.9. However, the state collected substantially higher level at 286.2. This can be explained by the rate of electricity duty levied which is among the highest in the country, possibly after Jammu and Kashmir and comparable to Maharashtra. While the amount of electricity duty collected by the state has historically been higher than the All States average, replacement of Madhya Pradesh Electricity Duty Act 1949 (MPEDA) by Madhya Pradesh Vidyut Shulk Adhiniyam, (MPVSA) 2012 has permitted the state to continue this lead.

Table 6: Per Capita Electricity Duty Collection (₹)

S. No.	Item	2006-10	2011-14	2014-15	2015-16
1	Madhya Pradesh	136.2	226.2	259.5	286.2
2	All States Average	83.2	163.5	204.4	243.9
3	GCS Average	86.4	169.5	210.7	250.9
4	At 66 percent of GCS average	57.0	111.9	139.1	165.6
5	At 80 percent of GCS average	69.1	135.6	168.6	200.7

Source: Same as Table 3

State excise forms an important source of own-tax revenues for Madhya Pradesh. Its contribution in the total own-tax revenues for the state has risen from 15.85 during 2006-10 period to 19.7 percent in 2015-16. In contrast, state-excise forms a relatively smaller part of

GCS revenues, being stagnant at around 12 percent of the overall revenues. However, unlike the case of electricity, where there was a historical lead for the state, both as a share of GSDP and in per capita terms, in this case, the state's lead in per capita terms is a recent phenomenon. Earlier, Madhya Pradesh had a lead in terms of as a share of GSDP. However, even the absolute amount collected by the state has been above GCS average in the recent years. Unlike the case of electricity, where per capita electricity consumption could provide an indicator of the tax base, per capita consumption estimates for alcohol are not reliable. While comparing the figures with GCS average, care should be taken since Gujarat and some smaller states had a prohibition on alcohol during 2005-16. However, per capita revenue collection by Madhya Pradesh (₹ 864) is comparable to the neighbouring richer state of Maharashtra (₹ 963) in 2014-15.

Table 7: Per Capita State Excise Collection (₹)

S. No.	Item	2006-10	2011-14	2014-15	2015-16
1	Madhya Pradesh	293	637	864.5	1004
2	All States Average	315	609	718	788
3	GCS Average	322	623	731	801
4	At 66 percent of GCS average	213	411	482	529

Source: Same as Table 3

Incidentally, the items where Madhya Pradesh levies higher tax effort compared to GCS are not covered under GST; hence the state will be able to leverage its advantage in collecting greater revenue from these sources. For Madhya Pradesh, the lower tax-GSDP ratio of VAT (excluding petroleum products) could be due to a lower share of manufacturing in the state's economy. In 2015-16, agriculture accounted for around 35.56 percent of the GSDP of the state, as against 18.8 percent for All States. On the other hand, manufacturing contributed to only 9.25 percent of the GSDP for Madhya Pradesh compared to 15.62 percent for All States.[3] Since

[3] In the recent years, Madhya Pradesh has experienced a rise in the share of agriculture in the economy, and corresponding decline for shares of industry and services. In 2011-12, agriculture accounted 30 percent of the Madhya Pradesh's state income as against 19.64 percent for All States. Manufacturing accounted for 12.61 percent of the state income for Madhya Pradesh as against 16.97 percent for All States. Thus, the argument of sectoral composition of the state economy being less favourable to origin based indirect taxes remains valid for years prior to 2015-16 also, though with a lower force.

agricultural items are generally exempt/attract a lower tax rate under indirect taxes, it is the manufacturing sector which can be expected to bear more burden of the states' VAT. However, given the smaller share of manufacturing sector in the GSDP, Madhya Pradesh is likely to have the tax base for VAT collection even lower than reflected by its GSDP. This could partially explain why the state which incurs greater tax effort on all other components ‘appears' to have a lower tax-effort for VAT (excluding petroleum products). Given the lower share in manufacturing, it is quite likely that Madhya Pradesh is a net importing state for these items. Thus, ceteris paribus, destination-based Goods and Service Tax with coverage of service sector is likely to benefit Madhya Pradesh as compared to existing origin-based state VAT. However, as shown in section 5, this assumption may not hold true for various reasons.

4. Non-Tax Revenues

As discussed earlier, Madhya Pradesh collects a greater share of its GSDP as non-tax revenues compared to All States average. Two major sources of interest receipts are interest realised on the investment of cash balances and interest from Public Sector Undertakings (PSUs). The former accounts for nearly 53 percent of the total interest receipt while the later amounted to around 30 percent of the interest received during 2005-06 to 2015-16. The volatility of interest realised on investment of cash balances would depend upon the volatility of underlying cash balances invested. Further, since the interest accrued on the investment in cash balances account is more due to amount retained in the cash balances account rather than any revenue effort by the state, this can be ignored from the perspective of revenue effort. The interest receipt from PSUs account for nearly 30 percent of the interest receipts on average during 2005-16 However, this has been volatile, with no interest receipts from PSUs during 2010-11, 2012-13, and 2013-14. Even in the years when interest amount was received from the PSUs, it has been quite volatile. For example, the interest amount received in 2015-16 was only

6.5 percent of the amount received in the previous year. All this contributes to the volatility of the overall interest receipts for the state.

General services showed a good revenue receipts during 2005-10 period both for Madhya Pradesh and All States, though this declined from 2010-11 onward. A closer examination of the Finance Account showed that nearly 70 percent of the receipt under general services was actually the debt wavier received from the 12th Finance Commission. Report of the 13th Finance Commission also observed that the states and CAG have wrongly booked the amount of debt waived under the Debt Consolidation and Relief Facility (DCRF) recommended by 12th Finance Commission as non-tax revenue receipts under ‘miscellaneous general services'. Ideally, this should not be counted as a non-tax revenue receipt, since the purpose was to reduce the debt burden of the states rather than giving them revenues to make fresh expenditures. To the extent debt waiver under DCRF forms part of the non-tax revenue receipt, the revenue receipts are overestimated, and correspondingly revenue and fiscal deficit are underestimated.

Table 8 Composition of Non-Tax Revenues (As % of GSDP)

S. No.	Item	Madhya Pradesh					All States					General Category States				
		2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
1	Interest Receipts	0.21	0.32	0.19	0.26	0.08	0.31	0.31	0.24	0.21	0.14	0.32	0.31	0.25	0.21	0.14
2	General Services	0.35	0.26	0.13	0.12	0.24	0.51	0.45	0.21	0.21	0.25	0.50	0.44	0.20	0.21	0.26
3	Education, Sports, Art and Culture	0.01	0.24	0.46	0.68	0.24	0.06	0.07	0.10	0.13	0.13	0.06	0.07	0.10	0.14	0.14
4	Health	0.01	0.01	0.01	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.03	0.02	0.02	0.03
5	Forestry and Wildlife	0.38	0.35	0.27	0.20	0.18	0.07	0.06	0.04	0.04	0.04	0.06	0.05	0.04	0.03	0.03
6	Industries	0.67	0.70	0.66	0.59	0.57	0.32	0.33	0.31	0.30	0.29	0.33	0.35	0.32	0.31	0.30
7	Power	0.00	0.24	0.12	0.08	0.04	0.10	0.11	0.06	0.07	0.05	0.05	0.05	0.03	0.04	0.03
8	Irrigation	0.03	0.03	0.10	0.09	0.09	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.04	0.04
9	Petroleum	0.00	0.00	0.00	0.00	0.00	0.04	0.03	0.06	0.05	0.03	0.00	0.00	0.05	0.04	0.02
10	Road Transport	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01
	Urban Development	0.00	0.00	0.01	0.02	0.01	0.06	0.03	0.03	0.03	0.02	0.06	0.03	0.03	0.03	0.02
11	Others	0.10	0.10	0.08	0.08	0.12	0.17	0.17	0.12	0.11	0.14	0.17	0.17	0.12	0.11	0.14
	Total	1.77	2.25	2.03	2.16	1.58	1.72	1.65	1.27	1.23	1.18	1.63	1.57	1.22	1.22	1.16

Source: Basis data RBI (2018) for the absolute amount of revenues, and mospi.nic.in for the GSDP data. Finance Account (2015-16) for Madhya Pradesh.

In the 2005-08 period, education, sports, art, and culture contributed only 0.01 percent of the GSDP as non-tax revenue receipt for the state. However, this has gone up over the years reaching nearly 0.68 percent of the GSDP by 2014-15 before declining in the next year to 0.24 percent. The rise for GCS in their revenue receipt from this source has been rather moderate. Examination of Finance Accounts, Revenue Audit, and Budget document showed that this rise is from 2008-09 onward under the receipt from schools and other receipts. It is desirable that whenever such jumps (or even fall) take place in the revenue receipts, detailed explanation is provided on the revenue measures that led to the growth of revenue receipts. Revenues from industries essentially reflect the revenues from mining, which accounts for 99 percent of the overall receipts under this category. License and royalty revenues from mining activities are of the nature of economic rent on natural resources. Economic Surveys for Madhya Pradesh provide data on the monetary value of the mineral output of the state. The non-tax revenue receipts recorded in the Finance Accounts amounted to around 18-20 percent of the value of mineral output during 2005-16.

Table 9: Revenue, Volume and Price Indicators for State Trading in Timber

S. No.	Item	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
1	Revenue (₹ Crores)	482.30	479.33	603.78	636.27	687.23	725.65	792.88	779.19	708.54
2	Quantity (cmt) in lakhs	2.45	2.15	2.58	2.78	2.43	2.53	2.35	2.4	2.07
3	Implicit Price (₹/cmt)	19,686	22,295	23,402	22,887	28,281	28,682	33,740	32,466	34,229
4	Volume growth %		-12.24	20.00	7.75	-12.59	4.12	-7.11	2.13	-13.75
5	Price growth%		13.25	4.97	-2.20	23.57	1.42	17.63	-3.77	5.43
6	Nominal Growth%		-0.61	25.96	5.38	8.01	5.59	9.26	-1.73	-9.07

Source: Economic Surveys (various years) and Finance Account for Madhya Pradesh, cmt =cubic metre

With an area of 9.46 million hectares, Madhya Pradesh stands first in the country in terms of area under forest. Forests account for 30.72 percent of the geographical area of the state against 23.34 percent for the nation. However, there has been a decline in the forestry sector's contribution to the revenue receipts in the recent years for Madhya Pradesh as well as for All States taken together. Sale of timber accounts for nearly 75 percent of the revenues from forestry sector for Madhya Pradesh (Finance Accounts, 2015-16). Table 9 shows the revenues from state trading in timber, the output of timber, and implicit prices. Subsequently, the growth rate of prices, volume, and nominal revenues are calculated from row 4 to 6. The CAGR for total revenue, volume growth, and price growth during 2007-08 to 2015-16 have been 4.93, -2.08, and 7.16 percent respectively. Clearly, the price has kept pace with general inflation rate, but fall in volume had resulted in relatively slower growth in nominal revenue receipts. Since the GSDP has grown at CAGR of 16.02 percent during this period, declining revenue-GSDP ratio is on expected lines.

5. Implications of GST for the Revenues of the State

With introduction of GST from 1st July 2017, following state/local bodies taxes were subsumed in the GST: State Value Added Tax (VAT), (ii) central sales tax, (iii) entry tax, octroi, local body tax, (iv) taxes on luxuries, (v) taxes on advertisements, etc. Further, to alleviate the fears of the states regarding uncertainty of the revenue collection in the new regime, particularly during the transition period, the Goods and Services tax (Compensation to States) Act, 2017 was enacted. As per section 7 of the Act, the States (including Union Territories with legislatures) have to be compensated for any loss of revenue arising out of implementation of GST during the "transition period". The "transition period" has been defined in the Act as a period of five years from the "transition date" which in turn has been defined in the Act as the date on which the SGST Act of the concerned State comes into force, which is effectively 1st July 2017 for all states except Jammu & Kashmir (who enacted SGST from 8th July 2017). The amount of revenue to be protected was decided based on collection of taxes subsumed in GST during 2015-16 with an annual growth rate of 14 percent. Compensation is paid out of GST compensation cess levied on items decided by GST council, and settlements are made once in every two months.

Table 10 shows that Madhya Pradesh collected Rs 40,214 Crores as own tax revenue during 2015-16, of which Rs 15,328 Crores amounting to 38.12 percent of the total own-tax revenues collected came from the taxes subsumed under GST. Compared to this, the taxes subsumed under GST accounted for nearly 45 percent of the own-tax revenues for General Category/All States. Since, transfers from centre and non-tax revenue account for nearly 62 percent of the state's revenue resources, taxes subsumed under GST accounted for only 14.53 percent of the overall revenue receipts of the state.

Table 10: Own Tax Revenues and Taxes subsumed under GST for 2015-16 (Rs Crores)

1	2	3	4
State	Total Own Tax Revenues	Revenue Collected under Taxes Subsumed in GST	3 as % of 2
Madhya Pradesh	40,214	15,328	38.12
GCS	8,08,810	3,56,907	44.13
All States	8,47,145	3,78,975	44.74

Source: Author's calculation based on data from Agenda of 27th GST Council meeting held on 4th May 2018

Table 11 provides details on the performance of tax collection and shortfall from the protected revenues during August 2017 to February 2018. Clearly, the shortfall for Madhya Pradesh at 26.08 percent is at much higher level compared to GCS (15.08 percent) or All States average (16.04 percent), which is a cause of concern for the state. Benchmarking this shortfall to 2015-16 revenue base would equate to a shortfall of 3.79 percent of the overall revenue resources/receipts for the state and 0.74 percent of the GSDP. The state ranked 5th among 18 General Category States in terms of shortfall as share of protected revenue.

As shown in Table 11, except Punjab, it is the poorer states who occupy ranks among the top 6 revenue shortfall states. Reason behind Punjab's revenue losses could be the post-GST abolition of the origin based statutory duties (like VAT, market fee, mandi fee, APMC cess, Nirashrit shulk, etc.) on food-grains which are procured in Punjab and consumed across country. In the pre-GST regime, these taxes were levied by the states even on the grains exported out of states through FCI/PDS system. Punjab, the largest contributor to the food-grains procured for PDS across country, used to levy 14.5 percent origin based taxes on wheat and rice.

Table 11: Monthly Average Tax Collection and Shortfall during August 2017 to February, 2018 (Rs Crores)

1	2	3	4	5	6
S. No.	State	Revenue Protected	Shortfall	4 as % of 3	Import Index
1	Bihar	1,367	524	38.33	66.4
2	Punjab	1,567	580	37.01	54.6
3	Chhattisgarh	797	248	31.12	35.1
4	Odisha	1,194	365	30.57	41.7
5	Madhya Pradesh	1,660	433	26.08	51.1
6	Jharkhand	694	179	25.79	31.5
7	Goa	236	53	22.46	34.7
8	Karnataka	3,914	876	22.38	39.2
9	Rajasthan	1,858	335	18.03	47.1
10	Haryana	1,649	294	17.83	24.3
11	Kerala	1,822	285	15.64	56
12	Gujarat	3,125	428	13.70	26.8
13	West Bengal	2,176	279	12.82	41.7
14	Uttar Pradesh	3,613	431	11.93	54.6
15	Andhra Pradesh	1,457	103	7.07	53.5
16	Telangana	1,745	110	6.30	50.2
17	Tamil Nadu	3,226	112	3.47	34.9
18	Maharashtra	6,553	193	2.95	28.2
	GCS	38,653	5,828	15.08	40.4
	All States	41,043	6,584	16.04	40.9

Source: Author's calculation based on data from Agenda of 25th to 27th GST Council.
Import index is defined as IGST settlement to the state as a share of total SGST collection of the state.

Interestingly, during the last decade, Madhya Pradesh has also emerged as an important contributor to the wheat procurement for PDS purposes. During the triennium of 2005-06 to 2007-08, the state contributed on average 1.80 lakh tonnes of wheat per year to the public procurement accounting for 1.54 percent of the total wheat procured across country. However, this increased to 6.2 million tonnes on average for the triennium of 2013-14 to 2015-16, accounting for 25.56 percent of wheat procured across country (DES, 2016).

Rise in procurement of wheat from the state also created incentives for the state government to tap origin based taxes on procured grains. Statutory duties on wheat procured from state was raised from 3.2 percent in 2009-10 to 9.2 percent in 2012-13, of which 5 percent was VAT (CACP, 2013 and 2016). During 2015-16, at MSP of Rs 1,525 per quintal, levy of 9.2 percent, and procurement of 7.3 million tonnes the overall collection under statutory levy on wheat would have amounted to Rs 1,025 crores, equivalent of 6.69 percent of the revenue collected under taxes subsumed under GST (some of the taxes may not have been subsumed under GST, but separate details are not available). Food-grains are exempted from GST, clearly there is no counterpart tax replacing the 5 percent VAT in the pre-GST regime. VAT alone would have amounted to 557 crores in 2015-16, at 3.6 percent of the total revenue collected under taxes subsumed under GST. Thus, the revenue loss on VAT levied on procurement of wheat for PDS system alone would account for nearly 1/3rd of the revenue shortfall for Madhya Pradesh in excess of GCS average which stands at 11 percentage points during August 2017 to February, 2018 (presuming a negligible revenue loss for all GCS taken together on this account).

SGST revenues received by the state include SGST collected within state and IGST settlement received on items imported to the state. Thus, IGST settlement as a share total SGST can be taken as an index for identifying consuming and producing states. The last column of Table 11 provides import index, measured as share of IGST settlement in total SGST collection during November 2017 to February 2018. Madhya Pradesh ranks 6th among General Category States on this index. It should be noted that this index is solely based on imports of items covered under GST weighed by their GST rate. Thus, food-grains, a major export from Punjab and Madhya Pradesh are not included in this index since they are exempt from GST.

A comparison of columns 5 and 6 of Table Y shows that contrary to a-priori expectations from a destination based GST; exporting states like Maharashtra, Tamil Nadu, and to certain extent Gujarat have suffered relatively lower revenue loss. On the other hand, importing states like Punjab, Bihar, and Madhya Pradesh have suffered revenue losses exceeding 25 percent. However, this relationship is not a very clear one. Importing states like Kerala, Andhra Pradesh, Telangana, and Uttar Pradesh have suffered relatively lower revenue loss, while exporting states like Chhattisgarh and Jharkhand have suffered revenue losses of more than 25 percent.

There can be many reasons behind such trends. With the introduction of GST, services have been included in the tax base of SGST, which did not form the part of state/local taxes subsumed under GST for measuring tax base of states in 2015-16. States like Maharashtra, Tamil Nadu may have gained on service tax front, though losing taxes on their manufacturing output exported to rest of the nation. This may also be the case with importing states like Kerala, Andhra Pradesh, Telangana, and Uttar Pradesh where either tourism, financial, or IT related services may have played some role in protecting revenues for these state. Madhya Pradesh may not have a comparable tax base in services. Unfortunately, the data on commodity/service revenue collection under GST is not available, which could have permitted further exploration of this issue.

The Goods and Services Tax (Compensation to States) Act, 2017 provides for the compensation of revenue losses to the states during July 2017 to July 2022, presuming annual growth rate of 14 percent on the base of 2015-16 revenue collection for taxes subsumed under GST. Hence, unless the collected SGST exceeds the revenue protected, latter would remain the maximum SGST receipts for the state (including the compensation) during the period upto July 2022. Revenue projection for SGST beyond July 2022 is a difficult task at this stage. There are multiple possibilities, including i) improvement in tax collection due to stabilization/better compliance or ii) in case of continuing shortfall the states asking GST council to continue the compensation for some additional years.

Part of the problem lies in unrealistic forecasting of the revenue protected. Nominal GDP has grown only at a CAGR of 11.79 percent during 2011-12 to 2016-17. If anything, pursuance of inflation targeting regime is likely to bring down the nominal growth rate (provisional GDP estimates for 2017-18 suggests a nominal growth rate of only 10 percent over previous year with implicit GDP deflator of 3.07 percent). Hence, presumption of 14 percent growth would imply a high tax buoyancy of 1.4 times. Continuing compensation on the basis of 14 percent after 2022 might help the states with revenue shortfall, however, it will be against the interest of the states that exceeds the revenue protected target or have relatively lower revenue shortfall. As consumers of the latter category of states will pay the compensation taxes which will be channelled to revenue shortfall states. If the efforts towards stabilization of GST and compliance improvement by 2022 still end up with some shortfall in SGST collection compared to protected revenue target, the GST council may consider raising the tax rate to reach revenue neutral rate. While calculating the revenue neutral rate, it may be desirable to moderate the expectations of 14 percent growth to be replaced by growth rate of other taxes or anchoring it to growth rate of nominal GDP with some reasonable buoyancy.

6. Conclusion

Being a poorer state, transfers from the centre in terms of share in central taxes, grants, and funds for CSS forms an important part of revenue resources for Madhya Pradesh. The state relied more on the CSS bypassing the state budgets during 2006-10 compared to other states. However, the share of CSS funds continued to decline over the years, and which were finally routed through state budgets from 2014-15 onward. It appears that Madhya Pradesh has been responding to the movements in central tax devolution in a countercyclical manner with a lag of around two years. The fall of central tax devolution - GSDP ratio during 2008 to 2010, in the aftermath of the Global Financial Crisis, was followed by a subsequent rise in the own-tax effort by the state in the next three years. However, the rise in central tax devolution during 2010-11 and 2011-12 were followed by a decline in own-tax effort from 2012-13 onward. While the award of the 14th Finance Commission increased the tax devolution for Madhya Pradesh by 1.7 percentage point of GSDP during 2015-16 compared to 2010-14, the state suffered a net loss of central resource flow of 0.53 percentage point of GSDP when all CSS and central grants are considered along with tax devolution. Against this, GCS gained 0.13 percentage point of GSDP in their revenue receipts from centre when tax devolution and all other central transfers are considered together. Clearly, the recent changes in the federal transfer system have hurt Madhya Pradesh, while benefiting GCS taken together.

In terms of own-revenue resources, Madhya Pradesh makes a higher tax effort than GCS, with its tax-GSDP ratio of the state being around 1.1 to 1.15 times the tax-GSDP ratio for GCS taken together. Despite this, the tax effort for sales tax/VAT (excluding petroleum products) amounted to around 0.75 times tax-GSDP ratio for GCS. In 2015-16, state excise, sales tax on petroleum products, and electricity duty accounted for 45 percent of own-tax revenues for Madhya Pradesh as against 33 percent for GCS. Compared to other states, Madhya Pradesh incurs substantially higher tax efforts for sales tax on petroleum products, state excise, electricity duty, taxes on vehicle and passengers, etc. These taxes more than compensate for lower tax effort on the VAT, thus translating into an overall tax-GSDP ratio higher than GCS average. Incidentally, the items where Madhya Pradesh levies higher tax effort compared to other states are not covered under GST; hence the state should be able to leverage its advantage in collecting greater revenue from these sources in future. On the other hand, Madhya Pradesh has a greater share of agriculture and a lower share of manufacturing compared to other states in its GDSP. This sectoral composition of the economy of Madhya Pradesh could contribute to its lower tax-GSDP ratio for VAT (excluding petroleum products).

Taxes subsumed under GST accounted for 38.12 percent of the total own-tax revenues for Madhya Pradesh compared with nearly 45 percent of the own-tax revenues for General Category/All States during 2015-16. Since, transfers from centre and non-tax revenue account for nearly 62 percent of the state's revenue resources, taxes subsumed under GST accounted for only 14.53 percent of the overall revenue receipts of the state. Given lower share of manufacturing in state income, it is quite likely that Madhya Pradesh is a net importing state of taxable commodities. Madhya Pradesh ranks 6th among General Category States on importing state index based on share of IGST settlement revenues as a share of SGST. Thus, destination based Goods and Service Tax is likely to benefit Madhya Pradesh compared to existing origin-based state VAT. However, the data on GST revenues does not support this, as the state is incurring a high revenue shortfall compared to the protected revenue target under GST regime. The shortfall for Madhya Pradesh at 26.08 percent is at much higher level compared to GCS (15.08 percent) or All States average (16.04 percent), which is a cause of concern for the state. Benchmarking this shortfall to 2015-16 revenue base would equate to a shortfall of 3.79 percent of the overall revenue resources/receipts for the state and 0.74 percent of the GSDP.

The state ranked 5th among 18 General Category States in terms of shortfall as share of revenue protected under GST Compensation to States Act (2017). There can be many reasons behind this. Post-GST, most of the origin based statutory duties (like VAT, market fee, mandi fee, APMC cess, Nirashrit shulk, etc.) on food-grains which are produced in Madhya Pradesh and consumed across country have been abolished. Food-grains are exempted from GST, hence there is no counterpart tax replacing the 5 percent VAT in the pre-GST regime. VAT alone would have amounted to 557 crores in 2015-16, at 3.6 percent of the total revenue collected under taxes subsumed under GST. Thus, the revenue loss on VAT levied on procurement of wheat for PDS system alone would account for nearly 1/3rd of the revenue shortfall for Madhya Pradesh in excess of GCS average which stands at 11 percentage points during August 2017 to February, 2018. With the introduction of GST, services have been included in the tax base of SGST, which did not form the part of state/local taxes subsumed under GST for measuring tax base of states in 2015-16. States like Maharashtra, Tamil Nadu, Kerala, Telangana, may have gained on service tax front on tourism, financial, and IT related services. Madhya Pradesh may not have a comparable tax base in services. Thus, it will be challenging for the state post-July 2022, when the GST compensation for the revenue shortfall against protected revenues will cease to exist.

Chapter 2
Analysis of Expenditure

1. Introduction

As noted in the previous chapter, the central government started to route the funds for centrally sponsored schemes (CSS) through state budgets from 2014-15 onward. Hence, the expenditure on agriculture, rural development, health, education, etc. incurred through central funds under CSS were not part of the state budget till 2013-14. A comparable analysis of expenditure of the state over the period of 2005-16 requires consistent treatment of the CSS throughout the period. In the previous chapter, resources under CSS were considered as a part of revenue resources available to the state. In this chapter also, the same approach is followed, where the central expenditure on CSS is added to expenditure by the state to get an overall picture of the expenditure in the state. Since by inclusion of the CSS, both revenue and expenditure increase by the same amount, there is no net change in the fiscal deficit. However, the composition of CSS in terms of capital and revenue expenditure can influence the overall figures for revenue deficit. From 2014-15 onward, entire revenue of the CSS will form a part of the budgetary revenue receipt of the state. However, a part of CSS funds are meant for capital expenditure. Thus, on account of the CSS itself, there is bound to be a ‘revenue surplus' for the state, which will overstate the overall revenue surplus when compared with the previous years. Similarly, capital expenditure for 2014-15 onward is likely to be overstated compared to previous years, when the capital expenditure carried out of CSS funds did not form a part of the capital expenditure in the state finances.

The present chapter is concerned with the analysis of expenditure. In regard to this, a challenge is caused due to the rerouting of the CSS through state budgets. The composition of the expenditure by the state government on social, economic, and general services and their sub-classifications or distinction between revenue and capital expenditure can be calculated from the total expenditure inclusive of the CSS from 2014-15 onward. However, for years prior to 2014-15, RBI's Study on State Finances and the Finance Accounts provide the composition of state government's expenditure out of total expenditure exclusive of the CSS. While the total resources transferred, under CSS bypassing the state budgets, could be obtained through the Finance Accounts of the state government, the breakup of CSS in terms of sectoral composition requires certain assumptions. The broad nature of the CSS program can be associated with a particular sector (e.g., Sarva Shiksha Abhiyan with education, National Rural Health Mission with health, etc.), it is quite possible that expenditure under these schemes may cut across different sectors. More importantly, the breakup of the expenditure under CSS in terms of capital and revenue expenditure is not available in the Finance Account. A comparison of Madhya Pradesh with All States will also be made difficult if the adjustments are carried out for Madhya Pradesh, but not for other states. Hence, this chapter takes into account the CSS while considering the aggregate expenditure. For this, the CSS is shown as a separate category till 2013-14. Thus, the aggregate expenditure from 2014-15 onward will remain comparable with the earlier years. However, the composition of the expenditure in terms of sectoral classification or capital-revenue expenditure breakup will not be strictly comparable over the years. The intertemporal analysis carried out in this chapter should be contextualized in the above background.

2. Composition of the Expenditure

Table 1 provides details on the composition of the expenditure by Madhya Pradesh as a percentage out of the total expenditure. Row 1 shows that revenue expenditure accounted for around 68.67 percent of the total expenditure in the 2005-08 period, which declined to 64.84 percent in 2008-10, before rising to 71.28 percent of the total expenditure during 2010-14. The rise in the share of revenue expenditure in the next two years to above 82 percent is largely owing to the routing of the CSS through the state budget from 2014-15 onward. As noted earlier, the Finance Accounts till 2013-14 provide unaudited figures for the CSS funds received by the state. However, a breakup of these funds into revenue and capital expenditure is not available. Thus, a comparable figure for 2014-15 against 2010-14 for revenue and capital expenditure is not possible. The CSS funds are embedded in both revenue and capital expenditure for 2014-15. The CSS, accounting for 9.71 percent of the total expenditure during 2010-14, was merged with all other categories of expenditures in 2014-15. In 2014-15, there was a rise in the share of revenue expenditure by 11.07 percentage point along with a decline of 0.68 percentage point for the capital expenditure (compared with the 2010-14 period). The share of capital expenditure recovered in the next year.

Table 1: Composition of the Expenditure

S. No.	Item	Madhya Pradesh					All States					General Category States				
		2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
1	Revenue Expenditure	68.67	64.84	71.28	82.36	83.42	77.43	75.48	78.45	85.28	81.53	78.62	77.08	79.63	85.32	81.14
1.1	Social	22.45	22.85	27.72	32.06	35.66	26.71	28.70	30.98	32.98	32.83	27.21	29.60	31.81	33.05	32.86
1.2	Economic	16.64	15.72	17.49	23.71	21.34	17.01	16.76	16.66	21.21	19.56	16.99	17.03	16.80	21.30	19.45
1.3	General	25.62	22.01	21.51	22.36	21.49	31.71	28.02	28.43	28.67	26.99	32.22	28.37	28.70	28.44	26.56
1.3.1	Interest	11.67	8.63	6.98	7.07	6.76	14.15	11.02	9.90	9.92	9.50	14.72	11.47	10.29	10.14	9.63
1.3.2	Pension	5.28	5.45	5.89	6.84	6.54	7.28	7.55	9.22	9.54	9.05	7.44	7.77	9.35	9.44	8.86
1.4	Transfer to local bodies	3.97	4.25	4.56	4.22	4.93	2.00	2.00	2.29	2.42	2.15	2.20	2.08	2.32	2.53	2.27
2	Capital Outlay	18.90	14.53	12.55	11.88	14.08	14.85	14.93	12.53	14.16	14.79	14.64	14.66	12.48	14.13	14.86
3	Net Loans and Advances (a-b)	-0.61	5.41	6.45	5.77	2.50	0.93	0.72	1.29	0.56	3.68	1.01	0.78	1.39	0.54	4.00
a)	Loan & Advances	2.93	5.49	9.47	12.53	2.64	2.19	1.71	1.92	1.54	4.00	2.40	1.87	2.07	1.62	4.32
b)	Recovery of Loans and Advances	3.54	0.08	3.02	6.76	0.14	1.26	0.99	0.63	0.99	0.32	1.39	1.09	0.69	1.08	0.32
4	CSS	13.04	15.22	9.71	0.00	0.00	6.79	8.87	7.73	0.00	0.00	5.73	7.48	6.50	0.00	0.00
	Total (1 + 2 + 3 +4)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

Compared to GCS, the share of revenue expenditure in the total expenditure for Madhya Pradesh has been consistently lower, except for 2015-16. However, the lower share of revenue expenditure in the total expenditure for Madhya Pradesh, compared to GCS, is accompanied by a higher share of CSS. Thus, it is possible that funds under CSS, meant for social and economic services, had replaced the state's own revenue expenditure. This can be seen particularly in the case of revenue expenditure on social services whose share in the total expenditure continued to lag behind GCS, but from 2014-15 its share increased and outpaced GCS average in the next year. The share of revenue expenditure on economic services, out of the total expenditure, for Madhya Pradesh is comparable to GCS average. Revenue expenditure on general services occupies a lower share in the total expenditure for Madhya Pradesh compared to GCS average. Partly this is driven by the lower share of interest burden on the state, whose share on average has been lower by 3.1 percentage point for Madhya Pradesh compared to GCS average. However, the share of non-interest general expenditure for Madhya Pradesh is also lower by 3.5 percentage point compared to GCS average. The state government of Madhya Pradesh provides a greater share of its resources to the local bodies. Transfers to local bodies as a share of total expenditure occupy roughly double the share observed in case of GCS average. The capital expenditure for Madhya Pradesh occupied much larger share in the state's expenditure compared to GCS during the 2005-08 period. However, post-GFC, the share of capital expenditure declined for both Madhya Pradesh and All States, though more so in case of the former.

Table 2 provides the composition of the states' expenditure as a share of GSDP. Table 3 provides details on the changes in the composition of the expenditure by states. To understand the issues related to states' response to the global financial crisis, and implications of the award period of 13th and 14th Finance Commission, a comparative analysis of Madhya Pradesh against GCS average is carried out separately for 2005-10 and 2010-16.

Table 2 Composition of Expenditure as % of GSDP

S. No.	Item	Madhya Pradesh					All States					General Category States				
		2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
1	Revenue Expenditure	15.96	15.37	16.55	17.16	18.38	14.09	14.31	13.29	14.01	14.14	13.46	13.72	12.76	13.49	13.70
1.1	Social	5.21	5.42	6.43	6.68	7.86	4.86	5.44	5.25	5.42	5.69	4.66	5.27	5.10	5.23	5.55
1.2	Economic	3.87	3.72	4.05	4.94	4.70	3.10	3.18	2.82	3.48	3.39	2.91	3.03	2.69	3.37	3.28
1.3	General	5.95	5.22	5.01	4.66	4.74	5.77	5.31	4.82	4.71	4.68	5.52	5.05	4.60	4.50	4.48
1.3.1	Interest	2.71	2.04	1.63	1.47	1.49	2.57	2.09	1.68	1.63	1.65	2.52	2.04	1.65	1.60	1.63
1.3.2	Pension	1.23	1.29	1.37	1.42	1.44	1.32	1.43	1.56	1.57	1.57	1.27	1.38	1.50	1.49	1.50
1.4	Transfer to local bodies	0.92	1.01	1.06	0.88	1.09	0.36	0.38	0.39	0.40	0.37	0.38	0.37	0.37	0.40	0.38
2	Capital Outlay	4.38	3.44	2.93	2.47	3.10	2.70	2.83	2.12	2.33	2.57	2.51	2.61	2.00	2.24	2.51
3	Net Loans and Advances (a-b)	-0.11	1.29	1.51	1.20	0.55	0.17	0.14	0.22	0.09	0.64	0.17	0.14	0.22	0.09	0.68
a)	Loan & Advances	0.68	1.31	2.24	2.61	0.58	0.40	0.32	0.32	0.25	0.69	0.41	0.33	0.33	0.26	0.73
b)	Recovery of Loans and Advances	0.79	0.02	0.73	1.41	0.03	0.23	0.19	0.11	0.16	0.06	0.24	0.19	0.11	0.17	0.05
4	CSS	3.05	3.60	2.29	0.00	0.00	1.24	1.68	1.32	0.00	0.00	0.98	1.33	1.05	0.00	0.00
	Total (1 + 2 + 3 +4)	23.28	23.70	23.28	20.84	22.04	18.19	18.95	16.95	16.43	17.35	17.12	17.80	16.03	15.81	16.88

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

Table 3 Changes in the Composition of Expenditure over Previous Period as % of GSDP

S. No.	Item	Madhya Pradesh				All States				General Category States			
		2008-10	2010-14	2014-15	2015-16	2008-10	2010-14	2014-15	2015-16	2008-10	2010-14	2014-15	2015-16
1	Revenue Expenditure	-0.59	1.19	0.61	1.22	0.22	-1.02	0.72	0.14	0.26	-0.96	0.73	0.21
1.1	Social Services	0.21	1.01	0.25	1.18	0.58	-0.19	0.17	0.28	0.61	-0.17	0.13	0.32
1.2	Economic Services	-0.15	0.33	0.89	-0.24	0.08	-0.36	0.66	-0.09	0.12	-0.34	0.68	-0.08
1.3	General Services	-0.74	-0.21	-0.35	0.08	-0.46	-0.49	-0.11	-0.03	-0.47	-0.45	-0.11	-0.01
1.3.1	Interest	-0.67	-0.41	-0.16	0.02	-0.49	-0.41	-0.05	0.02	-0.48	-0.39	-0.05	0.02
1.3.2	Pension	0.07	0.07	0.06	0.02	0.11	0.13	0.00	0.00	0.11	0.11	0.00	0.00
1.4	Transfer to local bodies	0.09	0.05	-0.18	0.20	0.02	0.01	0.01	-0.02	-0.01	0.00	0.03	-0.02
2	Capital	-0.94	-0.52	-0.45	0.63	0.13	-0.71	0.20	0.24	0.10	-0.61	0.23	0.27
3	Net Loans and Advances (a-b)	1.40	0.22	-0.31	-0.65	-0.03	0.08	-0.13	0.55	-0.03	0.08	-0.14	0.59
a	Loan & Advances	0.63	0.93	0.37	-2.03	-0.07	0.00	-0.07	0.44	-0.08	0.00	-0.08	0.47
b	Recovery of Loans and Advances	-0.77	0.71	0.68	-1.38	-0.04	-0.08	0.06	-0.11	-0.04	-0.08	0.06	-0.12
5	CSS	0.55	-1.31	-2.29	0.00	0.45	-0.36	-1.32	0.00	0.35	-0.29	-1.05	0.00
	Total (1 + 2 + 3 -4 + 5)	0.42	-0.42	-2.44	1.20	0.76	-2.00	-0.53	0.92	0.68	-1.77	-0.22	1.07

Note: 2008-10 is calculated as the difference over 2005-08. For 2010-14, the difference is calculated over 2008-10. Considering 2014-15 as an abnormal year of lower expenditure, the figures for change for 2014-15 and 2015-16 are calculated against 2010-14.
Source: Table 2

2.1 Differing Response to Global Financial Crisis: 2005-10

The overall expenditure by Madhya Pradesh (including CSS) accounted for 23.28 percent of the GSDP during 2005-08, which increased to 23.64 percent for the next two years. This is largely due to the implementation of the 6th Pay Commission's recommendations along with some efforts to fight the Global Financial Crisis. For the latter reason, the central government also raised its support through CSS. In contrast to Madhya Pradesh, GCS have an expenditure GSDP ratio of around 17.5 percent. This is on expected lines, as being a poorer state, Madhya Pradesh needs to spend nearly 1.5 times of expenditure-GSDP ratio compared to All States average to equalize per capita expenditure to their levels.[4] However, in reality, this ratio is only around 1.38 times pointing to per capita expenditure by Madhya Pradesh being around 90 percent of GCS average.

Like Madhya Pradesh, GCS (taken together) also stepped up their expenditure in the aftermath of the global financial crisis. The overall expenditure rose from 17.12 percent during 2005-08 to 17.8 percent of the GSDP during 2008-10, a rise of 0.68 percentage point (table 2 and 3). Of this rise, 0.35 percentage point came from the CSS. States' own expenditure in terms of revenue and capital outlay expanded by 0.26 percentage point and 0.1 percentage point respectively. This is in contrast to Madhya Pradesh where the total expenditure, during 2008-10 over 2005-08, increased by only 0.42 percentage points (23.7 – 23.28). Further, for Madhya Pradesh, the entire rise in the CSS of 0.55 percentage point was more than countered by the decline in revenue expenditure by 0.59 percentage point and capital outlay by 0.94 percentage point (table 3). The main channel of the rise in the aggregate expenditure for the state was net

[4] Ideally, the target of horizontal fiscal equalization should be to equalize the primary expenditure rather than the overall expenditure. Else, at the same level of debt-GSDP ratio, the poorer states would have lower absolute debt and interest burden. Thus, equalizing overall expenditure would result in higher primary expenditure for the poorer states.

loans and advances, which increased by 1.40 percentage points of GSDP. Of this, it is the fall in the recovery of loans and advances that made the state's fiscal policy to appear somewhat expansionary. Thus, unlike other states, Madhya Pradesh did not respond much to the financial crisis by expanding its revenue expenditure or capital outlay.

To some extent, the expansionary fiscal policy of the state is hidden due to concurrent fall in the interest payment and rise in the expenditure on the social services, which together depress the overall revenue expenditure in 2008-10 period. The interest payment declined from 2.71 to 2.04 percent of GSDP for Madhya Pradesh, a decline of 0.67 percentage point. A similar decline is observable for GCS, from 2.52 percent to 2.04 percent of GSDP, a decline of 0.48 percentage point. However, even considering this, the non-interest revenue expenditure for Madhya Pradesh increased by only 0.08 percentage points, while for GCS it increased by 0.75 percentage points. Within the revenue expenditure for Madhya Pradesh, it is the social services which increased by 0.21 percentage point while economic services declined by 0.15 percentage point. It should be noted that Madhya Pradesh made budgetary provisions for implementing recommendations of the 6th Pay Commission from 2008-09 onward. Possibly, given the greater share of wages in the social services, it appears that the state reduced the expenditure on economic services to accommodate the rise in the wage bill. Clearly, Madhya Pradesh did not engage in fiscal expansion in response to GFC compared to All States.

2.2 Implications of 13th and 14th Finance Commission Awards 2010-15

The overall expenditure for Madhya Pradesh declined from 23.64 percent to 23.28 percent of GSDP during 2010-14 compared to 2008-10. Interestingly, the level of expenditure during 2005-08 was also at 23.28 percent. At the face of it, this appears to winding-up of the mild fiscal expansion undertaken during 2008-10 period. However, table 2 shows that CSS declined from 3.6 percent to 2.29 percent of GSDP. Clearly, the consolidation efforts of the centre translating into reduced flows under CSS led to this outcome. Despite this, the overall expenditure of the state declined by only 0.42 percentage point of GSDP. The state countered the reduction in flows under CSS through a rise in its own revenue expenditure. However, the capital expenditure continued to decline further. In the case of GCS, the decline in aggregate expenditure during 2010-14 compared to 2008-10 was even sharper at 1.77 percentage points of GSDP. Unlike Madhya Pradesh, where the decline was driven by the reduction in central flow of funds under CSS, for GCS, the CSS accounted for only 0.29 percentage point of the total fall. Major decline came in the revenue and capital expenditure at 0.96 and 0.61 percentage point of GSDP respectively. Thus, the reduction in aggregate expenditure by Madhya Pradesh had its origin in the fall of CSS while for All States its origin was in the reduction in their own account expenditure. In fact, interest payment declined by 0.41 and 0.39 percentage point of GSDP for Madhya Pradesh and GCS respectively. Thus, for Madhya Pradesh, there was no reduction in the primary expenditure, while for All States, primary expenditure declined by a full 1.38 percentage point. (1.77- 0.39).

The year 2014-15 has been harsh for the states, particularly so for Madhya Pradesh. The previous chapter noted that the fall of the CSS was not matched by an equal rise in the grants from the centre. The rerouting of CSS, which amounted to 2.29 percent of GSDP during 2010-14, coincided with an even larger reduction in the aggregate expenditure of 2.44 percentage points of GSDP for Madhya Pradesh in 2014-15 compared to average for previous four years. The fall in the interest payment of 0.16 percentage points roughly covers this gap. Thus, the own account primary expenditure by the state remained exactly at the same level, despite counting the CSS in its own expenditure. The revenue expenditure increased by 0.6 percentage point of GSDP, with non-interest revenue expenditure rising by 0.76 percentage point of GSDP. However, the capital expenditure declined by 0.45 percentage point of GSDP. Thus the net rise in the own revenue and capital expenditure by the state was only 0.15

percentage point, much lower than 2.29 percent, the size of CSS during 2010-14 which is now embedded in the own expenditure. Further, transfers to local bodies and net lending declined by 0.18 and 0.31 percentage point respectively.

Despite generous recommendations by the 14th Finance Commission, the state could not regain the previous levels of the overall expenditure in 2015-16. At 22.04 percent of the GSDP, the overall expenditure continued to remain around 1.24 percentage point below the levels observed in 2010-14. However, the revenue and capital expenditure have gone up by 1.83 and 0.18 percentage point, thus roughly compensating the fall of 2.29 percentage points of GSDP on account of rerouting of the CSS. The net loans and advances declined by 0.96 percentage points during 2015-16 compared to 2010-14. Thus, overall it appears that the state could reasonably regain its position in the revenue and capital outlay.

3. The composition of Expenditure on Social Services

Table 4 provides the break-up of expenditure on social services by Madhya Pradesh, All States, and GCS. During 2005-10, expenditure by Madhya Pradesh government on education, sports, and art as a share of GSDP has been comparable to GCS average. In effect, this indicates that the per capita absolute expenditure was around 2/3rd of GCS average. Given that the overall expenditure by the state (excluding CSS) was around 20 percent of the GSDP, as against 16.5 percent for GCS average during this period, education sector appears to receive inadequate funds and priority from the state.

The situation improved from 2010-11 onward, and by 2014-15 the quantum of resources devoted to education increased to 3.45 percent of the GSDP. It may be recalled that 2014-15 was an abnormal year in terms of lower overall expenditure by the state at 20.83 percent of the GSDP. However, the rise in the expenditure in the next year to 22.55 percent of the GSDP was accompanied with a fall in expenditure on education (as a percentage of GSDP). Madhya Pradesh's expenditure on health sector increased from 0.79 percent of the GSDP to 1 percent of the GSDP during 2005-08 to 2015-16. The relative apathy of the state government during 2005-10 towards social sector is visible from the comparable size of GSDP being spent on the social sectors by Madhya Pradesh and by GCS, despite the former having higher fiscal space in terms of GSDP. Things improved from 2010-11 onward when Madhya Pradesh provided greater expenditure towards social sector. The welfare of SC, ST, and OBC and relief for natural calamities, are the domain where the state spends a larger share of its GSDP compared to All States average. Recently, education has also joined this club. As noted in the previous section, the CSS bypassing the state budgets may have induced the state to reduce its expenditure on social services like health and education till 2013-14. Thus, rerouting of the CSS from state budget from 2014-15 onward may have led to a rise in the own-account expenditure on the social sector.

Table 4 Expenditure on Social Services as % of GSDP

S. No.	Item	Madhya Pradesh					All States					General Category States				
		2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
A.	Total Expenditure															
1	Education, Sports, Art	2.46	2.73	3.11	3.45	3.28	2.55	2.72	2.72	2.77	2.77	2.42	2.59	2.61	2.64	2.66
2	Medical and Public Health and Family Welfare	0.79	0.71	0.82	0.99	1.00	0.71	0.74	0.71	0.83	0.85	0.66	0.69	0.67	0.79	0.81
3	Water Supply and Sanitation	0.49	0.45	0.40	0.39	0.43	0.44	0.41	0.27	0.34	0.35	0.39	0.36	0.24	0.30	0.33
4	Housing	0.08	0.10	0.11	0.22	0.24	0.11	0.14	0.13	0.17	0.17	0.10	0.13	0.13	0.17	0.16
5	Urban Development	0.29	0.27	0.36	0.31	0.77	0.31	0.53	0.38	0.36	0.40	0.31	0.52	0.38	0.35	0.41
6	Welfare of SC, ST, and OBC	0.81	0.70	0.70	0.52	0.62	0.38	0.42	0.43	0.41	0.45	0.38	0.42	0.44	0.42	0.46
7	Labour and Labour Welfare	0.45	0.64	0.77	0.50	0.81	0.42	0.62	0.65	0.68	0.75	0.41	0.62	0.66	0.68	0.75
8	Nutrition	0.15	0.19	0.31	0.23	0.24	0.14	0.19	0.19	0.17	0.17	0.14	0.19	0.19	0.18	0.17
9	Relief for Natural Calamities	0.24	0.15	0.24	0.43	0.94	0.22	0.16	0.14	0.16	0.25	0.20	0.15	0.14	0.15	0.25
10	Others	0.04	0.07	0.10	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06
	Total	5.79	6.01	6.92	7.11	8.42	5.36	6.01	5.70	5.96	6.23	5.09	5.76	5.52	5.74	6.06
B.	Revenue Expenditure															
1	Education, Sports, Art and Culture	2.40	2.62	3.06	3.38	3.14	2.48	2.63	2.65	2.70	2.69	2.37	2.52	2.55	2.58	2.58
2	Medical and Public Health and Family Welfare	0.72	0.68	0.78	0.94	0.96	0.63	0.66	0.64	0.73	0.75	0.60	0.62	0.61	0.70	0.71
3	Water Supply and Sanitation	0.22	0.21	0.20	0.19	0.26	0.25	0.20	0.15	0.18	0.21	0.22	0.17	0.13	0.15	0.19
4	Housing	0.08	0.08	0.10	0.20	0.22	0.08	0.11	0.09	0.11	0.12	0.08	0.12	0.09	0.10	0.11
5	Urban Development	0.24	0.24	0.34	0.29	0.68	0.25	0.43	0.30	0.29	0.33	0.25	0.44	0.30	0.30	0.34
6	Welfare of SC, ST, and OBC	0.68	0.57	0.58	0.46	0.55	0.34	0.38	0.39	0.36	0.40	0.34	0.38	0.40	0.37	0.41

S. No.	Item	Madhya Pradesh					All States					General Category States				
		2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
7	Labour and Labour Welfare	0.45	0.64	0.77	0.50	0.81	0.42	0.62	0.65	0.68	0.75	0.41	0.62	0.66	0.68	0.75
8	Nutrition	0.15	0.19	0.31	0.23	0.24	0.14	0.19	0.19	0.17	0.17	0.14	0.19	0.19	0.18	0.17
9	Relief on account of Natural Calamities	0.24	0.15	0.24	0.43	0.94	0.22	0.16	0.14	0.16	0.25	0.20	0.15	0.14	0.15	0.25
10	Others	0.03	0.04	0.05	0.06	0.06	0.04	0.05	0.04	0.03	0.03	0.04	0.05	0.03	0.03	0.03
	Total	5.21	5.42	6.43	6.68	7.86	4.86	5.44	5.25	5.42	5.69	4.66	5.27	5.10	5.23	5.55
C.	Capital Expenditure															
1	Education, Sports, Art and Culture	0.06	0.11	0.06	0.07	0.14	0.07	0.09	0.07	0.07	0.08	0.05	0.07	0.05	0.07	0.07
2	Medical and Public Health and Family Welfare	0.07	0.03	0.04	0.05	0.04	0.08	0.07	0.07	0.09	0.10	0.07	0.07	0.06	0.09	0.10
3	Water Supply and Sanitation	0.26	0.24	0.20	0.20	0.17	0.19	0.21	0.12	0.16	0.14	0.17	0.19	0.12	0.15	0.14
4	Housing	0.00	0.01	0.01	0.01	0.02	0.03	0.02	0.04	0.06	0.05	0.02	0.02	0.04	0.06	0.05
5	Urban Development	0.05	0.03	0.02	0.02	0.09	0.06	0.10	0.08	0.06	0.07	0.05	0.09	0.08	0.05	0.07
6	Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes	0.12	0.13	0.11	0.06	0.08	0.04	0.04	0.04	0.05	0.05	0.04	0.04	0.04	0.05	0.05
7	Others	0.01	0.03	0.05	0.03	0.02	0.03	0.03	0.03	0.04	0.04	0.02	0.03	0.03	0.04	0.03
	Total	0.57	0.59	0.49	0.43	0.56	0.50	0.57	0.46	0.54	0.54	0.43	0.50	0.42	0.51	0.51

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

4. Composition of Expenditure on Economic Services

Table 5 provides the break-up of expenditure on economic services by Madhya Pradesh and All States. Unlike the social services, expenditure by the state on economic services, as a share of GSDP, has been substantially higher compared to GCS average for the entire 2005-16 period. The state devoted roughly 1.47 times resources on economic services compared to the GCS figures, when measured as a share of GSDP. This is even higher than the size of Madhya Pradesh's own-account overall spending as a share of GSDP, which has been around 1.38 times the GCS average. Clearly, the state seems to prioritise the expenditure on economic services. Within economic services, energy accounted for 2.22 percent of GSDP during 2005-08, which declined to 1.4 percent of the GSDP in the subsequent years. A closer examination suggests that out of 2.22 percent of the GSDP, nearly, 1.3 percent was accounted by capital expenditure. Revenue expenditure on energy sector fell from 0.91 to 0.74 percent of the GSDP. Revenue expenditure on energy sector is largely meant to cover power sector losses and subsidies. Compared to All States, Madhya Pradesh spends a greater share of its GSDP as revenue expenditure for the power sector, and it has been rising in the recent years. Since there can be a difference in the years in which power utilities made losses and the year when the state provided the budgetary provision, this issue will be explored in more details in chapter 6.

Table 5 Expenditure on Economic Services Expenditure as % of GSDP

S. No.	Item	Madhya Pradesh					All States					General Category States				
		2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
A.	Total Expenditure															
1	Agriculture and Allied Activities	1.16	1.30	1.59	1.76	1.40	0.79	0.98	0.82	0.98	0.92	0.72	0.92	0.76	0.94	0.89
2	Rural Development	1.39	1.21	1.22	1.64	1.57	0.69	0.66	0.58	0.97	1.03	0.67	0.65	0.58	0.95	1.01
3	Irrigation and Flood Control	1.32	1.23	1.33	1.04	1.29	1.25	1.20	0.88	0.74	0.74	1.27	1.20	0.88	0.73	0.75
4	Energy	2.22	1.40	0.93	1.25	1.43	1.04	1.01	0.82	1.08	1.21	0.95	0.94	0.78	1.07	1.19
5	Industry and Minerals	0.26	0.16	0.38	0.30	0.50	0.17	0.15	0.15	0.17	0.18	0.15	0.14	0.14	0.16	0.18
6	Transport and Communications	1.19	1.12	0.90	0.87	0.85	0.92	0.97	0.84	0.94	0.92	0.86	0.91	0.78	0.88	0.88
7	Others	0.07	0.09	0.09	0.08	0.11	0.34	0.36	0.30	0.26	0.26	0.29	0.31	0.26	0.23	0.24
	Total	7.61	6.52	6.44	6.93	7.15	5.19	5.33	4.39	5.14	5.27	4.90	5.07	4.18	4.97	5.14
B	Total Expenditure															
1	Agriculture and Allied Activities	1.12	1.28	1.53	1.73	1.38	0.70	0.82	0.75	0.90	0.82	0.64	0.76	0.70	0.86	0.80
	Crop Husbandry	0.27	0.35	0.38	0.55	0.41	0.20	0.28	0.28	0.39	0.33	0.18	0.26	0.26	0.38	0.33
	Animal Husbandry	0.13	0.13	0.16	0.14	0.12	0.08	0.09	0.08	0.08	0.08	0.07	0.08	0.07	0.07	0.07
	Forestry and Wild Life	0.50	0.43	0.42	0.46	0.37	0.13	0.13	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10
	Food Storage and Warehousing	0.07	0.26	0.38	0.47	0.24	0.05	0.08	0.08	0.10	0.10	0.05	0.07	0.08	0.10	0.10
	Co-operation	0.08	0.05	0.12	0.05	0.18	0.09	0.10	0.07	0.06	0.06	0.09	0.10	0.07	0.06	0.06
2	Rural Development	1.10	1.00	0.92	1.38	1.13	0.55	0.54	0.47	0.81	0.83	0.53	0.53	0.46	0.81	0.82

S. No.	Item	Madhya Pradesh					All States					General Category States				
		2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
3	Irrigation and Flood Control	0.25	0.22	0.20	0.18	0.12	0.38	0.37	0.32	0.26	0.22	0.37	0.36	0.32	0.26	0.21
4	Energy	0.91	0.74	0.69	1.06	1.33	0.71	0.67	0.60	0.79	0.85	0.66	0.65	0.57	0.78	0.82
5	Industry and Minerals	0.12	0.15	0.35	0.27	0.46	0.13	0.12	0.13	0.15	0.17	0.12	0.12	0.12	0.15	0.17
	Village and Small Industries	0.06	0.06	0.06	0.07	0.05	0.07	0.06	0.06	0.06	0.05	0.06	0.05	0.05	0.05	0.05
	Industries	0.05	0.09	0.29	0.20	0.41	0.06	0.06	0.07	0.09	0.11	0.06	0.07	0.08	0.09	0.12
6	7.Transport and Communications	0.31	0.28	0.29	0.27	0.22	0.39	0.40	0.34	0.37	0.32	0.36	0.38	0.31	0.34	0.29
7	Others	0.05	0.06	0.06	0.06	0.08	0.24	0.26	0.22	0.20	0.19	0.22	0.25	0.20	0.18	0.18
	Total	3.87	3.72	4.05	4.94	4.70	3.10	3.18	2.82	3.48	3.39	2.91	3.03	2.69	3.37	3.28
C	Capital Expenditure															
1	Agriculture and Allied Activities	0.03	0.02	0.06	0.04	0.02	0.09	0.17	0.07	0.08	0.10	0.08	0.16	0.06	0.07	0.09
2	Rural Development	0.29	0.21	0.30	0.26	0.45	0.14	0.12	0.12	0.16	0.20	0.14	0.13	0.12	0.15	0.19
3	Irrigation and Flood Control	1.07	1.01	1.13	0.86	1.17	0.87	0.83	0.56	0.48	0.53	0.89	0.84	0.56	0.48	0.54
4	Energy	1.30	0.66	0.24	0.19	0.10	0.33	0.33	0.22	0.29	0.36	0.29	0.30	0.21	0.30	0.37
5	Industry and Minerals	0.13	0.01	0.03	0.03	0.05	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.01
6	Transport and Communications	0.88	0.85	0.60	0.60	0.62	0.53	0.57	0.50	0.57	0.61	0.49	0.53	0.47	0.54	0.59
7	Others	0.02	0.03	0.02	0.02	0.03	0.10	0.10	0.08	0.07	0.07	0.07	0.06	0.06	0.05	0.06
	Total	3.74	2.80	2.39	1.99	2.44	2.09	2.16	1.57	1.66	1.88	1.99	2.04	1.49	1.61	1.85

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

5. Composition of Expenditure on General Services

Table 6 provides the break-up of expenditure on general services by Madhya Pradesh and All States. The overall size of the general expenditure has been consistently declining over the years. Expenditure on general services accounted for 6.01 percent of the GSDP in 2005-08 which declined to 4.84 percent of the GSDP by 2015-16. A similar trend is also visible for GCS where the expenditure on general services declined from 5.6 percent to 4.63 percent of the GSDP during this period. Most significant source of the decline in expenditure on general services has been interest payment. The interest payment accounted for 2.71 percent of the GSDP during 2005-08 for Madhya Pradesh, which declined to 1.49 percent of the GSDP by 2015-16. Other than the lower interest rate environment, the sources of reduction in interest payment include Debt Swap Scheme (DSS) and the Debt Consolidation and Relief Facility (DCRF) undertaken during 2000-05 and 2005-10 respectively. These will be explored in detail in the next chapter.

Madhya Pradesh's non-interest expenditure on general services has remained stable at around 3.3 percent of the GSDP during 2005-16. However, within non-interest expenditure on general services, there has been rise in the expenditure on pension and police. Expenditure on pension itself has gone from 1.23 percent of the GSDP to 1.44 percent of the GSDP during 2005-08 to 2015-16. This has been accompanied by a fall in the expenditure on fiscal services from 0.69 to 0.53 percent of the GSDP. The trend has been similar for GCS, on these matters. For GCS, non-interest expenditure on general services has remained stable at 2.9 percent of the GSDP, accompanied by a rising expenditure on pension from 1.27 percent of the GSDP to 1.50 percent of the GSDP. The overall expenditure on general services by Madhya Pradesh is comparable to GCS average, suggesting that per capita absolute expenditure by Madhya Pradesh is around 2/3rd of GCS average. There is one major exception to this rule, namely the fiscal services. The expenditure on fiscal services by Madhya Pradesh as a share of GSDP is roughly three times the share for GCS average. Even on per capita basis, this is nearly double the GCS average. It should be recalled that Madhya Pradesh's revenue mobilization is heavily dependent upon state excise, petroleum products, and electricity duty. It is unclear if the greater expenditure on fiscal services is due to the nature of the tax base being exploited by the state.

6. Loans and Advances

Table 7 provides the break-up of expenditure on general services by Madhya Pradesh, All States, and GCS. Row 1 shows that Madhya Pradesh provides a much higher share of its GSDP as loans and advances. This is largely driven by the power sector. Power sector also accounts for the most of the loan recovery by the state. However, even on the net basis (item 3), Madhya Pradesh provides greater budgetary resources towards loans and advances. Given that this issue is directly associated with PSUs, specifically power sector, this issue will be explored in chapter 5 and 6.

Table 6 Expenditure on General Services Expenditure as % of GSDP

S. No.	Item	Madhya Pradesh					All States					General Category States				
		2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
1	Organs of State	0.14	0.15	0.19	0.22	0.17	0.13	0.15	0.14	0.15	0.13	0.12	0.14	0.13	0.15	0.12
2	Fiscal Services (i to ii)	0.69	0.66	0.70	0.44	0.53	0.27	0.22	0.20	0.19	0.17	0.27	0.22	0.20	0.19	0.17
3	Interest Payments and Servicing of Debt	2.71	2.04	1.63	1.47	1.49	2.77	2.24	1.82	1.71	1.76	2.72	2.19	1.79	1.68	1.73
4	Administrative Services	1.10	1.07	1.12	1.09	1.10	1.09	1.15	1.05	1.03	1.00	0.97	1.02	0.94	0.92	0.90
	Secretariat-General Services	0.04	0.04	0.04	0.03	0.03	0.06	0.08	0.04	0.04	0.03	0.04	0.06	0.03	0.03	0.03
	District Administration	0.10	0.11	0.10	0.09	0.10	0.12	0.12	0.10	0.10	0.10	0.12	0.11	0.10	0.10	0.10
	Police	0.69	0.69	0.74	0.75	0.77	0.66	0.71	0.69	0.70	0.69	0.59	0.63	0.62	0.63	0.62
	Public Works	0.12	0.08	0.09	0.08	0.07	0.11	0.11	0.09	0.08	0.07	0.09	0.09	0.07	0.06	0.06
	Others	0.16	0.15	0.14	0.14	0.14	0.14	0.14	0.13	0.12	0.12	0.13	0.13	0.11	0.11	0.11
5	Pensions	1.23	1.29	1.37	1.42	1.44	1.32	1.43	1.56	1.57	1.57	1.27	1.38	1.50	1.49	1.50
6	Others	0.07	0.00	0.00	0.00	0.00	0.18	0.12	0.05	0.07	0.05	0.16	0.09	0.04	0.06	0.06
7	Capital Expenditure	0.06	0.06	0.05	0.05	0.10	0.11	0.11	0.10	0.13	0.15	0.08	0.07	0.09	0.12	0.15
	Total	6.01	5.27	5.06	4.71	4.84	5.88	5.42	4.92	4.84	4.84	5.60	5.12	4.69	4.62	4.63

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

Table 7 Loans and Advances as % of GSDP

S. No.	Item	Madhya Pradesh					All States					General Category States				
		2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
1	Loans and Advances by State Governments	0.68	1.31	2.24	2.61	0.58	0.40	0.32	0.32	0.25	0.69	0.41	0.33	0.33	0.26	0.73
1.1	Social Services	0.33	0.12	0.05	0.00	0.01	0.12	0.12	0.09	0.05	0.07	0.12	0.12	0.09	0.05	0.07
1.2	Power Projects	0.31	1.18	2.07	2.47	0.48	0.14	0.10	0.15	0.15	0.56	0.14	0.10	0.15	0.15	0.59
2	Recovery of Loans and Advances	0.79	0.02	0.73	1.41	0.03	0.23	0.19	0.11	0.16	0.06	0.24	0.19	0.11	0.17	0.05
2.1	Power Projects	0.76	0.00	0.72	1.39	0.00	0.13	0.09	0.06	0.13	0.02	0.14	0.09	0.06	0.14	0.02
3	Net Loan and Advances (1-2)	-0.11	1.29	1.51	1.20	0.55	0.17	0.14	0.22	0.09	0.64	0.17	0.14	0.22	0.09	0.68

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

7. Public Sector Employment, Wages, and Pension

Madhya Pradesh implemented the recommendations of the Sixth Pay Commission from September 2008. The pay arrears pertaining to 1st January 2006 to August 2008 were paid from the year 2010-11 in five equal annual instalments. Thus, arrears were for 32 months which were to be paid on for five years at 6.4 months equivalent of pay per year. Thus 2008-09 is expected to experience a rise in the wage bill due to the revision of the salary. Since the revised pay was paid for only half of the financial year, the next year can also be expected to show a jump in the wage bill when the full implications of the 6th Pay Commission in terms of current wages are accounted for. Another jump can be expected for 2010-11 when the payment of arrears started. From the next year onward, the wage bill will stabilize at a new level, and can be expected grow at the 'normal' rate; where the change in wage bill will come from 'Dearness Allowance', the net increment in the workforce, and change in the seniority profile of the workforce. It would be interesting to divide the rise in the growth of wage bills in these components. However, the existing workforce data does not permit this. The trends in the growth rate of the wage bill are visible in table 8, with the years of 2008-09 to 2010-11 experiencing a high growth rate in the wage bill in line with reasons discussed above.

Table 8: Annual Growth Rate in the Wage Bill for Madhya Pradesh

State	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Madhya Pradesh	4.97	10.09	22.49	24.09	25.26	13.54	7.49	13.26	15.73	6.82

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

Table 9 provides details on the composition of public sector employment in the bodies operated by Madhya Pradesh state/local governments. State government along with rural and urban local bodies provide nearly 90 percent of the total state government employment. However, there has been a decline in the share of employment within the state government and a substantial rise in the employment in the rural and urban local bodies. Size of state PSUs and universities in the total public sector employment has been falling over the years. Rising employment in the local bodies (though a decline in the employment in the rural bodies in recent years) indicates some deepening of the third tier of government. As noted by the 12th Finance Commission, public sector employment data is weak a link in the official statistics in India. For example, the data on sectoral employment in terms of education, healthcare, economic services, etc. are hard to find. Better employment statistics on public sector can help in understanding the efficacy and cost of public services.

Table 9: Public Sector Employment (Numbers)

S. No.	Sector	2006	2011	2017	% Shares (2017)	Growth 1	Growth 2
1	State Government	4,72,062	4,45,856	4,47,262	60.5	-5.6	0.3
2	State PSUs	73,574	53,531	52,492	7.1	-27.2	-1.9
3	Semi Government bodies	9,439	8,324	7,141	1.0	-11.8	-14.2
4	Universities	9,436	7,666	6,372	0.9	-18.8	-16.9
5	Urban Local bodies	66,086	73,283	85,961	11.6	10.9	17.3
6	Development Authorities	1,946	1,804	1,687	0.2	-7.3	-6.5
7	Rural Local Bodies	1,01,280	1,59,472	1,38,855	18.8	57.5	-12.9
	Total	7,33,823	7,49,936	7,39,770	100	2.2	-1.4

Source: Form F-11, Madhya Pradesh FRBM Main Reports. Growth 1 shows % change in the number of employees from 2006- to 2011. Similarly, Growth shows % change in the number of employees from 2011- to 2017.

8. Subsidies

The Economic and Purpose Classification, published by the Department of Economics and Statistics, defines subsidy as grants on current account which are received by the private industries from the government. These may take the form of direct payments to producers. Transfers by the public authorities to private industries for investment purpose is classified as `capital transfers' rather than subsidies. The losses accrued by the departmental undertakings are treated as the imputed subsidy. Between 2005-06 to 2015-16, the DES reports, available on its website, provide economic and purpose classification for 2013-14 Accounts and 2014-15

(Revised). In 2013-14, the overall subsidies amounted to ₹ 4046.43 crores, which increased to ₹ 5025.17 crores in the next year. These numbers amount to around 1.06 and 1.14 percent of the GSDP respectively. Further, subsidies accounted for 4.31 and 5.02 percent of the total expenditure.

Table 10: Composition of Subsidies (Crores)

S. No.	Item	2013-14	2014-15
1	Education	78.81	77
2	Social Welfare Services	1689.7	2213.95
3	Cultural, Recreational & Religious Services	48.47	52.75
4	Agriculture, forestry, fishing & hunting	1398.55	2075.25
5	Mining, manufacturing & construction	299.02	130
6	Energy	182.84	0
7	Other economic services	349.04	476.22
	Total	4046.43	5025.17

Source: Economic and Purpose Classification of Madhya Pradesh Budget, Department of Economics and Statistics

A comparative examination of the FRBM reports (prepared by the budget department) and Economic and Purpose Classification, suggests that there are differences in the scope of activities considered as subsidy in the two publications. The FRBM report for 2015-16 measures subsidy at 27,472 and 47,846 Crores for 2013-14 and 2014-15 respectively. Subsidy alone accounted for 39.3 and 48.7 percent of the total revenue expenditure. Further, subsidy, wages, pension, and interest payment together accounted for nearly 85 percent of the total revenue expenditure. Clearly, it seems that nearly all revenue expenditure excluding wages, pension, and interest expenditure is considered as the subsidy. Such a wide definition of subsidies by the FRBM reports lead us back to the overall analysis of revenue expenditure, which has been carried out in the previous sections of this chapter. On the other hand, the Economic and Purpose Classification seems to underestimate the subsidy, particularly given the ‘0' for energy in 2014-15. Obviously, the distribution companies were making losses on account of transmission and distribution losses and power subsidies, which are financed by the state government. The other way to define the subsidy, given to economic sectors, is revenue expenditure figures given in the state budget net of the revenue receipt. Since this amount represents support given through state budget for the current operations of the recipient sectors, this can be treated as subsidy.

Power sector and irrigation department meet their operational losses through the budgetary support. Table 11 provides net revenue expenditure on irrigation and power sector as a share of GSDP. Compared to All States, Madhya Pradesh provides lower subsidy on irrigation. Further, the irrigation subsidy as a share of GSDP has been falling for both Madhya Pradesh as well as for All States, though at a faster pace for the former. In case of electricity, Madhya Pradesh incurred subsidy of 0.91 percent of the GSDP compared to 0.65 for GCS during 2005-08. Subsequently, the subsidy burden for Madhya Pradesh declined till 2013-14, where it remained close to GCS average. However, in the recent years, electricity subsidy burden has increased, though at a much faster rate for Madhya Pradesh, where it reached to 1.29 percent of the GSDP in 2015-16. In case of the power sector, it is quite possible that the stated figures for the subsidy are different than the actual subsidy, given that states generally underpay distribution companies for the subsidy. It is only after a few years when the distribution companies start facing troubles in their cash flows, the state either provide them fresh loans or waive the previous loans to reduce the interest expenditure of the distribution companies. This issue will be explored in chapter 6, where power sector reforms are discussed.

Table 11: Subsidies on Irrigation and Power Sector (as a % of GSDP)

Sector	Madhya Pradesh					General Category States				
	2005-08	2008-10	2010-14	2014-15	2015-16	2005-08	2008-10	2010-14	2014-15	2015-16
Irrigation	0.22	0.19	0.10	0.08	0.03	0.37	0.36	0.32	0.26	0.21
Power	0.91	0.50	0.57	0.98	1.29	0.65	0.64	0.56	0.77	0.81

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

9. Conclusion

Being a poorer state with per capita income of around 2/3rd of GCS average, Madhya Pradesh needs to have public expenditure as a share of GSDP at 1.5 times the level observed for All States average. Against this, the actual ratio is around 1.38 times only, suggesting that the absolute per capita government expenditure in Madhya Pradesh is around 90 percent of the levels observed for GCS. During 2005-10, the expenditure towards social services was comparable to All States average when measured as a percentage of GSDP. On the other hand, the state has been consistently spending nearly 1.5 times share of its GSDP on economic services when compared with GCS. Thus, the state appears to prioritise the expenditure on economic services, while not spending enough on social services. However, the expenditure on social services has improved from 2010-11 onward. Since 2014-15 onward, when the CSS spending was merged with the state budget, state's expenditure on social services as a share of its GSDP reached around 1.3 times the levels observed for All States. This suggests possibility that the inclusion of CSS in the state budget could be the reason for higher budgetary spending by the state in the recent years. Madhya Pradesh spends a roughly equal share of its GSDP towards general services compared to All States, except for fiscal services, where even the per capita expenditure is nearly twice the All States average. This could be because of the composition of the tax base being exploited by the state.

Unlike other states, Madhya Pradesh did not respond much to the financial crisis by expanding its revenue expenditure or capital outlay. For Madhya Pradesh, the entire rise in the CSS by 0.55 percentage point was more than countered by the decline in own-account revenue expenditure by 0.59 percentage point and capital outlay by 0.94 percentage points (table 3). The main channel of the rise in the aggregate expenditure for the state was net loans and advances, which increased by 1.40 percentage points. Of this, it is the fall in recovery in loans and advances that made the state's fiscal policy to appear somewhat expansionary. On the other hand, the overall expenditure for GCS rose from 17.12 percent during 2005-08 to 17.8 percent of the GSDP during 2008-10, a rise of 0.68 percentage points (table 2 and 3). Of this rise, 0.35 percentage points came from the CSS. States' own expenditure in terms of revenue and capital outlay expanded by 0.26 percentage point and 0.10 percentage point respectively.

The overall expenditure for Madhya Pradesh declined from 23.70 percent to 23.28 percent of the GSDP during 2010-14 compared to 2008-10. The CSS declined from 3.6 percent to 2.29 percent of the GSDP. Clearly, the consolidation efforts of the centre, translating into reduced flows under CSS, led to this outcome. Despite this, the overall expenditure of the state declined by only 0.42 percentage point. The state countered the reduction in flows under CSS through a rise in its own revenue expenditure. In the case of GCS, the decline in aggregate expenditure during 2010-14 compared to 2008-10 was even sharper at 1.77 percentage point. Unlike Madhya Pradesh, where the decline was driven by the reduction in central fund flow under CSS, for GCS, the CSS accounted for only 0.29 percentage point of the total fall. The major decline came in the own revenue and capital outlay at 0.96 and 0.61 percent respectively.

The year 2014-15 has been harsh for the states, particularly so for Madhya Pradesh. The fall of the CSS was not matched by an equal rise in the grants from the centre. The rerouting of CSS, which amounted to 2.29 percent during 2010-14, was coincided with an even larger reduction in the aggregate expenditure of 2.44 percentage point for Madhya Pradesh in 2014-15 compared to the average for previous four years. The own account primary expenditure by the state remained exactly at the same level of 2010-14, despite counting the CSS in its own expenditure. The generous recommendations by the 14th Finance Commission, helped the state to somewhat regain the previous levels of the overall expenditure in 2015-16. At 22.04 percent of the GSDP, the overall expenditure continued to remain around 1.24 percentage points below the levels observed in 2010-14. However, the revenue and capital expenditure have gone up by 1.83 and 0.18 percentage point, roughly compensating the fall of 2.29 percentage point on account of rerouting of the CSS. The net loans and advances declined by 0.96 percentage points during 2015-16 compared to 2010-14. Thus, overall it appears that the state could regain its position in the revenue and capital outlay comparable to the 2010-14 period.

Chapter 3

Analysis of Deficits and Public Debt

1. Analysis of Deficits

Table 1 provides details on the composition of fiscal deficit as a share of GSDP. The table is divided into three parts. The first part shows the composition of fiscal deficit into revenue deficit, capital outlay, net-lending, and non-debt capital receipts. The second section of the table shows the annual changes in the variables as a percentage point of the GSDP. The third section of the table helps in understanding the utilization of the additional resources from revenue surpluses or fiscal deficits. The first row of table 1.1 shows that after a small revenue surplus of 0.03 percent of the GSDP, Madhya Pradesh had consistent revenue surpluses during the entire duration of the previous decade. The revenue surpluses continued to be above 2 percent of the GSDP for the period of 2006-07 to 2011-12, which declined to 1.06 percent of GSDP by 2015-16. The revenue surpluses were partly used to raise the capital expenditure and partly to reduce the fiscal deficit. The capital expenditure and net lending reached 4.97 percent of the GSDP in 2011-12. However, decline in revenue surpluses in the subsequent years also translated into reduction in capital expenditure, that declined to 3.65 percent of the GSDP by 2015-16. Period of 2012-16 was also accompanied by rising fiscal deficits.

Madhya Pradesh's revenue surplus increased by 3.12 (2.28+0.85) percentage point during 2007-08 over 2005-06. In 2006-07, 77.9 percent of the additional revenue surpluses were devoted to reduce the fiscal deficit (1.77 percentage points out of 2.28 percentage points of the GSDP). Focus shifted to capital expenditure in the next year, where out of 0.85 percentage point of the GSDP, 0.67 percentage point was devoted to raise capital expenditure, and 0.18 percentage point was used to reduce the fiscal deficit further. In 2008-09, the revenue surplus declined by 1.09 percentage point of the GSDP compared to the previous year. The impact of the decline in revenue surplus translated into a reduction in capital expenditure and a rise in the fiscal deficit in roughly equal amount (0.56 and 0.52 percentage point respectively). However, the capital expenditure was again raised by 0.83 percentage point in 2009-10, when the revenue surplus improved by 0.36 percentage point over the previous year. This resulted in 0.48 percentage point rise in the fiscal deficit. Improvements in the revenue surpluses in the next two years were largely used to reduce the fiscal deficit, rather than raising capital expenditure. The year 2012-13 is somewhat similar to 2008-09, where a sizable reduction in revenue surplus (1.18 percentage point of GSDP) translated into a reduction in capital expenditure and rise in the fiscal deficit in roughly equal amount (0.53 and 0.65 percentage point respectively). The next year (2013-14) saw a further reduction in revenue surplus. However, the government chose to cut the capital expenditure rather than raising the fiscal deficit. Despite a fall in the revenue surplus, the fiscal deficit was reduced by 0.23 percentage point of GSDP compared to the previous year by compressing the capital expenditure. Despite the inclusion of the CSS funds in the state budgets, next two years saw relatively stable capital expenditure. Considering this, actually, there might be a fall in the capital expenditure from non-CSS resources. In the absence of details on the capital and revenue breakup of CSS funds, careful analysis cannot be carried out on this matter. It must be noted that 2014-15 was a bad year from the perspective of states, particularly for Madhya Pradesh, because the rerouting of the CSS through state budget was not accompanied by a similar rise in the central grants. Thus, a revenue deficit of 1.31 percent of GSDP compared to 1.34 percent in the previous year, suggests that the contraction of central funds was matched by a contraction in the revenue expenditure by the state (a point noted in the previous chapter as well).

The above discussion along with trends in table 1 suggests that decline in revenue surpluses were, in general, accompanied by a reduction in capital expenditure and a rise in fiscal deficit. On the other hand, the rise in fiscal deficits was not accompanied by a rise in capital expenditure (except for 2009-10, and a minor rise in capital expenditure during 2014-15 owing to henceforth inclusion of capital expenditure on CSS in the state budget). In sum, it can be concluded that at the aggregate level fiscal deficits were used to finance the capital expenditure, and revenue surpluses further contributed to raise the capital expenditure. However, a detailed examination suggests that fiscal deficits were generally raised to address the fall in revenue surpluses rather than to increase the capital expenditure. On the other hand, fall in revenue surpluses led to curtailment of capital expenditure, as fiscal deficits were not raised by the same amount. It is interesting to note Madhya Pradesh consistently exceeded its FRBM targets (more on this in section 2). Yet, wherever the revenue surpluses declined, the state chose to cut the capital expenditure rather than passing the full burden to the fiscal deficit. To some extent, this is a cause of concern because the time period being discussed belongs to post-GFC accompanied by domestic troubles translating into 'Twin Balance Sheet Problem'. The balance sheets of the financial firms and non-financial corporations are in bed shape leading to a decline in investment activities (GoI, 2017a). States could play some role in addressing the investment slowdown by using their fiscal space to raise the capital expenditure.

Table 1.1: Composition of Fiscal Deficit (Madhya Pradesh)

S. No.	Item/Year	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Variables as % of GSDP												
1	Revenue (+ Deficit/ -Surplus)	-0.03	-2.30	-3.15	-2.06	-2.42	-2.60	-3.14	-1.96	-1.34	-1.31	-1.06
2	Capital Outlay and net	3.71	4.22	4.88	4.32	5.15	4.74	4.97	4.44	3.59	3.68	3.65
3	Non-Debt Capital Receipts	0.00	0.01	0.01	0.01	0.01	0.14	0.01	0.01	0.01	0.01	0.00
4	Fiscal Deficit (1+2-3)	3.68	1.90	1.72	2.25	2.72	2.00	1.83	2.47	2.25	2.37	2.59
Annual Change as Percentage point of GSDP												
5	Revenue (+ Deficit/ -Surplus)		-2.28	-0.85	1.09	-0.36	-0.18	-0.54	1.18	0.62	0.03	0.25
6	Capital Outlay and net		0.51	0.67	-0.56	0.83	-0.41	0.23	-0.53	-0.85	0.08	-0.02
7	Fiscal Deficit		-1.77	-0.18	0.52	0.48	-0.72	-0.18	0.65	-0.23	0.12	0.23
Use of Additional Revenue Surpluses / Fiscal Deficit												
8	Revenue (+ Deficit/ -Surplus)				208	-75			182		27	110
9	Capital Outlay and net		22.4	78.7	-107	174	-226.1	43.2	-82	-275	71	-10
10	Fiscal Deficit		77.9	21.4			397.4	32.5		376		

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

Table 1.2 Composition of Fiscal Deficit All States

S. No.	Item/Year	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Variables as % of GSDP												
1	Revenue (+ Deficit/ -Surplus)	0.23	-0.69	-1.03	-0.26	0.56	-0.05	-0.29	-0.22	0.10	0.39	0.04
2	Capital Outlay and net Lending	2.71	2.90	3.00	3.07	2.87	2.50	2.34	2.30	2.23	2.42	3.20
3	Non-Debt Capital Receipts	0.00	0.05	0.17	0.01	0.01	0.02	0.01	0.00	0.00	0.01	0.01
4	Fiscal Deficit (1+2-3)	2.94	2.16	1.80	2.80	3.41	2.43	2.04	2.08	2.33	2.80	3.24
Annual Change as Percentage point of GSDP												
5	Revenue (+ Deficit/ -Surplus)		-0.92	-0.33	0.76	0.82	-0.61	-0.24	0.07	0.32	0.29	-0.35
6	Capital Outlay and net Lending		0.19	0.09	0.07	-0.20	-0.37	-0.16	-0.04	-0.07	0.19	0.79
7	Fiscal Deficit		-0.78	-0.35	0.99	0.61	-0.98	-0.39	0.04	0.25	0.47	0.44
Use of Additional Revenue Surpluses / Fiscal Deficit												
8	Revenue (+ Deficit/ -Surplus)				77	134			182.8	128.1	61.9	-79.9
9	Capital Outlay and net Lending		21.1	28.3	7	-32	-60.6	-65.1	-100.1	-27.1	39.4	179.7
10	Fiscal Deficit		84.6	105.6			161.2	160.7				

Source: Basis data RBI (2018)

Table 1.3 Composition of Fiscal Deficit General Category States

S. No.	Item/Year	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Variables as % of GSDP												
1	Revenue (+ Deficit/ -Surplus)	0.42	-0.48	-0.83	-0.02	0.70	0.08	-0.19	-0.12	0.16	0.43	0.14
2	Capital Outlay and net Lending	2.52	2.73	2.79	2.84	2.66	2.34	2.21	2.20	2.14	2.32	3.18
3	Non-Debt Capital Receipts	0.00	0.06	0.18	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01
4	Fiscal Deficit (1+2-3)	2.94	2.19	1.78	2.81	3.35	2.42	2.01	2.08	2.30	2.75	3.31
Annual Change as Percentage point of GSDP												
5	Revenue (+ Deficit/ -Surplus)		-0.90	-0.34	0.81	0.72	-0.62	-0.28	0.08	0.27	0.28	-0.30
6	Capital Outlay and net Lending		0.22	0.06	0.05	-0.18	-0.32	-0.13	-0.02	-0.06	0.18	0.86
7	Fiscal Deficit		-0.74	-0.41	1.03	0.54	-0.94	-0.41	0.07	0.22	0.45	0.56
Use of Additional Revenue Surpluses / Fiscal Deficit												
8	Revenue (+ Deficit/ -Surplus)				79	133			115	126	61	-53
9	Capital Outlay and net Lending		24.2	16.1	5	-33	-51.0	-47.4	-25	-26	40	154
10	Fiscal Deficit		82.0	118.7			151.6	146.8				

Source: Basis data RBI (2018)

When a similar analysis is carried out for GCS taken together, the difference in the approach followed by Madhya Pradesh becomes evident. GCS taken together saw a turnaround of 1.24 percentage point of the GSDP (0.90 + 0.34) in their revenue surplus 2007-08 over 2005-06. However, this was used to address fiscal deficit rather than to raise the capital expenditure. On the other hand, Madhya Pradesh has given some emphasis to capital expenditure as well. When the fiscal positions deteriorated in 2008-09, the capital expenditure slightly increased by 0.05 percentage point, but the revenue deficit increased by 0.81 percentage point of GSDP. Thus, both capital expenditure and revenue deficit contributed to the rise in fiscal deficit. Compression of capital expenditure started from 2009-10 onward, which lasted till 2013-14. Interestingly, in 2010-11 and 2011-12, the revenue surpluses for GCS improved yet the states continued to curtail capital expenditure, even though the fiscal deficit remained below 2.1 percent of the GSDP. This points to an unwillingness of the states to incur capital expenditure.

There was a mild increase in the capital expenditure by GCS during 2014-15 by 0.18 percentage point of the GSDP. As noted before, this could partially be a result of the inclusion of the CSS funds meant for capital expenditure in the state budgets. It is only in 2015-16 when there the capital expenditure increased from 2.32 percent to 3.18 percent of the GSDP, a rise of 0.86 percentage point compared to the previous year. This happened even when the fiscal deficit reached 3.31 percent of the GSDP. Other than pointing to a possible revival of the investment, this can partly be attributed to the inclusion of the capital expenditure under CSS in capital expenditure, which was earlier not part of the state budget. Clearly, in light of the need to raise investment, the Finance Commission may consider incentivizing the states to raise the public investment. Madhya Pradesh, while shying away from the investment, has been relatively less hesitant to cut investment.

2. Implementation of FRBM Act and Outcome Evaluation

The time-period from 1998-99 to 2004-05 has been particularly challenging for the state governments, where their debt GSDP ratio increased from 21 percent to 37.5 percent from 1998 to 2005. Debt-GSDP ratio for Madhya Pradesh also increased from 22 percent to at an alarming level of 39.5 percent by 2005. With objectives to ensure prudence in fiscal management by progressive elimination of revenue deficit and reduction in fiscal deficit, the state brought Madhya Pradesh Rajkoshiya Uttardayitva Evam Budget Prabandhan Adhiniyam, 2005 (FRBM Act). The state aimed to

a) reduce revenue deficit in each financial year so as to eliminate it by 31st March 2009 and generate revenue surplus thereafter;
b) reduce the fiscal deficit in each financial year so as to bring it down to not more than 3.0 percent of GSDP by 31st March 2009.
c) ensure within a period of 10 years, that is as on the 31st day of March 2015, total liabilities do not exceed 40 percent of the estimated GSDP for that year;
d) limit the annual incremental guarantees so as to ensure that the total guarantees do not exceed 80 percent of the total revenue receipt in the year preceding the current year

Since 2005, the FRBM Act has been amended three times. The details of these amendments are as follows (sources: respective amendment notifications by the state government):

a) First Amendment notified on 31st March 2012 revised the target for the outstanding liabilities. Amendment required the state to "ensure that the total outstanding debt do not exceed 37.6 percent, 36 percent, 35.3 percent, for the financial year 2012-13, 2013-14, and 2014-15 of the estimated GSDP for the year respectively.
b) In line with the recommendations by the 13th Finance Commission, the state amended the FRBM Act to revise the target for fiscal deficit conditional upon meeting the criteria laid down the Commission.

"reduce fiscal deficit in each financial year so as to bring it down to not more than 3.5 percent of GSDP by 31st March 2016 and maintain it thereafter, subject to the following conditions, namely: - i) interest payment in the previous financial year is 10 percent or less of the total revenue receipts; and ii) total outstanding debt to GSDP ratio for the previous financial year is 25 percent of less. If either of the conditions mentioned above is not met, reduce fiscal deficit in that financial year so as to bring it down to not more than 3.25 percent of the GSDP for that year and if both the conditions mentioned above are not met, reduce the fiscal deficit so as to bring it down to not more than 3 percent of the GSDP for that financial year"

c) 30th March 2017: "for the financial *year ending* 31st March 2017, the borrowings under Ujjwal Discom Assurance Yojana (UDAY), for financial reconstruction of the Companies of the Energy Department shall not be reckoned against the normal permissible net borrowing ceiling of the state."

Table 2: Debt and Deficit Indicators for Madhya Pradesh (+ Deficit/ -Surplus)

Indicator	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Revenue Deficit	-0.03	-2.30	-3.15	-2.06	-2.42	-2.60	-3.14	-1.96	-1.34	-1.31	-1.06
Fiscal Deficit	3.68	1.90	1.72	2.25	2.72	2.00	1.83	2.47	2.25	2.37	2.59
Debt-GSDP Ratio	39.95	37.33	34	30.57	29.85	28.68	25.66	23.49	21.93	22.65	23.41

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

The experience of the state in meeting the FRBM targets has been reasonably well. As shown in table 2, the state consistently had a revenue surplus right from 2004-05. The fiscal deficit and debt –GSDP ratio have also remained within the stipulated limits. However, table 2 also shows that there was a general trend of reduction in fiscal deficit and rise of revenue surplus till 2012 (with 2009 being an outlier), after which there seems to be a period of decline in revenue surpluses and rise of fiscal deficit. Concurrently, the rate of fall in the debt-GSDP ratio first started decelerating, and debt-GSDP ratio eventually started rising from 2014-15 onward. To examine these issues, the time frame can be divided into two parts: 2005-06 to 2011-12 characterizing fiscal consolidation and 2012-13 to 2015-16 showing signs of fiscal slippage.

2.1 Fiscal Consolidation during 2005-06 to 2011-12

Targets of revenue and fiscal deficit can be achieved by expenditure restrain, raising more own revenues, or by greater resources received from the central government. Table 3 provides details of various fiscal indicators for Madhya Pradesh which permits identification of the sources of fiscal consolidation during 2005-06 to 2011-12. In the first three years of this time-frame, the overall revenue resources of the state increased from 18.66 percent of the GSDP in 2005-06 to 22.62 percent in 2007-08, a rise of 3.95 percentage point of the GSDP. However, this entire rise can be attributed to the transfer of central resources, that increased from 9.55 percent of the GSDP to 13.48 percent of the GSDP, reflecting a rise by 3.92 percentage point of the GSDP. Both own-tax revenues and own non-tax revenues remained stagnant during this time-frame. Thus, on the revenue side, the entire consolidation came from the central transfers. On the expenditure side, there was some restrain exercised by the state government. Revenue expenditure declined from 16.55 percent of the GSDP in 2005-06 to 15.85 percent of the GSDP in 2007-08, a fall of 0.69 percentage point. A part of this can be attributed to debt restructuring and write-off measures undertaken based on the recommendations of the 12th and 13th Finance Commissions (more on this in section 3). However, interest relief due to debt consolidation/write-offs along with fall in interest rate accounted for only 0.16 percent point of the GSDP. Thus, primary revenue expenditure was squeezed by 0.53 percentage point of the GSDP. Fall in revenue expenditure could also be because of the rise in the CSS, which permitted states to replace their own spending by the CSS whose functional domain overlapped with the subjects pertaining to states' jurisdiction. Central transfers for CSS increased from

2.09 percent of the GSDP to 3.61 percent, a rise of 1.52 percentage point. Despite fiscal consolidation, the allocation for capital expenditure and net lending was increased from 3.71 percent in 2005-06 to 4.88 percent in 2007-08. Thus, it can safely be concluded that higher central transfers were partly used to finance capital expenditure and partly for fiscal consolidation.

In the year 2008-09, the Indian economy felt the shocks of the global financial crisis. Due to this, the central tax collection declined which automatically led to a decline in the states' share in central taxes. For Madhya Pradesh, share in central taxes declined from 6.32 percent of the GSDP in 2007-08 to 4.87 percent of the GSDP in 2009-10 before recovering to 5.77 percent of the GSDP by 2011-12. While there has been some stability in CSS transfers in the initial years after the global financial crisis, these also declined from 3.61 percent of the GSDP in 2007-08 to 2.62 percent of the GSDP by 2011-12. However, increase in the state's own revenue resources largely held the ground for maintaining the overall revenue resources. Own-tax revenue increased from 7.44 percent of the GSDP in 2007-08 to 8.55 percent by 2011-12. Own-non-tax revenues also increased from 1.70 percent to 2.37 percent of the GSDP during this period. The overall rise in the own revenues was 1.78 percentage points of the GSDP as against the fall in central transfers of 1.94 percent. Thus, the overall impact on the revenue side was only 0.16 percent of the GSDP.

On the expenditure side, the CSS expenditure by the central government declined from 3.61 percent of the GSDP in 2007-08 to 2.62 percent of GSDP in 2011-12 (0.99 percentage point). However, this was partially compensated by a rise in the own-revenue expenditure of the state, which increased from 15.85 percent of the GSDP to 16.7 percent of the GSDP (0.85 percentage point) during this period. The full benefits of lower interest rate and debt consolidation were evident by 2012 in terms of low-interest burden. Interest payment declined from 2.6 percent of the GSDP in 2007-08 to 1.68 percent of the GSDP in 2011-12, reflecting a fall of 0.92 percent of the GSDP. Thus, the state's own primary revenue expenditure actually increased by 1.78 percent of the GSDP (0.92 + 0.85). However, despite the rise in primary revenue expenditure, the revenue surplus remained stable during the time period despite the global financial crisis. Capital outlay and net lending saw a slight increase. Overall it can be concluded that the state faced the fiscal challenge from global financial crisis emanating in the form of lower transfers from the centre. The state weathered this challenge largely due to rise in own revenue receipt and decline in interest burden which in turn was caused by fiscal consolidation and debt restructuring undertaken in the previous years.

2.2 Fiscal Slippage: 20012-13 to 2015-16

This phase saw the reversal of events on revenue side observed during 2007-08 to 2011-12. Own-tax revenues of the state declined from 8.55 percent of the GSDP to 7.41 percent of the GSDP between 2011-12 to 2015-16. Own non-tax revenues also declined from 2.37 to 1.58 percent of the GSDP during this period. The overall decline in own revenue receipts was 1.93 percentage points of the GSDP. While the size of state's share in central taxes in terms of percentage of GSDP remained stable till 2014-15, they increased in the subsequent year mainly due to the award of the 14th Finance Commission. Madhya Pradesh's share in the central taxes for 2015-16 was 1.3 percentage point of GSDP higher than levels observed in 2011-12 (7.07 – 5.77). However, this was accompanied with the rerouting of the CSS through the state budget and abolishment of the Planning Commission. The central grants increased by only 0.23 percentage point of the GSDP in 2015-16 over 2011-12 (3.38 -3.15). Thus, the overall central resource flow to the state, channelled under Finance Commission transfers and other central grants, increased by 1.53 percentage point of the GSDP. However, overall CSS declined by 2.62 percent of the GSDP, much lower than the gains received from the higher devolution by the 14th Finance Commission. The overall decline in the central resources was 1.09 percentage point of the GSDP which added together with a decline in own revenue receipt gives total decline in revenue resources of 3.02 percentage points of the GSDP.

In addition to the revenue side, the expenditure side also played a role in the deterioration of the deficit indicators. Revenue expenditure increased from 16.7 percent of the GSDP to 18.38 percent between 2011-12 to 2015-16. However, a part of this is simply due to the reclassification of the CSS expenditure into state's expenditure. All this led to a sharp fall in the revenue surplus from 3.14 percent of the GSDP to 1.06 percent of the GSDP, an overall decline of 2.08 percentage point in 2015-16 over 2011-12. The fiscal deficit, however, rose by a smaller magnitude of 0.95 percentage points of the GSDP. This is because the capital outlay and net lending also declined from 4.97 percent of the GSDP to 3.65 percent of the GSDP, reflecting a decline of 1.32 percentage point.

While the overall fiscal deficit still remains in the limits prescribed under the state's FRBM Act, there are some cause for concerns. The primary fiscal deficit has been rising in the recent years, mainly because the fall in interest payment has been partially matched by a rise in non-interest expenditure. Thus, revenue and fiscal deficit numbers may remain stable in the short run, due to fiscal space provided by the falling interest burden. However, once the full gains of debt consolidation and lower interest rate is realized, there may not be further fall in the interest burden creating a need for compression of non-interest expenditure or increase in the revenue receipts. In fact, the interest rates have started rising again, which may eventually lead to a reverse of the cycle observed during the past decade. There is a clear need to keep vigilance on the primary fiscal deficit.

Table 3: Fiscal Indicators for Madhya Pradesh (as % of GSDP)

S. No.	Item	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Revenue Side												
1	Own-tax Revenues	7.33	7.24	7.44	6.90	7.59	8.13	8.55	8.03	7.63	7.62	7.41
2	Own Non-Tax Revenues	1.78	1.84	1.70	1.69	2.80	2.17	2.37	1.84	1.75	2.16	1.58
3	Share in Central Taxes	5.10	5.59	6.32	5.46	4.87	5.94	5.77	5.46	5.17	5.02	7.07
4	Grants from the Centre	2.36	3.09	3.55	2.97	2.93	3.45	3.15	3.16	2.68	3.67	3.38
5	Revenue Receipts	16.57	17.77	19.00	17.02	18.19	19.69	19.84	18.49	17.24	18.47	19.44
6	CSS	2.09	3.46	3.61	3.77	3.43	3.22	2.62	1.43	1.89	0.00	0.00
7	Total Revenue resources	18.66	21.23	22.62	20.79	21.62	22.90	22.46	19.92	19.12	18.47	19.44
8	of which Total Central Transfers	9.55	12.15	13.48	12.19	11.23	12.60	11.54	10.05	9.73	8.69	10.45
Expenditure Side												
9	Revenue Expenditure	16.55	15.47	15.85	14.96	15.77	17.09	16.70	16.53	15.90	17.16	18.38
10	of which: Interest Payment	2.75	2.79	2.60	2.12	1.96	1.92	1.68	1.46	1.45	1.47	1.49
11	Capital Outlay	5.33	3.58	4.23	3.40	3.48	3.34	2.87	3.04	2.46	2.47	3.10
12	Net Lending	-1.62	0.64	0.65	0.92	1.67	1.40	2.10	1.40	1.13	1.20	0.55
13	Non-Debt Capital Receipts	0.00	0.01	0.01	0.01	0.01	0.14	0.01	0.01	0.01	0.01	0.00
14	Total Expenditure (6+9+11+12-13)	22.34	23.14	24.34	23.04	24.35	24.91	24.29	22.39	21.37	20.83	22.03
Deficit Indicators												
15	Revenue (+ Deficit/ -Surplus)	-0.03	-2.30	-3.15	-2.06	-2.42	-2.60	-3.14	-1.96	-1.34	-1.31	-1.06
16	Fiscal Deficit	3.68	1.90	1.72	2.25	2.72	2.00	1.83	2.47	2.25	2.37	2.59
17	Primary Fiscal Deficit	0.93	-0.88	-0.87	0.12	0.77	0.08	0.15	1.01	0.79	0.89	1.10

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

3 Debt Profile

The debt profile of the states has substantially changed in its composition since 1991. Table 4.1 provides the long-term composition of the outstanding liabilities of Madhya Pradesh from 1991 onward for selected years. There is a distinct trend of decline for the share of loans from the centre and rise in share for market borrowings in the outstanding liabilities of the state. Loans from the centre which accounted for 47 percent of the outstanding liabilities of the state on March 1991, has fallen to 10.07 percent by March 2016. Special securities issued to National Small Saving Fund (NSSF) emerged as an important source of borrowings in the early 2000s, though its share in the outstanding liabilities has been declining since 2006 (peaked at 27 percent share). Market borrowings accounted for 44 percent of the state's outstanding liabilities as on March 2016. Tables 4.2 and 4.3 show that changes on similar lines in the composition of the outstanding liabilities have also taken place for All States and GCS respectively.

Table 4.1: Composition of the Outstanding Liabilities: Madhya Pradesh (%)

Year/Component	Loans & Advances from Centre	Special Securities issued to NSSF	Market Loans	Provident Funds etc.,	Others	Total
1991	47.0	0.0	8.5	26.3	18.1	100
1995	43.1	0.0	12.4	30.0	14.6	100
1999	42.0	0.0	15.5	26.6	15.8	100
2004	28.8	13.4	20.6	16.8	20.5	100
2008	16.0	26.7	26.8	14.3	16.2	100
2013	13.7	18.8	36.0	11.4	20.1	100
2016	10.7	15.8	44.0	10.7	18.8	100

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

Measures undertaken from 1999-00 onward on the creation of NSSF, Debt Swap Scheme (DSS), and restructuring the state's debt under Debt Consolidation and Relief Facility (DCRF) provided by the 12th Finance Commission have greatly influenced the composition of the debt profile of the state. The last two measures have also helped in reducing the interest burden for the state, which along with the favourable macro-environment till 2007-08 enabled the states to bring their fiscal parameters under control in line with the FRBM requirements. The 12th Finance Commission made implementation of the FRBM as a precondition for debt consolidation and achievements of pre-specified targets for revenue deficit as a precondition for debt waiver. Hence, to understand the changing composition of the debt profile of the states, and also to understand Madhya Pradesh's performance in post FRBM period compared to pre-FRBM period, it is necessary to trace the developments taken place during the last two decades in the system through which states finance their fiscal deficit.

Table 4.2: Composition of the Outstanding Liabilities: All States (%)

Year/Component	Loans & Advances from Centre	Special Securities issued to NSSF	Market Loans	Provident Funds etc.,	Others	Total
1991	57.4	0.0	12.2	13.2	17.3	100
1995	53.2	0.0	14.4	15.2	17.2	100
1999	49.8	0.0	15.4	15.8	19.0	100
2004	29.0	17.3	19.8	13.5	20.4	100
2008	10.9	32.4	24.2	12.2	20.2	100
2013	6.6	22.0	40.0	12.6	18.8	100
2016	4.6	16.8	50.2	10.9	17.5	100

Source: Basis data RBI (2018)

Table 4.2: Composition of the Outstanding Liabilities: General Category States (%)

Year/Component	Loans & Advances from Centre	Special Securities issued to NSSF	Market Loans	Provident Funds etc.,	Others	Total
1991	56.1	0.0	12.7	13.4	17.8	100
1995	53.0	0.0	14.6	15.2	17.1	100
1999	49.9	0.0	15.4	15.7	19.0	100
2004	29.2	17.9	19.2	13.0	20.7	100
2008	11.1	33.5	23.4	11.7	20.3	100
2013	6.7	22.5	40.2	11.8	18.7	100
2016	4.8	16.8	51.1	9.9	17.4	100

Source: Basis data RBI (2018)

The central government has provided loans to states under various heads like assistance for the state plan, loans for centrally sponsored schemes, on-lending of the small saving collection, and external loans. In the recent past, the loan from the central government to states has seen following changes in its components.

a) As a part of Normal Central Assistance (NCA), General Category States (GCS) received NCA as grant and loan mix in 30:70 ratio. While the Special Category States (SCS) received NCA as 90:10 mix. The practice of these loans was stopped from 2005-06 onward after the recommendations of the 12th Finance Commission in this regard.
b) Prior to 1999-00, a part of the proceeds from the small saving collection was on-lent by the centre to the states. Since 1999-00, states borrow from the proceeds of small saving collection directly, by issuing special securities to the NSSF, which is part of the public account of the centre.
c) Loans for centrally sponsored schemes and central plan schemes
d) External assistance which are routed through the central government. The 12th Finance Commission recommended that rather than channelling all funds at similar terms to all states, the funds should be transferred to states on back to back basis on the same conditions on which lender has provided the funds.

3.1 Creation of National Small Saving Fund (NSSF)

The first important change in the pattern of loan flows from the centre to states came in 1999-00. Hitherto, the deposits and withdrawals by subscribers of small saving were made from the public account of the centre. However, interest payment to the depositors was made from the revenue account of the Consolidated Fund of India (CFI). Loans to the states against the collection of small savings (75 percent of the proceed between 1987 to 2000) were made out of CFI as a capital transaction, while interest receipt from the states were credited to CFI as revenue receipts. Since the on-lending of small saving to the states was carried out through the CFI, the borrowing from small savings formed a part of centre's fiscal deficit, while corresponding assets were also created as loans given to the state. Thus, the centre's fiscal deficit was overstated by this amount. To address this, the NSSF was created within the public account. The centre and states raised capital receipts by issuing special securities to the NSSF at share decided by the Government of India.

While the above shift reduced the stated fiscal deficit for the centre, it had no impact on the level of the states' fiscal deficit or borrowings. However, in terms of the composition of the borrowings, what earlier was a part of the central loan now got a separate entry as special securities issued to the NSSF. Thus, when comparing the states liabilities overtime, securities issued to NSSF and loans from the centre should be considered together, as the reduction in central loans is partially an outcome of bringing out the flow of small saving from the central loans as a separate category, namely, special securities issued to NSSF. In fact, the sum of the shares of central loans and securities issued to NSSF in the outstanding liabilities remained reasonably stable for Madhya Pradesh during 1999-00 to 2007-08, where it marginally increased from 42 percent to 42.7 percent of the total outstanding liabilities. The decline in loans from the centre at 26 percent (42-16) was more than compensated by the rise in special securities issued to NSSF at 26.7 percent. The share of market loans in the total liabilities also increased from 15.5 percent to 26.8, which essentially compensated for a roughly equal reduction in the flow from provident funds (26.6 percent to 14.8 percent of the total outstanding liabilities). However, since 2008-09 there is a steep decline in the share of loans from the centre, special securities issued to NSSF, and also the provident funds. Market borrowing replaced these three sources in the composition of the debt. By 2015-16, market borrowings accounted for nearly 44 percent of the outstanding liabilities for the state.

To understand the rise of NSSF borrowings and decline in the central loans during 1999-00 to 2007-08, we need to look at the policy developments that took place during this time. When the NSSF came into existence in April 1999, the central government took the responsibility of servicing the small saving deposits outstanding as on 31st March 1998. For this, the central government issued special securities carrying an interest rate of 11.5 percent to the NSSF for ₹ 1,76,221 Crores, an amount equal to the face value of outstanding deposits. The states were required to borrow from the net proceeds of NSSF by issuing it special securities. In the initial years of the inception of the NSSF, the states were to mainly receive the money from NSSF, as the fresh liabilities were being created to be paid in future; consequently, the net collection was high. Special securities by the states were issued with a tenor of 25 years, where there was a moratorium on principal payment for the first five years. Further, the share of proceeds to be absorbed by the states was increased (80 percent during 2000-01 to 2002-03 and 100 percent of the proceed during 2003-04 to 2007-08), which contributed to rise in the states' borrowings from the NSSF. Finally, the 2000s were marked with an environment of lower interest rate, which incentivized the savers to channel more of their savings thorough small savings which offered higher administered interest rate. This led to greater collection under NSSF, which was eventually borrowed by the states by issuing special securities.

3.2 Debt Swap Scheme

The loans against the deposits from small savings, prior to the creation of NSSF, were extended to the state governments from the consolidated fund of India. However, the stock of these loans to the states carried a higher interest rate, generally around 13.5 percent. In the early 2000s, owing to lower interest rate environment, market borrowings emerged as the cheapest source of borrowings. The interest rate on market borrowings declined continuously from 14 percent in 1995-96 to around 6 percent by 2003-04. However, the central government exercised control over the state borrowings, as under article 293 of the constitution, a state cannot raise any loan without the consent of the central government if there is an outstanding loan made by the centre to the state. Troubles for the states arose from the fact that interest rate on the central loans was very high, even ranging between 14-15 percent, particularly on loans made out of small savings from 1993 to 1999. Thus, states were unable to take advantage of the lower interest rate environment.

In September 2002, the central government introduced a Debt Swap Scheme (DSS) during 2002-03 to 2004-05, under which the states could repay the 'high-cost debt' owed to the central government. For this, the states were permitted to raise resources from the market (prevailing interest of around 6.5 percent) or through NSSF (at an interest rate of 9.5 percent as fixed by the centre). The 'high-cost debt' was defined as debt that carried an interest rate of 13 percent or above. The scope of the central loans eligible for the DSS included loans for state plan and small saving loan contracted up to 31st March 1999. The DSS did not reduce the outstanding liabilities of the states, but changed its composition from high-cost loans from the centre to low-cost market borrowings and special securities issued to NSSF. Thus, the rise in the share of NSSF and market borrowings, accompanied with a decline in the share of central loans in the outstanding liabilities for the state can be attributed to this replacement of central debt by the former two channels.

Madhya Pradesh had ₹ 3,432 crores of high-cost debt outstanding as on March 2002, which constituted 13.22 percent of the outstanding debt. The state swapped ₹ 3,332 crores of high-cost debt under DSS (12.77 percent of the outstanding debt). Of this, ₹ 1,595 crores were through additional market borrowings, while remaining ₹ 1,728 crores was through borrowings from small savings by issuing special securities to NSSF. As against this, All States, taken together, had a high-cost debt of ₹ 1,14,317 crores outstanding as on March 2002 (16.5 percent of the total outstanding debt), out of this debt of ₹ 1,02,034 crores was swapped. For this, states raised ₹ 53,640 crores from additional market borrowings and remaining ₹ 48,394 crores were raised through borrowings from small savings.[5] Fresh borrowings used by Madhya Pradesh for debt swap was at an effective interest rate of 8.07 percent (the effective interest rate on entire market borrowings for the state during 2002-03 to 2004-05 was 6.53 percent[6], while the interest rate on borrowings from NSSF was 9.5 percent). As against this, the effective interest rate on 'high cost' debt swapped was around 13.5 percent. Clearly, this gave a difference of around 5.43 percentage points on the debt swapped.

3.3 Debt Consolidation and Relief Facility (DCRF)[7]

The DSS covered central loans to the state having an interest rate of 13 percent or above. Hence, despite the DSS, the effective interest rate on outstanding central loans to the states was around 11.5 percent, at a time when the weighted interest rate on central borrowings during 2003-04 was at 6.07 percent. Recognizing the differential in the interest rate charged on central loans to the states and centre's cost of borrowing, the 12th Finance Commission argued for bringing the interest rate on central loans to the states closer to the centre's marginal cost of borrowing. To achieve this, the Commission recommended to consolidate central loans to the

[5] RBI (2013). Sub-National Debt Sustainability: An Assessment of the State Governments, State Finances: A Study of Budgets

[6] Based on the Finance Accounts, market borrowing during the triennium of 2002-03 to 2004-05 was as follows: 2002-03: Rs 1,113.6 Cr at 7.28 percent, 2003-04: Rs 1,428 Crores at 6.29 percent, and 2004-05: Rs 2,128.9 Cr at 6.29 percent. The weighted average works out to be 6.53 percent.

[7] In addition to the DCRF, other important recommendations by the 12th Finance Commission on central loans to the states were to reduce intermediation of the central government in providing loans to the state. Given the improved ability of the states to borrow from the market, the Commission recommended that centre should provide NCA only as a grant. The loan component of the NCA generally had a higher interest rate than the market interest rate, thus making the NCA grants not exactly free for the states. The Commission also recommended that the external loans/grants should be passed on to the states on back to back basis on the same terms as granted by the external agency. Earlier, the central government used to pass-on all external loan/grant receipts as a uniform loan and grant mix of 70:30 (10:90 for special category states) at an interest rate applicable to block loans. Clearly, this penalized the states for whom the external agency had provided more grant component or charged a lower interest rate while subsidized the states receiving higher cost external loans.

states contracted till March 2004 and outstanding on March 2005, to be repaid in 20 equal instalments, at an interest rate of 7.5 percent. The scope of central loans covered under the consolidation program included the loans channelled through the finance ministry. Thus, the loans provided by other central ministries for centrally sponsored schemes and central schemes were excluded, largely owing to the unavailability of data on them. Further, the borrowings of the states through special securities issued to NSSF were also excluded, since these borrowings were now made from the public account of the centre rather than the CFI. The Commission made provision of the debt-consolidation to the states contingent on their implementation of the FRBM Act. The estimated interest relief for Madhya Pradesh due to lowering of interest rate was ₹ 1,311 Crores as against ₹ 21,276 crores for all states taken together.

The overall impact of the above consolidation was targeted to reduce the interest burden of the states, as the total debt were to remain at the existing level. Going a step ahead, the 12th Finance Commission recommended that to incentivize the achievement of targets under FRBM, a debt waiver should also be provided. Accordingly, the Commission set a target of eliminating the revenue deficit/maintaining the existing level of revenue surplus by 2008-09, while also containing the fiscal deficit to the level of 2004-05. On meeting the targets, the states were entitled to receive a waiver in principal payment. All states, except Sikkim and West Bengal, implemented their FRBM act, thus qualified for the consolidation of loans from the centre at an interest rate of 7.5 percent, with a 20-year schedule for principal repayment. Madhya Pradesh achieved the revenue surplus from the first year of the FRBM itself and maintained it in the subsequent years, thus qualified for the debt waiver for all five years of the award period of the 12th Finance Commission. The estimated debt waiver (on meeting the target for all five years) relief for Madhya Pradesh was ₹ 1875 crores as against ₹ 32,199 crores for All States taken together.

3.4 Relief on NSSF: 13th and 14th Finance Commissions

During 2002-03 to 2006-07, the states were required to borrow the entire net collection in a state by NSSF. The interest rate on these securities was at 9.5 percent or above, which was more than then market borrowing cost for centre or states. The securities to NSSF were issued for a period of 25 years, including a moratorium period of 25 years on principal repayment. Cleary, the states were locked in a long-term high-cost borrowing, while the average duration of the small saving deposit was 5 to 7 years. In 2005, a sub-committee of the National Development Council was set up to examine issued related to the NSSF. Based on the recommendations of the committee, states were required to take 80 percent of the net collection, with an option to go up to 100 percent. Further, the interest rate on the outstanding securities issued till 2002-03 was reduced to 10.5 percent.

Despite the implementation of the committee's recommendations, the states continued to bear a higher burden on the NSSF. In 2007-08, the states paid an effective interest rate of 10.1 percent on their NSSF liabilities, as against 8.4 percent by the centre on its NSSF loans. Considering this, the 13th Finance Commission recommended to reset the interest rate on the loans contracted till 2006-07 and outstanding at the end of 2009-10 at a common interest rate of 9 percent. The benefit of this interest rate relief was subject to necessary amendments/enactment in the FRBM Act recommended by the Commission.[8] The

[8] The Commission also recommended to write-off the loans from the central ministries to states (other than Ministry of Finance) outstanding as at the end of 2009-10. This was a relatively small amount. For Madhya Pradesh, the debt waiver was Rs 218 Crores, as against for all state debt waiver of RS 4506 Crores (Annexure 9.5, THFC). The Commission further recommended to stop the practice of providing loans for CSS, except in case of fiscally weak states. The overarching idea was to reduce the central government’s intermediation in states’ borrowing and allow states to borrow from the market.

Commission estimated outstanding amount for Madhya Pradesh at Rs 13,402 crores, on which the total interest relief during 2010-11 to 2014-15 was measured at ₹ 450 crores.[9]

The Commission further recommended to link the interest rate on small saving instruments to the prevailing G-sec rates. Consequent to these recommendations, a "Committee on Comprehensive Review of National Small Savings Fund" was constituted in 2010. Based on the recommendation of the Committee, the mandatory component of net collection under small saving to be subscribed by the special securities of state government was reduced to 50 percent. The tenor of the securities was also reduced from 25 years to 10 years. A further relief came from the 14th Finance Commission which recommended for not forcing the states for compulsory borrowings from the NSSF. With effect from April 2016, the central government permitted states to opt out from the mandatory borrowings from the NSSF. All states/UTs (with Legislature), other than Arunachal Pradesh, Delhi, Kerala, and Madhya Pradesh, have opted to not make fresh borrowings from NSSF. Arunachal Pradesh has chosen to take 100 percent of the NSSF proceeds within its territory, while other three states/UT have opted to take 50 percent of the NSSF collection. It is important to note that the interest rate on the small saving instruments have been linked to G-sec, and benefits of consequent lower interest rates were shared with the states. Thus, the fresh borrowings in 2016-17 were made, by the four states who opted for the NSSF, at an interest rate of 8.8 percent, compared to 9.5 percent during 2015-16. While the states will benefit from the lower interest rate that they can get on market borrowings, as against the high-cost borrowings from NSSF. However, the overall market borrowings of the states will increase due to a fall in capital receipts from NSSF.

4. Contingent Liabilities

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[9] The estimated outstanding amount for all states was Rs 3,89,349.63 Crores with an imputed interest relief of 13,516.62 Crores (Annexure 9.4, THFC)

The state government provides guarantees for the discharge of certain liabilities like loans raised by Statutory Corporations, Government Companies, Joint Stock Companies, Cooperative Institutions, local bodies, firms, and Individuals etc. These Guarantees constitute contingent liabilities on the state's revenues. As per the Madhya Pradesh State Government Guarantee Rules, 2009 (replacing Madhya Pradesh State Government Guarantee Rules, 1976) sanction orders of the guarantees are issued by the Finance Department instead of the concerned Administrative Department. The maximum amount guaranteed during 2015-16 was ₹ 40,171 crores with an outstanding guarantee at the year-end being ₹ 27,530 crores. The FRBM Act 2005, mandates that the state government shall limit the annual incremental guarantees so as to ensure that the total guarantees do not exceed 80 percent of the total revenue receipts in the year preceding the current year. For example, the total outstanding guarantees at the end of 2015-16 at ₹ 27,530 crores were within the limit of 80 percent of revenue receipts of ₹ 88,641 crores in the previous year (2014-15). The state has been able to meet the FRBM requirement in this regard over the years. Table 5 shows the sectoral composition of guarantees provided. It is the power sector and food and civil supply department which have been provided the largest share of the state's guarantee.

Table 5: Sectoral Composition of the Guarantees Provided by the State (%)

S. No.	Sector	Maximum during the year 2015-16	As on march 2016
1	Power	30.5	18
2	Co-operative	10.8	11
3	State financial corporation	2.7	3
4	Urban development & housing	16.0	5
5	MP food and civil supply department	31.6	42.8
6	Others	8.5	20.1
	Total	100	100

Source: Basis data RBI (2018) and Finance Account for Madhya Pradesh (2016)

The 12th Finance Commission recommended that states should set up Guarantee Redemption Funds (GRF) through earmarked guarantee fees. This should be preceded by risk weighting of guarantees. The fund should be maintained outside the consolidated fund of the states in the public account, which should not be used for any other purpose, except for meeting contingent liabilities on account of the guarantees provided. Accordingly, guarantee fee is charged from the borrowing institutions. The proceeds of the fees so realized are credited to the revenue of the Government. As on March 2016, the accumulated balance in the GRF is ₹ 394.57 crores, which are then invested in the central government securities. Stated figures for GRF in the Finance Account suggests that the fund value is presented at face value. For example, in 2010-11 and 2015-16, the opening and closing balance were exactly the same. Further, during 2015-16 a sum of ₹ 14.20 crores was recovered as guarantee fees, but the corpus under GRF remained exactly the same, suggesting that the guarantee fees were not credited to the GRF.

5. Fiscal Deficits and Debt Roadmap for 2020-25

This section discusses the debt roadmap for the state during 2020-25 in light of the emerging macro-economic concerns on growth, inflation targeting, and the implementation of the GST. Section 5.1 discusses the theoretical framework used for debt sustainability analysis. Section 5.2 discusses the assumptions used for growth rate, interest rate, and target debt-GDP ratio. Using these, the target fiscal deficits and debt level during 2020-25 for the state are discussed in section 5.3.

5.1 Theoretical framework

Let D be the absolute amount of the existing stock of government debt. FD be the fiscal deficit for the year. Subscript t denotes the current year and t-1 denotes the previous year. Then

$$D_t = D_{t-1} + FD_t \qquad (1)$$

The fiscal deficit can be decomposed into primary fiscal deficit, denoted by PD, and the interest payment on the existing stock of government debt at the end of the previous year on which interest burden accrue at the nominal interest rate of r.

$$D_t = D_{t-1} + rD_{t-1} + PD_t \qquad (2)$$

To convert the fiscal variables as a percentage of GDP, divide equation (2) by $Y_t = Y_{t-1}\ (1+g)$, where Y refers to nominal GDP, g refers to growth rate of the nominal GDP. Small letters, unless specified, denote variables as % of GDP.

$$d_t = \frac{d_{t-1}}{1+g} + \frac{rd_{t-1}}{1+g} + pd_t \qquad (3)$$

$$d_t = \frac{d_{t-1}(1+r)}{1+g} + pd_t \qquad (4)$$

To measure the incremental change in debt-GDP ratio over two consecutive years, we subtract previous year's debt-GDP ratio from the current year's debt-GDP ratio.

$$d_t - d_{t-1} = \frac{d_{t-1}(1+r)}{1+g} - d_{t-1} + pd_t \qquad (5)$$

$$d_t - d_{t-1} = \frac{d_{t-1}(1+r) - d_{t-1}\ (1+g)}{1+g} + pd_t \qquad (6)$$

$$d_t - d_{t-1} = \frac{d_{t-1}(r-g)}{1+g} + pd_t \qquad (7)$$

Equation (7) shows that there are three sources of change in debt-GDP ratio. While economic growth contributes in reducing the debt-GDP ratio, higher interest rate and primary fiscal deficit contribute to increase in debt-GDP ratio. The key to debt sustainability lies in maintaining a stable debt-GDP ratio at a targeted level that is debt GDP ratio should not change over the years. By putting $d_t = d_{t-1} = d^*$ in equation (7), we get:

$$\frac{d^*(r-g)}{1+g} + pd_t = 0 \qquad (8)$$

Sustainable level of primary fiscal deficit can be calculated as follows:

$$\frac{d^*(g-r)}{1+g} = pd_t \qquad (9)$$

Equation (9) shows that in case the interest rate exceeds the growth rate then there is no space for primary fiscal deficit. In fact, to maintain the existing debt-GDP ratio, primary fiscal surplus needs to be generated. Any primary fiscal deficit will lead to explosion of the debt-GDP ratio. On the other hand, if the growth rate exceeds interest rate, then there can be a space for primary fiscal deficit. By rearranging equation 9, we get the sustainable level of debt-GDP ratio, associated with given levels of growth rate, interest rate, and primary fiscal deficit.

$$d^* = pd_t \frac{(1+g)}{g-r} \qquad (10)$$

By adding interest payment as share of GDP to both sides of equation (9), we can also calculate the sustainable level of fiscal deficit as:

$$\frac{d^*(g-r)}{1+g} + \frac{rd_{t-1}}{1+g} = pd_t + \frac{rd_{t-1}}{1+g} \qquad (11)$$

$$\frac{d^{*}g}{1+g} = fd_t \qquad (12)$$

5.2 Assumptions for Growth Rate, Interest Rate, and Target Debt-GDP ratio

The theoretical framework discussed above can be used to determine the feasible primary and gross fiscal deficit consistent with a level of debt. To calculate this, the variables required are effective interest rate, growth rate, and targeted level of fiscal deficit.

Interest Rate: Market borrowings and NSSF accounted for 45.2 and 16.2 percent of the outstanding liabilities for Madhya Pradesh at the end of 2015-16, and their share has been rising in the overall liabilities of the state. Other components of state's liabilities, namely, loans from center and provident fund accounted for 11.4 and 10.7 percent respectively, and their share in the overall liabilities of the state have been declining over the years. With effect from April 2016, the central government permitted states to opt out from the mandatory borrowings from the NSSF. However, Madhya Pradesh is among the four states that opted to borrow from NSSF. The state is currently borrowing 50 percent NSSF proceeds within its territory. Hence, to determine the effective interest rate over the period of 2020-25, we focus on the interest rate applicable on market borrowings and NSSF. Effective interest rate on the outstanding market borrowing and NSSF securities on March 2015, on which interest payment was made during 2015-16, was at 8.96 percent and 9.63 percent respectively. Interest rate on the outstanding market borrowing and NSSF securities on March 2016 was 8.54 and 9.38 respectively. Interest rate on the fresh borrowings from NSSF during 2016-17 was 8.8 percent, which was reduced to 8.4 and 8.2 percent respectively in 2017-18 and 2018-19 respectively. Interest rate on state's market borrowing has been in the range of 8.15 to 8.76 during 2015-16 and 7.15 to 7.76 during 2016-17. Given this, it can be expected that the effective interest rate on the state's outstanding liabilities from market/NSSF can be expected to remain in the range of 8 to 8.5 percent during the period of 2020-25.

Nominal Growth Rate: GSDP data for Madhya Pradesh are available for 2011-12 series up to 2016-17. During this period, Madhya Pradesh's economy has grown at the CAGR of 15.45 in nominal and 8.27 percent at constant prices, implying a GSDP deflator at the rate of 6.64 percent. While nominal growth rate is relevant for the framework discussed in previous section, the timeframe of 2020-25 is unlikely to have an inflation rate in the range of 6.5 to 7 percent, given the commitment of the Monetary Policy Committee to maintain CPI inflation at 4 percent (+/- 2 percent). It should be noted that a 4 percent CPI may not translate into an equivalent implicit GSDP deflator. CPI used in India is based on Laspyres index where price of a fixed basket from the initial base year is tracked over the years to derive inflation, which is likely to have upward bias due to not accounting for the substitution effect. On the other hand, GSDP deflator is based on Passhce index where price of the basket for current year is tracked over the years, which is likely to understate inflation, since the items with higher inflation may see a fall in their weights (Eurostat, 2016).

In addition to the difference in the base year used for basket, CPI and GDP deflator also differ in their basket, since food & beverages accounts nearly 45.86 percent of the CPI basket (2012 series) compared to nearly14 percent share of agriculture, forestry & fishing in the national GDP (though the two categories are not strictly comparable, yet this comparison provides evidence for wide differences for weight of agriculture in CPI and GDP deflator). It is not easy to forecast a relationship between GSDP deflator and CPI. Annual inflation measured through GDP deflator at the national level has been at 4.58 percent during 2011-12 to 2016-17 compared to around 5.44 percent for CPI during comparable period; supporting the earlier reasoning of lower inflation measured by GDP deflator compared to CPI. Thus, a target of 4 percent CPI inflation is may translate into lower GDP deflator in the coming years.

A comparison of GSDP deflator for Madhya Pradesh against national GDP deflator also indicates that state has been having a higher inflation measured through GSDP deflator than the national level. Compared to annual GDP deflator of 4.58 percent at the national level during 2011-12 to 2016-17, GSDP deflator for the state has been 6.64 percent during the same period. In fact, the state had highest GSDP deflator among all states with the next highest GSDP deflator belonging to West Bengal at 5.97 percent. An analysis of GSDP deflator at sectoral level shows that agriculture is the source of comparatively high deflator for Madhya Pradesh. Compared to aggregate GSDP deflator of 6.64 percent, the GSDP deflator for agriculture is 9.94 percent during the quinquennium. This trend of relatively higher sectoral deflator for agriculture is also visible at the national level as well, where sectoral deflator for agriculture and allied sectors is measured at 7.67 percent compared to 4.58 percent GDP deflator at aggregate level. Since agriculture accounts for 37.83 percent of the state's economy compared to 14 percent at the national level, higher weight of a sector with high inflation sector translated into greater aggregate inflation for Madhya Pradesh compared to national level.

Generally, the higher inflation of agricultural sector (measured through GDP deflator) is matched by slower real growth of the sector, eventually bringing down the nominal growth rate of the sector below aggregate growth rate. This is the story behind falling share of agriculture in the GDP over time. For example, real and nominal growth of agricultural sector at the national level has been 2.71 and 10.59 percent respectively compared to 6.9 and 11.79 percent respectively for overall GDP. However, for Madhya Pradesh, higher inflation in agricultural sector has been accompanied by higher real agricultural growth as well. Real and nominal growth of agricultural sector at the state level has been 10.85 and 21.88 percent respectively compared to 8.27 and 15.45 percent respectively for overall GSDP.

Above discussion clearly shows that the state has benefited from both higher real agricultural growth rate and its sectoral inflation, which raised the nominal GSDP (consequently lowered debt-GSDP ratio). Despite such commendable performance of agricultural sector in the recent past, it may be hazardous to anticipate similar price and volume growth in the sector in coming years. While a definite answer explaining the higher inflation and real growth in agricultural sector requires research beyond the scope of this study, it is likely that the higher support prices offered both in theory and in practice (effective procurement) may have helped in achieving price rise induced volume growth in the sector. If that is the case, then after convergence of state's farm harvest prices to the national prices (e.g. MSP), there may be limited space for replicating this growth in the coming years. Moreover, even at the national level, the GDP deflator for agricultural sector compared to aggregate inflation may not continue to remain substantially higher in the coming years. If in addition to 4 percent aggregate inflation, the inflation targeting regime is also able to converge the inflation for all sectors, particularly for food items, in the range of 4 percent then Madhya Pradesh's GSDP deflator is likely to be closer to the national GSDP deflator. Given high weight of food & beverages in the CPI basket, inflation targeting regime has a greater incentive to reduce food inflation, which in turn will reduce GSDP deflator for Madhya Pradesh.

In light of above discussion, it may be prudent to presume that with a CPI target of 4 percent inflation, the corresponding GSDP deflator will be in the range of 3.5 percent both at national and state levels. Added to this inflation, the real GDP growth rate of 8.27 percent gives a nominal GDP growth rate of around 11.75 percent. As discussed earlier, the higher constant price growth of agriculture sector for the state, driven by price incentives might have exhausted its growth potential through this channel. Unless efforts are made to improve the productivity of agriculture through non-price mechanism, maintaining high growth of agricultural sector would be challenging. Non-agricultural sector of the state has experienced a growth rate of 7.14 percent over the five-year period. Considering these factors, it may be prudent to revise the growth forecast for the state downward to 7.5 to 8 percent.

With the projected real growth rate coupled with 3.5 percent inflation, the nominal growth rate is expected to be in the range of 11 to 11.5 percent. Interestingly, these numbers are closed to the assumptions taken by the FRBM Review Committee for the national level, which assumed growth rate of 11.5 percent and interest rate at three levels, ranging between 7.3 to 8.3 percent (GoI, 2017b). On average, the weighted average spread of the SDL over GoI has been in the range of 40 to basis points during last few years (Ibid). Thus, an interest rate of 8.5 percent on SDL corresponds to around 8 percent interest rate on the GoI's market loans.[10]

The FRBM Act implemented by the state set a target for fiscal deficit at 3 percent of the GSDP. This is in line with FRBM target set at the national level and by other states at 3 percent of the respective GDP/GSDP. These targets of combined fiscal deficit in the range of 6 percent were set during the mid-2000s, in an environment of higher domestic savings and availability of foreign funds. The 12th Finance Commission noted that "The transferable savings of the household sector of 10 per cent of GDP combined with an acceptable level of current account deficit of 1.5 per cent would be adequate to provide for a government fiscal

[10]At this juncture, it is important to note that the fall in inflation rate should not only lead to a reduction in nominal growth rate but also a reduction in nominal interest rate, if the real interest rate is to remain constant. However, the brief experience of inflation targeting regime suggests that fall in inflation rate has yet not accompanied by the matching fall in nominal interest rate. Further, the interest payment is to be made on the stock of debt rather than on fresh borrowing alone, and interest rate on the former is fixed till repayment. Thus, even if nominal interest rate reduces in medium term due to inflation targeting, it may take some time for the fall in inflation to translate into matching fall in the nominal interest rate on outstanding debt of the state/center.

deficit of 6 per cent, an absorption by the private corporate sector of 4 per cent, and by non-departmental public enterprises of 1.5 per cent of GDP" (TFC, 2005).

However, the savings rates have declined in the recent years, in response to which, the FRBM Review Committee report noted that "a total of around 10% of GDP of household savings and external borrowing would be available for the public and private sectors in the medium-term, which the Committee assumed to be allocated equally between the two. This would lead to a combined fiscal deficit of the centre and the states of 5% of GDP, and at the same time ensure an investment of 5% of GDP. The 5% general government deficit, divided equally between the centre and the states, would imply a 2.5% deficit for the centre in the medium-term" (GoI, 2017b). Along with the 2.5 % target of fiscal deficit for both centre and state, the committee also set a target of debt-GDP ratio of 40 percent and 20 percent for centre and state respectively to be achieved by Financial Year 2023. Cleary, in line with the falling nominal growth rate and declining saving rate, there is a need for fiscal stringency compared to existing target for fiscal deficit at 3 percent of the GSDP.

5.3 Sustainable Levels of Debt and Deficits for Madhya Pradesh

Applying the nominal growth rate of 11.5 percent, interest rate of 8.5 percent, and 3 percent fiscal deficit at the currently mandated FRBM target, we obtain a terminal debt-GDP ratio of 28.53 percent. The fiscal deficit of 3 percent can be divided into primary fiscal deficit of 0.83 percent and interest payment of 2.17 percent of the GSDP. As shown in table 2 of this chapter, while the fiscal deficit has always remained within the limit of 3 percent during 2012-16 period, the primary fiscal deficit has been growing over the years, and thrice exceeded the implicit limit of 0.83 percent during the last 5 years. Decline in debt-GSDP ratio achieved during the time frame of 2005-14, is also showing a trend reversal with the ratio standing at

23.41 percent in 2016. At 3 percent fiscal deficit, this ratio will continue to rise to converge to its terminal value of 28.53 percent.

A target of fiscal deficit at 2.5 percent will translate into terminal value of debt-GSDP ratio of 23.8 percent (close to existing level), with a primary fiscal deficit and interest payment as a ratio of GSDP at 0.7 and 1.8 percent respectively. The aggregate fiscal deficit of the state is quite close to this target (in the range of 2.25 to 2.57 during 2013 to 2016), with interest burden being around 1.5 percent of the GSDP. Thus, the state can aim to maintain the target of fiscal deficit of 2.5 percent of the GSDP during 2020-25, with reduction in primary fiscal deficit from 1 percent to 0.7 percent over the years. Another target recommended by FRBM Review Committee, namely of terminal value of 20 percent debt-GSDP ratio, turns out to be consistent with fiscal deficit of 2.1 %, primary fiscal deficit of 0.58 percent, and interest payment of 1.52 percent of the GSDP.[11] This, by 2025 may bring down the debt-GSDP ratio to 21.25 percent. While the interest burden of the state is already in the range of 1.5 percent, a reduction in primary fiscal deficit will be required to achieve this goal.

Given the potential slowdown in GSDP for the reasons discussed in the previous section along with uncertainty in the SGST receipts post July 2022, it may be desirable for the state to follow a path of moderate fiscal stringency rather than a very strict path. State may target a fiscal deficit of 2.5 percent during the period of 2020-25, which would be comparable to current levels of fiscal deficit for the state. This will keep the debt-GSDP ratio stable at the current levels of around 23.8 percent. Under this approach, in the medium-run there would be space to

[11]It is interesting to note that the FRBM Committee has recommended an equal target of 2.5 percent fiscal deficit individually for state and central government, though it prescribed unequal targets of debt-GDP ratio for the centre and states at 40 and 20 percent of GDP/GSDP respectively. Theoretically, national GDP is nothing but aggregation of GSDP of its constituents (excluding supra-regional sectors defined in regional accounts). Following equation (12), with same growth rate, interest rate, and fiscal deficit targets for the centre and states their corresponding debt-GDP ratio targets should also be same (controlling for intergovernmental transactions/on-lending of external loans by centre to states).

run a primary fiscal deficit of around 1 percent of GDP compared to terminal equilibrium of 0.7 percent. State may use this fiscal space to strengthen balance sheets of Public Sector Undertakings, particularly of the power sector. Post UDAY, 50 percent of the losses of SPSUs in power sector need to be provided for through the state budget. Ideally, state should take responsibility of entire losses of power sector, which will generate seriousness to eliminate the losses/or provide full subsidy and take responsibility for socio-politically driven under-recoveries on annual basis. This will reduce the need for future bailouts, and consequent burden on state finances.

6 Conclusion

The analysis carried out in section 1 suggests that the state had consistently maintained revenue surpluses during the last decade, though the magnitude of the surplus has declined in the recent years. Further, declines in the revenue surplus were in general accompanied by a reduction in capital expenditure and a rise in fiscal deficit. On the other hand, the rise in fiscal deficits was not accompanied by a rise in capital expenditure (except for 2009-10, and a minor rise in capital expenditure during 2014-15 and 2015-16 owing to henceforth inclusion of capital expenditure under CSS in the state budget). In sum, it can be concluded that at the aggregate level, fiscal deficits were used to finance the capital expenditure, and revenue surpluses further contributed to raising the capital expenditure. However, a detailed examination suggests that fiscal deficits were generally raised to address the fall in revenue surpluses rather than to increase the capital expenditure. On the other hand, fall in revenue surpluses led to curtailment of capital expenditure, as fiscal deficits were not raised by the same amount.

It is interesting to note that Madhya Pradesh consistently exceeded its FRBM targets during the 2005-16 period. Yet wherever the revenue surpluses declined, the state chose to cut the capital expenditure rather than passing the full burden to the fiscal deficit. Interestingly, when this issue is examined for All States at an aggregate level, Madhya Pradesh fare relatively better in terms of providing resources for capital formation. In 2010-11 and 2011-12, the revenue surpluses for GCS improved yet the states continued to curtail capital expenditure, even though the fiscal deficit remained below 2.1 percent of the GSDP. This points to an unwillingness of the states to incur capital expenditure. To some extent, this is a cause of concern because the time period being discussed belongs to post-GFC accompanied by domestic troubles translating into a decline in investment activities. In such circumstances, states could play some role in addressing the investment slowdown by using their fiscal space to raise capital expenditure.

The experience of the state in meeting the FRBM targets has been reasonably well. The fiscal deficit, revenue deficit, and debt –GSDP ratio have remained within the stipulated limits. However, there was a general trend of reduction in fiscal deficit and rise of revenue surplus till 2012 (with 2009 being an outlier), after which there seems to be a period of decline in revenue surpluses and rise of fiscal deficit. Concurrently, the rate of fall in the debt-GSDP ratio started decelerating, and debt-GSDP ratio eventually started rising from 2014-15 onward. Fiscal consolidation during 2005-08 was solely because of the rising flow of central transfers, though the state also contained its revenue expenditure to some extent. Fall in state's own revenue expenditure could also be because of the rise in the CSS, which permitted states to replace their own spending by the central resources since the functional domain of CSS overlaps with the states' jurisdiction. In the wake of the global financial crisis, the resource flows from the centre declined. The state weathered this challenge largely by raising own revenue efforts aided by a decline in interest burden which in turn was caused by fiscal consolidation and debt restructuring undertaken in the previous years. Since 2012 onward, there has been a decline in the state's own revenue effort coupled with a decline in the central resource flows, leading to some fiscal slippage.

While the overall fiscal deficit still remains in the limits prescribed under Madhya Pradesh's FRBM Act, there is some cause for concerns. The primary fiscal deficit has been rising in the recent years, mainly because the fall in interest burden has been partially matched by the rise in non-interest expenditure. Thus, revenue and fiscal deficit numbers may remain stable in the short run, due to fiscal space provided by the falling interest burden. However, the falling interest burden has its origin in the events of the previous decade, namely, debt consolidation under DSS and DCRF (including debt write-off). Further, the previous decade was also characterized by lower interest rate macro-environment in which market borrowings emerged as the main channel to finance the fiscal deficit. Once the full gain of debt consolidation and lower interest rate are realized, there may not be any further fall in the interest burden, creating a need for compression of growth of non-interest expenditure or increase in the revenue receipts. In fact, the interest rates have started rising again, which may eventually lead to a reverse of the cycle observed during the past decade. There is a clear need to keep vigilance on the primary fiscal deficit.

In light of the recent macro-economic developments on growth, inflation targeting, and implementation of GST, the state should target a fiscal deficit of 2.5 percent during the period of 2020-25, which would be comparable to current levels of fiscal deficit for the state. This will keep the debt-GSDP ratio stable at the current levels of around 23.8 percent. Under this approach, in the medium-run there would be space to run a primary fiscal deficit of around 1 percent of GDP compared to terminal equilibrium of 0.7 percent. State should use this fiscal space to strengthen balance sheets of Public Sector Undertakings, particularly of the power sector.

Chapter 4

Analysis of the State's Transfers to Local Bodies

1. Introduction

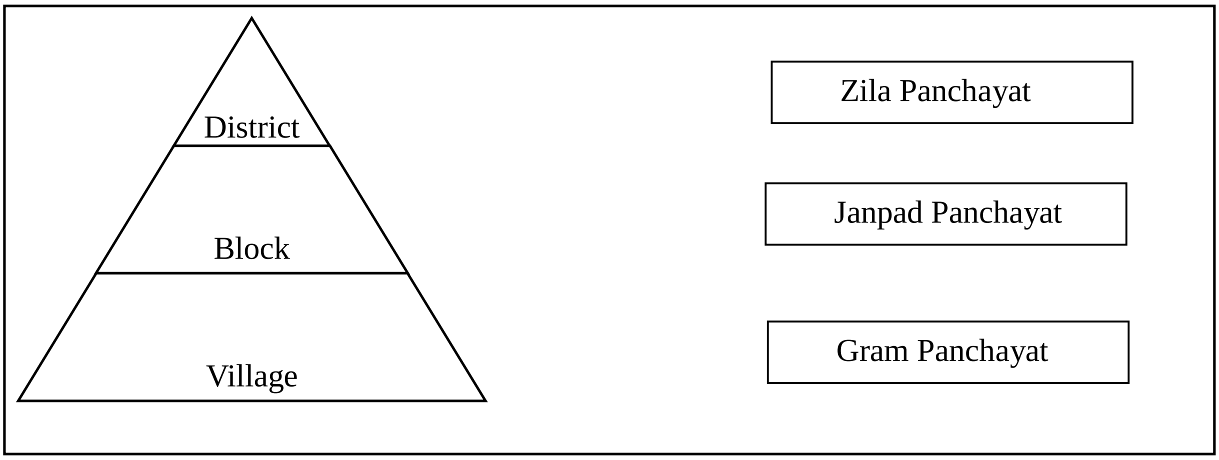
Decentralization refers to the transfer of fiscal, administrative, and political responsibilities to the urban and rural local bodies. Fundamentally, decentralization acts as a strategy to facilitate political stability and better provision of public goods and services. It is expected that devolving resources to local bodies will lead to better matching of preferences of the local population and the provision of services. This is because local officials are better placed to understand local conditions and are more accessible than leaders of union or state government (Buchanan, 1950; Tiebout, 1954).

Panchayati Raj Institutions (PRIs), comprising of Zila Panchayats, Janpad Panchayats, and Gram Panchayats are set up as rural local bodies as per 73rd amendment to Constitution Act in 1992. Analogously, Urban Local Bodies (ULBs) comprising of Municipal Corporations, Municipal Councils, and Nagar Parishads, have been set up as local bodies for urban areas as per 74th amendment. Consequently, the legislatures of the states were required to facilitate the functioning of PRIs and ULBs by bestowing powers and responsibilities to enable them to act as self-government. It was expected that empowerment of these bodies would not only occur in functional but also in financial terms. This is important because PRIs and ULBs are responsible for providing necessary civic facilities such as providing education and health services, construction and maintenance of public goods, etc. at a grass root level (refer annexure _ & _ for list of functions devolved to PRIs and ULBs respectively by state government).

2. Administrative Set-Up

Panchayats follow the three-tier system as depicted in Figure 1:

Figure 1: Administrative set-up of PRIs



Zila Panchayat (ZP) works at the district level, Janpad Panchayat (JP) is functional at the block level, and Gram Panchayat (GP) is operational at the village level. ZP is responsible for coordinating and supervising the activities of GP and JP. Analogously, ULBs comprises of three segments, Municipal Corporation for large urban areas, Municipal Councils for smaller urban areas, and Nagar Parishads for areas in transition from a rural to an urban area (Figure 2).

Figure 2: Administrative set-up of ULBs

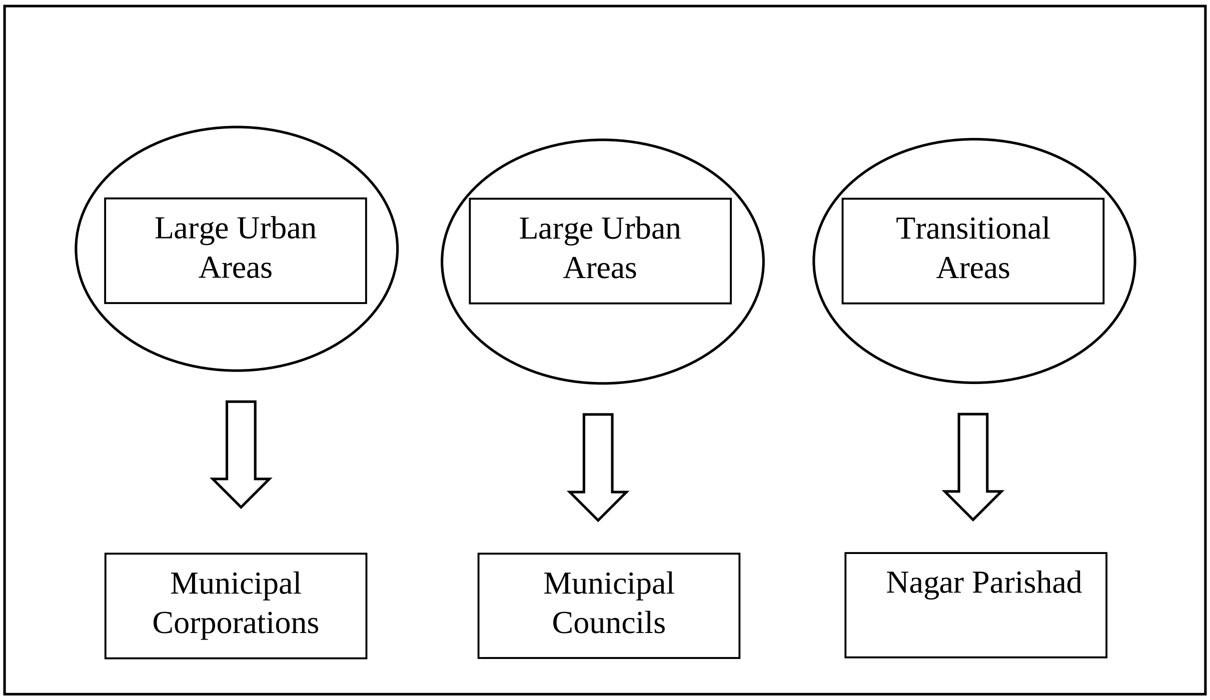


Table 1 provides the number of PRIs and ULBs as per their administrative set-up in Madhya Pradesh during 2005-06, 2014-15, and 2015-16.

Table 1: Number of PRIs and ULBs in Madhya Pradesh

		2005-06	2014-15	2015-16
PRIs	Zila Panchayat	48	51	51
	Janpad Panchayat	313	313	313
	Gram Panchayat	23051	22823	22825
ULBs	Municipal Corporations	14	16	16
	Municipal Councils	87	98	98
	Nagar Parishad	237	264	265

Source: CAG Reports on Local Bodies for Government of Madhya Pradesh.

As is evident, there is an increase in number only for Gram Panchayat and Nagar Parishads in the last two years. However, the number of Gram Panchayats has fallen over the last ten years.

Panchayat and Rural Development Department oversees the activities of PRIs and is also responsible for guiding the all the three tiers to facilitate the smooth functioning and implementation of PRIs arrangements. Following standing committees of PRIs are constituted based on section 46 & 47 of Madhya Pradesh Panchayat Raj Avam Gram Swaraj Adhiniyam, 1993.

Figure 3: Standing Committees of PRIs

Standing Committees of GP:	Standing Committees of ZP and JP:
• General Administrative • Construction and Development • Education, Health, and Social Welfare	• General Administrative • Agriculture • Education • Communication and Works • Cooperation and Industries

On the other hand, ULBs are entrusted with powers subject to administrative control by the Urban Development and Housing Department.

3. Sources of Funds

The own financial resources of local bodies are usually insufficient to deliver their core services. This paucity of funds is overcome by the grants from state and union government as per the recommendations of finance commission. Therefore, there are primarily three sources of finance for PRIs and ULBs, viz., Government grants based on Union and State Finance Commissions recommendation, own revenues, and other grants (which include assigned revenues to ULB bodies and Grants schemes including the government of India and state share). The former consists of grants assigned under the Union Finance Commission (UFC) and the proportion of divisible tax revenue based on the recommendation of State Finance Commission (SFC). The 13^{th} Finance Commission provided grants to local bodies in two parts: (i) basic grant and (ii) performance grants. While the former could be accessed without any conditions, the latter could be only accessed after PRIs and ULBs meet specific requirements. The division between basic and performance grant is on 90:10 basis for PRIs and 80:20 basis for ULBs as per recommendations of 14^{th} FC. The basic grant is provided with the sole objective of extending unconditional support to local bodies for achieving the basic purpose of their existence such as adequate water supply, maintenance of public goods, etc.

Own-Revenues:

The sources of own revenues of Municipal Corporations and Municipal Councils under MP Municipal Corporation Act, 1956 and MP Municipal Council Act 1961 includes: property tax, sanitary cess, lighting tax, fire tax, user charges, earning from municipal enterprises like land, markets, shops etc., and grants-in-aid from state government for compensation in lieu of octroi and passenger tax. As we shall see below, the last category, namely, grants-in-aid from state government for compensation in lieu of octroi and passenger tax was the most important contributor to own revenues of the ULBs.

Table 2: Details of financial resources of MCs during 2011-12 to 2015-16

Name of MC	Own Revenue	Government Grants	Total financial resources	Total Expendi-ture	Share of own revenue in total financial resources (*per cent*)	Share of own revenue out of total expenditure (*per cent*)
Municipal Corporations						
Dewas	203.62	265.5	469.12	543.88	43	37
Indore	2,600.96	1227.34	3,828.30	3,796.04	68	69
Ratlam	201.6	137.85	339.45	391.8	59	51
Rewa	174.37	192.56	366.93	296.65	47	59
Municipal Councils						
Amla	15.24	13.54	28.78	31.28	54	49
Anuppur	9.49	34.9	44.39	39.11	21	24
Badwah	18.33	12.29	30.62	28.96	60	63
Begumganj	15.29	25.71	41	32.99	37	46
Garhakota	11.3	27.94	39.24	32.06	29	35
Harda	57.26	33.38	90.64	89.13	63	64
Junnordeo	12.45	31.74	44.19	51	28	24
Nainpur	12.42	9.52	21.94	23.82	57	52
Pandhurna	35.68	35.61	71.29	97.49	50	37
Porsa	18.75	25.99	44.74	32.95	42	57

Source: CAG Reports on Local Bodies for Government of Madhya Pradesh.

Despite the importance of decentralized governance, unfortunately, the existing data systems on budgets of local governments are weak. The CAG Reports noted in this regard that there was no mechanism available at the state level to capture revenue resources and expenditure of urban or rural Local Bodies (CAG, 2017). The CAG conducted test checks for certain ULBs and found that the share of own revenue remained between 21 per cent and 68 per cent of total expenditure in these local bodies (shown in Table 2). Economic Survey 2018 included a chapter on local bodies, which shows that own revenues forms around 40 percent of the total revenue receipts for ULBs in India (GoI, 2018).[12]

[12] The Economic Survey used data from Annual Survey of Indian City-Systems, Janaagraha"; Ministry of Finance

Table 3: Major Sources of Own-Tax Revenues of MCs

	Octroi +Passenger Tax	Property Tax	Composite Tax	Water Tax	Rent
2011-12	237.5	50.9	38.7	35.1	5.4
2015-16	452.8	69.9	48.6	32.5	6.0

Source: CAG Reports on Local Bodies for Government of Madhya Pradesh.

Table 3 provides details on the composition of own revenues for ULB audited by the CAG. Clearly, grants-in-aid from state government for compensation in lieu of octroi and passenger tax was the main source own revenues for MCs. For useful understanding of the operations of the local bodies, data on their budgets need to maintained at the state level. Based on survey data from four states (Andhra Pradesh, Karnataka, Kerala, and Uttar Pradesh) Economic Survey 2018 shows that own revenues accounts for only 6 percent of the revenue receipts of the rural local bodies. Unfortunately, no comparable data are available for Madhya Pradesh. While the CAG noted that the details of receipts and expenditure of ULBs/PRIs were not being maintained at the directorate level, its report did not provide comparable test audit results on own-revenues of the PRIs. Interestingly, the Third State Finance Commission appended an annexure in its report, according to which own revenues constituted ₹16.11 per person in 2004-05 accounting for 13.57 percent of the total revenue resources of the PRIs. The Commission based its results on a sample size of 18.78 percent of the total Gram Panchayats. While the 4th State Finance Commission also made attempts to collect data on finances of local bodies, the report did not provide analysis comparable to the Third Finance Commission.

Grants to ULBs and PRIs

Article 243I of the Constitution prescribes that the Governor of a State shall, as soon as may be within one year from the commencement of the Constitution (Seventy-third Amendment) Act, 1992, and thereafter at the expiration of every fifth year, constitute a Finance

Commission to review the financial position of the Panchayats. The Commission will make recommendations to the Governor on the principles which should govern:

a) The distribution between the State and the Panchayats of the net proceeds of the taxes, duties, tolls and fees leviable by the State, which may be divided between them under this Part and the allocation between the Panchayats at all levels of their respective shares of such proceeds;
b) The determination of the taxes, duties, tolls and fees which may be assigned as, or appropriated by, the Panchayats;
c) The grants-in-aid to the Panchayats from the Consolidated Fund of the State;

Article 243Y of the Constitution further provides that the Finance Commission constituted under Article 243 I shall make similar recommendation vis-a-vis municipalities.

In pursuance to its constitutional mandate, the state has constituted Finance Commission from time to time. The First State Finance Commission submitted its report on June 1996 covering the award period of Financial Years (FY) 1997 to 2001. The second and third Commission made recommendations for the period of 2002-06 and 2007-11 respectively. The fourth Commission's award period was supposed to be from 2011-16, however, the Commission was formed in January 2012, however, due to various issues the Commission's term was extended till January 2016, with interim recommendations for 2015-16 submitted in November 2015. The final report was submitted with a further delay in January 2017.[13] Given this delay, the state decided to implement the recommendations of the Third Finance Commission during 2015-18 period. Thus, the recommendations of the Fourth State Finance Commission would remain in force only for two-year period of 2018-20, so that the

[13] The chairman of the Commission, Dr. Dhal Singh Bisen resigned in October 2013, and the new chairman Shri Himmat Kothari (also the chairman of 5th State Finance Commission) took charge in July 2014.

recommendations of the Fifth Finance Commission would be conincide with recommendations of the 15th Union Finance Commission. Most recently, the Fifth State Finance Commission was constituted on 20th March 2017, which is scheduled to submit its report by 31st January 2019.

Table 4: Recommendations of Finance Commission (₹ in crore)

Transfers to Local Bodies	13th FC during 2014-15	14th FC during 2015-16
Local Bodies	**1,721.50**	**1,960.40**
Grants to PRIs	**1,224.01**	**1,463.61**
General Basic Grants to PRIs	728.32	1,463.61
General Performance Grants to PRI	495.69	-
Grants to ULBs	**444.49**	**496.79**
General Basic Grants	264.48	496.79
General Performance Grants to ULBs	180.01	-
Special Areas Grant to Local Bodies	**53**	**-**

Source: CAG Reports on Local Bodies for Government of Madhya Pradesh.

Table 5: Devolution of Funds from the Divisible Fund to ULBs and PRIs (₹ in crore)

Year	Expected	Actual	Excess (Short)
	ULBs		
2011-12	174.1	141.41	(32.69)
2012-13	202.41	202.41	-
2013-14	239.4	170.81	(68.59)
2014-15	256.79	270.47	13.68
2015-16	289.45	271.31	(18.14)
	PRIs		
2011-12	696.41	568.6	(127.81)
2012-13	809.62	809.62	-
2013-14	957.6	809.63	(147.97)
2014-15	1027.14	591.47	(435.67)
2015-16	1,157.78	910	(247.78)

Source: CAG Reports on Local Bodies for Government of Madhya Pradesh.

Table 4 presents the substantial increase in recommendations of grants to PRIs while there is no significant change for ULBs. Also, the performance grants have not been recommended in 2015-16. Further, 14th FC recommends respective states to disburse these grants to PRIs and ULBs within 15 days. Failing to do so, will result in additional interest payments at the bank rate of Reserve Bank of India which will be paid from the State funds. Audit scrutiny for 2015-16 unveils that State Government delayed the first instalment of grants to PRIs and ULBs and thus had to pay the interest of ₹ 5.17 crore to PRIs and ₹ 44.92 lakhs to ULBs. This represents the additional burden on the shoulders of State Government.

Moreover, as per the recommendations of Third State Finance Commission (SFC), four and one percent of divisible tax revenue should be devolved to PRIs and ULBs respectively. Divisible fund refers to previous year own tax revenue minus 10 percent of expenditure for tax collection minus deductions of assigned revenue to PRIs and ULBs. The devolution for last five years shown in Table 5.

It can be witnessed that there has always been a shortfall between funds that were to be devolved and funds that were actually devolved (an exception being 2014-15). As stated in CAG reports, the reason for the shortfall was not intimated by the concerned authority. The situation highlights the shortage of funds for the smooth functioning of ULBs and PRIs.

Table 6 and 7 depict the receipts and expenditure of PRIs and ULBs respectively. It is evident from the Tables that grant allocation increased by 167% and 113% for PRIs and ULBs respectively. However, both PRIs and ULBs were not able to spend the entire amount and thus have savings ranging from six to 30%. CAG Reports mentions that this was mainly due to considerable unspent balances in the Revenue head, without giving any further insights in this issue.

Table 6: Receipts and Expenditure of PRIs (₹ in crore)

Year	Grants in Aid			Actual Expenditure			Unspent Funds	Unspent funds (%)
	Revenue	Capital	Total	Revenue	Capital	Total		
2011-12	7,670.04	241.08	7,911.12	6,697.87	365.29	7,063.16	847.96	11
2012-13	8,948.74	345.78	9,294.52	8,385.85	345.3	8,731.15	563.37	6
2013-14	10,752.72	213.7	10,966.42	9,151.26	91.1	9,242.36	1,724.06	16
2014-15	18,871.32	76.6	18,947.92	13,209.32	12.66	13,221.98	5,725.94	30
2015-16	21,044.83	110.5	21,155.33	15,272.97	1.94	15,274.91	5,880.42	28
Total	**67,287.65**	**987.66**	**68,275.31**	**52,717.27**	**816.29**	**53,533.56**	**14,741.75**	

Source: CAG Reports on Local Bodies for Government of Madhya Pradesh.

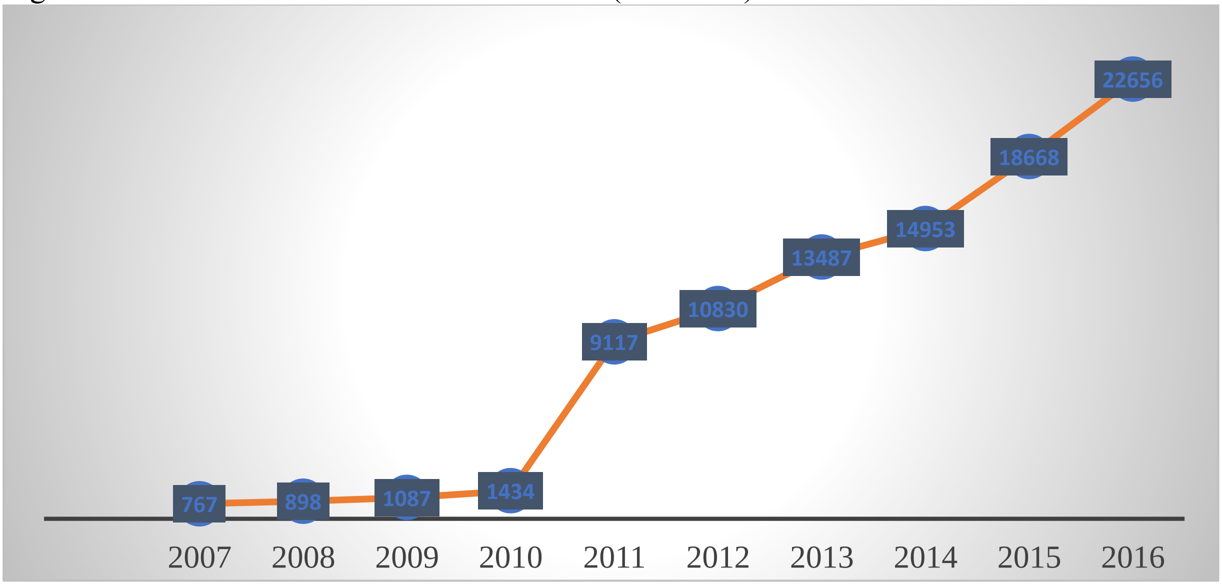
Table 7: Receipts and Expenditure of ULBs (₹ in crore)

Year	Grants in Aid			Actual Expenditure			Unspent Funds	Unspent Funds (%)
	Revenue	Capital	Total	Revenue	Capital	Total		
2011-12	4,148.30	208	4,356.30	3,743.23	152.54	3,895.77	460.53	11
2012-13	5,271.89	215.09	5,486.98	4,879.63	138.5	5,018.13	468.85	9
2013-14	6,547.97	124.21	6,672.18	5,435.55	53.18	5,488.73	1,183.45	18
2014-15	6,718.54	33.27	6,751.81	5,281.52	12.63	5,294.15	1,457.66	22
2015-16	8,896.56	366.4	9,262.96	8,350.63	139.51	8,490.14	772.82	8
Total	**31,583.26**	**946.97**	**32,530.23**	**27,690.56**	**496.36**	**28,186.92**	**4,343.31**	

Source: CAG Reports on Local Bodies for Government of Madhya Pradesh.

Figure 4 represents a trend in financial assistance to local bodies by the state government of Madhya Pradesh. It can be seen that the financial assistance to local bodies has increased almost 30 times in the last ten years.

Figure 4: Financial Assistance to Local Bodies (₹ in crore)



Source: CAG Reports on Local Bodies for Government of Madhya Pradesh.

4. Accounts and Audit

Table 8 presents the number of PRIs and ULBs which were audited during 2015-16.

Table 8: Audited number of PRIs and ULBs during 2015-16

		Total Number	Compliance Audit	Proportion (%)
PLIs	Zila Panchayat	51	24	47%
	Janpad Panchayat	313	88	28%
	Gram Panchayat	22825	1020	4%
ULBs	Municipal Corporations	16	6	38%
	Municipal Councils	98	18	18%
	Nagar Parishad	265	39	15%

Source: CAG Reports on Local Bodies, Government of Madhya Pradesh.

The proportion of compliance audit varies from 4% (Gram Panchayat) to 47% (Zila Panchayat). Hence, in the year 2015-16, test check of 1132 PRIs (24 ZPs, 88 JPs, and 1020 GPs) and 63 ULBs (6 Municipal Corporations, 18 Municipal Councils, and 39 Nagar

Parishads) was conducted in the state of Madhya Pradesh. The detailed results of the audit are as follows.

First, CAG along with Ministry of Panchayati Raj developed an accounting framework – Model Panchayat Accounting System (MPAS) to be adopted by PRIs. MPAS was suggested to overcome the limitations of previous accounting framework. The system has following noteworthy features: (i) each institution was considered as a separate entity; (ii) the transaction is to be recorded when actual expenditure or receipt is done i.e., on the cash basis; (iii) it requires a detailed chart of accounts that is to be used for both accounting and budgeting; and (iv) the system necessitates the recording of capital transactions as well. Analogously, National Municipal Accounting Manual (NMAM) was developed for ULBs. The pivotal features of this system are as follows: (i) it follows double-entry accounting system; (ii) addition of expenditure and receipts is considered on the basis of ground realties; (iii) uses standard chart of accounts; (iv) budgeting and accounting go hand-in-hand; and (v) the accounts are used to provide the financial performance of ULBs at the end of the year.

The use of MPAS and NMAM was one of the conditions to avail the performance grant. However, test check of 1132 PRIs unveils that all the PRIs were maintaining their accounts as per previous accounting framework and hence did not adopt the MPAS. Also, only four out of 63 tested ULBs were using NMAM framework for the preparation of the final accounts. Second, the situation of the annual budget was equally worse. Out of 1132 tested PRIs, 253 did not prepare their budgets, and out of 63 tested ULBs, only 34 prepared their budget, but 22 of them did not send their budget estimates to state government. Third, as prescribed by Madhya Pradesh Accounting Rules, any differences between the balances of bank accounts and cash accounts should be reconciled on a monthly basis to overcome the threat of misuse of funds. However, out of tested PRIs and ULBs, 124 (91 PRIs and 33 ULBs) did not prepare the bank reconciliation statement. Fourth, it was found that tax revenue amounted to ₹ 101.95 crores was unrealized in 50 out of 63 tested ULBs. A similar situation was observed for non-tax revenue. Lastly, audit unveils that temporary advances of ₹ 92.90 lakh by 44 PRIs and ₹ 1.15 crore by 19 ULBs were outstanding as on 31 March 2015. This is against the mandate that requires the submission of details of expenditure as soon as the purpose is accomplished.

Hence, even after 20 years of the empowerment of PRIs and ULBs to serve the basic services to the residents of their jurisdiction, the local bodies in Madhya Pradesh have not succeeded in providing the satisfactory details on the financial aspects. The proper and adequate financial accounts is a fundamental step for exhibiting financial accountability. Inadequate or delayed financial reports leads to the difficulty in assessing the financial requirements of local bodies for their smooth functioning.

5. Conclusion

Pursuant to 73rd and 74th constitutional amendments, rural and urban local bodies were set in the state. Major sources of funding for the local bodies are resources received from the Union and State Finance Commissions. The State has constituted State Finance Commission from time to time. However, there have been delays in preparation of the report by the Fourth State Finance Commission, and implementations of its recommendations. Most recently, the Fifth State Finance Commission was constituted in March 2017, which is scheduled to submit its report by 31st January 2019. The recommendations of the Fourth State Finance Commission would remain in force only for two-year period of 2018-20, and the recommendations of the Fifth Finance Commission would coincide with award period of the 15th Union Finance Commission. The Third State Finance Commission recommended to devolve four and one percent of divisible tax revenue to PRIs and ULBs respectively. Divisible fund refers to previous year own tax revenue minus 10 percent of expenditure for tax collection minus deductions of assigned revenue to PRIs and ULBs. In addition, certain duties are also assigned to local bodies. Local bodies also received funds for implementing the CSS along with matching grants provided by the state. However, both PRIs and ULBs were not able to spend the entire amount and thus have savings ranging from six to 30%.

CAG along with Ministry of Panchayati Raj developed an accounting framework – Model Panchayati Accounting System (MPAS) to be adopted by PRIs. Analogously, National Municipal Accounting Manual (NMAM) was developed for ULBs. This was one of the conditions to avail the performance grant. However, test check of 1132 PRIs unveils that all the PRIs were maintaining their accounts as per previous accounting framework and hence did not adopt the MPAS. Also, only four out of 63 tested ULBs were using NMAM framework for the preparation of the final accounts. The situation of the annual budget was equally worse. Out of 1132 tested PRIs, 253 did not prepare their budgets, and out of 63 tested ULBs, only 34 prepared their budget, but 22 of them did not send their budget estimates to state government.

For useful understanding of the operations of the local bodies, data on their budgets need to maintained at the state level. With the test data on ULBs, the CAG found that own revenue receipts accounts for 21 to 68 percent of the overall revenue receipts in different ULBs. However, the data analysed by the CAG also shows that grants-in-aid from the state government for compensation in lieu of octroi and passenger tax accounted for nearly half of the own revenue receipts of the ULBs. No such comparable results are available from the CAG reports on rural local bodies. The Third State Finance Commission in its analysis showed that own revenues constituted ₹16.11 per person in 2004-05 accounting for 13.57 percent of the total revenue resources of the PRIs. No recent data are available in this regard. Clearly, there a need to strengthen the database on the budgets of local bodies.

Annexure 1: Devolution of Functions to Panchayati Raj Institutions by State Government

S.No.	Function
1	Agriculture, including agricultural extension
2	Land improvement, implementation of land reforms, land consolidation and soil conservation
3	Minor irrigation, water management and watershed development
4	Animal husbandry, dairying and poultry
5	Fisheries
6	Social forestry and farm forestry
7	Minor forest produce
8	Small scale industries, including food processing industries
9	Khadi, village and cottage industries
10	Rural housing
11	Drinking water
12	Fuel and fodder
13	Roads, culverts, bridges, ferries, waterways and other means of communication
14	Rural electrification, including distribution of electricity
15	Non-conventional energy sources
16	Poverty alleviation programme
17	Education, including primary and secondary schools
18	Technical training and vocational education
19	Adult and non-formal education
20	Libraries
21	Cultural activities
22	Markets and fairs
23	Health and sanitation, including hospitals, primary health centres and dispensaries
24	Family welfare
25	Women and child development
26	Social welfare, including welfare of the handicapped and mentally retarded
27	Welfare of the weaker sections, and in particular of the Scheduled Castes and Scheduled Tribes
28	Public distribution system
29	Maintenance of community assets

Source: CAG Reports on Local Bodies, Government of Madhya Pradesh

Annexure 2: Devolution of Functions to Urban Local Bodies by State Government

S.No.	Function
1	Urban Planning including Town Planning
2	Regulation of land-use and construction of buildings
3	Planning for economic and social development
4	Roads and bridges
5	Water supply for domestic, industrial and commercial purposes
6	Public health sanitation, conservancy and solid waste management
7	Fire services
8	Urban forestry, protection of the environment and promotion of ecological aspects
9	Safeguarding the interests of weaker sections of society, including the handicapped and mentally retarded
10	Slum improvement and up-gradation
11	Urban poverty alleviation
12	Provision of Urban amenities and facilities such as parks, gardens, playgrounds
13	Promotion of cultural, educational and aesthetic aspects
14	Burials and burial grounds; cremations, cremation grounds and electric crematoriums
15	Cattle pounds, prevention of cruelty to animals
16	Vital Statistics including registration of birth and deaths
17	Public amenities including street lighting, parking lots, bus stops and public conveni
18	Regulation of slaughter houses and tanneries

Source: CAG Reports on Local Bodies, Government of Madhya Pradesh

Chapter 5

Impact of State Public Enterprises on State Finances

1. Introduction

The State Public Sector Undertakings (PSUs) (comprises of government companies and statutory corporations)[14] are established to maintain a balance between their respective commercial activities and welfare of the people. Profits and dividends earned by state PSUs are one of the revenues sources for the state. The state has a considerable stake in PSUs. Apart from capital contributions, the state government also provides loans, grants, subsidies, and besides acts as a guarantor for PSUs borrowings. Hence, analysing the financial health of PSUs deserves particular attention for the state government. The chapter addresses this purpose and considers data from the last ten years 2006-07 to 2015-16 to investigate the position of PSUs in Madhya Pradesh. For simplicity, 2006-07 will be referred to as 2007, 2007-08 will be referred to as 2008 and so on.

At present (2016) there are 67 PSUs out of which 96% are government companies. No PSU was listed on the stock exchange. They accommodate various industries such as power, manufacturing, finance, service, infrastructure, etc. The working PSUs registered a turnover of ₹ 78,315.94 crores and contributed nearly 13.86% of Gross State Domestic Product (GSDP). Also, they employed 63,459 employees and incurred an aggregate loss of ₹ 4592.58 crores during the same year. As per the latest finalised accounts, out of 58 working PSUs, 31 PSUs earned a profit of ₹ 729.34 crores and 21 PSUs incurred a loss of ₹ 5321.92 crores. Five working PSUs prepared their accounts on ‘no profit no loss' basis, and one working PSU did not finalise its first accounts. In spite of the formulation of dividend policy in 2005, which

[14] The government pays minimum capital of 51% for a company to be called as government company while government contributes full capital in statutory corporations.

requires all PSUs to pay at least 20 percent return on profit after tax, the state government of Madhya Pradesh received the dividend of ₹ 12.10 crore from only two PSUs. Therefore, 29 profit-making PSUs did not pay dividend violating the dividend policy. This observation has been made by the CAG for earlier years as well. However, there are no details available on action taken on this issue in the CAG reports. Persistence of this issue in the CAG reports suggest either the state government has been unable to force the SPSUs to release mandated dividends or it has chosen to ignore this issue. Further, nine non-working PSUs attracted an investment of ₹ 192.03 crores. This highlights the unnecessary and unproductive expenditure on the shoulders of state government.

2. Number of PSUs

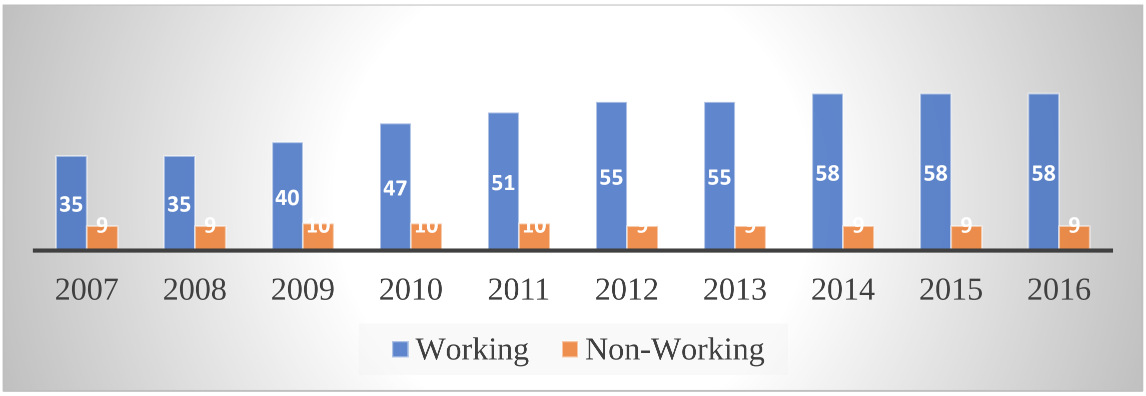
As of March 2016, there were 67 PSUs in Madhya Pradesh out of which nine were non-working. Table 1 carries the detail of the number of PSUs. In 2016, no PSU was closed down, and no PSU was incorporated. Also, 87% of the total PSUs were operational.

Table 1: Total Number of PSUs as of March 2016

Type of PSUs	Working	Non-Working	Total
Government	55	9	64
Statutory Corporations	3	-	3
Total	58	9	67

Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.
Note: Non-Working companies are those who are under the process of liquidation, closure, merger, etc.

Figure 1 The trend in the number of PSUs from 2007 to 2016



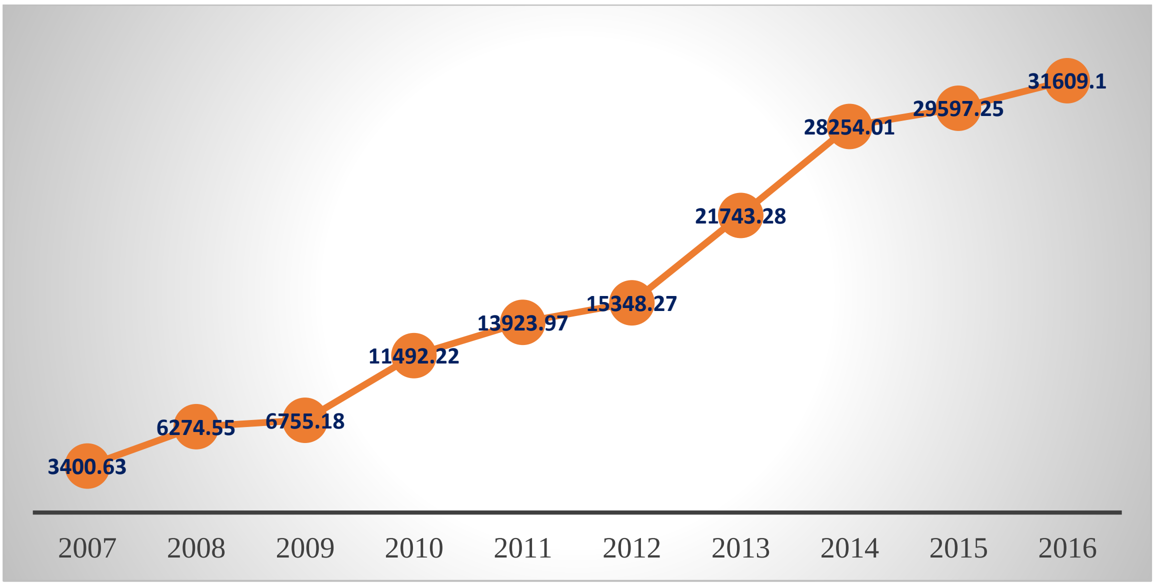
Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.

3. Financial Performance of PSUs

The number of PSUs have significantly increased during the last ten years. Figure 1 displays the trend in the increase in the total number of PSUs from 2007 (44) to 2016 (67). It is evident that although the number of non-working PSUs has remained the same, despite the poor performance, the working PSUs has increased considerably. Most of the new PSUs were established in power sector and highlights the focus of government towards accelerating the power sector reforms.

Table 2 captures the financial performance of PSUs in Madhya Pradesh for the last ten years. It is witnessed that although turnover is increasing, so does debt, interest payments and more crucially accumulated loss. The accumulated loss has increased 9.30 times in the last ten years. The trend is depicted in Figure 2. The figure shows a rising trend of accrued loss as it expanded from ₹ 3,400.63 crores (2007) to ₹ 31,609.10 crores (2016). The major contributor of loss in the latest year was Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited (₹ 13,998.21 crores), Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited (₹ 10,001.41 crores), Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited (₹ 9,986.02 crores). This depicts the deteriorating operational and financial performance of PSUs in Madhya Pradesh. The present situation of PSUs is worrisome not only for PSUs but the government of Madhya Pradesh as well. However, the debt-turnover ratio decreased from 1.05:1 to 0.59:1 showing the improved balance between turnover and debt. Further, the percentage of PSUs' turnover to state GDP has increased in the last ten years (from 10.91% to 13.86%) indicating an additional marginal contribution of PSUs to state GDP.

Figure 2 Accumulated Loss by PSUs (₹ in crores)



Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.

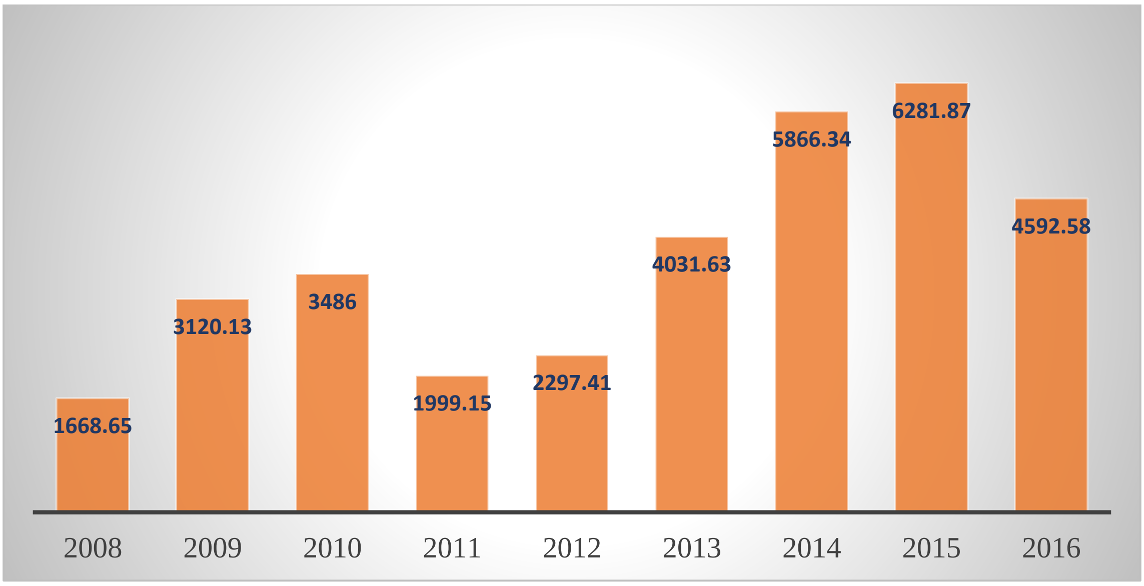
Overall losses incurred by working PSUs in the last ten years is depicted in Figure 3. Since 2011, the PSUs have witnessed an increasing trend in the amount of loss incurred exception being the latest year, which saw a fall in the amount of loss. Our analysis, segregating the profit-making and loss-making enterprises, finds that this fall is owed to both, increase in profits by former and decrease in losses by the latter (Figure 4). This implies the improved performance of PSUs. The endured losses owe primarily to insufficiencies in financial, planning, implementing, running, and monitoring management.

Table 2 Performance of PSUs in Madhya Pradesh (₹ in crores)

Year	Debt	Turnover	Debt/Turnover ratio	State GDP	% of Turnover to State GDP	Interest Payments	Implicit Interest rate on Debt (Interest as % of Debt)	Accumulated Loss
2007	14989.7	14257.2	1.05:1	130571	10.91	734.8	4.9	3400.63
2008	9170.36	12800.7	0.72:1	142500	8.9	1228.69	13.4	6274.55
2009	9309	20735.7	0.45:1	162525	12.75	545.89	5.9	6755.18
2010	10160.1	26067.4	0.39:1	194427	13.41	1117	11.0	11492.2
2011	13599.1	31637.5	0.43:1	271681	11.65	2082.37	15.3	13924
2012	21671	37949.3	0.57:1	305158	12.44	1601.69	7.4	15348.3
2013	28932.2	58237.3	0.50:1	361270	16.12	2715.97	9.4	21743.3
2014	34988.5	59860.1	0.58:1	434730	13.77	3382.32	9.7	28254
2015	37178.9	61264.4	0.61:1	508006	12.06	4064.62	10.9	29597.3
2016	46322	78315.9	0.59:1	565053	13.86	4616.1	10.0	31609.1

Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.
Note: (i) All figures relate to all PSUs, but turnover which is for working PSUs and (ii) % of turnover to State GDP shows the range of PSUs activities in the State economy.

Figure 3 Losses incurred by Working PSUs (₹ in crores)



Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.
Note: The year 2007 witnessed a profit of ₹ 555.78 crores and thus has not been shown in the figure.

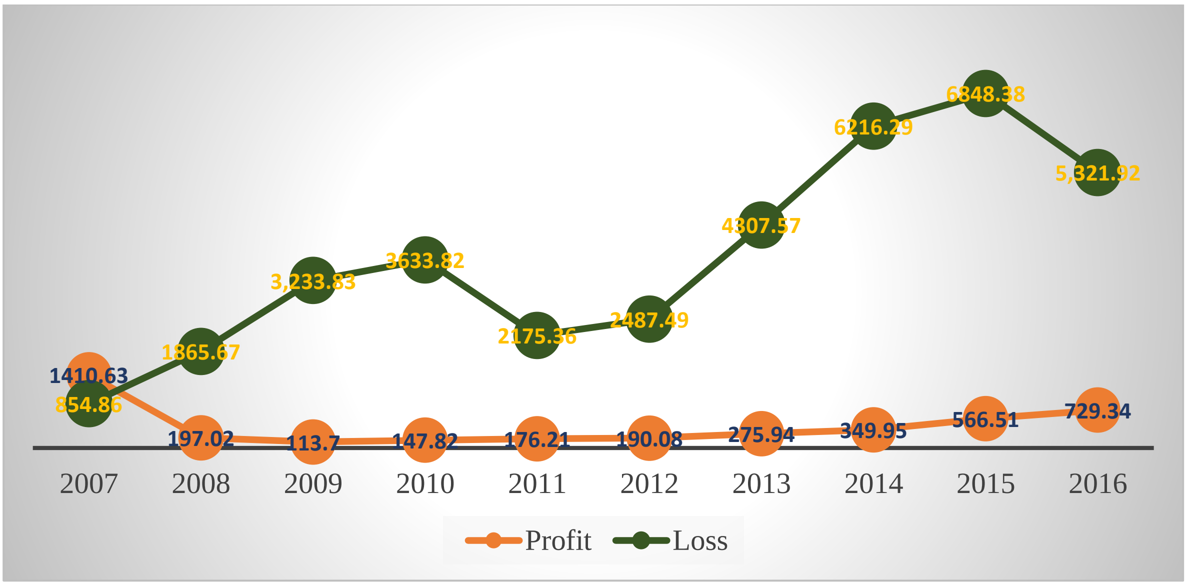
Figure 4 represents the trends in profits and losses of State PSUs. It may be observed that there is an increase in profit from 2011 onwards. Also, in the last five years, i.e., from 2012 to 2016 profit increased 3.84 times while the losses increased only 2.14 times. But, due to a more substantial base value of the loss, the absolute loss outweighs profits and consequently results in overall losses incurred by PSUs.

4. Investment in PSUs

The total investment in PSUs (Working and Non-Working) is depicted in Table 3. The investment has increased 3.40 times in the last ten years. The trend of total investment is illustrated in Figure 5. Despite the poor performance of PSUs, state government continues to provide financial assistance in the form of capital and long-term loans. In 2016, of the total investment in State PSUs, 99.72 percent was in working PSUs and the remaining 0.28 percent in not working PSUs. This total investment consisted of 30.24 percent towards capital and 69.76 percent in long-term loans as compared to 27.01 percent of equity capital and 72.98

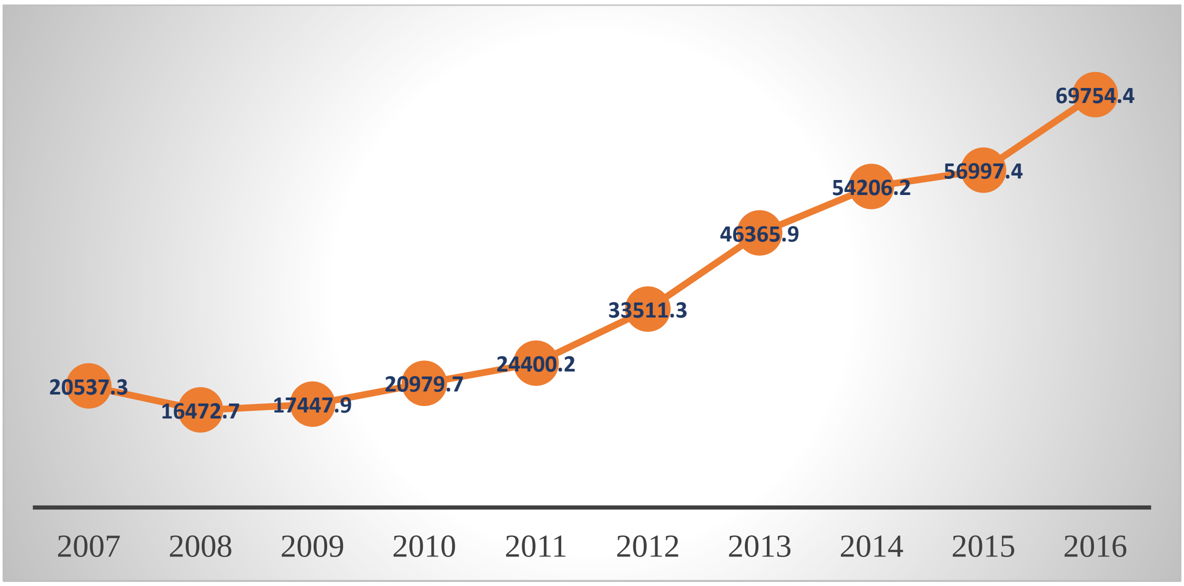
percent of loans ten years ago (2007). The investment in non-working companies is although reducing but still is quite significant. The prompt action is needed for closure of these companies to circumvent further unproductive outlays.

Figure 4: Profits and Losses of State PSUs (₹ in crores)



Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.

Figure 5: Total Investment (Capital + Long-term Loans) in PSUs (₹ in crores)



Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.

Table 3 Investment in PSUs (₹ in crores)

Year	Total Investment	Working				Non-Working	
		Government Companies		Statutory Corporations			
		Capital	Long-Term Loans	Capital	Long-Term Loans	Capital	Long-Term Loans
2007	20537.3	4351.24	5492.94	1136.79	9327.39	59.6	169.38
2008	16472.7	6279.92	7811.03	962.77	1182.47	59.61	176.86
2009	17447.9	6488.82	7951.88	1589.01	1180.29	61.1	176.83
2010	20979.7	9130.78	8814.97	1627.69	1169.49	61.1	175.62
2011	24400.2	10159.3	12178.2	580.62	1245.32	61.1	175.62
2012	33511.3	11197.1	20315.8	585.62	1220.69	57.59	134.44
2013	46365.9	16863.1	27401.2	511.01	1396.58	59.57	134.44
2014	54206.2	18642	33353.9	516.01	1500.21	59.57	134.44
2015	56997.4	19239.9	35270.3	521.01	1774.23	57.59	134.44
2016	69754.4	20513.4	46628.4	525.97	1894.54	57.59	134.44

Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.

4.1. Sector-Wise Investment in PSUs

Table 4 presents the sector-wise investment in PSUs. The table indicates the investment is mainly concentrated in the power sector. Out of the total investment, 87% was directed towards this sector in the latest year. The corresponding figure is 92% for 2015. Thus, implies the domination of power sector in Madhya Pradesh and thus impedes the process of privatization.

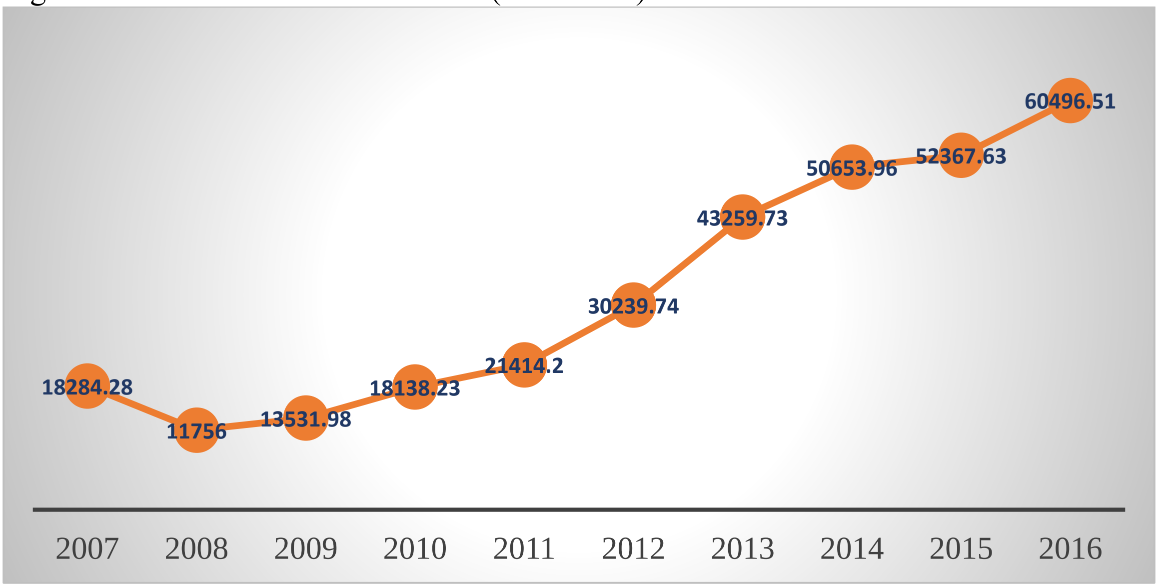
Table 4 Sector-Wise Investment in PSUs (₹ in crores)

Sector	2016	2015
Power	60496.5	52367.6
Manufacturing	477.71	530.06
Finance	1988.48	1926.27
Services	5888.88	1733.57
Infrastructure	633.69	208.96
Agriculture and Allied	269.08	230.94

Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.
Note: The amount includes investment in both, working and non-working PSUs.

Since the thrust of investment is the power sector, Figure 6 displays the investment pattern in the concerned sector for the last ten years. It is witnessed that investment in this sector has never seen a drop in post-2008.

Figure 6: Investment in Power Sector (₹ in crores)



Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.

5. Budgetary Outgo and Grants/Subsidies

The budgetary outgo, in the form of equity capital and loans, and grants/subsidies from the state government of Madhya Pradesh to the working PSUs for last ten years is provided in Table 5, and the subsequent trend is depicted in Figure 6. It may be noted that the share of grants/subsidy in total outgo has increased dramatically since 2007 (20%) to 2016 (83%).

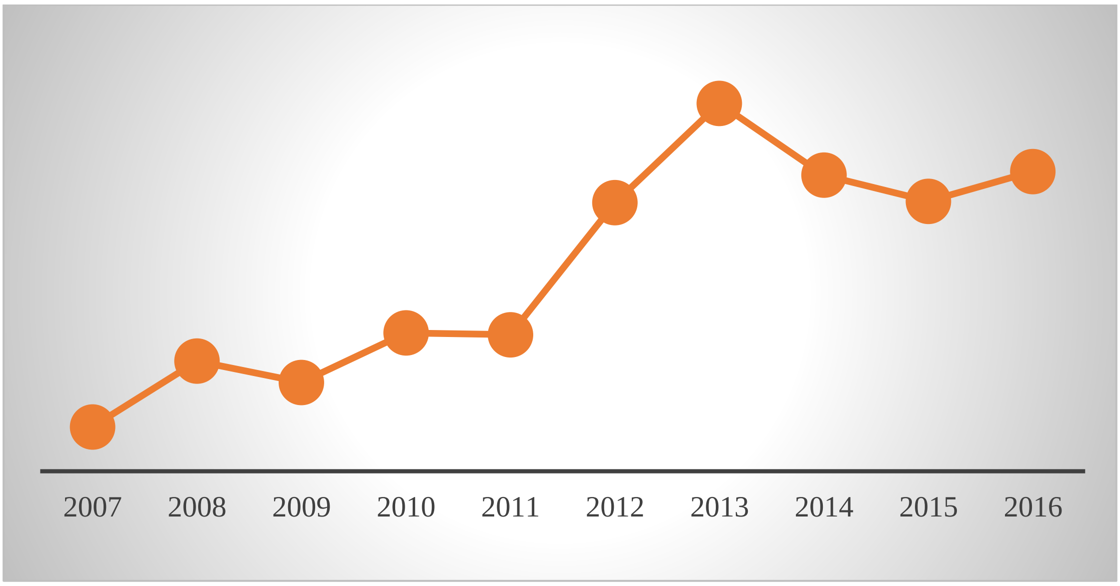
Table 5: Budgetary Outgo and Other Grants/Subsidies (₹ in crores)

Year	Equity Capital Outgo	Loans	Other grants/subsidy	Total Outgo
2007	983.61	196.79	293.8	1474.2
2008	1541.19	638.71	1464.68	3644.58
2009	679.73	215.63	2045.19	2940.55
2010	1047.85	1649.19	1879.29	4576.33
2011	1060.63	989.25	2467.91	4517.79
2012	1147.38	1745.99	5981.37	8874.74
2013	1418.65	2148.5	8588.93	12156.1
2014	1544.67	3786.5	4456.45	9787.62
2015	803.1	2060.14	6058.22	8921.46
2016	468.57	1216.82	8222.61	9908

Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.

Budgetary outgo has although increased substantially in the last ten years, the trend was not linear. For example, the highest outflow was witnessed in 2013 after which it falls to again rise in the latest year. The budgetary outgo of ₹ 9908 crores during 2015-16 included support of ₹ 7870.18 crores extended to three PSUs viz. ₹ 3268.72 crores to Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited, ₹ 3007.37 crores to Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited and ₹ 1594.09 crores to Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited.

Figure 7: The Trend in Total Outgo (₹ in crores)



Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.

The guarantee commission[15] amount to ₹ 82.57 crores was paid by four PSUs to the state government in the year 2016. However, seven PSUs did not pay the commission, and the amount outstanding was ₹ 124.52 crores.

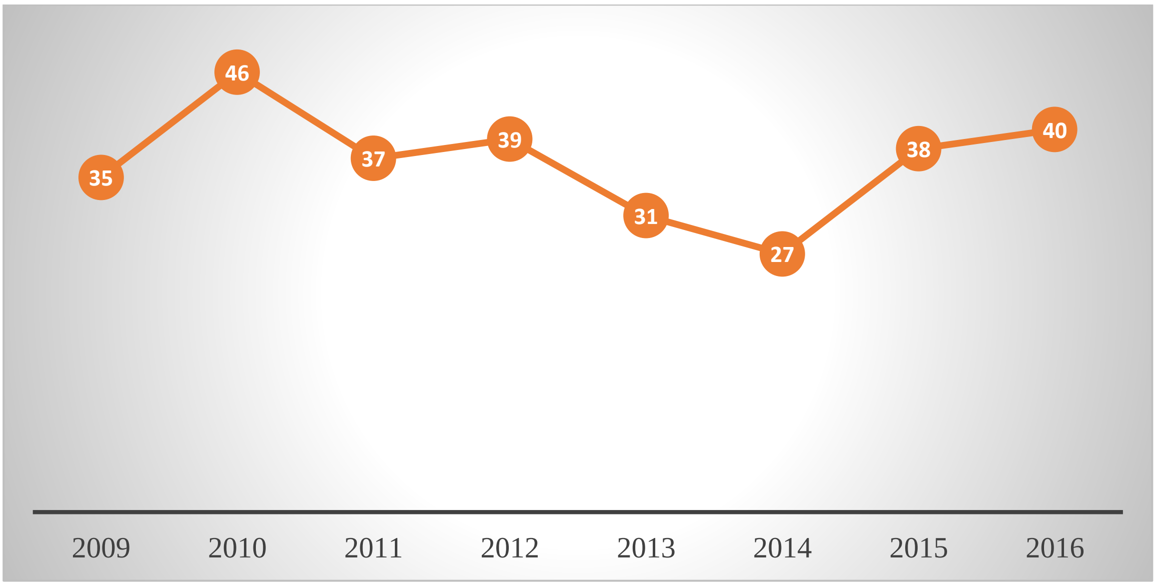
It appears that some of the available revenue raising opportunities are not realised by the SPSUs. For example, due to recurring operational losses, Madhya Pradesh Road Transport Corporation discontinued operation of its own buses since 2005 and allowed (13 June 2005) private buses to be operated. Besides bearing all expenses of operation, the operators had to pay administrative charges at ₹ 3 per route km to the Corporation. Despite annual revenue earnings in the range of ₹ 2.5 to 7 Crores during 2008-09 to 2010-11, agreements with private operators were not renewed. The matter was raised by CAG in May 2011, however, its reply remained awaited (CAG, 2011).

[15] The state government of Madhya Pradesh charges guarantee commission from state PSUs to acts as a guarantor for PSUs borrowings.

6. Equity, Loans, Guarantees Outstanding as per Finance Accounts vis-à-vis Records of PSUs

Every year CAG highlights the difference in the equity, loans, guarantees outstanding as per finance Accounts vis-à-vis records of PSUs. This difference from 2009 onwards is indicated in Table 6. It was noted that the differences in 2016 accrue to 40 PSUs, mainly operating in the power sector. Further, some of them were pending even for more than five years now. Figure 8 exhibits the number of PSUs with discrepancies. Every year the significant number of PSUs are encountered with differences in their accounts vis-à-vis state finance accounts.

Figure 8: Number of PSUs with Discrepancies



Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.

Despite noting these discrepancies year after year no corrective measures were taken either by the State Government or PSUs. There should be a mechanism to resolve these differences promptly.

Table 6 Differences in amount as per State Finance Accounts and Record of PSUs (₹ in crores)

Year	Equity			Loans			Guarantees		
	State	PSUs	Difference	State	PSUs	Difference	State	PSUs	Difference
2009	6,734.02	7,809.93	1,075.91	4,525.53	3,121.23	1,404.30	439.33	2,751.27	2,311.94
2010	6022.26	10819.6	4797.31	2027.18	10160.1	8132.9	89	1031.1	942.1
2011	6323.86	10389.4	4065.55	1617.34	5554.43	3937.1	3604	3247.37	356.63
2012	9038.64	11412.7	2374.04	1220.99	11579.4	10358.4	3900.24	2429.15	1471.09
2013	9414	12355.8	2941.75	21190.6	17072.8	4117.85	6281.62	5303.11	978.51
2014	4160.69	13283.4	9122.7	30686.3	20859.3	9827.06	8115.21	7873.52	241.69
2015	4511.22	16291.9	11780.7	15017.4	24692.4	9675.02	15676.6	8958.9	6717.72
2016	8783.96	14298.8	5514.79	17883.4	30938.6	13055.2	6071.84	5907.42	164.42

Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.

6. Arrears in the Finalization of Accounts

As per the Companies Act 2013, companies are required to finalize their financial statement within six months from the end of the relevant financial year. Table 6 provides the details of the progress made by working PSUs in concluding their respective financial statements. It also sheds light on the data on the arrears in the finalization of accounts.

It can be witnessed that every year there are the significant number of PSUs with arrears in accounts and delayed financial accounts. Both the issues may result in the risk of fraud and leakage of public money apart. Therefore, CAG gave a couple of recommendations. First, the government should facilitate a setting up of cell that would take control of the clearance of arrears. The cell should also be responsible for setting and monitoring the targets for individual enterprises. Second, the government may also outsource in the cases where staff lacks or have inadequate expertise. Madhya Pradesh Road Transport Corporation can be cited as an example for delay in finalizing the reports. The CAG reports for 2010 mentions net loss of the corporation for 2008-09 at ₹13.62 Crores. However, the report for 2013 also gives latest data for 2008-09 only. It is likely that updated reports have not been received by even the CAG.

Table 7 Arrears in the Finalization of Accounts

S. No.	Particulars	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	Working PSUs	35	35	40	47	51	55	55	58	58	58
2	Accounts finalised during the year	31	37	25	49	59	50	49	47	59	56
3	Accounts in arrears	52	54	69	66	58	63	64	84	77	79
4	Average arrears per PSU (3/1)	1.49	1.54	1.73	1.4	1.14	1.15	1.16	1.45	1.33	1.36
5	PSUs with arrears in accounts	30	25	29	33	26	26	25	32	36	32
6	Extent of Arrears (in years)	1 to 7	1 to 7	1 to 8	1 to 8	1 to 7	1 to 8	1 to 9	1 to 10	1 to 11	1 to 12

Source: CAG Reports on Public Sector Undertakings, Government of Madhya Pradesh.

7. Conclusion

The total number of state PSUs in the state of Madhya Pradesh has increased from 44 to 67 in the last ten years. The overall losses incurred by working PSUs has increased dramatically from 2007-2008 (₹ 1668.65 crores) to 2015-2016 (₹ 4592.58 crores). However, latest year (2015-2016) has seen a fall in the amount of loss as compared to 2014-2015. PSUs' turnover share to Gross State Domestic Product increased marginally from 10.91% to 13.86% during the last ten years. The investment in the state PSUs has increased 3.40 times in the last ten years. This increase is mainly attributed to Power Sector. Both, capital and long-term loans have significantly increased. Also, the investment in the non-working companies is although stagnant but still substantial and hence represents the wastage of resources. The share of grants/subsidy in total outgo has increased dramatically from 2006-2007 (20%) to 2015-2016 (83%). The differences in the amounts of equity, loans, guarantees outstanding as per state finance accounts vis-à-vis records of PSUs is quite substantial in the last few years. However, the latest year (2015-2016) has witnessed the decrease in the amount of difference. On an average, every year, 30 working PSUs experienced arrears in their respective financial accounts.

Our analysis of financial performance of state PSUs and its impact on State Government reveals the dark side of PSUs where they are incurring heavy losses year after year with marginal improvement in their contribution to state GDP. Despite the poor performance, the State Government is investing exorbitantly in the form of capital and long-term loans. The proportion of grants/subsidies in the budgetary outgo has exponentially increased in the last ten years. Besides, the problem of delay in the finalization of accounts and differences in the figures related to equity, loans, and guarantee as per state finance accounts and PSUs are a matter of great concern as they increase the chances of fraught and fraud.

The analysis finds that the basis objective of establishing PSUs, i.e., to enhance social welfare and promote economic growth is questionable. There can be several measures that can be opted to improve the stated condition of PSUs. First, there is a need to focus on the liquidation of the non-working PSUs so that the financial and administrative resources can be put to better usage. Second, PSUs are also operating in the areas where private enterprises are working exceptionally well. This somewhere represents the wastage of resources. Lastly, the state should provide flexibility to the PSUs in terms of their financial and administrative decisions. This will not only reduce the burden of the state but will also generate the sense of autonomy in PSUs.

Chapter 6

Impact of Power Sector Reforms on State Finances

1. Introduction

Much of the reforms in Power sector like delicensing and competitive bidding have happened in Generation, fewer in Transmission, while Distribution continues to be the weakest link in the entire power sector value chain with issues like unsustainably low tariffs and high Aggregate Technical and Commercial (AT & C) Losses. As Distribution segment is mostly run by State Utilities, the losses on account of Distribution are thus a burden on the State Finances. The AT & C losses for Madhya Pradesh (MP) are in the range of 25-30%. High AT & C losses in MP are historically due to the high dominance of agricultural sales and unmetered sales for both domestic and agricultural consumers. After the introduction of Ujjwal DISCOM Assurance Yojana (UDAY) Scheme in MP, the AT & C losses have come down in 2016-17. However, under UDAY, the state governments are required to reduce the AT & C losses to 15% by 2018-19. The AT & C losses of MP for the years 2013-14, 2014-15, 2015-16 and 2016-17 are given in table 1:

Table 1: Aggregate Technical and Commercial Losses (%)

Item	2013-14	2014-15	2015-16	2016-17
AT & C losses (%)	28.03	32.55	30.45	28.12

Source: Power Finance Corporation (PFC) Report on "The Performance of State Power Utilities for the years 2013-14 to 2015-16" and PFC Interim Report on "Performance of State Power Utilities for the years 2014-15 to 2016-17"

2. Unbundling of power sector in Madhya Pradesh

Madhya Pradesh Electricity Board (MPEB) came into existence on November 1, 1956 and was rechristened as Madhya Pradesh State Electricity Board (MPSEB) on November 1, 2000, after Chhattisgarh was carved out of MP. The dilapidated financial condition of MPEB further worsened after creation of Chhattisgarh as many power stations went to the new state.

Under Madhya Pradesh Vidyut Sudhar Nigam 2000, the MPSEB was restructured in 2002 into five wholly owned State Government Companies and residual MPSEB. One company each has been independently assigned Electricity Generation (sl.no.1) and Transmission functions (sl. no.2) and the balance three are Distribution companies (sl. no.3-5) responsible for electricity distribution in their respective jurisdiction. In June 2006, a power trading company, MP Power Trading Co. Ltd. (TRADECO) was carved out from residual MPSEB. Later, in accordance with Government of MP (GoMP) decision, the name of MP Power Trading Company Ltd has been changed to MP Power Management Company Ltd. (sl. no. 6) and the MP Power Management Company has been made holding company for all the DISCOMS of MP. MPSEB along with residual assets, liabilities and proceeding was merged in M.P. Power Management Company. Therefore, the six functional companies are as under:

1. MP Power Generation Co. Ltd. Jabalpur.
2. MP Power Transmission Co. Ltd. Jabalpur.
3. MP Poorv Kshetra Vidyut Vitaran Co. Ltd. Jabalpur.
4. MP Madhya Kshetra Vidyut Vitaran Co. Ltd. Bhopal.
5. MP Paschim Kshetra Vidyut Vitaran Co. Ltd. Indore.
6. MP Power Management Co. Ltd., Jabalpur.

3. Involvement of private sector in power distribution in the State

It is being increasingly realized that the Achilles heel of Indian power sector is the distribution segment. The Chief Ministers'/Power Ministers' conference organised in March 2001 had recognised that the real challenge lies in distribution sector and that commercial viability has to be achieved in distribution through a number of initiatives including privatisation of distribution. In order to increase revenue collection and reduction of theft and losses, M.P. has explored the possibility of privatisation of distribution network in few cities including Ujjain.

4. Ujjwal DISCOM Assurance Yojana (UDAY)

Ujjwal DISCOM Assurance Yojana (UDAY) was launched by Government of India on 20th November 2015 for the operational and financial turnaround of state-owned Power Distribution Companies (DISCOMs). The main objective of UDAY included the reduction in the cost of power and interest cost of DISCOMS so as to enforce financial discipline on DISCOMs through alignment with State finances. States would take over 75% of DISCOM debt as on 30 September 2015 over two years - 50% in 2015-16 and 25% in 2016-17. States were allowed to issue non-SLR state development loan (SDL) bonds in the market or directly to banks / FIs holding the DISCOM debt. The UDAY-related borrowings raised by the State Governments were exempted from the fiscal deficit targets during 2015-16 and 2016-17. In 2015-16, MP did not borrow under UDAY. However, during 2016-17, MP borrowed under UDAY. MP is one of the few states which has already issued 100% of the Bonds to the DISCOMS as mandated in the UDAY scheme amounting to₹7630 Crore.

Several states including MP witnessed worsening of their Gross Fiscal Deficit-Gross Domestic Product (GFD-GDP ratio) on account of UDAY. After a gap of more than ten years, the combined GFD-GDP ratio for all states put together crossed 3 percent in 2015-16. Even for MP, the Gross Fiscal Deficit-Gross State Domestic Product (GFD-GSDP) ratio crossed 3% for both 2015-16 and 2016-17. The Gross Fiscal Deficit and Debt as a percentage of Gross State Domestic Product for MP during the years 2013-14, 2014-15, 2015-16 and 2016-17 are given in table 2:

Table 2: Deficit and Debt Indicators (Percent to GSDP)

Item	2013-14	2014-15	2015-16	2016-17
Gross Fiscal Deficit (GFD) with UDAY (%)	2.3	2.4	2.7	3.9
Debt/GSDP (%)	22.0	22.6	23.41	23.1

Source: Reserve Bank of India (RBI) Publication-"State Finances: A Study of Budgets of 2016-17"

UDAY inter-alia caused outstanding liabilities (debt) to increase in 2015-16 and 2016-17. Therefore, there has been a deterioration of the debt position of MP in 2015-16 and 2016-17 due to its participation in the financial and operational restructuring of state power distribution companies through UDAY. However, as the debt burden from UDAY subsides and performance of DISCOMS improve, the states including MP are expected to continue their efforts towards fiscal consolidation, and the consolidated GFD-GDP ratio of states is expected to improve in 2017-18.

The Financial Gap between Average Cost of Supply (ACS) and Average Revenue Realized (ARR) for Distribution Utilities has increased over the years due to inadequate tariff increase even as power purchase costs have increased steeply, collection inefficiencies and technical losses. These factors have weakened the finances of state utilities, lowering the ability to attract private investment in the sector and resulting in heavy reliance upon state government support for both investment and working capital.

5. Cost Recovery and Losses

The Appellate Tribunal for Electricity (ATE) Judgement in 2011 regarding action by the State Electricity Regulatory Commissions (SERCs) for undertaking periodic tariff revisions ensured financial discipline in the sector as states revised their tariffs in 2012-13 and 2013-14. For Madhya Pradesh, the tariff hikes for 2011-12, 2012-13 and 2013-14 were 6%, 7% and 1% respectively. Although tariff hikes were timely and periodic, but not commensurate with the increasing cost of power which has adversely affected the financial health of the State utilities. Under UDAY, the difference between the average cost of Supply (ACS) per unit of power and per unit average revenue realised (ARR) has to be brought to nil by 2018-19. ACS-ARR Gap (₹/Kwh) for MP for the years 2013-14, 2014-15, 2015-16 and 2016-17 are given in table 3.

Table 3: Cost of Supply and Revenue Realization (Rs/Kwh)

Item	2013-14	2014-15	2015-16	2016-17
ACS-ARR Gap (subsidy booked basis)	1.25	0.88	0.90	0.25
ACS-ARR Gap (subsidy/revenue on realized basis)	1.21	0.98	0.99	0.39

Source: Power Finance Corporation (PFC) Report on "The Performance of State Power Utilities for the years 2013-14 to 2015-16" and PFC Interim Report on "Performance of State Power Utilities for the years 2014-15 to 2016-17"

Post UDAY, the ACS-ARR gap for MP has reduced to 0.33 ₹/Kwh as on June 2018.

An overall assessment of the financial performance of Madhya Pradesh (MP) State Utilities over the years 2013-14, 2014-15 and 2015-16 indicate two noticeable trends. First, it is seen that MP has registered a significantly higher level of losses and second, it has also witnessed substantial improvement in terms of increase in book profit or reduction in book losses. However, the aggregate losses for MP State Utilities have reduced significantly in 2016-17, primarily due to the reduction in interest expenses under the Ujjwal DISCOM Assurance Yojana (UDAY) Scheme.

Increase in book profit or reduction in book losses for MP State Utilities for the years 2013-14, 2014-15, 2015-16 and 2016-17 are given in table 4:

Table 4: Losses in Power Sector (₹ Crore)

Item	2013-14	2014-15	2015-16	2016-17
Profit/(loss) on accrual basis	(6,941)	(6,065)	(5,630)	(1,421)
Profit/(loss) on subsidy received basis	(6,947)	(6,115)	(5,629)	(1,073)
Profit/(loss) without subsidy	(9,141)	(10,383)	(11,047)	(8,157)

Source: Power Finance Corporation (PFC) Report on "The Performance of State Power Utilities for the years 2013-14 to 2015-16" and PFC Interim Report on “Performance of State Power Utilities for the years 2014-15 to 2016-17"

MP State Utilities received Grant under UDAY Scheme as revenue in Profit & Loss Account for 2016-17. In percentage terms, the Aggregate Losses have decreased significantly in 2016-17. The Aggregate Revenue and Profit/(loss) on the accrual basis as a percentage of Aggregate Revenue for MP Utilities during the years 2013-14, 2014-15, 2015-16 and 2016-17 are given in table 5:

Table 5: Aggregate Revenue and Losses

Item	2013-14	2014-15	2015-16	2016-17
Aggregate Revenue (₹ Crore)	16,386	17,638	19,845	20,650
Profit/(loss) on accrual basis as percentage of Aggregate Revenue (%)	(42.36)	(34.38)	(28.37)	(6.88)

Source: Power Finance Corporation (PFC) Report on "The Performance of State Power Utilities for the years 2013-14 to 2015-16" and PFC Interim Report on “Performance of State Power Utilities for the years 2014-15 to 2016-17"

The total outstanding debt and State Government Loans funding the debt for MP Utilities during the years 2013-14, 2014-15, 2015-16 and 2016-17 are given below in table 6:

Table 6: Outstanding Debt of Power Sector

Item	2013-14	2014-15	2015-16	2016-17
Total Outstanding Debt (₹ Crore)	41,198	48,677	54,209	54,261
State Government Loans (₹ Crore)	18,152	30,010	23,458	25,891
State Govt. Loans as percentage of Total Outstanding Debt (%)	44.01	61.65	43.27	47.71

Source: Power Finance Corporation (PFC) Report on "The Performance of State Power Utilities for the years 2013-14 to 2015-16" and PFC Interim Report on "Performance of State Power Utilities for the years 2014-15 to 2016-17"

The government of India approved Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) in December 2014 that aims at segregation of agricultural and non-agricultural feeders for uninterrupted to non-agricultural consumers in the rural areas. MP has shown rapid progress in Feeder segregation post-UDAY compared to the pre-UDAY scenario. As per the UDAY Portal, as on June 2018, 96% of feeder segregation work in MP has been completed. Feeder Segregation is one of the critical operational indicators under UDAY and requirement for disbursement of funds from Ministry of Power, Government of India. Plant Load Factor (PLF) is the barometer of the performance of thermal power plants. Thermal PLF (%) for MP Utilities for the years 2013-14, 2014-15, 2015-16 and 2016-17 are given in table 7.

Table 7: Plant Load Factor in Thermal Plants

Item	2013-14	2014-15	2015-16	2016-17
Thermal PLF (%)	47.95	44.44	52.05	40.49

Source: Power Finance Corporation (PFC) Report on "The Performance of State Power Utilities for the years 2013-14 to 2015-16" and PFC Interim Report on "Performance of State Power Utilities for the years 2014-15 to 2016-17"

6. Conclusion

The power sector in MP was unbundled in 2002 into separate generation, transmission and distribution companies. Much of the reforms in Power sector like delicensing and competitive bidding have happened in Generation, fewer in Transmission, while Distribution continues to be the weakest link in the entire power sector value chain with issues like unsustainably low tariffs and high Aggregate Technical and Commercial (AT & C) Losses. As Distribution segment is mostly run by State Utilities, the losses on account of Distribution are thus a burden on the State Finances.

The AT & C losses for Madhya Pradesh (MP) are in the range of 30 percent. After the introduction of Ujjwal DISCOM Assurance Yojana (UDAY) Scheme in MP, the AT & C losses have come down in 2016-17 to 28.12 percent. However, under UDAY, the state governments are required to reduce the AT & C losses to 15% by 2018-19. For Madhya Pradesh, the tariff hikes for 2011-12, 2012-13 and 2013-14 were 6%, 7%, and 1% respectively. Although tariff hikes were timely and periodic, but not commensurate with the increasing cost of power which has adversely affected the financial health of the State utilities.

Under UDAY, the difference between the average cost of Supply (ACS) per unit of power and per unit average revenue realised (ARR) has to be brought to nil by 2018-19. MP has shown rapid progress in Feeder segregation post-UDAY compared to the pre-UDAY scenario. As per the UDAY Portal, as on June 2018, 96% of feeder segregation work in MP has been completed. The aggregate losses for MP State Utilities have reduced significantly in 2016-17, primarily due to the reduction in interest expenses under the Ujjwal DISCOM Assurance Yojana (UDAY) Scheme. The future health of power sector would depend upon whether the state can use feeder separation to effectively target the agricultural subsidy, and reduce leakages to other sectors in the form of AT&C losses and diversion of electricity from agricultural lines to non-agricultural purposes.

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