Study Report

Evaluation of State Finances of Karnataka

Submitted to the Fourteenth Finance Commission,

Government of India

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Executive Summary

Karnataka is a progressive state and has pioneered many reform initiatives. There has been a sea change on the state's fiscal front from one of severe fiscal stress in the decade of nineties to that of fiscal prudence following a series of reform initiatives. The state took stock of the fiscal situation by presenting a White paper on the State Finances in the financial year 2000. The fiscal consolidation path was initiated by the Karnataka state government with the framing of legislations such as Karnataka ceiling on government guarantee Act, Karnataka transparency in public procurement Act (KTPP) and the most important of all in the fiscal context being the Karnataka Fiscal Responsibility Act (KFRA) 2002. The fiscal principles laid down in the KFRA have guided the state through its fiscal consolidation process. Currently, the state has been able to adhere to the fiscal and revenue deficit targets very well and has also been in a position to enhance the much required outlays on the social sector and the capital account. Notwithstanding the recovery in the state finances, there are a number of emerging challenges in sustaining the same. Efficient utilization of the state's resources for the state's socio economic development is the need of the hour.

The state's resource performance is discussed in chapter two. This chapter has traced the trends in the growth and composition of state's resources during post KFRA period by providing comparisons with the previous period wherever necessary. Performance of the tax resources in terms of their buoyancy and tax effort in comparison with major states has been analyzed. The analysis reveals that state's own tax performance is very good and majority of state taxes have proved to be buoyant and the tax effort in the state to be highly comparable with the major states. The state's reform initiatives have yielded positive results and it can be stated that the state's fiscal recovery has been largely lead by the revenue gains. However, the performance of non-tax revenue has been weak over time and in comparison with other major states. A large explicit subsidy element in the economic services category offers less scope for cost recovery from these services.

Analysis of public expenditure is carried out in chapter three. Analysis of the broad aggregates of public expenditure such as plan and non-plan; revenue and capital; development and non-development reveals that Karnataka's performance has been good and the state has had the distinction of being among the top states in terms of per capita development and plan expenditure. Composite management of expenditure index reveals similar findings, wherein Karnataka has been one of the exemplary performers among Indian states with better expenditure management index. The state's social sector allocations as indicated by the social allocation and human priority ratios although on increase during the KFRA period need to be enhanced further to address the human development concerns in the state. The capital outlays despite the increase need further enhancement and insulation from fiscal adversities given the poor economic infrastructure of the state. Ironically states with similar outlays on social and economic sectors have revealed better outcomes as compared to Karnataka, indicating the need to tone up effectiveness of public spending in Karnataka. Government subsidies have been an area of concern with the power sector subsidy posing a threat to the fiscal health of the state. Ironically, subsidy element is quite large in the category of economic services, the services that can be provided by the private sector on commercial basis as opposed to the social services that are associated with large-scale externalities and social benefits. This certainly narrows down the scope of cost recovery by way of user charges. Policy pronouncements such as loan waivers do not augur well for the state's development. State support to religious institutions, albeit small is certainly to be denounced as it is certainly not a state's responsibility.

Discussion of state's fiscal position in terms of the deficit indicators, fiscal responsibility Act and status of public debt are analyzed in chapters four and five. Karnataka has been able to achieve the fiscal targets well within the timelines and has adhered to all the debt norms suggested by the Thirteenth Finance commission. The revenue surplus that has been achieved has been contributing to the enhancement of capital outlays; however, there has been a decline in the revenue surplus in the recent past. The increased reliance on the low cost market borrowings may help in lesser interest burden; however, an issue for concern would be their repayments. In addition to the creation of sinking fund that will ease the debt repayment, it is primarily important that the borrowed funds are productively used. While it is gratifying to note that the overall debt position in terms of GSDP and the interest payments are well within the stipulated levels, an important area of concern is the huge impending debt repayment, which are expected by grow almost ten times during 2018-22. Government borrowings are expected to be productively used such that the debt servicing and repayments are made possible through the returns of the capital investments made with such resources. In the present context it is not very clear as to how these resources are used, the available evidence suggests that as on March 2012 GoK had invested INR 44295 crore in government companies, corporations etc., and the return from these investments, although on increase from INR 23.4 crore in 2007-08 to INR 60.56 crore constitutes hardly 0.1 percent of the investment. (CAG, 2013) Given these current trends in the returns from investments, the government will be forced to raise fresh loans to repay the old loans and there is every possibility that such practices can result in debt spiral and the government has to take early precautionary measures to prevent such fiscal crisis in future times.

Chapter six discusses the issues of power sector in Karnataka. The Government of Karnataka had initiated the reform in its power sector in the year 1999 to ensure the quality of power distribution across the state and financial stability in the power sector. As a part of this reform process, 5 ESCOMs was formed to operate only the distribution of power across the states. Subsequently KPTCL was formed to look after the power transmission business and set KPCL as one of the power generating company in Karnataka. As a result of this effort, significant improvement has been observed in the revenue cost gap of the power supply in Karnataka. One major cause behind this is the significant increase in industrial consumers. Prior to the implementation of power sector reform in Karnataka, higher rate of power tariff as well as poor quality of power supply, had resulted in a significant decline in industrial consumer. To address this issue, Governmentt Of Karnataka has reduced the variations in power tariffs across different category of consumers and improved the supply demand gap from 80% in pre reform period to more than 90% in post reform period. Though there is significant improvement in power distribution there has been inadequate improvement in power generation. Despite the privatization policy in power generation, the overall capacity utilization has declined from 54% in the year 1999-00 to 38% in the year 2009-10. As a result of this power purchasing cost is continuously increasing for this state which will again threat the financial stability of the power sector in future. Hence policy should focus on improving power generation efficiency in Karnataka and strengthening alternative power sector generation opportunities would be a fruitful solution for that.

Performance of state public sector enterprises (PSEs) based on major financial data discussed in chapter seven reveals that profits and losses performance of the enterprises improved in the recent decade (2001 onwards) vis-à-vis the previous decade (1990-2000) indicating easing of burden on the states due to losses of the loss making companies. Further , examining turnover to capital employed ratio, the paper observes an overall declining trend but comparatively figures in the recent decade (2001 onwards) have increased substantially compared to the decade prior to 2001 ; however, a substantial decline has been observed of late. One of the important observations in this context is that while in terms of current prices one observes an increasing trend for many financial indicators at constant prices the trends are often fluctuating in nature. A further disaggregated analysis shows that amongst the number of loss making enterprises that creates burden on state resources as high as 20% are from manufacturing sector and 13% are from the road transport sector. Ironically these two sectors are the ones that are expected to operate on a commercial basis. It is to be noted however, that not all manufacturing enterprises are loss making and paper identifies the enterprises that needs special attention to make best utilization of state resources.

Chapter eight discusses the decentralization initiatives in Karnataka. Public Expenditure and Financial management reforms are presented in chapter nine**.** One of the fiscal management principles laid down in the KFRA is to pursue expenditure policies that would provide impetus for economic growth, poverty reduction and improvement in human welfare. There has also been emphasis on expenditure reforms, stressing on the need to adopt a threefold approach of outcome linkage-program prioritization and designing and rationalization of schemes and programs on the basis of a medium term performance evaluation. The two important strategies that seem to have been pursued by Government of Karnataka to achieve these objectives a) is to enhance allocations for the high priority development sectors identified by the government year on year ever since the FRA, b) Introduce frameworks that enable the government to track the outputs and outcomes of the programs.

With reference to the first strategy, government has listed some sectors as high priority development sectors. These sectors (as listed in various MTFPs) include Agriculture, Rural development, Power among the Economic services category and Health and Education from the Social services category. The expenditure analysis presented in chapter three of the present report too highlights the increases that have occurred in select development sectors. This is a welcome development given the human and infrastructure development challenges of the state. Government also has constituted Expenditure Reforms Commission (ERC) in 2009, with wide terms of reference to tone up public expenditure in Karnataka. This is a major initiative, probably one of the few Indian states to examine the aspects of growing public expenditure and the corrective measures required. In all four reports were submitted by the ERC providing wide ranging recommendations (totaling 292 recommendations) pertaining to aspects of inter sectoral prioritization, organizational structure and review of departmental schemes. Many of these recommendations have been accepted and implemented by the GoK (MTFP, 2013-17). Among the measures that attempted to promote economy and ensure transparency was the introduction of e-procurement in all departments with effect from, 3-12-2012, by the e-governance department. Independent Directorate of Social Audit has been set up to ensure social audit of schemes identified by the Planning department. Karnataka evaluation policy has been announced and Karnataka Evaluation Authority (KEA) set up in 2011 to streamline program evaluation.

With reference to the second strategy too there has been a constant effort by the Government of Karnataka to put in place appropriate frame work that would enable systematic tracking of the performance of government programs and eventually help in toning up the quality of public spending. The frameworks attempted by GoK include Departmental Medium Term Framework; Program Performance budgets (PPBs); Monthly Program Implementation Calendar; Results Framework Document. While the first two frameworks have been at the instance of the international aid agencies, MPIC has been conceived by the Finance department, GoK. Government of Karnataka has adopted the Results framework of Government of India to track the results of government programs and ensure accountability. While the state has been very quick in adopting new initiatives, four varied approaches attempted in a span of eight years, they are also put to disuse fast. There are also issues such as use of inappropriate outcome indicators, poor outcome database, multiple reporting formats and inadequate understanding of the new approaches. It is also important to note that the ultimate benefit of these frameworks lies in the use of outcome information in the expenditure planning for the ensuing financial year which has to be ensured by the Government of Karnataka. There are issues relating to bunching of expenditure more so for the plan expenditure which will adversely impact the service delivery.

The issue of sustaining the sound fiscal health in the long run needs immediate attention. The revenue led recovery achieved by the state in the present juncture may not continue for long in the absence of buoyant economic growth. The global recession impact has already revealed that the state's resource position is very much dependent on the general economic condition. Creation of additional fiscal space required to address the social and economic development needs of the state is largely possible through a thorough review of public expenditure, framing of informed expenditure decisions, setting of right priorities and enhancing the technical efficiency of public spending.

KARNATAKA STATE FINANCES

CHAPTER 1

INTRODUCTION

Karnataka is a progressive state and has pioneered many reform initiatives. There has been a sea change on the state's fiscal front from one of severe fiscal stress in the decade of nineties to that of fiscal prudence following a series of reform initiatives. The state took stock of the fiscal situation by presenting a White paper on the State Finances in the financial year 2000. The fiscal consolidation path was initiated by the Karnataka state government with the framing of legislations such as Karnataka ceiling on government guarantee Act, Karnataka transparency in public procurement Act (KTPP) and the most important of all in the fiscal context being the Karnataka Fiscal Responsibility Act (KFRA) 2002. The fiscal principles laid down in the KFRA have guided the state through its fiscal consolidation process. Currently, the state has been able to adhere to the fiscal and revenue deficit targets very well and has also been in a position to enhance the much required outlays on the social sector and the capital account. Notwithstanding the recovery in the state finances, there are a number of emerging challenges in sustaining the same. Efficient utilization of the state's resources for the state's socio economic development is the need of the hour.

The issue of sustaining the sound fiscal health in the long run needs immediate attention. The revenue led recovery achieved by the state in the present juncture may not continue for long in the absence of buoyant economic growth. The global recession impact has already revealed that the state's resource position is very much dependent on the general economic condition. Coupled with the revenue shortfall that occurs in the natural course with the slowing down of the economy, governments have justifiably played a pro active role in providing stimulus to the economy through tax and expenditure measures. Karnataka too has adopted similar measures leading to enhanced fiscal deficits, albeit, within the permissible limits.

The state's expenditure growth is characterized by a huge chunk of committed expenditure leaving a little room for maneuverability for furthering the capital investment to meet the growing needs of social and economic infrastructure required to steer the economy to greater economic heights. The state has been increasingly resorting to Public Private Partnerships (PPPs) to fill the investment gaps; however, the infrastructure challenges remain large. There is also increasing demand on the public resources in the light of Right to Education, Food Security and Employment guarantee measures. These emerging concerns necessitate a review of the public resources for their allocative and technical efficiency.

It is also important to take stock of the state's achievements vis-a- vis the impending requirements. The state has experimented with frameworks such as Departmental Medium Term Fiscal Policy(DMTFP), Program Performance Budget (PPB), and now has in place tools such as Monthly Program Implementation Calendar (MPIC) and Results framework Document (RFD) to track the results of the programs and tone up the expenditure management. Sakala initiative aims at guaranteed delivery of services in specified time frame. However, the frameworks used to track the results of the governmental programs on the social and economic wellbeing of the individuals needs further toning up as there is need to focus on outcomes rather than outputs. The processes also need a big change by way of using the outcome information in the expenditure planning for the ensuing financial year, which aids in reflecting the changing sectoral priories thus enhance allocative efficiency. The current incremental budgeting practices not only result in bloating of public expenditure but also fail to create the necessary fiscal space to accommodate the public spending arising out of the changing demands given the resource constraints of the governments. In the light of these developments it is essential to take stock of the status of state finances in Karnataka.

The present study at the behest of the Fourteenth Finance commission has the following terms of reference:

The study should provide an analysis of the State Finances over a period of 10 years starting from 1st April, 2002. Specifically, the study should include (and may not be restricted to) the following:

i. Estimation of revenue capacities of State and Measures to improve the tax-GSDP ratio during last five years. Suggestions for enhancing the revenue productivity of the tax system in the State.

ii. Analysis of the state's own non-tax revenues and suggestions to enhance revenues from user charges and profits from departmental enterprises and dividends from non-departmental commercial enterprises.

iii. Expenditure pattern and trends separately for Non-Plan and Plan, Revenue and Capital, and major components of expenditure there under. Measures to enhance allocative and technical efficiency in expenditures during the last 5 years. Suggestions for improving efficiency in [public spending.

iv. Analysis of Deficits – Fiscal and Revenue along with Balance of Current Revenues for Plan financing.

v. The level of Debt: GSDP ratio and the use of debt (i.e whether it has been used for capital expenditure or otherwise). Composition of the state's debt in terms of market borrowing, Central government debt (including those from bilateral/multilateral lending agencies routed through the Central government), liabilities in public account (small savings, provident funds etc) and borrowings from agencies such as NABARD, LIC etc.

vi. Implementation of FRBM Act and commitment towards targets. Analysis of MTFP of various departments and aggregate.

vii. Analysis of the state's transfers to urban and rural local bodies in the state. Major decentralisation initiatives. Reforms undertaken under JNNURM conditionalities.

viii. Impact of State Public Enterprises finances on the States' financial health and measures taken to improve their performance and/or alternatives of closure, disinvestment etc.

ix. Public Expenditure and Financial Management (PEFM) Reforms implemented in the State.

x. Impact of Power Sector Reforms on States' fiscal health. In case reforms have not been implemented, the likely outcome on the States' fiscal health.

xi. Analysis of contingent liabilities of the state.

xii. Subsidies given by the States (Other than Central subsidies), its targeting and evaluation.

Methodology:

Karnataka state finances are evaluated in the present study based on the performance over time and also wherever possible using an inter-state perspective. The study uses secondary data from budget documents, Economic Survey, Finance department's computerized database, reports and existing studies. Time period covered for the study is from 2002-03 till 2013-14 (BE). The study uses descriptive statistics and appropriate econometric methods to analyze the data. Data relating to Public Sector enterprises was difficult to obtain as the latest issue of Public Enterprise Survey has been published very recently (providing data up to 2009-10 only) and does not provide adequate data for a meaningful economic analysis.

Structure of the report:

The report is structured into ten chapters. Chapter one provides a brief introduction, terms of reference, methodology and outline of the report. Karnataka's resource position in terms of its growth, resource composition, tax effort and the status of non-tax revenue (pertaining to TOR 1 and 2) are discussed in chapter two. Trends and growth of public expenditure by important categories such as revenue and capital; development and non-development; plan and non-plan categories and the composite index of expenditure management in an interstate perspective are discussed in chapter three. This chapter also includes discussion relating to subsidies of the state (TOR 12) The state's fiscal position in terms of the various deficit variables (TOR 4) and the implementation of FRBM Act and commitment towards targets analysis of MTFP of various departments and aggregate (TOR 6) are analyzed in chapter 4. Karnataka's debt position, its composition and contingent liabilities (TOR 11) are discussed in chapter 5. Issues pertaining to the power sector and its implications on state's health are dealt with in chapter 6. Transfers to local bodies constitute the discussion of chapter 7. The impact of Public sector enterprises on state's health is analyzed in chapter 8. Public expenditure and finance management reforms are presented in chapter 9. The last chapter pertains to summary, conclusion and recommendations..

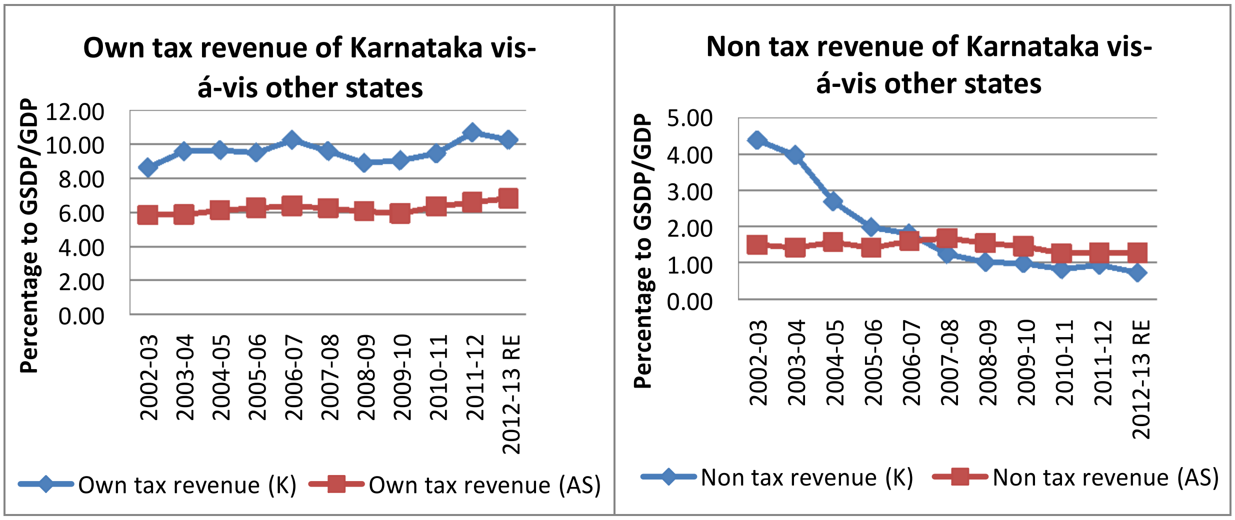
Chapter Two

State’s Revenue Position

The state’s revenue resources comprise of state’s own revenue in the form of tax and non tax revenue and that of transfer of resources from the Central government by way of tax and grants. Karnataka’s own tax performance has played a key role in reviving the state’s finances from severe stress experienced in the decade of nineties. The state’s initiative to appoint the Tax Reforms Committee and the subsequent implementation of several of its recommendations has brought about a sea change in the revenue performance. This chapter presents a discussion of the trends in tax and non tax resources of Karnataka; tax buoyancy, trends in select taxes and tax effort of Karnataka.

Revenue receipts in Karnataka: State’s own resources constitute a major share in the total revenue resources- the share of state’s own tax being 65 percent and that of non-tax revenue being 4.07 percent in 2013-14 (BE). The small and declining share of the non-tax revenue has been an area of concern for the state government. While the state’s performance with reference to own taxes as compared to that of all states have been exemplary that of non tax revenue has deteriorated over time. The non tax revenue has in absolute terms increased from Rs 4422 crore in 2004-05 to Rs 3838 crore in 2013-14 (BE).Its share in GSDP has declined from 2.69 percent in 2004-05 to 0.64 percent in 2013-14 (BE). These trends are depicted in chart 2.1.1 A more detailed analysis of non tax revenue is presented later in the chapter after providing an analysis of tax revenue in Karnataka

Chart 2.1.1: Tax and non tax performance: Karnataka-vis-à-vis All States



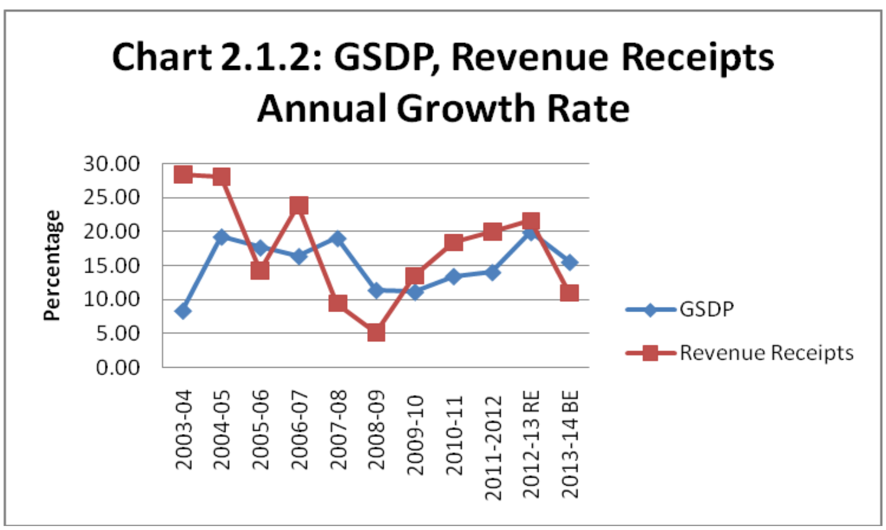
Revenue receipts and GSDP: Revenue receipts of Karnataka have been growing at a higher rate than that of state's GSDP all along with the exception of four years, (Table 2.1 and chart 2.1.2) the smaller growth of revenue receipts in 2007-2009 was caused by the recessionary trends and also reduction in rates of taxes by the government to revive the economic activity

Table 2.1: Revenue receipts and GSDP: Growth Rate

YEARS	GSDP	Revenue Receipts
2003-04	8.36	28.39
2004-05	19.27	27.99
2005-06	17.67	14.23
2006-07	16.39	23.84
2007-08	19.04	9.48
2008-09	11.39	5.2
2009-10	11.12	13.55
2010-11	13.44	18.41
2011-2012	14.02	19.93
2012-13 RE	19.92	21.6
2013-14 BE	15.53	10.99

Source: Finance Department-GOK

Graph 2.1.2: GSDP and Revenue Receipts: Annual Growth Rate



Revenue receipts and revenue expenditure:

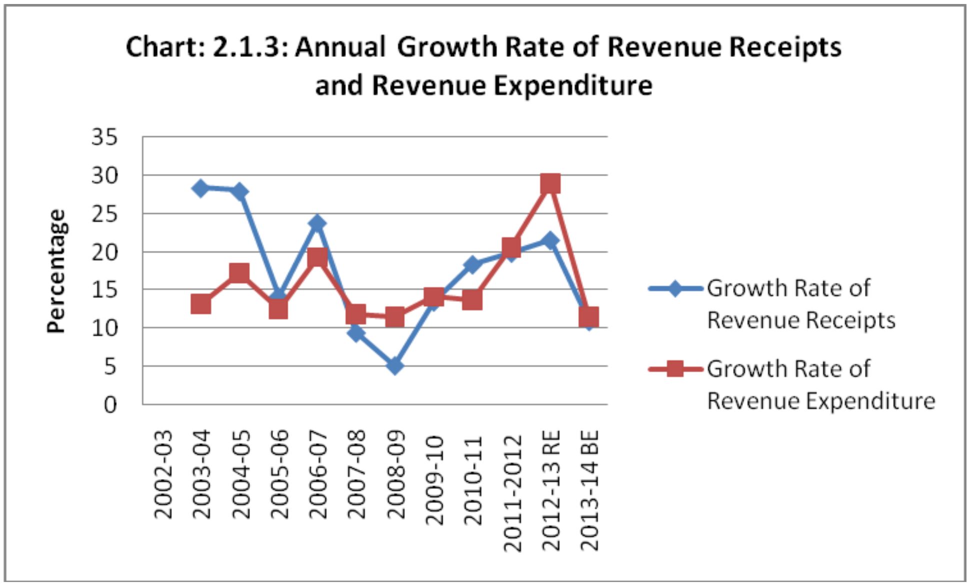
The sharper rate of growth of the revenue receipts over that of revenue expenditure from 2003-04 till 2006-07 (Table 2.2 and chart 2.1.3) has enabled the state to generate more revenue resources than its revenue spending. These trends not only expedited the fiscal correction process by way of attaining the fiscal and revenue deficit targets ahead of the prescribed timelines but also helped to generate savings on revenue account that could be used for capital investments. However, ever since the global melt down, the rate of growth of revenue expenditure has been largely on the higher side resulting in reduction in the revenue surplus achieved by the state earlier on.

Table 2.2: Revenue Receipts and Revenue Expenditure: Trends and growth (Rs Crores)

Years	Revenue Receipts	Revenue Expenditure	Growth Rate of Revenue Receipts	Growth Rate of Revenue Expenditure
2002-03	16169	18814		
2003-04	20760	21285	28.39	13.13
2004-05	26570	24932	27.99	17.13
2005-06	30352	28041	14.23	12.47
2006-07	37587	33435	23.84	19.24
2007-08	41151	37375	9.48	11.78
2008-09	43291	41659	5.2	11.46
2009-10	49156	47537	13.55	14.11
2010-11	58206	54034	18.41	13.67
2011-2012	69806	65115	19.93	20.51
2012-13 RE	84884	83941	21.6	28.91
2013-14 BE	94216	93631	10.99	11.54

Source: Finance Department-GOK

Graph 2.1.3: Annual Growth Rate of Revenue Receipts and Revenue Expenditure



Distribution of state's revenue resources:

Details of state's revenue resources are presented in table 2.3. State's own tax revenue has increased from Rs 10440 crore in 2002-03 to Rs 61012 crore in 2013-14 revealing almost a fivefold increase. Share in central taxes has increased from Rs 2786 crore to Rs 14375 crore and that of grants has increased from Rs 1665 crore to 14991 crore during the above reference period. State's own resources as percent of GSDP have increased from 8.11 percent to 10.14 percent. (Table 2.4 and Chart 2.1.4)

Table 2.3: Category wise revenue resources of Karnataka (Rs in crores)

YEARS	State's Own Tax Revenue	Share in Central Taxes	GRANTS	Revenue Receipts	Non-Tax Revenue
2002-03	10440	2786	1665	16169	2943
2003-04	12570	3245	1987	20760	4945
2004-05	16072	3878	2147	26570	6619
2005-06	18632	4213	3632	30352	7507
2006-07	23301	5374	4813	37587	8912
2007-08	25987	6779	5027	41151	8385
2008-09	27646	7154	5332	43291	8491
2009-10	30578	7360	7883	49156	11217
2010-11	38473	9506	6869	58206	10227
2011-2012	46475	11075	8168	69806	12255
2012-13 RE	53492	12500	15095	84884	18891
2013-14 BE	61011	14375	14991	94216	18829

Table 2.3a: CAGR of Own Tax Revenue, Share in Central Taxes, Grants, Revenue Receipts and Non-Tax Revenue

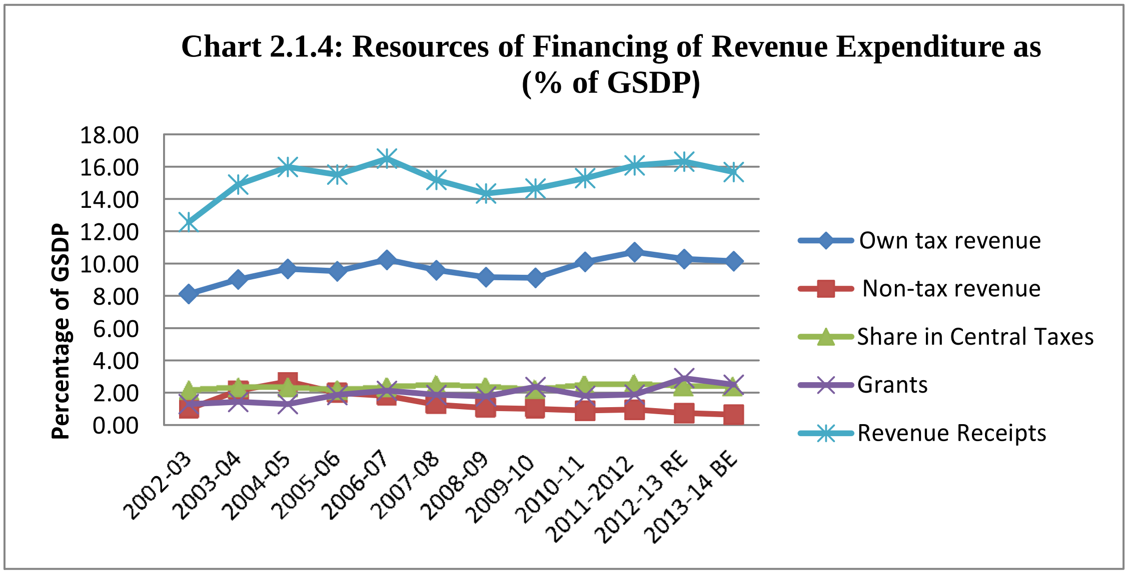
ITEMS	State's Own Tax Revenue	Share in Central Taxes	Grants	Revenue Receipts	Non-Tax Revenue
CAGR (2002-2013)	15.85	14.65	20.10	15.82	16.73

Source: Finance Department-GOK

Table 2.4: Resources as percent of GSDP

Composition of Revenue Receipts as percentage of GSDP					
Years	Own-tax Revenue	Non-tax revenue	Share in Central Taxes	Grants	Revenue Receipts
2002-03	8.11	0.99	2.16	1.29	12.56
2003-04	9.01	2.12	2.33	1.42	14.88
2004-05	9.66	2.69	2.33	1.29	15.97
2005-06	9.52	1.98	2.15	1.86	15.5
2006-07	10.23	1.8	2.36	2.11	16.5
2007-08	9.58	1.24	2.5	1.85	15.17
2008-09	9.15	1.05	2.37	1.76	14.33
2009-10	9.11	0.99	2.19	2.35	14.64
2010-11	10.1	0.88	2.5	1.8	15.28
2011-2012	10.7	0.94	2.55	1.88	16.07
2012-13 RE	10.27	0.73	2.4	2.9	16.3
2013-14 BE	10.14	0.64	2.39	2.49	15.66

Source: Finance Department-GOK



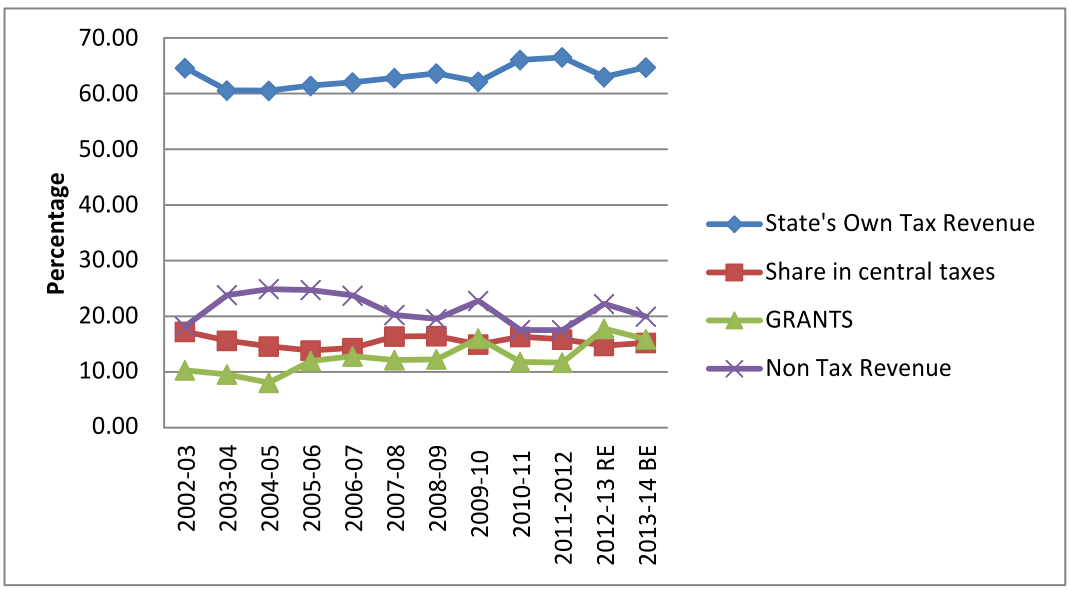
Distribution of revenue receipts by its major components reveals that state's own tax revenue has constituted the largest share with over 60 percent of the total during all the reference years. It increased from 64.57 percent in 2002-03 to 64.76 percent in 2013-14 and had reached its peak in 2011-12 at 66.58 percent. Share in central taxes has had a marginal decline from 17.23 percent in 2002-03 to 15.26 percent in 2013-14 and that of grants has increased from 10.3 percent to 15.91 percent during the reference period. (Table 2.4 and chart 2.1.5)

Table 2.5: Composition of revenue receipts (Percentage to total Revenue Receipts)

YEARS	Own-tax Revenue	Share in Central Taxes	GRANTS	Non Tax Revenue
2002-03	64.57	17.23	10.30	18.20
2003-04	60.55	15.63	9.57	23.81
2004-05	60.49	14.6	8.08	24.91
2005-06	61.39	13.88	11.97	24.73
2006-07	61.99	14.30	12.80	23.71
2007-08	62.78	16.38	12.14	20.25
2008-09	63.60	16.46	12.27	19.53
2009-10	62.12	14.95	16.01	22.78
2010-11	66.02	16.31	11.79	17.54
2011-2012	66.49	15.85	11.69	17.53
2012-13 RE	62.94	14.71	17.76	22.22
2013-14 BE	64.69	15.24	15.89	19.96

Source: Finance Department-GOK

Graph 2.1.5: Composition of Revenue Receipts



Trends in major taxes:

Revenue from major taxes as percent GSDP, its compound growth rates and buoyancy details are presented in tables2.5 through 2.7. The performance of major taxes in Karnataka as percent of GSDP to that of all states is presented in chart 2.1.6.

Sales tax: Sales tax revenue has increased from Rs 5473.55 crore in 2002-03 to Rs 32850 crore in 2013-14 BE. It constitutes the largest share in the own tax revenue of the state. Its share in the

GSDP has increased from 4.53 percent to 5.46 percent during the above reference period after reaching its peak in 2011-12 at 5.76 percent. Sales tax has become more buoyant after the launch of reform initiatives, it has increased from 0.86 percent (1991-92- 2001-02) to 1.06 percent (2002-03 till 2012-13 (RE) The sales tax in Karnataka has also performed better than that of ‘All states’, the share of which in GDP has ranged between 3.09 percent (2002-03) and 3.94 percent (2012-13, RE). Growth in the sales tax revenue can be largely attributed to the Information Technology initiatives that the Commercial taxes department has introduced for providing most of the services. More than 80 percent of the revenue is mobilized through electronic mode. There are however issues such as the loss of revenue on account of various incentives and concessions announced by the government and also cases of non-recovery of arrears pertaining to deferred tax amounts given by way of industry concessions. CAG reports also raise issues such as under assessment, non/ short levy of taxes, excess input tax credit claims etc., Tax administration has been of late strengthened by the government through the e-initiatives, however, it is very important to set right the issues of input tax credit as this can become a more serious issue once the GST is introduced.

State Excise: Revenue from State Excise has increased from Rs 2806 crore in 2004-05 to Rs 12400 crore in 2013-14 (BE). Its share in the GSDP has increased significantly from 1.69 percent to 2.06 percent during the reference period. State Excise too has become more buoyant after the KFRA as it has increased from 0.79 (1991-92- 2001-02) percent to 1.17 percent (2002-03 to 20013-14 BE). The department has intensified patrolling and surveillance on manufacturing and selling units. There are also proposals to use Information Technology to enhance growth of revenue.

Stamps and Registration: Revenue from the Stamps and Registration has increased from Rs 1760 crore in 2004-05 to Rs 6100 crore 2013-14 (BE).As a percent of GSDP, it has been fluctuating. There has been an increase from until 2006-07 followed by a gradual decline until 2009-10 followed by a marginal increase till 2011-12 which declined further. Unlike Sales tax and Excise Duty, the Stamps and Registration buoyancy which was less than unity prior to reforms at 0.91 has declined further to 0.89 during the post reform period. This is definitely a cause for concern and there is need for more reform initiatives. Some measures of department include anywhere registration facility, it has facilitated registration with any Sub Registrar office within a district. It is a citizen friendly move. The department is contemplating to create a dedicated cell as started by Government of Maharashtra to regularly advise on guidance value revision.

Motor Vehicles Tax: State's revenue from Motor Vehicles source has increased from Rs 983 crore in 2004-05 to Rs 4008 crore in 2013-14 (BE). Its share in the GSDP has increased from 0.59 percent to 0.67 percent during the reference period. Motor vehicle tax too has become more buoyant after the reforms improving from 0.66 percent to 1.11 percent. Motor Vehicles department too has been extensively resorting to use of Information Technology in the provision of its services such as issuance of driving licenses, issue of permits, registration certificates etc.

Table 2.6: Revenue performance of Karnataka (percent to GSDP)

Years	Own tax revenue	Land Revenue	Sales Tax	State Excise	Stamp,Reg Fee	Taxes on Motor Vehicles
2002-03	8.11	0.05	4.25	1.73	0.87	0.52
2003-04	9.01	0.05	4.77	1.78	0.97	0.57
2004-05	9.66	0.07	5.23	1.68	1.06	0.59
2005-06	9.52	0.06	5.04	1.73	1.13	0.56
2006-07	10.23	0.05	5.18	1.98	1.41	0.60
2007-08	9.58	0.05	5.13	1.76	1.26	0.61
2008-09	9.15	0.08	4.71	1.85	0.94	0.54
2009-10	9.11	0.04	4.69	2.06	0.78	0.58
2010-11	10.1	0.05	5.31	2.04	0.93	0.63
2011-12	10.1	0.05	5.76	2.11	1.06	0.64
2012-13 RE	10.27	0.04	5.46	2.14	1.02	0.66
2013-14 BE	10.14	0.04	5.46	2.06	1.01	0.67

Table 2.6a: Compound annual growth rates: own tax categories

	PRE KFRA PERIOD	POST KFRA PERIOD
	(1991-02)	(2002-14 BE)
Own tax revenue	11.76	15.85
Land revenue	10.11	12.50
Sales tax	11.11	16.11

State Excise	13.1	15.98
Stamps and Registration fee	13.81	15.21
Taxes on motor Vehicles	10.94	15.99
Revenue Receipts	11.18	15.82

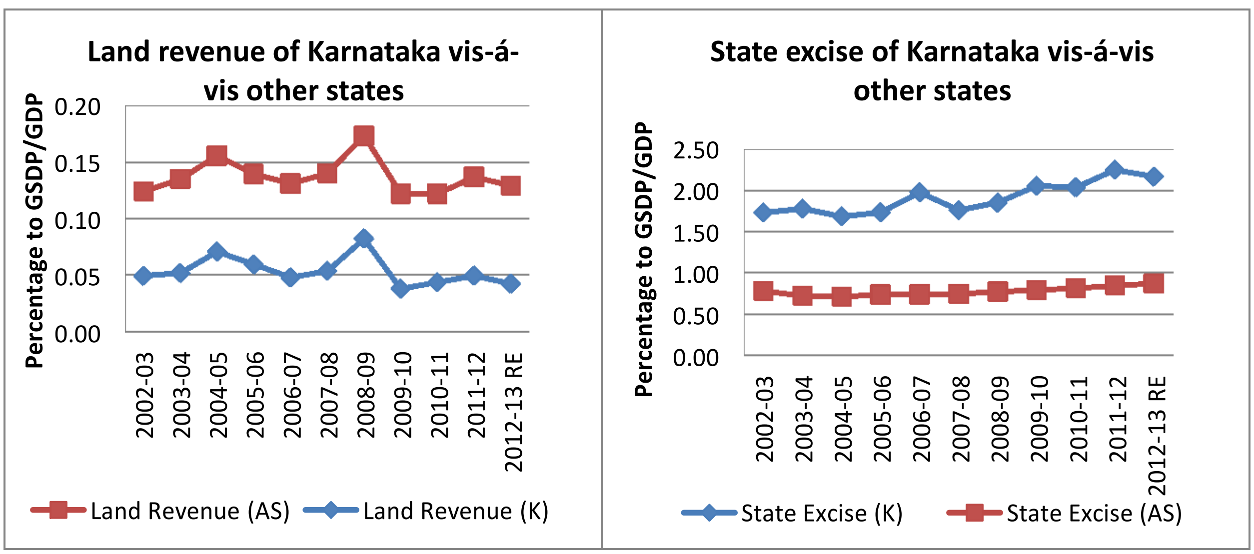
Source: Computed from the data of Government of Karnataka, Finance Department

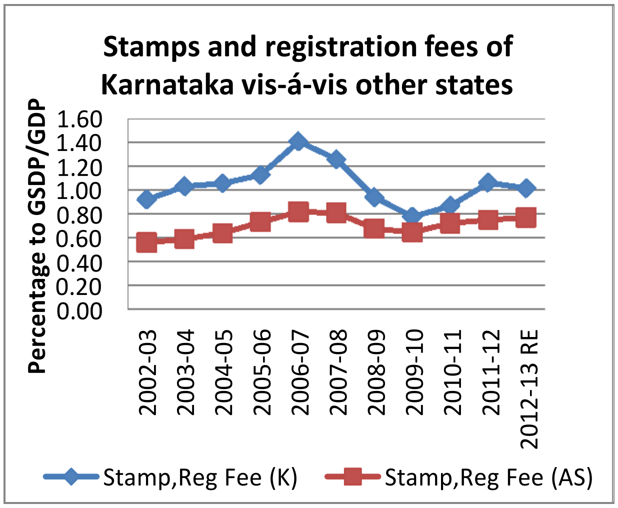
Table 2.7: Buoyancy of state taxes

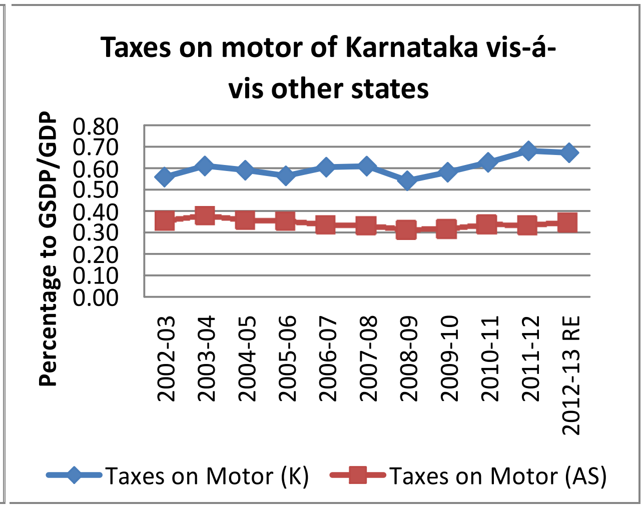
Taxes	1980-81to 2012-13	Before 2002-03	After 2002-03
Sales Tax	1.001*	0.983*	1.238**
Excise Duties	1.103*	0.835*	1.251*
Entertainment Tax	-0.22**	-0.6417	-0.065
Electricity Duty	0.670*	0.432*	0.787
Stamp Duty	1.458*	1.46*	0.862**
Vehicle Tax	0.802*	0.575*	1.097*
Land Rev+Ag income tax	0.236*	0.053	0.66***
Own Tax Revenue	1.045*	1.001*	1.05
Non-Tax Revenue	0.352*	0.238**	-0.439**
Total Revenue	0.937*	0.831*	0.973

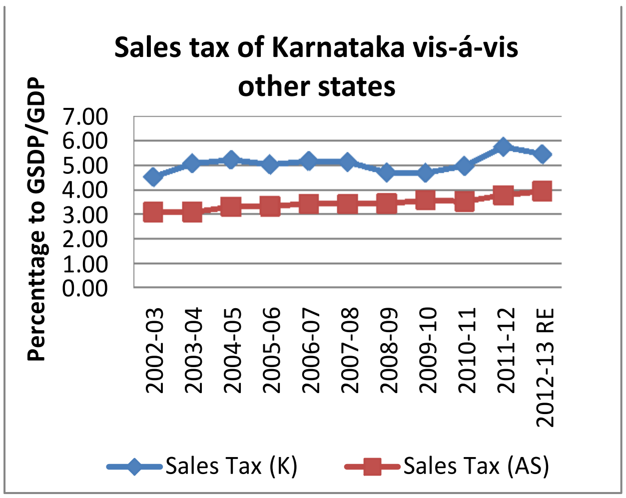
*significant at 1% level ** sig at 5% level ***sig at 10% level

Chart 2.1.6: Major taxes as percent to GSDP: Karnataka visa-vis other states









Karnataka's revenue capacity and tax effort:

It was observed in the earlier sections that Karnataka's own tax performance (tax to GSDP ratio) over time and in comparison with other states in India has been considerably good. It is important however to examine the tax effort of the state, which is defined as the ratio of actual tax revenue of the government to the state's taxable capacity. Present study has made an attempt to estimate the same for the last five years for various tax categories using the regression approach.

Methodology:

Tax effort is defined as the ratio of actual tax revenue of a government to its taxable capacity. The tax potential and tax efforts measured here are relative in nature (across the16 major states in this study). The available literature suggests two important methodologies to measure the tax potential of the government. They are,

1. Representative Tax System
2. Regression Method

In the Representative Tax System, actual base of the particular tax will be taken into consideration for estimating average effective rate. The average effective rate is calculated by dividing actual revenue with the actual base of the tax.

In the regression method potential base will be considered. The dependent variable will be the actual tax revenue and one or more than one potential bases can be taken as independent variables. The beta coefficient will be the marginal effective rate and on basis of this we estimate the tax potential of state governments.

In this study we use regression method as it is widely used in many earlier studies. Cross section analysis used to calculate the tax potential and tax efforts of the states separately for the time period from 2007-08 to 2011-12 on basis of data availability. The states are ranked on basis of its tax efforts. Data pertaining to sixteen major states has been taken for the analysis. The states considered for the analysis are as follows: Andhra Pradesh, Assam, Bihar, Goa, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh and West Bengal.

Sales Tax:

In order to estimate the tax potential for the sales tax across the sixteen major states GSDP of the particular states has been taken as the potential base. Sales turnover will be the correct base for the estimation. However due to time and resource constraints of collecting data pertaining to sales turnover we have chosen GSDP as the potential base for estimation. The equation used is as follows:

Ln (Sales Tax) = a + b ln(GSDP)

The results of the estimation are provided in the following table 2.8a. The t-values of the coefficient (lngsdp) are significant at 1% level for all the five years and R-square value is also high.

Table 2.8a: Sales Tax Regression results

Year	2007-08	2008-09	2009-10	2010-11	2011-12
Constant	-3.398977	-3.774717	-4.108037	-3.78429	-3.292515
	t-value (-3.59)	t-value (-3.66)	t-value (-3.57)	t-value (-3.98)	t-value (-3.33)
Lngsdp	1.007958	1.037703	1.060279	1.040085	1.00684
	t-value (12.96)*	t-value (12.41)*	t-value (11.51)*	t-value (13.84)*	t-value (13.02)*
R-Square	0.92	0.91	0.9	0.92	0.92

*t-values significant at 1% level **t-values significant at 5% level ***t-values significant at 10% level

Stamp Duty

For estimating potential of stamp duty across the states, GSDP has been considered as the potential base. The equation used is as follows:

Ln(Stamp Duty) = a + b ln(GSDP)

The result of the estimation is provided in the following table 2.8b. The t-values of the coefficient (lngsdp) are significant at 1% level for all the five years and the R-square value is also high.

Table 2.8b: Stamp duty regression results

Year	2007-08	2008-09	2009-10	2010-11	2011-12
Constant	-8.857531	-9.589466	-10.57283	-10.35871	-10.50373
	t-value (-4.43)	t-value (-5.11)	t-value (-5.42)	t-value (-4.62)	t-value (-4.61)
Lngsdp	1.325108	1.365856	1.432451	1.418855	1.429249
	t-value (8.07)*	t-value (8.97)*	t-value (9.16)*	t-value (8.01)*	t-value (8.02)*
R-Square	0.82	0.85	0.85	0.82	0.82

*t-values significant at 1% level **t-values significant at 5% level ***t-values significant at 10% level

Electricity Duty

For estimation of tax potential with respect to electricity duty among states, electricity consumption is taken as the potential base. Goa state is excluded from the analysis as it does not levy duty on electricity usage. Other 15 major states have been considered for the analysis. The equation used is:

Ln (Electricity Duty) = a + b ln(Electricity Consumption)

The result of the estimation is provided in the following table 2.8c. The t-values of the coefficient (lnElectricity consumption) are significant at 1% level for the years 2007-08 and 2008-09 and significant at 5% level for the year 2009-10. The R-square value is satisfactory.

Table 2.8c: Electricity duty regression results

Year	2007-08	2008-09	2009-10
Constant	-7.083428	-5.537878	-4.165683
	t-value (-1.95)	t-value (-2.24)	t-value(-0.95)
LnElectricity consumption	1.250433	1.117183	0.966618
	t-value (3.46)*	t-value (4.56)*	t-value (2.25)**
R-Square	0.47	0.61	0.28

*t-values significant at 1% level **t-values significant at 5% level ***t-values significant at 10% level

Motor Vehicle Tax

Number of vehicles registered has been taken as the potential base to calculate motor vehicle tax potential across the states. Punjab has been excluded from the analysis due to non-availability of the data on number of registered motor vehicles. The equation used for the estimation is as follows:

Ln (Motor Vehicle Tax) = a + b ln(Number of Vehicles Registered)

The result of the estimation is provided in the following table 2.8d. The t-values of the coefficient (lnNo of Vehicles Registered) are significant at 1% level for all the years. The R-square value is also high.

Table 2.8d: Motor Vehicle tax regression results

Year	2007-08	2008-09	2009-10	2010-11	2011-12
Constant	-6.372155	-6.781366	-6.868176	-6.902848	
	t-value (-4.79)	t-value (-4.69)	t-value (-4.17)	t-value (-5.18)	
Ln(No of Vehicles Registered)	0.99374	1.02835	1.032359	1.03657	
	t-value (9.69)*	t-value (9.25)*	t-value (8.28)*	t-value (10.44)*	
R-Square	0.87	0.86	0.84	0.89	

*t-values significant at 1% level **t-values significant at 5% level ***t-values significant at 10% level

Land Revenue & Agriculture Income Tax

Agriculture income tax is not levied in many states. However land revenue is levied in all the states. But in this analysis both land revenue and agriculture income tax added together and

GSDP from agriculture sector is taken as the potential base for the estimation of tax potential. The equation used is:

Ln (Land Rev + Ag Income Tax) = a + b ln(Agriculture GSDP)

The result of the estimation is provided in the following table 2.8e. The t-values of the coefficient (lnAg GSDP) are significant at 1% level for the year 2007-08 and significant at 5% level for remaining years. The R-square value is satisfactory for cross section analysis.

Table 2.8e: Land Revenue & Agriculture Income Tax regression results

Year	2007-08	2008-09	2009-10	2010-11	2011-12
Constant	-7.913242	-6.280955	-6.421444	-8.377442	-6.150213
	t-value (-1.88)	t-value (-1.36)	t-value (-1.40)	t-value (-1.76)	t-value (-1.20)
Ln(Ag GSDP)	0.845355	0.744812	0.75031	0.88184	0.729178
	T-value (3.01)*	t-value (2.43)**	t-value (2.50)**	t-value (2.87)**	t-value (2.22)**
R-Square	0.39	0.29	0.31	0.37	0.26

*t-values significant at 1% level **t-values significant at 5% level ***t-values significant at 10% level

Excise Duty

We have taken GSDP as the potential base for estimating potential excise duty across the states. Consumption of liquor will be the perfect base for estimating excise tax potential. But due to lack of the data availability of consumption of liquor we have considered GSDP as the potential base for the estimation. The equation estimated is as follows:

Ln (Excise Duty) = a + b ln(GSDP)

The result of the estimation is provided in the following table 2.8f. The t-values of the coefficient (lnGSDP) are significant at 1% level for the years 2007-08, 2008-09 and 2009-10 and significant at 5% level for remaining years. The R-square value is satisfactory for cross section analysis.

Table 2.8f: Excise Duty regression results

Year	2007-08	2008-09	2009-10	2010-11	2011-12
Constant	-6.328216 t-value (-1.42)	-7.275902 t-value (-1.52)	-6.792227 t-value (-1.44)	-5.801551 t-value (-1.17)	-5.431441 t-value (-1.08)
Ln(GSDP)	1.094903	1.170551	1.134546	1.056247	1.030684
	t-value (3.001)*	t-value (3.02)*	t-value (3.008)*	t-value (2.69)**	t-value (2.63)**
R-Square	0.39	0.39	0.39	0.34	0.33

*t-values significant at 1% level **t-values significant at 5% level ***t-values significant at 10% level

Entertainment Tax

The required potential bases to calculate the taxable capacity of the states with respect to entertainment tax will be number of theatres, number of television sets, DTH connections etc. But as the data on all these variables is not available across the states, we have taken GSDP as the potential base for estimation. The equation used is as follows:

Ln (Entertainment Tax) = a + b ln(GSDP)

The result of the estimation is provided in the following table 2.8g. The t-values of the coefficient (lnGSDP) are significant at 1% level for the years 2007-08 and2008-09 and significant at 10% level for years 2009-10 and 2010-11. But t-value is insignificant for the year 2011-12. Therefore we have not used this model to calculate tax potential from entertainment tax for the year 2011-12. The R-square value is satisfactory for cross section analysis.

Table 2.8g: Entertainment tax regression results

Year	2007-08	2008-09	2009-10	2010-11	2011-12
Constant	-23.6213	-19.24074	-9.356022	-8.314795	-6.40057
	t-value (-3.54)	t-value (-3.03)	t-value (-1.32)	t-value (-1.17)	t-value (-0.89)
Ln(GSDP)	2.160156	1.782752	0.988215	0.917056	0.764131
	t-value (3.98)*	t-value (3.46)*	t-value (1.74)***	t-value (1.64)***	t-value (1.36)
R-Square	0.55	0.46	0.17	0.16	0.11

*t-values significant at 1% level **t-values significant at 5% level ***t-values significant at 10% level

Results:

Table 2.9: Taxable capacity and tax effort of Karnataka*

(Actual & Estimated values in Rupees Crore & Rev efforts in %)					
	2007-08	2008-09	2009-10	2010-11	2011-12 RE
Sales Tax					
Actual	12631.9	13573.9	14389.74	19360.59	23510
Estimated	9987.26	11468.82	11981.3	15501.37	17636.11
Rev Efforts	126.5	118.4	124.32	124.9	133.3
Rank	4	5	3	2	3
Excise Duty					
Actual	4766.57	5749.57	6946.32	8284.74	9500
Estimated	1583.49	1855.86	2100.29	2740.61	2830.75
Rev Efforts	301	309.8	330.7	326.1	335.6
Rank	1	1	1	1	1
Motor Vehicle Tax					
Actual	1650.13	1681.16	1961.6	2550.02	
Estimated	1151.27	1486.24	1208.44	1470	

Rev Efforts	143.3	113.1	162.3	173.5	
Rank	1	9	1	1	
Stamp Duty					
Actual	3408.83	2926.72	2627.57	3531.08	4750
Estimated	2247.53	2169.49	2124.67	2881.83	3133.65
Rev Efforts	151.7	134.9	123.7	122.5	151.6
Rank	4	4	7	6	4
Electricity Duty					
Actual	449.5	370.59	678.69		
Estimated	392.43	484.93	395.7		
Rev Efforts	114.5	76.4	171.5		
Rank	9	10	7		
Entertainment Tax					
Actual	352.9	157.75	116.14	97.7	
Estimated	29.93	27.19	25.11	34.1	
Rev Efforts	1178.9	580.2	462.5	286.5	
Rank	1	1	4	4	
Land Revenue+ Agriculture Income Tax					
Actual	148.35	264.93	136.58	186.86	202.03
Estimated	136.56	156.47	164.4	211.65	191.49
Rev Efforts	108.6	169.3	83.1	88.3	105.5
Rank	8	6	11	9	7

*Note: Detailed tables of Karnataka's position among 16 major states are presented in appendices 2A1-A7

It can be observed from table 2.9 (detailed tables are presented in the appendices t2A to 27) that Karnataka's actual revenue realization with reference to sales, excise, motor vehicles and entertainment has been above the revenue capacity during all five years for which estimations were made. The state also compared favorably with the other fifteen states as indicated by its ranking position. Actual revenue realization was less than the capacity for the Electricity duty for the year 2008-09 and the state's rank was also quite low as compared to the other states. Actual revenue of Land revenue and agriculture income tax too fell short of the estimated revenue for two years 2009-10 and 2010-11. Karnataka had a low rank for all the five time points for which estimations were made.

II **Non tax revenue in Karnataka**

Karnataka's non tax performance has not been satisfactory, it has not only deteriorated over time but also has trailed behind that of all states. Karnataka's non tax revenue as percent of GSDP has declined from 4.38 (higher than that of all states) in 2002-03 to 0.73 percent in 2012-13 (RE), where as that of all states has declined from 1.5 percent to 1.27 percent during the above reference period. (Table 2.10)

Table 2.10: Non tax revenue Karnataka Vis a vis all states (Percent of GDP)

Items/Years	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13 RE**	**2013-14 BE**
Non tax revenue (K)	4.38	3.97	2.69	1.98	1.80	1.24	1.02	0.99	0.83	0.94	0.73	1
Non tax revenue (AS)	1.50	1.42	1.57	1.41	1.60	1.68	1.54	1.46	1.26	1.27	1.27	
Interest Receipts (K)	0.03	0.09	0.09	0.14	0.17	0.14	0.11	0.11	0.14	0.10	0.10	0.04
Interest Receipts (AS)	0.37	0.30	0.29	0.28	0.30	0.28	0.31	0.25	0.22	0.02	0.20	
Dividends and profits (K)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Dividends and profits (AS)	0.01	0.01	0.01	0.02	0.02	0.01	0.02	0.01	0.01	0.01	0.01	
General Services (K)	0.29	1.36	1.26	1.04	0.94	0.25	0.22	0.25	0.02	0.15	0.10	0.08
General Services (AS)	0.37	0.36	0.37	0.35	0.47	0.58	0.42	0.39	0.26	0.20	0.21	
Social Services (K)	0.15	0.09	0.09	0.07	0.06	0.07	0.06	0.07	0.08	0.09	0.09	0.09
Social Services (AS)	0.12	0.12	0.12	0.13	0.18	0.17	0.15	0.15	0.16	0.19	0.21	
Economic Services (K)	0.57	0.70	1.24	0.72	0.63	0.78	0.62	0.54	0.57	0.59	0.42	0.42
Economic Services (AS)	0.61	0.63	0.77	0.64	0.64	0.65	0.65	0.65	0.61	0.64	0.64	

Non tax revenue as percent of respective functional heads of expenditure reveals (Table 2.10) that there has been a decline during the reference period. The share of social services has dwindled to less than half from 2.81 percent in 2002-03 to 1.35 percent in 2013-14 B.E and that of Economic services has declined from 9.41 percent to 7.06 percent during the reference period. This is despite a sharp increase in the functional categories of expenditure. While one of the reasons is the retention of user charges by departments concerned, the cost recovery has been abysmally low and does not even cover the operation and maintenance charges incurred by the government in the provision of these services. Despite this government has not put in a clear policy. ERC has recommended that government should articulate a policy on user charges so that it is firmly on the agenda of every department (GoK, ERC, 2011, 41).

Table 2.11: Non Tax Revenue as (% of Expenditure of Functional Categories)

ITEMS/ YEARS	General Services	Social Services	Economic Services
2002-03	4.86	2.81	9.41
2003-04	19.46	1.67	12.95
2004-05	20.9	1.79	20.35
2005-06	19.8	1.29	11.37
2006-07	19.8	1.21	8.22
2007-08	6.06	1.19	11.91
2008-09	5.3	1.01	10.68
2009-10	6.38	1.1	8.28
2010-11	0.67	1.34	9.19
2011-12	3.72	1.37	8.22
2012-13 RE	2.46	1.34	6.08
2013-14 BE	1.71	1.35	7.06

Challenges on the revenue front: State's revenue resources have proved to be more buoyant during post FRA period as compared to the pre FRA phase. However, this is largely due to the own tax revenue whose buoyancy increased from 1.001 to 1.05 as compared to the non tax revenue whose buoyancy has turned negative at – 0.439 during the post reform phase as compared to 0.238 during the pre FRA phase.While the state's tax performance has been commendable, it is feared that the state has almost reached the tax plateau and further enhancement is largely possible only through higher economic growth. The sharp reduction in the rate of growth of tax revenue during the recent recession reveals that rate of growth of economy impacts the tax revenues in a significant manner. Managing the tempo of economic growth remains a major challenge with the state government by way of enhancing productive capital investments to generate social and economic infrastructure that helps in crowding in private investments in a big way.

CHAPTER 3

PUBLIC EXPENDITURE REVIEW OF KARNATAKA

Buoyant economic growth coupled with several revenue led reform initiatives adopted by the Government of Karnataka bailed out the state finances from severe fiscal distress experienced during the decade of nineties and early years of the current decade. The state government has been in a position to contain deficits in a phased manner and achieve considerable fiscal prudence.

Sustaining this fiscal prudence in the long run and creation of fiscal space however is possible only by introducing well thought-out reforms in public expenditure planning and management. The public expenditure planning has to be guided by the current achievements and the felt needs of the public in the respective sectors. This requires a complete review of the governmental schemes and programs implemented by each department vis-à-vis their impact on the sector's development in the light of the changing 'Role of State'. Government of Karnataka had constituted an Expenditure Reforms Commission (ERC) which made wide ranging recommendations on many aspects of public expenditure in Karnataka. Government of Karnataka has implemented some recommendations and the measures initiated are discussed in the Medium term fiscal plan, 2013-17.

Public Expenditure Review

In the conduct of analysis of the huge gamut of expenditure, it becomes imperative to scrutinize appropriate forms of aggregation to derive the corrective measures based on the directional changes occurring in the public expenditure. This chapter presents a discussion of the accounting aggregates such as revenue, capital expenditures, functional distribution of expenditure indicating the 'purpose' or the 'functions' (e.g. education, health, agriculture, transport etc) towards which spending is earmarked covering the trends in General, Social and Community and economic services. While these kinds of analysis may provide a broad summary of the nature of government expenditure the ultimate test to the spending lies in the end service delivery to the citizens and the efficiency and effectiveness with which these services are delivered. In this connection, although there is serious paucity of performance or service delivery data indicating the end outcomes, some broad indicators of certain departments are also discussed along with their trends in expenditure to serve as a guide for future expenditure planning and management. This chapter also provides a comparative analysis of revenue receipts and revenue expenditure, income elasticity of revenue and expenditure and the causality between expenditure and GSDP, fiscal space analysis followed by a comparison of Karnataka's expenditure with the southern states. There is also an attempt made to compute Compoisite Management of Expenditure Index (CMEI) for major states to place Karnataka's effectiveness in managing expenditure using appropriate indicators.

Table 3.1: Expenditure Indicators in Karnataka (Percent to GSDP)

Particulars	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-2012	2012-13 RE	2013-14 BE
Revenue Receipts	13.85	15.82	16.12	17.46	17.6	15.99	14.26	17.97	16.07	16.3	15.66
Revenue Exp	14.2	14.84	14.89	15.65	15.99	15.39	14.16	17.8	14.99	16.12	15.56
Capital Exp	2.02	2.78	3.09	3.97	3.7	3.65	4.15	3.49	3.99	3.16	2.91
Development Exp	9.69	11.17	11.92	13.75	14.07	9.98	13.02	12.27	13.63	13.83	12.67
Social Services	4.93	4.89	5.31	5.68	6.53	5.86	6.45	6.08	6.42	6.85	6.59
Economic Services	4.75	6.29	6.61	8.07	7.53	4.11	6.57	6.19	7.22	6.98	6.08
General Services	6.12	5.97	5.45	4.99	4.8	9.98	3.78	3.45	3.54	4.18	4.49
Plan Exp	4.95	5.29	6.13	5.69	7.27	6	6.58	7.25	7.75	8.11	8.16
Non Plan Exp	12.43	12.86	12.03	11.76	11.31	11.25	10.71	10.82	10.4	10.87	11.11
Non Development Exp	6.03	7.16	6.51	5.94	5.55	4.77	4.85	4.99	4.41	4.77	5.07
Total Exp	16.23	17.62	17.99	19.62	19.68	19.04	17.97	21.75	18.98	19.28	18.48
Total Exp Consolidated fund	23.12	21.26	18.58	20.6	20.58	22.23	18.66	25.81	23.66	19.97	19.45

Source: GoK-FD, MTFP

**** Decline in the power subsidy in the recent years is on account of under provision towards subsidy bill thus does not represent a decline in the power subsidy bill***

Growth of public expenditure in Karnataka:

Total government expenditure has increased from Rs 28167 crore in 2002-03 to Rs 117004.81 crore in 2013-14 (BE), an increase by 3.15 times. This represents expenditure comprising the broad categories of revenue account and capital disbursements (consisting of capital account, public debt repayment and loans and advances). The total expenditure as can be observed from Chart 3.1.1 reveals that the rapid growth is largely governed by the growth in revenue expenditure. Revenue and capital expenditure and their trends are presented in a detailed manner subsequently. Public debt repayment and loans and advances category has a much smaller share with the exception of 2003-04. The total expenditure has grown at a CAGR of 12.60 percent per annum during 2002-03 growing at a slightly higher rate of 12.43 percent during 1991-92 to 2001-02.

Public expenditure ratio: To facilitate interstate/ country comparisons and the growth over time UNDP (1991) has proposed some ratios, one of them being public expenditure ratio. The norm in the context of state's participation in the human development suggests that public expenditure ratio should be in the range of 25 percent of the national income. An attempt has been made to analyze this ratio for Karnataka for the period 2002-03 till date and the details are presented in table 3.3. During this period, the share of public expenditure in GSDP has decreased from 23.3 percent in 2002-03 to 19.45 percent in 2013-14 BE. The share has ranged between 17.41 percent (the lowest in 2008-09) and 26.45 percent (the highest in 2003-04). (Graph 3.1.1). While this ratio indicates the extent of state participation, its composition by Social allocation and human priority ratios gains more importance in the context of human development and is discussed subsequently. On an average the total expenditure constitutes 19.93 percent with revenue expenditure having 14.81 percent and that of capital expenditure having 3.07 percent.

Table 3.2: Growth of Public Expenditure in Karnataka

Years	Revenue Exp	Capital Exp	Public Debt	Loans & Advances	Consolidated Fund
2002-03	18814.5	2936	5789.2444	627.57	28167.31
2003-04	21284.71	3029.39	9323.0626	1011.2	34648.37
2004-05	24931.85	4673.68	5492.1906	611.42	35709.14
2005-06	28040.9	5821.93	810.8571	299.6	34973.28
2006-07	33435.43	8542.57	1749.371	357.22	44084.59
2007-08	37374.77	8648.94	1328.7719	756.74	48109.22
2008-09	41659.29	9870.29	1777.8956	731.34	54038.81
2009-10	47536.92	12136.68	2308.3286	981.58	62963.51
2010-11	54034	13355.16	2807.1289	1737.93	71934.07
2011-12	65115	15505.65	3319.8774	1815.55	85756.15
2012-2013 RE	83941	14877.12	3643.62	1561.54	104023.1
2013-2014 BE	93631	16373.63	5840.42	1159.92	117004.81

Source: Finance Department-GoK

Graph: 3.1.1: Growth of public expenditure in Karnataka

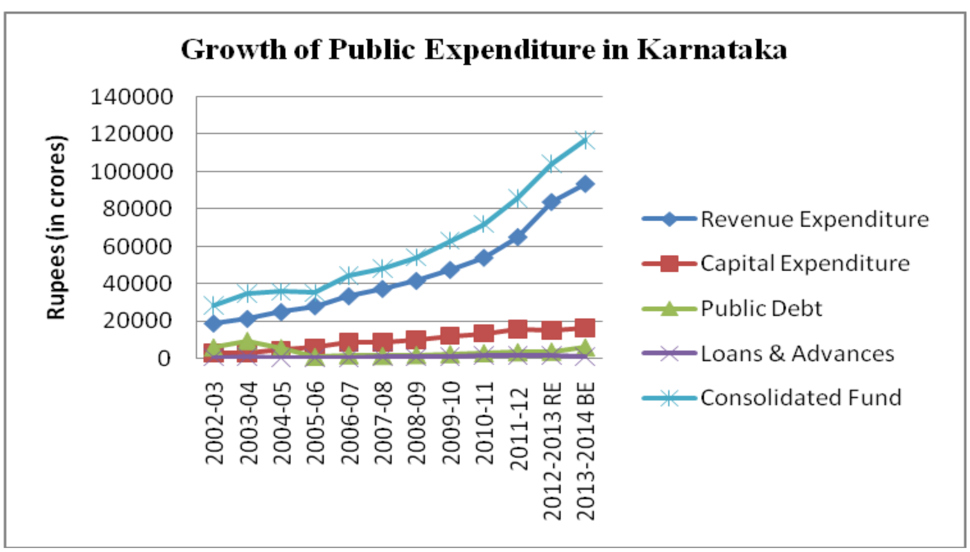
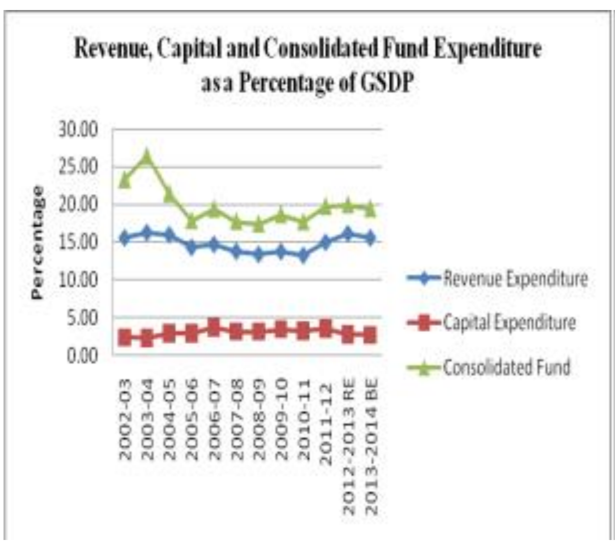
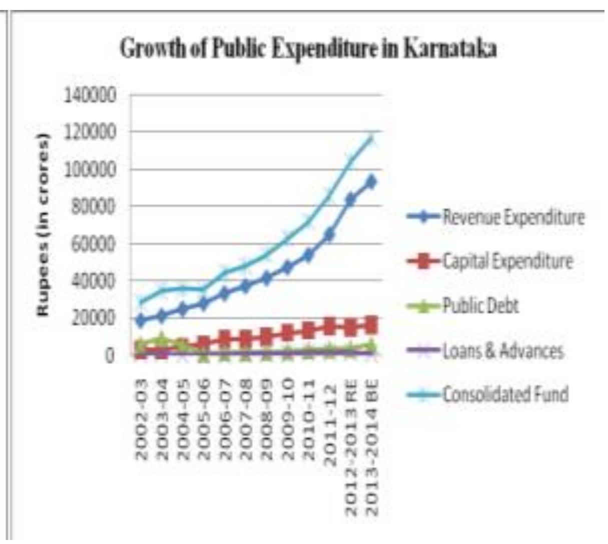


Table 3.3: Public Expenditure as a Percentage of GSDP

Years	Revenue Expenditure	Capital Expenditure	Consolidated Fund
2002-03	15.56	2.43	23.30
2003-04	16.25	2.31	26.45
2004-05	15.96	2.99	21.46
2005-06	14.31	2.97	17.85
2006-07	14.71	3.76	19.40
2007-08	13.81	3.20	17.78
2008-09	13.42	3.18	17.41
2009-10	13.77	3.52	18.65
2010-11	13.29	3.29	17.70
2011-12	14.99	3.57	19.75
2012-2013 RE	16.12	2.86	19.98
2013-2014 BE	15.56	2.72	19.45

Graph 3.1.2 and **Graph 3.1.3: Growth of Public Expenditure in Karnataka**





Growth rate comparisons of GSDP with key fiscal parameters presented in the table 3.1 reveals that the fiscal parameters in Karnataka such as revenue receipts, revenue and capital expenditures have revealed a higher rate of growth than that of GSDP.

Table 3.4: Growth Rate of GSDP: A Comparison with Fiscal Parameters

Time Period	GSDP	Rev Receipts	Rev Exp	Cap Exp	Public Debt	Loans & Advances	Con Fund
1991-92-2001-02	12.77	11.18	12.78	9.37	21.65	3.82	12.43
2002-03-2013-14	13.71	15.82	14.31	16.06	17.36	5.25	12.60
1991-92-2013-14	13.45	13.22	13.03	14.45	23.22	3.64	12.72

Growth in public expenditure: Revenue and Capital categories:

Growth and composition of total Karnataka government expenditure by revenue and capital heads- the former denoting recurring and maintenance expenditure and the latter capital investments[1] incurred by the government is discussed in the following. While the conventional public finance analysis supports growth in capital investments in view of the possible income and asset generation that are generally associated with such investments, the current thinking is that growth in revenue expenditure cannot be denounced either. This is in view of the fact that social sectors such as Education, Health etc are man power intensive, hence largely get accounted under the revenue account. However, this manpower needs to be supplemented with adequate infrastructures such as schools and hospital buildings and other equipments to produce these services. In fact many studies have established that investments in education and health yield high social and economic returns.

Trends in revenue and capital heads of expenditure

An analysis of the broad trends by the revenue and capital expenditure in Karnataka reveals that revenue expenditure has increased sharply from INR 18814 crore in 2002-03 to INR 93631 crore

[1] The current definition of capital investment is not clear- earlier on an investment over and above Rs 1 lakh was considered as capital investment.

in 2013-14 (BE) On the other hand capital expenditure has increased from INR 2936 crore to INR 16373.63 crore during the above reference period (Table 3.2). In terms of annual compound rate of growth (table 3.4) capital expenditure reveals a higher rate at 14.45 percent per annum as compared to that of revenue expenditure at 13.03 percent during 1991-92 to 2013-14 (BE). This sharper growth in capital account has largely occurred during the current decade (after 2002-03) caused by the recovery experienced by the state government finances following pronouncement of FRA and sound revenue position. Rate of growth of capital expenditure during the period 2002-03 to 2013-14 (BE) was 16.06 percent as opposed to 9.37 percent for the previous period (1991-92-2001-02). These are positive trends given the capital investment inadequacy in the past, however, the state needs to further step up these investments given the infrastructure deficit in the state. On an average revenue and capital heads constitute 82.76 and 17.23 percent share in total expenditure; 15.33 and 2.61 percent share in GSDP during the reference time period. (Table 3.5)

Table 3.5: Trends in Revenue and Capital Expenditure

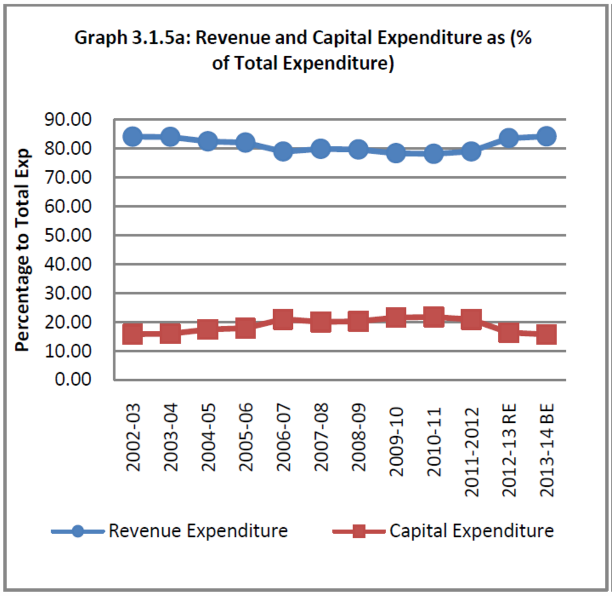
Year	Revenue expenditure (in crores)	Revenue Exp as a % to Total	Revenue Exp as a % to GSDP	Capital expenditure (in crores)	Capital exp as a % to Total	Capital exp as a % to GSDP
2002-03	18814.00	86.50	14.56	2935.99	13.50	2.27
2003-04	21284.72	87.54	14.20	3029.40	12.46	2.02
2004-05	24522.85	83.99	14.60	4673.68	16.01	2.78
2005-06	28040.90	82.81	14.89	5821.93	17.19	3.09
2006-07	33435.43	79.65	15.53	8542.57	20.35	3.97
2007-08	37374.77	81.21	15.99	8648.94	18.79	3.70
2008-09	41659.29	80.85	13.42	9870.29	19.15	3.18
2009-10	47536.92	79.66	13.76	12136.68	20.34	3.51
2010-11	54034.00	80.18	13.29	13355.16	19.82	3.29
2011-12	65115.00	80.77	14.06	15505.65	19.23	3.35
2012-2013 RE	83941.00	84.94	15.91	14877.12	15.06	2.82
2013-2014 BE	93631.00	85.12	15.56	16373.63	14.88	2.72

Source: ***Government of Karnataka, various budget documents***

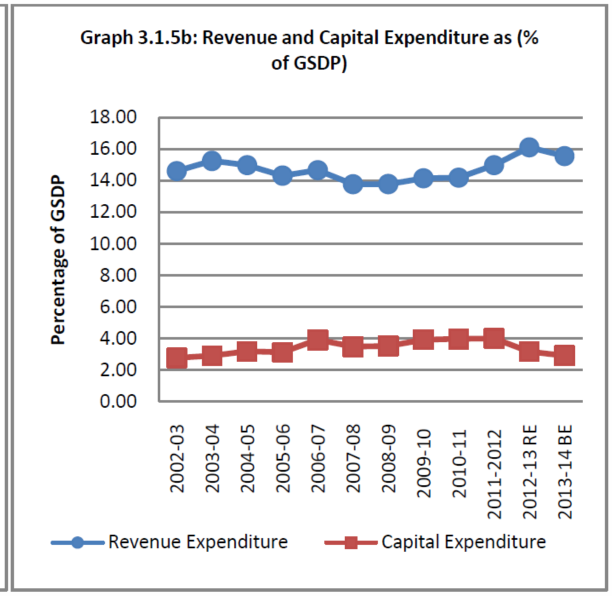
This clearly accounts for the fact that although capital expenditure has quite a small share in the total expenditure, its share has been largely on the increase in the current decade. However, this can be further stepped up to at least 5 percent of the GSDP and insulated from any kind of future fiscal adversities in order to address the infrastructure inadequacies in the state and sustain the rapid economic growth experienced by the state in the recent past.

Table 3.6: Compound Annual Growth Rate

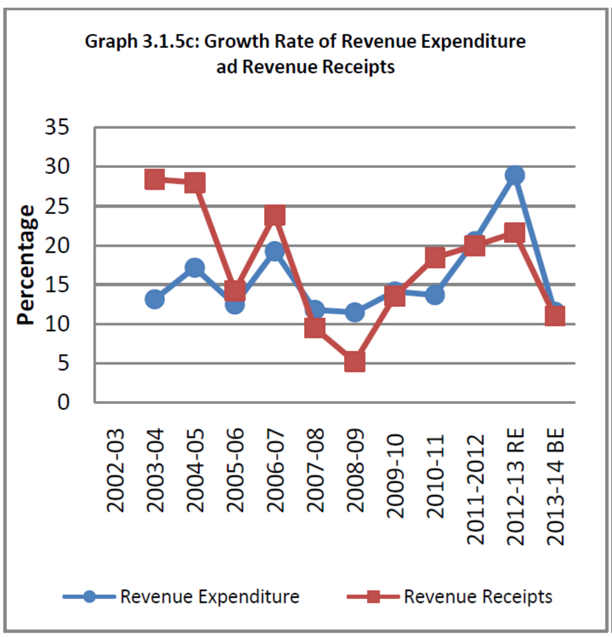
Year	Revenue Exp	Capital Exp	Total Exp
CAGR 1991-92 to 2013-14	13.63	14.45	13.75
CAGR 1991-92 to 2002-03	12.78	9.37	12.37
CAGR 2003-04 to 2013-14	14.31	14.2	14.29



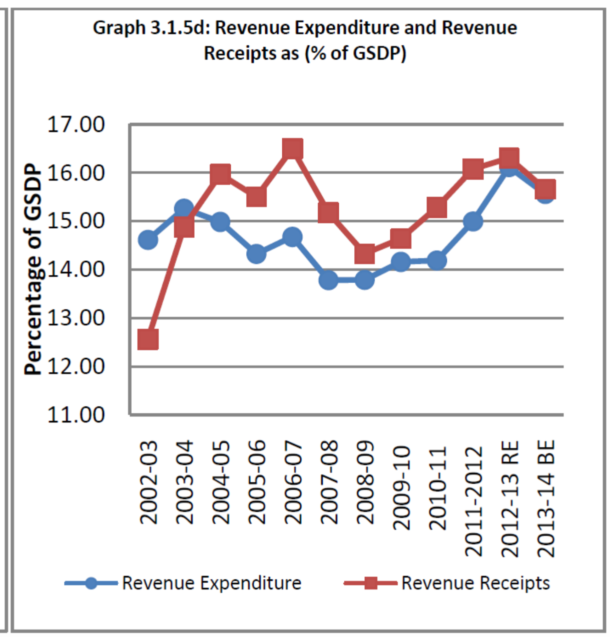
Graph 3.1.5a: Revenue and Capital Expenditure as (% of Total Expenditure)



Graph 3.1.5b: Revenue and Capital Expenditure as (% of GSDP)



Graph 3.1.5c: Growth Rate of Revenue Expenditure ad Revenue Receipts



Graph 3.1.5d: Revenue Expenditure and Revenue Receipts as (% of GSDP)

Government Revenue Expenditure Vis-à-vis Revenue Receipts:

Revenue receipts fell short of revenue expenditure for a number of years after the 1980s and also in 2002-03, as revenue receipts could meet only 85.9 percent of revenue expenditure, the rest being financed from borrowed funds. However, since the launch of fiscal reform processes in the state (FRA, 2003) the state finances have been experiencing a revenue led recovery. Revenue receipts as percent of revenue expenditure has increased from 107 percent in 2004-05 to reach its peak of 112 percent in 2006-07, while the revenue surplus continues to be present during the time period covered in the study, the margin has reduced and remains at 101 percent during the last two years, i.e 2012-13 1nd 2013-14.

Sources of financing revenue expenditure:

State's own tax revenue has increasingly financed the revenue expenditure – its contribution increasing from 55.5 percent in 2002-03 to 65.2 percent in 2013-14 (BE). Non tax revenue on the contrary has been a sharply declining source. With reference to the central share in taxes and grants, the former has had a marginal increase from 14.8 percent to 15.4 percent while that of latter has had a larger increase from 8.9 percent to 16 percent constituting the second largest share. This implies that the support that is received from the Central government is tilting more towards discretionary support rather than an entitlement which is of concern for fiscally efficient states like Karnataka. The state's own tax revenue has been a major source of financing of the revenue expenditure.

Graph 3.1.6: Sources of Financing of Revenue Expenditure

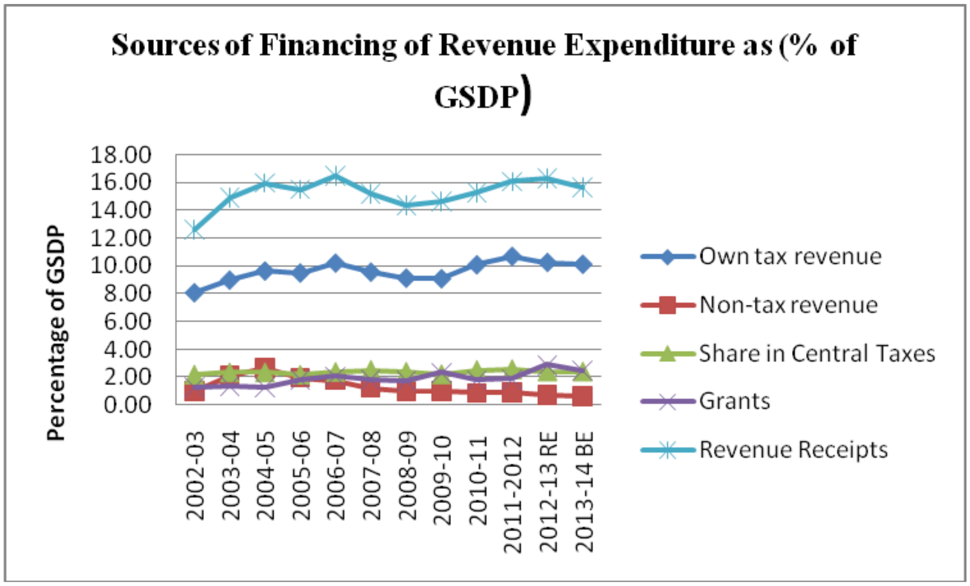
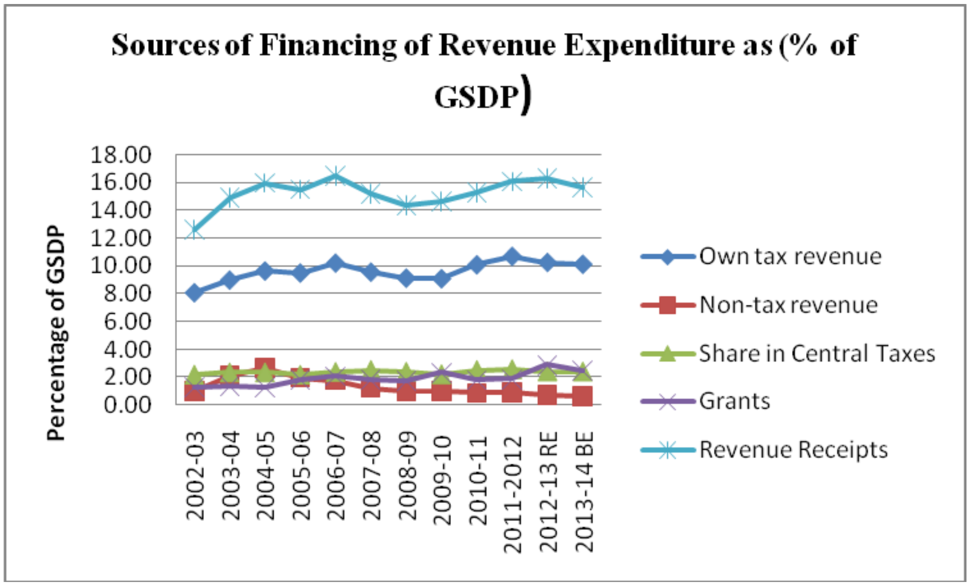


Table No.3.7: Sources of Financing of Revenue Expenditure

Year	Own tax revenue	As a % to RE	Non-tax revenue	As a % to RE	Share in Central Taxes	As a % to RE	Grants	As a % to RE	Total Revenue Receipts	As a % to RE	Total Revenue Exp
2002-03	10440	55.50	1278.00	6.80	2786	14.80	1665	8.90	16169	85.9	18815
2003-04	12570	59.10	2958.00	13.90	3245	15.20	1987	9.30	20760	97.5	21285
2004-05	16072	64.50	4472.00	17.90	3878	15.60	2147	8.60	26570	107	24932
2005-06	18632	66.40	3875.00	13.80	4213	15.00	3632	13.00	30352	108	28041
2006-07	23301	69.70	4098.00	12.30	5374	16.10	4813	14.40	37587	112	33435
2007-08	25987	69.50	3358.00	9.00	6779	18.10	1531	4.10	37655	101	37375
2008-09	27646	66.40	3159.00	7.60	7154	17.20	5332	12.80	43291	104	41659
2009-10	30579	64.30	3333.80	7.01	7360	15.48	7883	16.60	49155	103	47536
2010-11	38473	71.20	3358.28	6.22	9506	17.59	6868	12.70	58206	108	54034
2011-12	46476	71.40	4086.86	6.28	11075	17.01	8168	12.50	69806	107	65115
2012-13 RE	53492	63.70	3796.33	4.52	12500	14.89	15095	18.00	84884	101	83941
2013-14 BE	61012	65.20	3838.28	4.10	14375	15.35	14991	16.00	94216	101	93631

Source: Government of Karnataka, Finance Department, Accounts at a Glance and Medium Term Fiscal Plan, different issues

Graph 3.1.7: Sources of Financing of Revenue Expenditure as a Percentage of GSDP



Income elasticity of expenditure to GSDP:

An attempt has been made to statistically estimate the responsiveness of revenue expenditure to the GSDP in Karnataka. The effect of fiscal reforms in the state are captured by bifurcating the time period into 1987-88 to 2002-03 and 2003-04 to 2009-10- pertaining to the post FRA period by introducing a slope dummy for the second time period (2003-04 to 2013-14 BE) and the results are presented in table It can be observed that overall revenue expenditure changes by 1.76 percent with every one percent increase in GSDP and that of revenue receipts increases by 1.75 percent. The slope dummy is not significant for revenue expenditure during the reform phase implying that its growth is unaffected by the reforms. On the contrary the slope dummy is significant for the revenue receipts implying that there has been a positive impact of the reforms on the growth of revenue receipts- these are the results of revenue reforms introduced by the state government during the current decade. The unabated growth in expenditure reflects that there were no significant measures to contain expenditure by the government. The revenue led recovery will not help sustain the fiscal recovery in the long run and the government has to consciously reform the expenditure side of the budget in order to sustain the sound fiscal health achieved in the recent past.

Table 3.8

1. $\text{Log } TRE_t = a + b \log GSDP_t + c \log GSDP_{t-1} + d\ dummy_t * GSDP_t + e$

Here, $dummy_t = 0$ for the period1987-88 to 2002-03

= 1 for the period 2003-04 to 2009-10

Independent variable	Coefficient
Constant	-10.723***
Log $GSDP_t$	0.020*
Log $GSDP_{t-1}$	1.760***
$Dummy_t$ *$GSDP_t$	-0.001
R^2	0.99
F	767.84
Time period	1987-88 to 2009-10

* = 10% level, ** = 5% level, ***=1% level

2. $\text{Log } TRR_t = a + b \log GSDP_t + c \log GSDP_{t-1} + d\ dummy_t * GSDP_t + e$

Independent variable	Coefficient
Constant	-9.413***
Log $GSDP_t$	1.750***
Log $GSDP_{t-1}$	0.092**
$Dummy_t$ *$GSDP_t$	0.017**
R^2	0.98
F	477.46

Government expenditure and economic growth:

Theoretical literature suggests that the causality between GDP and expenditure is not one sided, expenditure too impacts the GDP. A number of studies have attempted empirical testing of impact of public expenditure on economic growth. Varied methodologies have been used in terms of the model specifications and components of public expenditure. Studies that have attempted to analyze the differential impacts of government consumption and capital investments (Ram, 1986, Rao, 1989, Aschauer, 1989) have observed a positive impact of the latter on growth. Devarajan et al, 1996 argue by analyzing the composition of public expenditure that excessive spending on capital spending by the developing countries is tending to become unproductive, Tanzi and Zee, 1997 providing a systematic discussion of the existing literature of the issues relating to fiscal policy and long run growth argue that the traditional approach of diving the expenditure into Public consumption and investment can be problematic in the assessment of growth implications of public expenditure. Instead they advocate classification of expenditure into productive (growth inducing which would include expenditures like education etc along with infrastructure investments) and non productive (growth retarding) categories. Empirical estimations of growth implications of public expenditure have been attempted in Indian context also. (Gayithri, 1988, Khunderakpam, 2003 and Pattnaik, R.K et al, undated) Gayithri using the Granger's bidirectional causality test analyses the relationship between the total government expenditure and the GSDP (for the time period 1957-58 to 1984-85) and observes that GSDP has a greater influence on expenditure as compared to that of expenditure on GSDP. Khunderakpam analyses the dynamic interaction between the public expenditure and national income in India for the time period 1960-61 to 1996-97 and finds that in the long run causality strictly runs from public expenditure to national income and that of national income to public expenditure is weak. In the short run the impact of growth in public expenditure on income growth is negative and it is argued that public expenditure turns negative when it is excessive, however, the paper does not provide any convincing argument to prove that the government expenditure is excessive in Indian context. Pattnaik et al have observed that gross capital formation in the public sector has a positive impact on the GDP; the paper also observes that the impact is even stronger in the post reform phase i.e. during 1992 to 2004 as compared to the pre reform phase of 1950-1991

An attempt has been made in the present study to examine the impact of government expenditure on economic growth at a disaggregate level- revenue expenditure and capital expenditure. All the variables are specified in per capita real terms and a log linear specification is used for the purpose. The analysis pertains to the time period 1987-88 to 2013-14 BE. The results using the following log linear specification are presented in the table 3.9 a. Results reveal that both revenue and capital expenditures have a positive impact on the GSDP. The elasticity of income with reference to revenue expenditure is higher with 0.702 values implying that with every one unit increase in revenue expenditure the state income increases by 0.702 units and that of capital expenditure is 0.274. An inter-state analysis of the bi directional causality comparing Karnataka with other states is presented in table 3.9 b. The states like Haryana, Maharashtra and Tamilnadu reveal a lesser responsiveness of public expenditure to GSDP as compared to that of Karnataka; however that of their GSDP to public expenditure is higher than that of Karnataka. The finding that expenditure in certain other states has a greater impact on the GSDP could be due to many factors ranging from the composition of public expenditure to the way the programs get executed and needs a detailed study by itself before any conclusions can be drawn.

Table 3.9a

ln(GSDP) = a + b ln (Real Per Capita rev. Exp) +c ln (percap real cap ex) + e

Variable	Coefficients
Constant	2.569***
Capital Expenditure	0.274***
Revenue Expenditure	0.702***
R2	0.98
F	4208.90

* = 10% level, ** = 5% level, ***=1% level

ln(Real Per Capita Expenditure) = a + b ln(GSDP) + e

ln(GSDP) = a + b ln(Real Per Capita Expenditure) + e

Table No: 3.9 b : Inter State Comparison

States	GSDP to Per cap Exp		Per cap exp to GSDP	
	Constant(a)	Elasticity (b)	Constant(a)	Elasticity (b)
Andhra Pradesh	0.047	0.419***	2.603	1.834***
Bihar	0.038	0.162	10.530	0.075
Gujarat	2.761	0.190***	2.881	1.949***
Haryana	2.937	0.180***	-1.891	2.592***
Karnataka	1.466	0.309***	-0926	2.463***
Kerala	0.710	0.414***	0.646	2.214***
Madhya Pradesh	-1.270	0.532***	7.438	0.794***
Maharashtra	2.170	0.228***	-0.883	2.638***
Orissa	2.998	0.157***	2.833	1.658***
Punjab	2.423	0.258***	4.785	1.175***
Rajasthan	1.597	0.302**	-2.864	2.820***
Tamil Nadu	1.703	0.290***	-2.664	2.816***
Uttar Pradesh	2.743	0.151	8.435	0.773
West Bengal	0.678	0.359***	2.343	1.911***

* = 10% level, ** = 5% level, ***=1% level

IV Composite Index of Expenditure Management and Fiscal space

Composite index of expenditure management:

A summary measure to understand the efficacy with which the government expenditure is managed enables comparison across regional governments and over time. Fiscal health of the state governments has been assessed by International Center for Information systems and Audit (ICISA, 2004) using four major components of state finances:

-Resource mobilization

-Expenditure management

- Management of fiscal imbalances

- Management of fiscal liabilities

The present study has applied this methodology in estimating the Composite Expenditure Management Index (CEMI) in a slightly modified manner. The parameters used for the estimation of CEMI include:

- Development expenditure (DE)/ Total expenditure
- Capital Expenditure (CE)/ Total expenditure
- Own resources (Tax +Non tax rev ,(OR)/ Revenue expenditure (RE)
- Interest payments(IP)/ Revenue Receipts (RR)
- Interest payments(IP)/ Revenue expenditure (RE)
- Capital expenditure and loans disbursed (CEL)/ Total expenditure including loans and advances.
- Plan expenditure (PE)/ Total expenditure

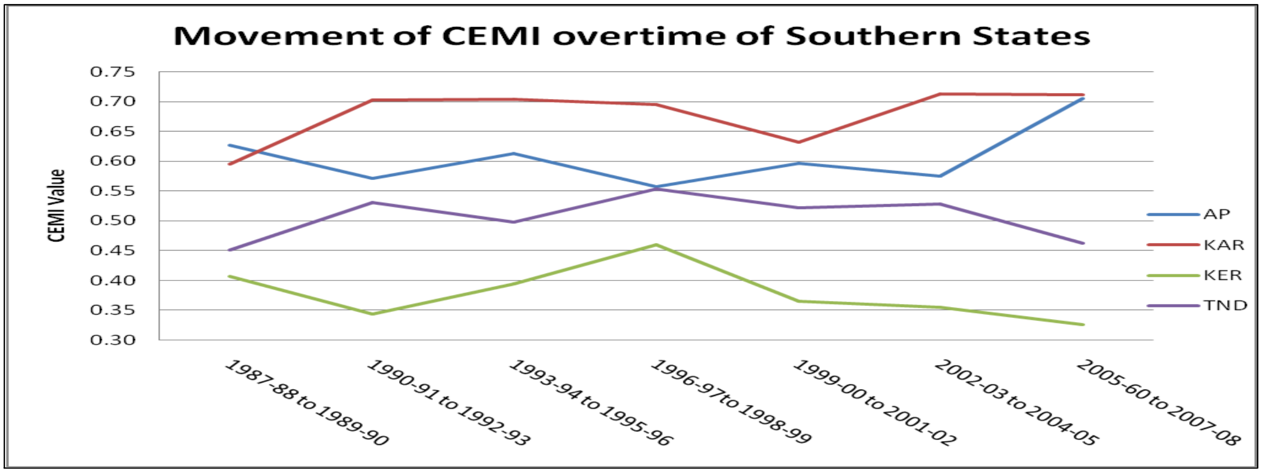
Methodology adopted by the study (ICISA, 2004) is same as that of Human Development Index of UNDP. (Detailed note presented in annexure 3A) The present study has analyzed the expenditure management index and the results for Karnataka and other major states are presented in the following table 3.10.

Table No. 3.10: Composite Expenditure Management Index of Major States in India

Year	AP	BIR	GUJ	HAR	KAR	KER	MP	MAH	ORS	PJB	RAJ	TND	UP	WB
1987-88 to 1989-90	0.63	0.51	0.48	0.65	0.59	0.41	0.53	0.46	0.42	0.37	0.31	0.45	0.24	0.32
1990-91 to 1992-93	0.57	0.33	0.55	0.64	0.70	0.25	0.56	0.50	0.48	0.44	0.46	0.53	0.33	0.29
1993-94 to 1995-96	0.61	0.32	0.52	0.59	0.70	0.30	0.48	0.63	0.42	0.28	0.44	0.50	0.30	0.36
1996-97to 1998-99	0.56	0.27	0.56	0.69	0.70	0.36	0.58	0.49	0.45	0.29	0.45	0.55	0.24	0.34
1999-00 to 2001-02	0.60	0.41	0.56	0.74	0.63	0.26	0.52	0.53	0.40	0.34	0.34	0.52	0.26	0.23
2002-03 to 2004-05	0.58	0.44	0.50	0.54	0.71	0.27	0.65	0.64	0.41	0.40	0.38	0.53	0.46	0.15
2005-06 to 2007-08	0.71	0.49	0.42	0.47	0.71	0.27	0.56	0.69	0.30	0.42	0.41	0.46	0.42	0.13
2008-09 to 2010-11	0.81	0.52	0.43	0.73	0.63	0.32	0.56	0.59	0.46	0.46	0.38	0.46	0.45	0.15
2011-12 to 2012-13	0.72	0.76	0.45	0.43	0.63	0.31	0.43	0.37	0.39	0.27	0.40	0.43	0.48	0.08

The results reveal that Karnataka's expenditure management has been exemplary (as revealed by the broad expenditure parameters included in the analysis) over time and across states. The index has improved from 0.59 levels during the late eighties to 0.70 during decade of nineties, further improving to 0.71 during 2002-03 to 2007-08, declining to 0.63 for the remaining period. States like Andhra Pradesh and Bihar have better index than Karnataka for the period 2011-12 and 2012-13. A comparison of CEMI for four southern states is presented in the following graph 3.8 a.

Graph: 3.1.8



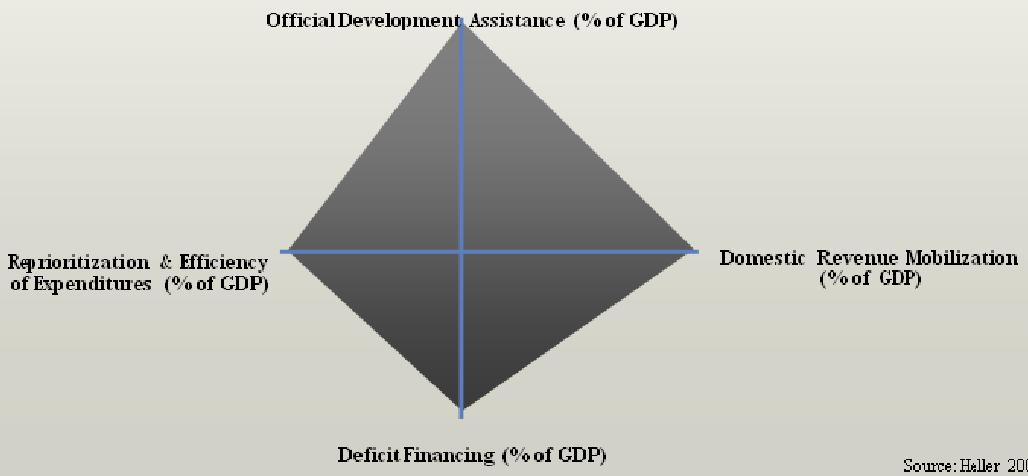
Fiscal Space:

'Fiscal space' can be enhanced by governments through alternative means such as enhancement of tax and non tax resources; reprioritizing expenditure, enhancing allocative and technical efficiency; increasing Official Development assistance including grants, loans and debt relief; financing public expenditure by borrowing from domestic and international sources. (Heller, 2005 as presented in the fiscal space diamond chart presented below.) An important source in addition to the tax and non tax resources that is completely under the control of the state governments is the option to create fiscal space by reprioritizing expenditure to reduce low priority expenditure and enhance the cost effectiveness of spending. This helps in providing additional cushion to enhance productive expenditure by retaining the tax and debt burden unchanged.

Box 5.2: The Fiscal Space Diamond

The fiscal space diamond has four 'pillars' that collectively constitute the universe of avenues to secure fiscal space with the area of the diamond representing the aggregate fiscal space available in the country. The diamond does not include seigniorage (i.e., issuing new currency), which is not commonly considered to be a desirable option due to its inflationary effects. Governments can create fiscal space through the following types of fiscal instruments:

1) Domestic revenue mobilization through improved tax administration or tax policy reforms
2) Reprioritization and raising efficiency of expenditures
3) Official Development Assistance (ODA) through aid and debt relief
4) Deficit financing through domestic and external borrowing



Source: Heller 2005

Large-scale committed expenditures of various kinds such as wages and salaries, pension payments, interest payments restrict the government's fiscal capability to enhance productive expenditure. In addition, MTFP argues that the committed grants-in-aid and the stipulated transfers to the local bodies too reduce the scope for expenditure by the state government. Details of committed expenditure as discussed in a study on public expenditure review in Karnataka are presented below (Gayithri, 2011)

With the exception of devolution to PRIs the other committed items (there has been an under provision for the subsidy heads, the details of which are not readily available to us) have had a reduced share in the total revenue resources, expenditure, GSDP and Own tax Revenue as presented below in a significant manner.

In addition to gaining of fiscal space by way of reducing expenditure on committed items, efficiency gains can be achieved by way of effective implementation of programs, reprioritization of expenditure. Heller aptly states that "It is also important to note that not spending an adequate amount in a sector (say, health) may weaken the sector to the extent that it would in the future be costly and time consuming to 'rebuild' the sector." (Heller, 2004, 8) This applies to many other sectors in Indian context such as capital expenditure and maintenance of assets created.

Table No. 3.11.a: Committed Items of Expenditure as a Percentage of Revenue Expenditure

Years	Empt. related	Interest	Subsidy	Grants-in-Aid	Devolution to PRIs	Committed Exp.	Balance
2001-02	35.56	14.42	16.08	5.88	9.00	88.74	11.26
2002-03	35.41	17.50	12.01	6.23	9.75	89.57	10.43
2003-04	33.67	17.43	10.02	5.81	7.82	90.59	9.41
2004-05	30.70	15.47	11.12	7.55	9.34	91.65	10.02
2005-06	28.96	13.43	13.26	5.83	11.76	90.26	9.74
2006-07	27.00	12.67	13.04	5.33	11.94	89.17	10.83
2007-08	31.13	12.06	15.15	5.54	11.04	90.60	9.40
2008-09	33.71	10.88	8.20	4.48	11.91	89.27	10.73
2009-10	28.80	10.97	8.99	4.70	11.54	79.70	20.30
2010-11 BE	32.14	11.89	8.55	5.50	10.94	79.43	20.57

Source: Gayithri, K, 2011

Table No. 3.11.b: Committed Items of Expenditure as a Percentage of Revenue Receipts

Years	Empt. related	Interest	Subsidy	Grants-in-Aid	Devolution to PRIs	Committed Exp	Balance
2001-02	43.18	17.51	19.53	7.14	10.93	107.77	13.67
2002-03	41.20	20.36	13.97	7.25	11.35	104.22	12.14
2003-04	34.52	17.87	10.27	5.96	8.02	92.88	9.64
2004-05	28.34	14.28	10.26	6.97	8.62	84.58	9.25
2005-06	26.76	12.40	12.25	5.38	10.86	83.38	9.00
2006-07	24.02	11.27	11.60	4.75	10.62	79.32	9.64
2007-08	30.90	11.97	15.03	5.50	10.96	89.93	9.33
2008-09	32.44	10.47	7.89	4.31	11.47	85.91	10.32

2009-10	29.50	11.23	9.21	4.82	11.83	81.64	20.80
2010-11 BE	31.84	11.78	8.47	5.45	10.84	78.69	20.37

Source: Same as 3.1.1a

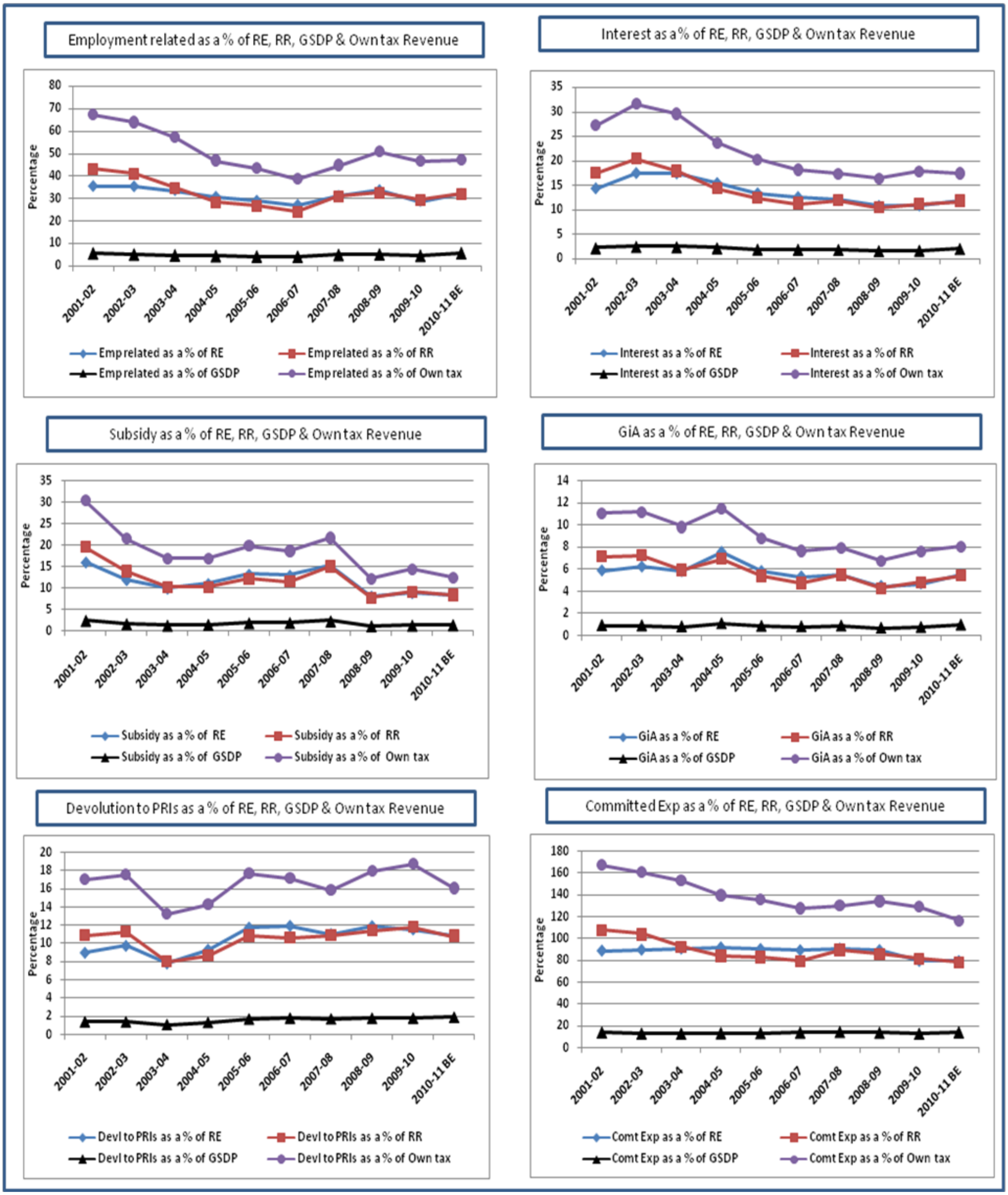
Table No. 3.11.c: Committed Items of Expenditure as a Percentage of GSDP

Years	Empt. related	Interest	Subsidy	Grants-in-Aid	Devolution to PRIs	Committed Exp	Balance
2001-02	5.61	2.28	2.54	0.93	1.42	14.00	1.78
2002-03	5.16	2.55	1.75	0.91	1.42	13.04	1.52
2003-04	4.78	2.48	1.42	0.83	1.11	12.87	1.34
2004-05	4.48	2.26	1.62	1.10	1.36	13.38	1.46
2005-06	4.31	2.00	1.97	0.87	1.75	13.44	1.45
2006-07	4.19	1.97	2.03	0.83	1.85	13.85	1.68
2007-08	4.98	1.93	2.42	0.89	1.76	14.48	1.50
2008-09	5.19	1.67	1.26	0.69	1.83	13.74	1.65
2009-10	4.64	1.77	1.45	0.76	1.86	12.84	3.27
2010-11 BE	5.72	2.12	1.52	0.98	1.95	14.14	3.66

Table No. 3.11.d: Committed Items of Expenditure as a Percentage of Own Tax Revenue

Year	Empt. related	Interest	Subsidy	Grants-in-Aid	Devolution to PRIs	Committed Exp	Balance
2001-02	67.15	27.23	30.37	11.10	16.99	167.57	21.26
2002-03	63.81	31.53	21.64	11.22	17.58	161.42	18.80
2003-04	57.02	29.51	16.96	9.84	13.25	153.40	15.93
2004-05	46.85	23.61	16.96	11.51	14.26	139.83	15.29
2005-06	43.59	20.21	19.96	8.77	17.69	135.84	14.66
2006-07	38.74	18.18	18.71	7.66	17.13	127.95	15.55
2007-08	44.77	17.34	21.78	7.97	15.88	130.31	13.51
2008-09	50.79	16.39	12.35	6.75	17.95	134.52	16.17
2009-10 RE	46.66	17.77	14.57	7.62	18.71	129.13	32.90
2010-11 BE	47.14	17.43	12.54	8.07	16.05	116.51	30.17

Graph: 3.1.9: Committed Items of Expenditure



Revenue and Capital expenditure trends in Southern States:

A comparative trend analysis of revenue and capital expenditure in four southern states is presented in table 3.12 and graphs 3.1.10 a to 3.1.10 d. Important observations from this analysis are that Karnataka's public expenditure ratio (Expenditure as percent of GSDP) is largely higher than all other southern states. (Kerala exceeds that of Karnataka in 1990-91 and Tamilnadu exceeds in 2008-09) By and large all the four states have a reduced share in 2012-13, AP has the largest share followed by Karnataka. It can also be observed that Karnataka has higher share in capital expenditure to GSDP than Tamilnadu and Kerala; Andhra Pradesh however has a higher share than Karnataka. In terms of per capita capital expenditure also Karnataka and Andhra Pradesh have higher levels; this has further increased after 2000-01. From these trends it can be inferred that while Karnataka's performance in terms of its allocation to capital investments may not have been very satisfactory, these trends compare well with the other southern states.

Table 3.12: Trends in Revenue and Capital Expenditure in Southern States

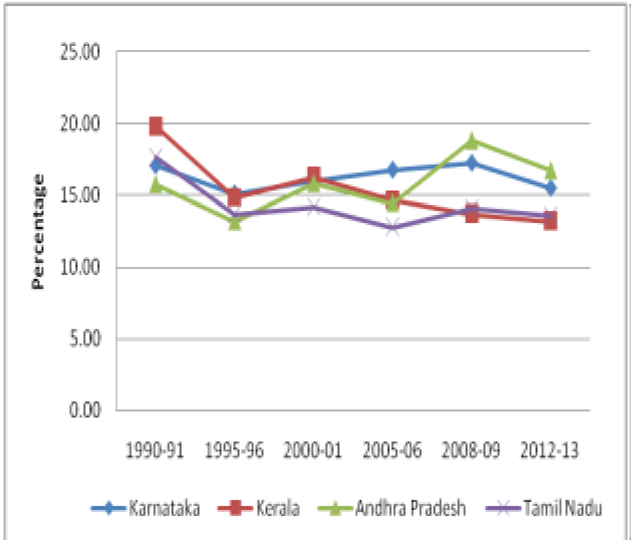
Yea	Name of the	Total Revenue Exp.	Total Capital Exp.	Grand Total Exp.

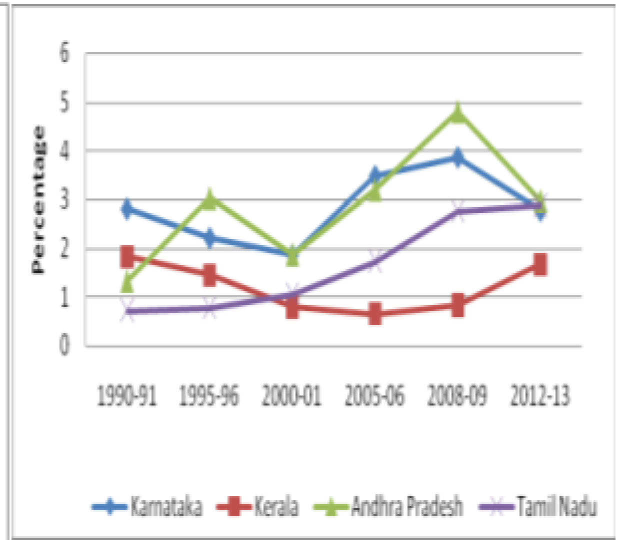
r	State	% to Grand Total Exp.	% to GSDP (current price)	Per - Capita (in Rs.)	% to Grand Total	% to GSDP (current price)	Per - Capita (in Rs.)	% to Grand Total Exp.	% to GSDP (current price)	Per - Capita (in Rs.)
1990-91	*Karnataka*	85.84	17.04	878.5	14.1	2.81	144.8	100.00	19.85	1023.4
	Kerala	91.60	19.81	1374.	8.40	1.82	88.57	100.00	21.62	1613.0
	Andhra	92.20	15.76	827.9	7.80	1.33	70.09	100.00	17.09	898.06
	Tamil Nadu	96.13	17.65	996.9	3.87	0.71	40.09	100.00	18.36	1037.0
1995-96	*Karnataka*	87.24	15.09	1713.	12.7	2.21	250.5	100.00	17.29	1952.1
	Kerala	91.08	14.84	1898.	8.92	1.45	185.9	100.00	16.29	2084.0
	Andhra	81.31	13.19	1467.	18.6	3.03	337.3	100.00	16.23	1804.7
	Tamil Nadu	94.77	13.68	1813.	5.23	0.76	100.1	100.00	14.44	1916.6
2000-01	*Karnataka*	89.55	15.97	3142.	10.4	1.86	366.6	100.00	17.83	3508.8
	Kerala	95.35	16.27	3729.	4.65	0.79	182.0	100.00	17.07	3911.6
	Andhra	89.37	15.83	3013.	10.6	1.88	358.3	100.00	17.71	3372.3
	Tamil Nadu	93.07	14.15	3339.	6.93	1.05	249.1	100.00	15.21	3594.3
2005-06	*Karnataka*	82.81	16.75	4962.	17.1	3.48	1030.	100.00	20.23	5993.4
	Kerala	95.75	14.67	5549.	4.25	0.65	246.8	100.00	15.32	5812.8
	Andhra	81.91	14.47	4320.	18.0	3.20	954.1	100.00	17.67	5274.1
	Tamil Nadu	88.09	12.77	4612.	11.9	1.73	623.7	100.00	14.49	5244.1
2008-09	*Karnataka*	81.67	17.23	7237.	18.3	3.87	1623.	100.00	21.10	8861.5
	Kerala	94.34	13.71	7679.	5.66	0.82	460.7	100.00	14.54	8140.4
	Andhra	79.64	18.82	8435.	20.3	4.81	2156.	100.00	23.62	10591
	Tamil Nadu	83.61	14.10	7203.	16.3	2.76	1413.	100.00	16.86	8627.9
2012-	*Karnataka*	***84.78***	15.46	1355	15.2	2.78	2433.	100	18.24	14935
	Kerala	***88.73***	13.19	1495	11.2	1.68	1899.	100	14.86	15991
	Andhra	***84.91***	16.72	1326	15.0	2.97	2359.	100	19.70	13770
	Tamil Nadu	***82.48***	13.58	1457	17.5	2.88	3094.	100	16.47	16646

Note: a) For the State, Kerala, Andhra-Pradesh and Tamil Nadu considering 2008-09 data as BudgetEstimate

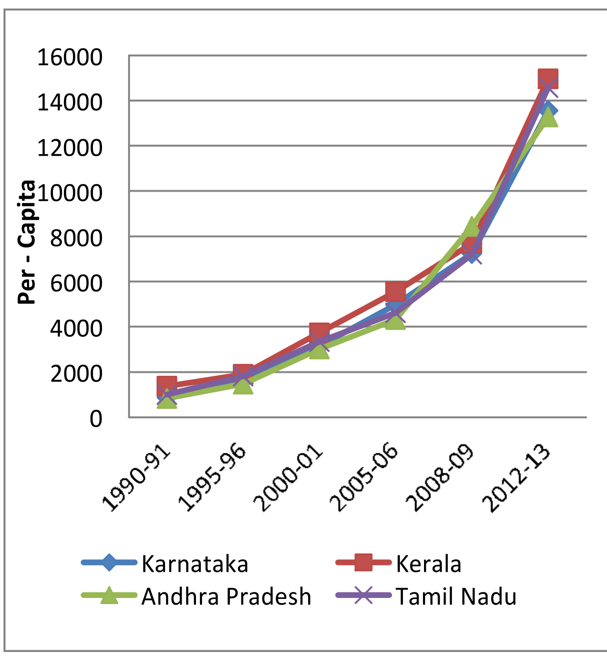
b) Grand Total Expenditure implies addition of expenditure in General Service, Social Service and Economic Service. c) Total expenditure implies addition of total revenue & total capital expenditure.

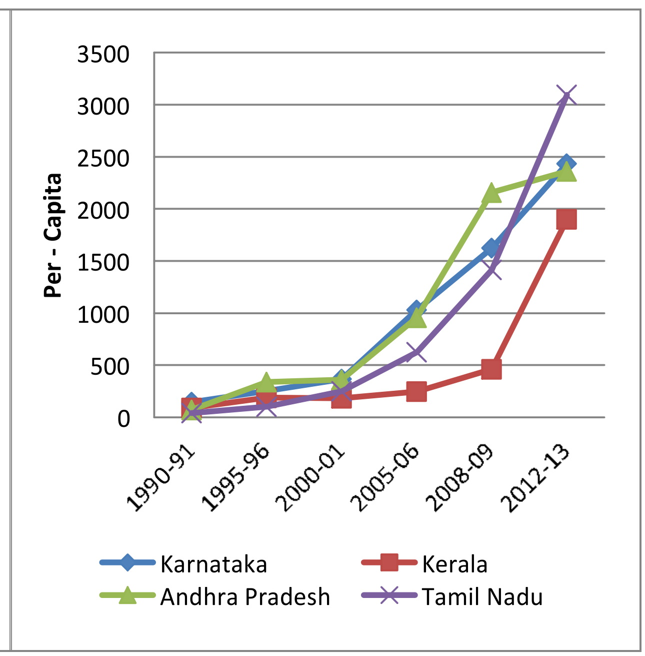
Graph 3.1.10a and 3.1.10b: Four Southern States Revenue Expenditure and Capital Expenditure as a Percentage of GSDP respectively.





Graph 3.1.10.c and 3.1.10d: Per Capita Revenue Expenditure and Capital Expenditure in Four Southern States respectively.





Given the infrastructure deficiencies Karnataka has to enhance its infrastructure investments and protect the same from fiscal adversities. The state wise infrastructure development index details are presented in table 3.13. It reveals the following:

- Karnataka state's infrastructure development index computed by the CMIE is above the national average, but ranks at 9th position with an index value of 106.12 as opposed to the top ranking Punjab's value of 171.92.
- Kerala and Tamilnadu too are much better placed in the 3rd and 4th places respectively and with an index value much above that of Karnataka. In terms of per capita expenditure and in relation to GSDP, it has been observed earlier that Karnataka fares better- an aspect that requires careful analysis as to where the problem lies.
- Karnataka state compares well with other states in terms of rural infrastructure. The low yield of food grains per hectare is an issue for concern and requires a deeper probe.

Table 3.13: State-wise Infrastructure Development Index

State	CDI Value	Rank	Rural Infra Index	Rank	Yield of food grains per hectare (kg)
Andhra Pradesh	104.01	12	53.60	10	1713(7)
Haryana	133.12	5	65.90	4	2730(2)
Karnataka	106.12	9	56.80	5	1152(12)
Kerala	162.42	3	70.00	2	1873(6)
Maharashtra	106.77	8	54.40	8	852(17)
Punjab	171.92	1	85.30	1	3684(1)
Tamil Nadu	145.62	4	68.40	3	2358(3)
All India	100.00				

Source: Gayithri, K,2011

The infrastructure inadequacy is further corroborated by the survey results of World Bank and International Finance Corporation (2004) to assess the investment climate. The report observes that infrastructure is rated as a major bottleneck in Karnataka, more so that of power supply. Transport too is another serious bottleneck faced by the investors.

Table 3.14: Investment Related Bottlenecks Encountered in States (Percent to respondents)

	Maharashtra	Gujarat	UP	Karnataka	TN	AP
Infrastructure	31.6	24.4	51.7	61.2	40.91	17.26
Power Supply	22.3	5.7	38.1	59.3	46.3	41.1
Transport	3.5	3.1	6.1	50.3	43.5	1.4

Source: The World Bank and IFC, 2004 as cited in Gayithri 2011

Functional distribution of public expenditure:

Distribution of expenditure by the functions performed by the government which generally depicts government expenditure as under 'General Services' 'Social and Community services' and 'Economic Services' is discussed in the present chapter. Generally in government parlance the latter two categories are treated as 'development' expenditure while the former is treated as 'non-development' expenditure. This categorization is also a subject of important ongoing debates. This is in view of the fact that items of expenditure falling under the General Services are essential support services, thus cannot strictly be treated as non-development expenditure. For that matter any wasteful or inefficient spending under the so called development expenditure under social and economic services should be treated as non developmental expenditure.

Growth of expenditure under functional categories:

Absolute expenditure incurred under each of the functional categories for the time period 2002-03-92 to 2013-14 (BE) are presented in table 3.15 which has generally revealed an increasing trend. The compound annual rates of growth presented in table 3.16 reveal that social and community services have experienced the highest rate at 16.08 percent per annum as opposed to 11.86 and 14.01 percent growth in the general and economic services respectively. The current decade has seen a good gain in the social and community and economic services as opposed to the highest rate of growth revealed by the general services expenditure in the decade of nineties. Growth rates for the time period 2002-03 to 2013-14

(BE) are 11.86, 16.08, 14.01 for general, social and community and economic services respectively. This accounts for an increased focus on the social and economic services by the Government of Karnataka which certainly a very welcome trend given the slow improvement in the Human Development Index (HDI) of the state. Per capita expenditure trends presented in chart 3.1.11c also account for these.

Table 3.15: Expenditure by Functional Categories (Rupees in crores)

Year	**General Services**	**Social Services**	**Economic Services**
2002-03	7187.97	6621.55	7367.26
2003-04	9167.56	7392.26	7125.45
2004-05	10036.46	8208.79	10152.94
2005-06	10253.74	10004.09	12446.03
2006-07	10740.36	12229.33	17369.25
2007-08	11210.8	15271.35	17615.56
2008-09	12750.94	18428.15	17976.4
2009-10	13252	21770	22178
2010-11	14520	24725	25165
2011-12	17071	27867	31339
2012-13 RE	21786	35688	36333
2013-14 BE	27595	39653	35568

Source: Government of Karnataka, Accounts at a glance for 1960-2009 and Finance Department Nov-09

Note: Total Functional categories of expenditure include both revenue and capital expenditure.

Table 3.16: Compound Annual Growth Rate (in Percentage)

Year	General Services	Social Services	Economic Services
1991-92 to 2013-14	13.71	14.05	12.72
1991-92 to 2001-02	14.33	11.91	11.15
2002-03 to 2013-14	11.86	16.08	14.01

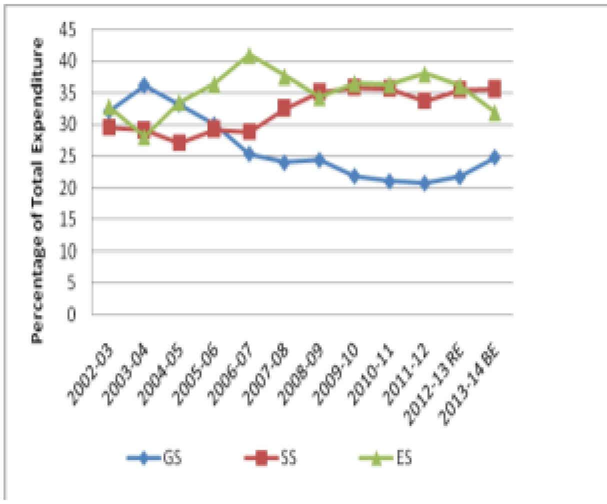
Composition by Functional Categories:

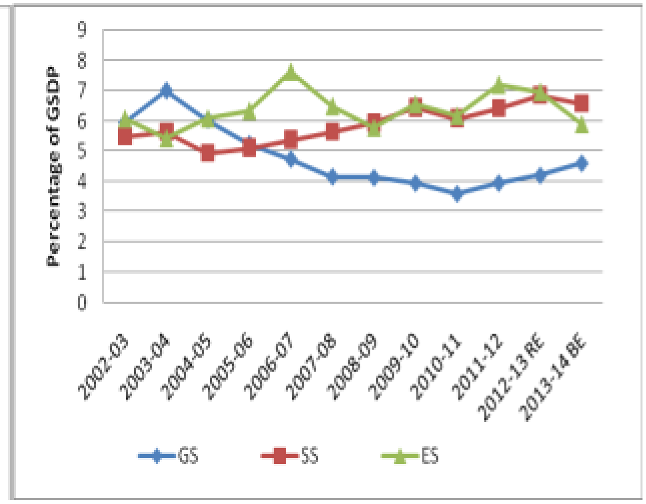
Many studies have empirically verified Wagner's theory of 'increasing state activity" which states that ratio of public expenditure to Gross domestic product (especially for social sectors like education, health and infrastructure) increases with increasing levels of development. Composition of government expenditure under functional categories as percent of GSDP in the context of Government of Karnataka reveals that on an average general, social and economic services have had 4.82, 5.97 and 6.52 percent share respectively during the study period. Distribution of expenditure by functional categories has experienced a positive shift as there has been a good hike in the share of economic services and a clear decline in the share of general services over the 1991-92 to 2001-02. Percentage composition during 1991-92 till 2001-02 was 6.5, 5.9 and 4.81 percent share in the GSDP respectively for general, social and community and economic services. The trends in these three functional categories reveals that (table 3.17) the share of general services has declined from 5.56 percent in 2002-03 to 4.59 percent in 2013-14BE, that of social services has increased from 5.13 percent to 6.59 percent and that of economic services has increased from 5.7 percent to 5.91 percent respectively during the reference period. The share of economic services had reached the largest share of 8 percent in 2006-07 probably the highest in the last two decades.

Table 3.17: Expenditure of Functional Categories (in percentage)

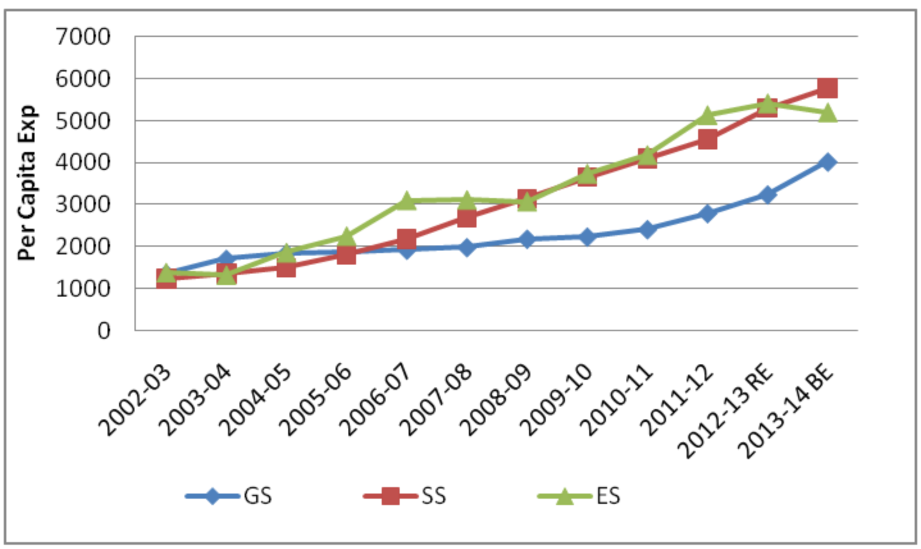
Table 3.17: Expenditure of Functional Categories (in percentage)									
Year	General Services			Social Services			Economic Services		
	% to Total Exp	% to GSDP	Per Capita	% to Total Exp	% to GSDP	Per Capita	% to Total Exp	% to GSDP	Per Capita
2002-03	33.05	5.56	1318.89	30.44	5.13	1214.96	33.87	5.7	1351.79
2003-04	37.7	6.12	1660.79	30.4	4.93	1339.18	29.31	4.75	1290.84
2004-05	34.38	5.97	1795.43	28.12	4.89	1468.48	34.77	6.04	1816.27
2005-06	30.28	5.45	1814.82	29.54	5.31	1770.64	36.75	6.61	2202.84
2006-07	25.59	4.99	1887.59	29.13	5.68	2149.27	41.38	8.07	3052.59
2007-08	24.36	4.79	1946.32	33.18	6.53	2651.28	38.27	7.53	3058.26
2008-09	24.74	4.71	2107.59	35.76	6.81	3045.98	34.89	6.64	2971.31
2009-10	21.85	3.93	2231.84	35.89	6.45	3666.41	36.56	6.57	3735.12
2010-11	21.00	3.57	2410.06	35.77	6.08	4103.91	36.40	6.19	4176.94
2011-12	20.71	3.93	2792.54	33.80	6.42	4558.59	38.02	7.22	5126.56
2012-13 RE	21.70	4.18	3241.96	35.55	6.85	5310.71	36.20	6.98	5406.70
2013-14 BE	24.82	4.59	4028.47	35.67	6.59	5788.76	32.00	5.91	5192.41

Graph 3.1.11.a, 3.1.11b and 3.1.11c: Functional Categories of Expenditure as a Percentage of Total Expenditure and GSDP respectively.





Graph 3.1.11.c: Functional Categories: Growth in Per Capita Expenditure



The state needs to protect social sector and earmark much higher allocation to address the human development issues (some of these are discussed in subsequent sections where certain sectors are taken up for a more detailed study) in the state. There have been serious issues of concerns such as health sector, a decline in its absolute allocation in 2009-10 budgets over the previous year expenditure. The Karnataka state's rank in the Human Development Index (HDI) has slipped from 6th place in 1981 to 7th place in 1991 and has remained at the same level. On the contrary states like Tamil Nadu (7th place to 3rd place), Rajasthan (12th rank to 9th rank) have advanced their position. HDI at the district level reveals that while there is an improvement in the HDI of some backward districts from North Karnataka, the pace has very slow between 1991 and 2001, thus indicating the need to supplement increased allocations with better expenditure planning and management measures.(Gayithri, 2011)

'Economic services' is yet another category which has been adversely affected during the fiscal crisis period. Susceptibility of social and economic services to the fiscal uncertainties is a matter of serious concern for the state's social and economic development. The state had earmarked 7.3 percent of GSDP towards economic services (average for 1991-94). Although the share has increased after touching a very low level of 4.75 percent in 2003-04, the increase is not sustained during the last two years. (Table 3.3; graph 3.3.b) One may argue that some of these huge investments such as irrigation and power are taken care of by the corporations, the issues pertaining to infrastructure inadequacy in the state are serious and the government has to address these issues on a priority basis in order to sustain the high economic growth that the state has enjoyed in the recent past. The decline that has occurred during the decade of nineties and till 2003-04/2004-05, have been made good subsequently.

Social allocation ratio:

In the context of human development and monitoring of state participation in human development United Nations Development Program (UNDP) has identified four ratios; (Mahendradev and Jos Mooij,).

The public expenditure ratio (PER): Percentage of national income accounted for by the public expenditure an the recommended ratio is 25 percent. This aspect has been discussed earlier on in this report.

The Social allocation ratio: This refers to the percentage share of public expenditure earmarked to social services and the recommendation is over 40 percent

The Social priority ratio: This refers to the percentage of social services expenditure devoted to human priority concerns that include areas like elementary education, water and sanitation, public health, maternal and child health. The suggested ratio for this item is over 50 percent

The human expenditure ratio: This ratio refers to percentage of national income earmarked to human priority concerns which basically is a product of the three ratios and the recommended value is 5 percent.

These ratios in the context of Karnataka are worked out for three years during the last decade and are presented in table 3.18. It is gratifying to note in the context of Karnataka that there has been an overall increase in the social allocation ratios during the study period which implies that GoK has recognized the importance of human development and has been earmarking resources on an increased scale. However, the issues for concern include that, the growth path is not steady and often the ratio has declined and also it is below the UNDP recommended level. In the context of public expenditure planning and management, we argue that norms of these ratios should be highly region specific as the needs, impending requirements and the cost of provision of these services vary significantly from one region to another, hence the required levels of state participation in these sectors also are best framed at the regional level. However, these tend to be very detailed exercises and it is very important to maintain constant updates on the program achievements which should serve in framing informed expenditure decisions. In the absence of such information base, research has been increasingly relying on the size of public expenditure.

Social allocation has been a problematic area in Karnataka as the public expenditure review has revealed that (Gayithri, 2011) sectors such as Health have even experienced an absolute decline, which a remote possibility given the incremental budgeting practices used by Indian governments both at the Centre and states. These declines are often associated with the revenue shortfalls experienced by the state government. The declining social priority ratios that were estimated only for three years account for the seriousness of the problem.

Table 3.18: Social sector ratios in Karnataka

Years	Public expenditure ratio	Social Allocation Ratio	Social priority ratio
2002-03	21.88	23.51	34.79
2003-04	24.84	21.34	-
2004-05	21.46	22.99	-
2005-06	17.86	28.61	-
2006-07	19.35	27.74	-
2007-08	17.74	31.74	-
2008-09	17.89	34.10	36.54
2009-10	18.75	34.58	-
2010-11	18.89	34.37	-
2011-2012	19.75	32.50	-
2012-13 RE	19.97	34.31	-
2013-14 BE	19.45	33.89	31.74

Source: Computed

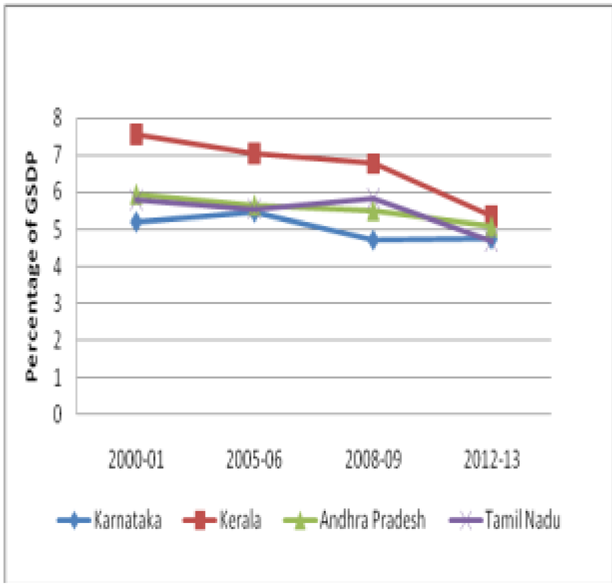
Karnataka compared with southern states: Functional categories:

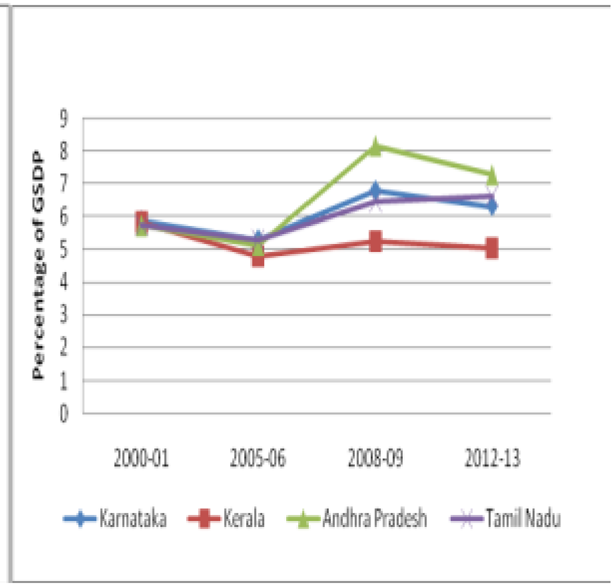
Karnataka state compared favorably with other states in terms of per capita general services expenditure during almost all the time points, AP has lesser than Karnataka in 20121-13. Per capita social services expenditure has been lesser than Kerala and Tamilnadu. During all the time points (Kerala has lesser per capita expenditure in 2008-09 than Karnataka) per capita economic services expenditure has been clearly higher than all the other southern states (AP has larger expenditure in 2008-09).

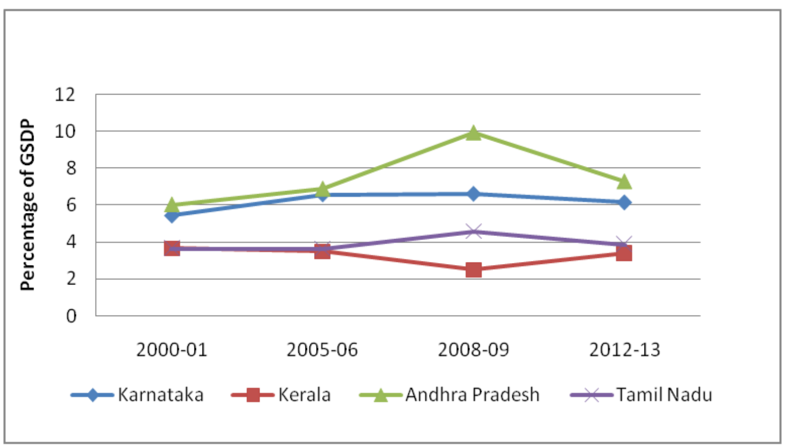
Table 3.19: Functional Categories of Expenditure in the Southern States

Year	Name of The State	General Services		Social Services		Economic Services	
		% to GSDP	Per Capita	% to GSDP	Per Capita	% to GSDP	Per Capita
2000-01	Karnataka	5.19	1068.09	5.88	1208.97	5.47	1125.86
	Kerala	7.56	1730.59	5.84	1337	3.66	837.08
	Andhra Pradesh	5.93	1129	5.75	1093.73	6.03	1147.58
	Tamil Nadu	5.79	1367.86	5.74	1355.09	3.67	866.59
2005-06	Karnataka	5.45	1814.57	5.31	1770.38	6.61	2202.53
	Kerala	7.03	2661.97	4.8	1818.57	3.49	1322.88
	Andhra Pradesh	5.64	1681.98	5.14	1532.11	6.89	2055.55
	Tamil Nadu	5.54	2004.61	5.3	1915.46	3.65	1321.39
2008-09	Karnataka	4.71	2442.85	6.81	3180.48	6.64	2793.46
	Kerala	6.77	3783.11	5.27	2944.82	2.5	1398.62
	Andhra Pradesh	5.5	2466.13	8.18	3662.7	9.94	4455.55
	Tamil Nadu	5.82	2974.29	6.47	3304.38	4.58	2338.11
2012-13	Karnataka	4.73	3661.73	6.33	4900.67	6.18	4782.48
	Kerala	5.35	5435.56	5.04	5119.71	3.41	3461.53
	Andhra Pradesh	5.08	3254.10	7.29	4672.81	7.28	4665.71
	Tamil Nadu	4.68	4486.06	6.63	6350.55	3.88	3722.18

Graph 3.1.12.a, 3.1.12b and 3.1.12c: General Services, Social Services and Economic Services as a percentage of GSDP respectively.







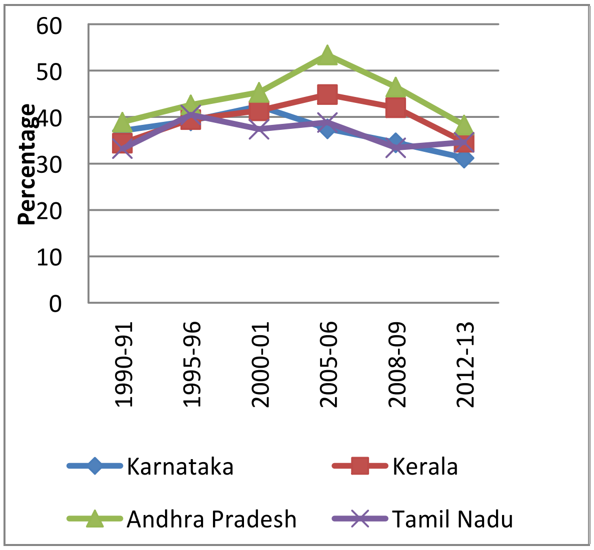
General Services

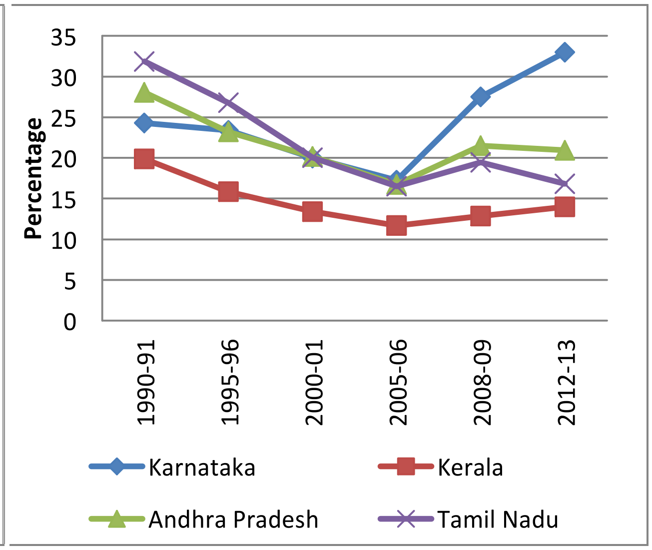
Percentage distribution of General services expenditure in the four southern states presented in table 3.18 and graphs 3..1.12a to 3.1.12c clearly reveals that Karnataka is much better placed in terms of the committed expenditure such as pension payments and interest payments. Administrative services however seem to be high and on the increase since 2005-06 as compared to other states, the reasons for this need to be probed into.

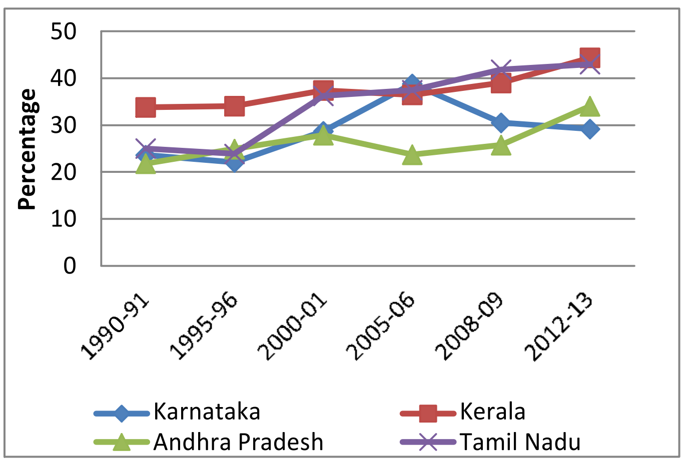
Table 3.20: Composition of General Services

Year	Name of The State	Organs of States	Fiscal Services	Interest Payments and Deriving of debt	Administrative Services	Pensions and General Services
1990-91	Karnataka	3.82	7.29	37.09	24.3	23.61
	Kerala	3.58	8.34	34.41	19.88	33.8
	Andhra Pradesh	2.98	8.25	38.93	28.04	21.81
	Tamil Nadu	3.1	6.78	33.24	31.85	25.02
1995-96	Karnataka	4.17	7.28	39.23	23.38	22.08
	Kerala	3.08	7.5	39.51	15.84	34.07
	Andhra Pradesh	3.7	5.55	42.64	23.2	24.9
	Tamil Nadu	3.14	5.71	40.49	26.78	23.88
2000-01	Karnataka	3.31	5.6	42.38	19.99	28.71
	Kerala	2.68	5.14	41.38	13.39	37.41
	Andhra Pradesh	2.46	4.16	45.34	20.17	27.86
	Tamil Nadu	2.26	4.07	37.39	20.03	36.24
2005-06	Karnataka	2.47	3.95	37.51	17.26	38.81
	Kerala	2.48	4.48	44.88	11.69	36.47
	Andhra Pradesh	2.15	4	53.42	16.73	23.7
	Tamil Nadu	1.9	5.25	38.86	16.52	37.48
2008-09	Karnataka	3.65	3.82	34.5	27.51	30.52
	Kerala	2	4.08	42.05	12.86	39.01
	Andhra Pradesh	2.27	4	46.5	21.5	25.73
	Tamil Nadu	2.07	3.27	33.4	19.44	41.83
2012-13	Karnataka	3.26	3.39	31.20	32.98	29.17
	Kerala	2.50	4.53	34.63	13.99	44.36
	Andhra Pradesh	2.90	3.83	38.30	20.93	34.04
	Tamil Nadu	2.77	2.81	34.60	16.81	43.01

Graph 3.1.13.a, 3.1.13.b and 3.1.11c: Interest Payments and Servicing of Debt in Southern States (%), Administrative Services (%) and Pensions and Miscellaneous General Services (%) respectively.







*includes only Revenue Expenditure

Subsidies in Karnataka: Subsidy bill of GoK has increased over years, despite its intentions to contain it from time to time. Explicit subsidy has more than doubled from Rs 4118 crore in 2009-10 to Rs 12391 crore in 2013-14 BE. MTFP also provides implicit subsidy estimates which are basically in the nature of financial assistance and has increased from Rs 1153 crore to Rs 2414 crore taking the total subsidy bill to Rs 14805 crore in 2013-14 BE. Of particular concern are the subsidies relating to power sector towards free supply of power to farmers for irrigation pump sets, food and interest subsidy for concessional crop loan. Power subsidy has increased from Rs 2341 crore in 2009-10 to Rs 6350 crore in 2012-13 R.E., constituting more than 50 percent of the total subsidy bill. Very often, the power subsidy bill is underprovided. Data presented in table 3.20 accounts for the subsidy bill as percent of GSDP. Subsidy bill as percent of revenue expenditure has also shown a decline (Table 3.21) some of the subsidies have been under provided for which would be partly responsible for this

Table 3.21: Subsidies as percent of GSDP

YEAR	FOOD	TRANSPORT	POWER	INDUSTRIES	HOUSING	COOPERATION	AGRICULTURE	OTHERS	TOTAL
2002-03	0.14	0.05	1.43	0.11	0.01	0	0	0.02	1.75
2003-04	0.13	0.02	1.2	0.04	0.07	0	0	0.06	1.53
2004-05	0.36	0.07	1.04	0.02	0.02	0	0	0.13	1.64
2005-06	0.37	0.05	0.93	0.05	0	0	0	0.49	1.9
2006-07	0.33	0.12	1.04	0.02	0	0.36	0	0.05	1.91
2007-08	0.24	0.08	0.85	0.08	0.09	0.66	0.04	0.05	2.09
2008-09	0.24	0.05	0.64	0.02	0.03	0.06	0.05	0.03	1.12
2009-10	0.35	0.05	0.7	0.01	0.03	0.04	0.03	0.03	1.23
2010-11	0.24	0.08	1.17	0.01	0.01	0.09	0.02	0.04	1.65
2011-12	0.18	0.07	1.22	0.02	0.01	0.1	0.04	0.06	1.7
2012-13 RE	0.17	0.06	1.22	0.02	0.07	0.29	0.05	0.11	1.99
2013-14 BE	0.2	0.07	0.96	0.02	0.02	0.16	0.04	0.08	1.55

Table 3.22: Subsidies as percent of Revenue Expenditure

YEAR	FOOD	TRANSPORT	POWER	INDUSTRIES	HOUSING	COOPERATION	AGRICULTURE	OTHERS	TOTAL
2002-03	0.93	0.34	9.79	0.75	0.06	0.00	0.00	0.13	12.01
2003-04	0.88	0.13	7.87	0.29	0.45	0.00	0.00	0.40	10.02
2004-05	2.39	0.46	6.91	0.13	0.15	0.00	0.00	0.89	10.94
2005-06	2.60	0.35	6.49	0.37	0.01	0.00	0.00	3.43	13.26
2006-07	2.24	0.82	7.09	0.11	0.00	2.46	0.00	0.33	13.04
2007-08	1.74	0.62	6.15	0.57	0.63	4.80	0.31	0.33	15.15
2008-09	1.74	0.34	4.66	0.16	0.22	0.45	0.34	0.25	8.16
2009-10	2.45	0.33	4.93	0.08	0.19	0.26	0.20	0.22	8.66
2010-11	1.71	0.58	8.22	0.08	0.04	0.62	0.15	0.26	11.67
2011-12	1.22	0.47	8.14	0.14	0.04	0.69	0.24	0.40	11.35
2012-13 RE	1.07	0.35	7.56	0.12	0.44	1.81	0.34	0.68	12.36
2013-14 BE	1.28	0.42	6.14	0.14	0.14	1.03	0.28	0.50	9.95

However, an important observation from the subsidy element under the three important functional categories is the fact that subsidy element is quite large in the category of economic services, the services that can be provided by the private sector on commercial basis as opposed to the social services that are associated with large-scale externalities and social benefits. The share of explicit subsidy under economic services was as high as 46.38 percent in 2005-06 and has declined to 36.92 percent (table 3.22). The decline is partly due to under provision in certain sectors like power etc., On the contrary the share of explicit subsidy element is small in the total of general services and has marginally declined from 0.11 percent in 2005-06 to 0.10 percent in 2011-12. The share of social services is also small but has increased from 0.16 percent to 0.66 percent. However, one has to carefully examine if this database has captured all the explicit subsidy items from all these heads.

Table 3.23: Subsidies by functional categories

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
General Services as (% to Total General Services)	0.11	0.12	0.10	0.12	0.10	0.09	0.10
	Social Services as (% to Total Social Services)						
Education Sports Art and Culture	0.01	0.02	0.03	0.03	0.04	0.02	0.01
Water Supply Sanitation Housing and Urban Development	0.03	0.13	0.57	0.98	0.81	0.52	0.53
Information and Broadcasting	0.03	0.03	0.03	0.01	0.02	0.03	0.02
Welfare of Scheduled Castes Scheduled Tribes and Other Backward Classes	0.05	0.07	0.13	0.10	0.07	0.10	0.10
Social Welfare and Nutrition	0.03	0.02	0.02	0.01	0.01	0.01	0.00
Total SS	0.16	0.30	0.78	1.13	0.95	0.68	0.66
	Economic Services as (% to Total Economic Services)						
Agriculture and Allied Activities	21.00	15.67	22.42	9.38	10.47	8.85	7.14
Energy	22.91	22.71	20.08	17.44	17.76	29.83	27.69
Industry and Minerals	1.24	0.30	1.82	0.59	0.30	0.28	0.48
Transport	1.24	2.61	2.01	1.29	1.19	2.12	1.61
Economic Services (Total)	46.38	41.29	46.33	28.70	29.77	41.08	36.92

Source: Finance Accounts

Issues:

Subsidies have been a concern, not merely because of the quantum of increase but also due to the issues of targeting, multiple and duplicative schemes, absence of sunset clauses, poor monitoring of use of such benefits. Power sector subsidy has been of serious concern. Subsidy studies have highlighted varied kinds of problems. The social housing subsidies reveal excess provisioning of houses over and above the need as indicated by the houseless population in districts of Yadgir and Uttara Kannada, a typical fallout of duplicative interventions by Central and state governments with individual targets. (Gayithri k, 2011. In the context of credit subsidy field level evidence indicated that loans were taken at low interest rate from Co-operatives and lent to other villagers at higher rate. (Kannan, Elumalai, 2011). Regarding industrial incentives and concessions, CAG has observed non recovery of the deferred tax arrears. As a part of the transparency, while some concession related revenue loss is reported in the MTFP, there is need to track all the revenue losses arising on account of concessions. These are only select instances; there is a need to comprehensively evaluate all the major subsidies periodically. Regarding the user charges, ERC urges the need to have a clear policy. Field based studies on electricity and fertilizer subsidies in Karnataka examining the willingness to pay for services, observe that users are willing to pay for these services provided uninterrupted and quality services are made available to them. (Kannan, Elumalai, 2012)

Chapter Four

Deficits in Karnataka

Karnataka has proved to be a fast reforming state that has been trying to implement reforms as and when mooted at the national level. The targets set in the KFRA 2002 have been achieved well within the timelines. The fiscal, revenue and primary deficit trends from 2002-03 till 2013-14 are presented in chart 4.1.1. The targets as per the KFRA and the status of their achievements are presented in table 4.1. The target to achieve revenue surplus and 3 percent fiscal deficit by March 2006 has been achieved by the FY 2004-05 itself. The revenue surplus has given room for enhanced capital investments. Revenue surplus, however, has in the last two years dropped significantly from 1.08 percent in 2011-12 to 0.10 percent in 2013-14 (BE). During this period the fiscal deficit has further declined from 2.83 percent 2.78 percent. Consequentially, there has been a decline in the capital expenditure, albeit, small. The general tendency to compress the capital expenditure in the wake of revenue shortfalls needs to be overcome in the interest of promoting social and economic infrastructure in the state. Expenditure Reforms Commission constituted by the Government of Karnataka has recommended that capital expenditure should be maintained at 5 percent of GSDP and insulated from such revenue shortfalls. An important policy challenge that the state government needs to address (also an issue for national level debate) has reference to the usefulness attached to the 3 percent fiscal deficit target, especially during the times when the state's demand/ requirement for infrastructure is large and until the time the much sought after adequate private investment takes place. Capital investments have greater potential to enhance growth and also help in crowding in of private investment.

Graph 4.1.1: Trends in Deficit-Karnataka (as % of GSDP)

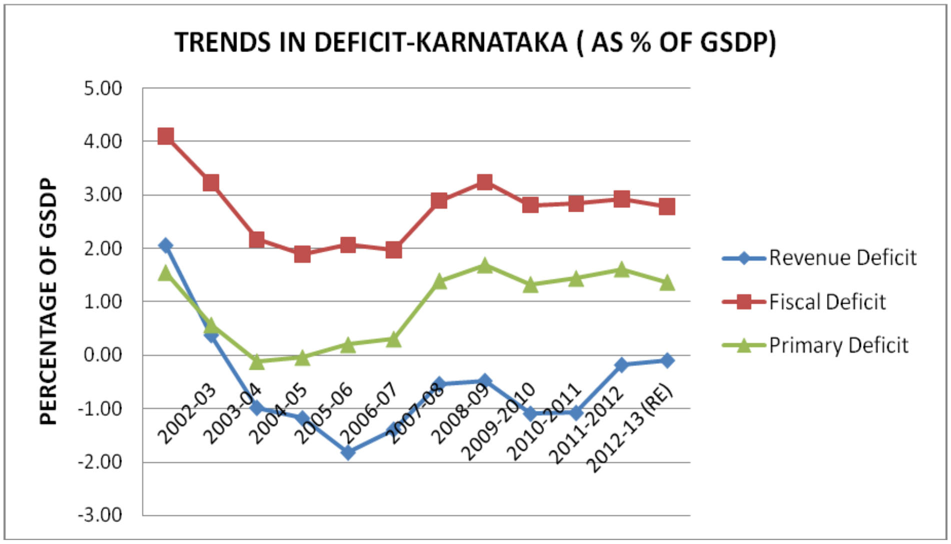


Table 4.1: Fiscal targets and achievements

Particulars	Statutory norm	Compliance by State
Revenue Deficit (RD)	Reduce RD to Nil by 31st March, 2006	Achieved in FY04-05 Itself Maintained adequate Revenue Surplus thereafter.
Fiscal Deficit (FD)	Reduce FD to not more than 3% of estimated GSDP by 31st March, 2006.	Maintained FD below 3% since FY04-05*
Total Liabilities to GSDP (TL/GSDP)	To ensure that TL/GSDP does not exceed 25.2% of GSDP by 31st March, 2015.	Already achieved this in FY10-11 much ahead of timeline prescribed.
Outstanding Guarantees (OG)	OG on 1st April of any year should not exceed 80% of Revenue Receipts of second preceding year.	Since enactment of Karnataka Guarantee of Ceiling Act, 1999 this limit has not been breached.

*Except in the FY 2008-11 where it was fixed based on the advice of the Central Government.

Source: MTFP 2013-2017, Government of Karnataka,

Karnataka compared with other states:

The fiscal position in the state compares well with the southern states as well as all states average both at the times when Karnataka was experiencing severe fiscal stress as well as the current decade when the state's fiscal health has substantially improved. This gets very well depicted from the information on various fiscal indicators presented in table 4.2. Revenue deficit as a proportion of Gross Fiscal Deficit (GFD) is smaller than all states average for all the time points presented and the surplus in the recent years has been larger than the other states. Further, the state has a better capital outlay level in the GFD. The other important expenditure indicators such as the proportion of interest payments in the revenue expenditure and that of non-development expenditure in the aggregate disbursements also place Karnataka in a better position. On the resource front, while Karnataka has all along performed better than the other states in terms of tax revenue as a proportion to revenue expenditure, that of non-tax revenue does not compare favorably with other states. Yet another cause for concern is that its contribution to revenue expenditure has been constantly on a decline, reflecting the poor recovery of user charges from the services provided by the government. A comparative profile of fiscal deficit in southern states is presented in chart 4.1.2 which reveals that Karnataka has made a steady progress in the reduction of fiscal deficits during the study period and also compares well with Andhra Pradesh and Kerala; Tamilnadu however, has largely revealed lesser deficit levels than Karnataka.

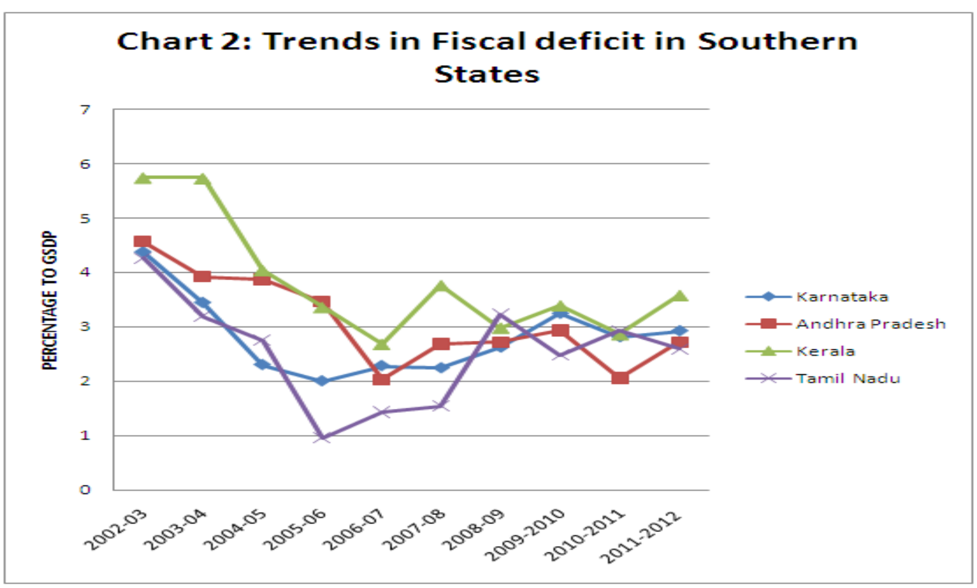
Table 4.2: Karnataka's fiscal indicators vis-à-vis all states

Note: RD: Revenue Deficit, GFD: Gross Fiscal Deficit, NDE- Non development Expenditure; AD-

Fiscal Indicators/Years	2004-2005		2006-2007		2008-2009		2010-2011		2011-2012 (RE)		2012-2013 (BE)	
Region	KAR	All States	KAR	All States	KAR	All States	KAR	All States	KAR	All States	KAR	All States
RD/GFD	-45.5	33.3	-88.6	-32.1	-18.7	-9.4	-39	-1.9	-24.8	-2.9	-6.1	-19.8
Capital Outlay/GFD	129.8	56.3	182.2	126.5	113	106	125	94.1	110.6	93.9	94.4	110.2
NDE/ AD	29.5	33.3	24.4	32.2	23.6	28.9	20.2	30.8	21.4	28.8	24.5	29.4
Interest Payments/RE	15.2	21.5	12.7	18.4	10.9	15.1	10.4	13.4	9.2	12.3	9.3	12.1
STR/RE	64.5	46.3	69.7	49.9	66.4	47.2	71.2	49.4	70.1	48.6	64.3	50.1
SNTR/RE	17.9	11.6	12.3	12.5	7.6	12	6.2	9.8	4.9	9.4	4	9.3

Aggregate disbursement; RE: Revenue Expenditure, STR: State's Own Tax Revenue; SNTR: State's Own Non-Tax Revenue SOURCE: RBI State Finances- Various Issues

Graph 4.1.2



KFRA and implementation:

Karnataka state was one of the first Indian states to formulate the Medium term fiscal plan based on the broad parameters suggested by the Eleventh Finance Commission for fiscal correction. A statutory back up to MTFP was provided with the framing of KFRA in September 2002. The fiscal and revenue deficit targets were achieved well within the stipulated time frame as discussed earlier on. State achieved revenue surplus by 2004-05 itself thus generating more resources for capital investment.

KFRA was mended in 2011 to accommodate the suggestions made by the Thirteenth Finance Commission. These included:

i) Outstanding debt inclusive of the off budget borrowings is gradually reduced. The target is to reduce it to 25.2 percent of GSDP by 2014-15

ii) Fiscal deficit not to exceed the 3 percent level of GSDP

iii) Constitution of Fiscal management review committee (FMRC) which will meet at least twice a year to review the fiscal and debt position of the state.

As per the CAG state finances report (2012, 4) the FMRC was constituted in July 2011 and since then has resolved the following.

i) There will be no new additions to grant-in-aid commitments

ii) Shifting from beneficiary orientation to capital investments for mobilizing more resources for power, roads and drinking water. ERC recommendation of 5 percent (to GSDP) level of capital investment is the guiding factor.

iii) Revision of user fee every alternate year.

iv) Setting up of a mechanism for ex-ante appraisal of new schemes and projects

Chapter 5

Public debt in Karnataka

The present chapter analyzes the growth and composition of public debt of Karnataka since 2002-03. According to the FRA, total liabilities include those under Consolidated Fund and the Public Account, the former includes the internal debt and loans and advances from Government of India. It also includes off budget borrowings. Outstanding liability of GoK has sharply increased by more than doubling from Rs 37326 crore in 2002-03 to Rs 130964 crore in 2013-14, amounting to a 2.5 fold increase in absolute terms. The total outstanding liability inclusive of off budget borrowing has increased from Rs 44294 crore to Rs 134212 crore during the above reference period. However, outstanding liability as percent of GSDP has declined from 30.88 percent to 21.77 percent and that of off budget borrowing has substantially declined from 5.76 percent to 0.54 percent during the reference period. (Table 5.1 and 5.1.1) This declining trend has been a feature of the Indian states caused by the debt relief linked to the rule based correction. Thirteenth Finance Commission had stipulated that the debt/GSDP ratio should be restricted to 25.5 percent of GSDP by 2014.15. Karnataka state has amended section 4 of the FRA to incorporate the ceilings. The FRA ceilings for outstanding debt as percent of GSDP and the total liability to GSDP ratios provided in table 5.2 reveal that the state government has been in a position to contain the debt to the prescribed levels.

Table 5.1: Karnataka's fiscal liability (Rs in crores)

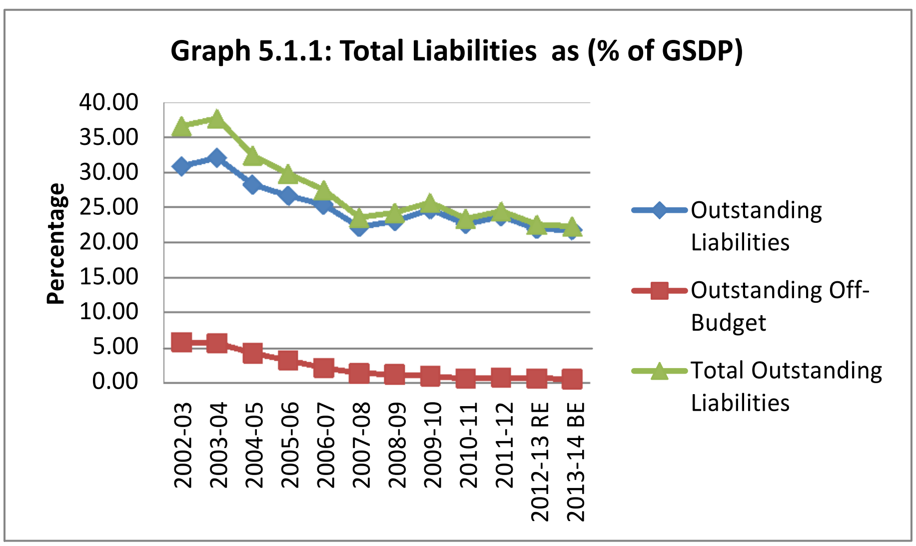
YEAR	Outstanding Liabilities(Yearend)	Off-Budget	Total Outstanding Liabilities (Yearend)
2002-03	37326	6968	44294
2003-04	42018	7360	49378
2004-05	46988	7013	54001
2005-06	52236	6198	58434
2006-07	57682	4837	62519
2007-08	60143	3701	63844
2008-09	71550	3736	75286
2009-10	83482	3249	86731
2010-11	91943	2349	95192
2011-12	103030	3249	106279
2012-13 RE	114252	3249	117501
2013-14 BE	130964	3249	134213

Source: Finance Department-GOK

Table 5.2: FRA ceiling and outstanding liability to GSDP

Year	2011-12	2012-13	2013-14	2014-15
FRA ceiling	26.0	25.7	25.4	25.2
Outstanding to GSDP	24.47	22.66	22.56	22.75

Source: GoK, MTFP, 2013-17.



Composition of debt:

Public debt in Karnataka has increased by 107 percent points increasing from Rs 40048 crore in 2005-06 to Rs 83280 crore in 2012-13. Karnataka's public debt is largely sourced from NSSF and market borrowings, the former has had a smaller increase of 48 percentage points from Rs 16827 crore in 2005-06 to Rs 21436 crore in 2012-13 where as that of latter has revealed the largest increase of 268 percent points from Rs 11934 crore to Rs 43991 crore. Although loans from financial institutions have had the second largest increase of 112 percent points among all the major components, its share in the total is quite small. Loans from Government of India has increased from Rs 9282 crore to Rs 13751 crore revealing a 48 percent increase.(Table 5.3) The annual growth of public debt (table 5.4) reveals that there has been a sharp increase in debt during 2008-09, 2009-10 and 2012-13 as compared to the other years. Market loans revealed a very sharp hike in 2008-09 to the tune of 54.92 percent and 42.96 percent in 2012-13. The years

Table 5.3: Composition of debt

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 RE
Market Borrowings	11934.53 (29.8)	11702	11989	18573	23527.18	24564.43	30771.93	43991
Loans from Financial Institutions	1932.79	1639	1852	2072	2343.28	2762.09	2969.93	4103
NSSF	16827.16	19305	19514	19351	19597.51	21435.5	20591.36	21436
GOI Loans	9282.22	9199.64	9557	9692	9902.2	10514.76	10981.62	13751
Total	40048	41845.5	42873	49688	55370.2	59276.81	65314.88	83280

For 2005-2008 Loans from financial institution=loans from LIC + GIC + NABARD+ Loans from other institutions+ loans from state bank and other banks and

Market loans include=Market Loans bearing interest +Market loans not bearing interest

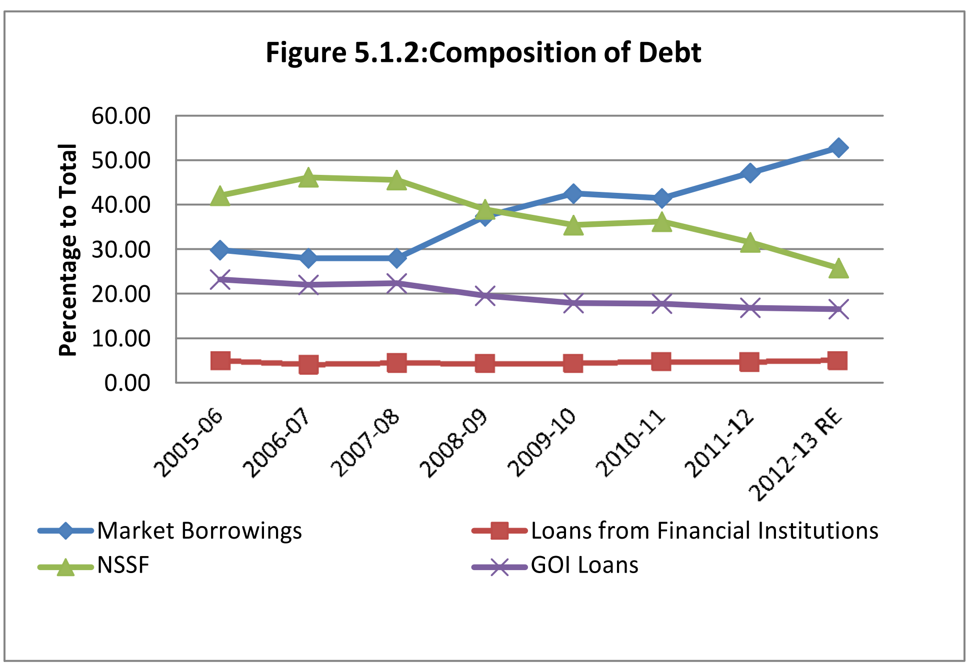
Table 5.4: Annual Growth Rate

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 RE
Market Borrowings		-1.95	2.45	54.92	26.67	4.41	25.27	42.96
Loans from Financial Institutions		-15.20	13.00	11.88	13.09	17.87	7.52	38.15
NSSF		14.73	1.08	-0.84	1.27	9.38	-3.94	4.10
GOI Loans		-0.89	3.88	1.41	2.17	6.19	4.44	25.22
Total		4.49	2.46	15.90	11.44	7.06	10.19	27.51

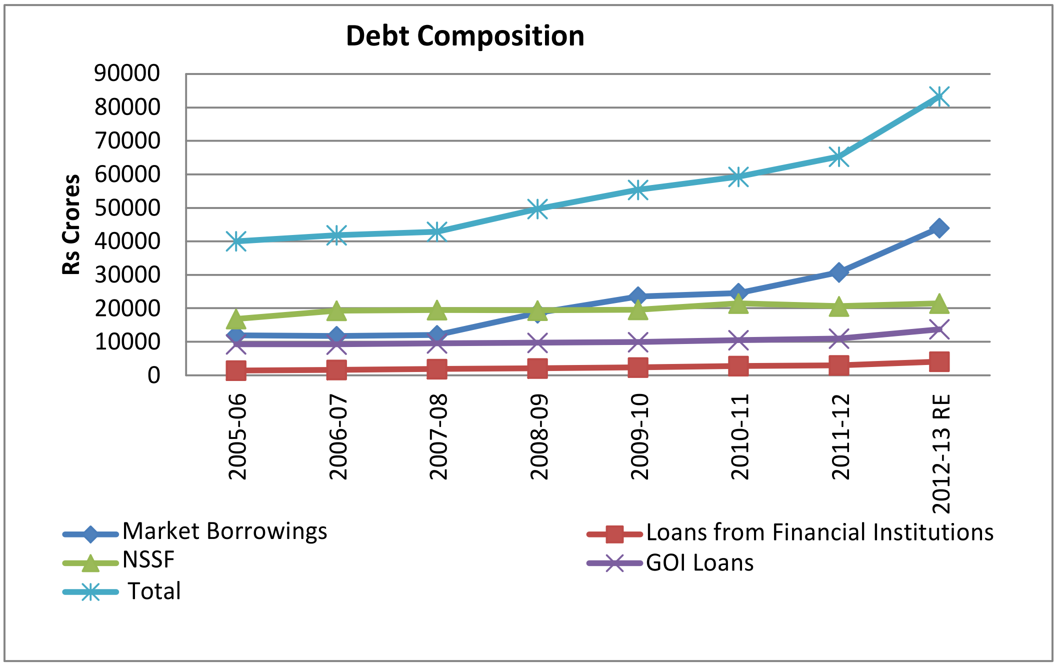
Table 5.5: Percentage to Total

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 RE
Market Borrowings	29.80	27.96	27.96	37.38	42.49	41.44	47.11	52.82
Loans from Financial Institutions	4.83	3.92	4.32	4.17	4.23	4.66	4.55	4.93
NSSF	42.02	46.13	45.52	38.95	35.39	36.16	31.53	25.74
GOI Loans	23.18	21.98	22.29	19.51	17.88	17.74	16.81	16.51

Graph: 5.1.2



Graph 5.1.3 - Debt Composition



Fiscal sustainability indicators:

Fiscal sustainability has been an important issue of debate in the current literature. A number of indicators have been used to assess the fiscal health of governments. The study by Dholakia, et al, 2004 identifies indicators such as public debt to GSDP ratio; fiscal deficit to GSDP; primary deficit/ GSDP; interest payments/revenue receipts; interest payments/state's own revenue receipts; interest payments/total expenditure; state's own revenue/ revenue receipts; revenue deficit/gross fiscal deficit to assess the fiscal health of state governments. In the context of debt sustainability it is argued that debt/state's own revenue ratio as a more critical indicator than that of debt/GDP ratio.

These indicators have been analyzed earlier on in various chapters. These are put together in table 5.4 for the time period 2002-03 till 2013-14 B.E to understand the fiscal health of Karnataka. The debt/ GSDP ratio of Karnataka has declined from 36.64 percent in 202-03 to 22.31 percent in 2013-14 B.E. some of these indicators. Interest payments as percent GSDP, has declined from 2.56 percent to 1.41 percent; interest payments to revenue receipts and own tax revenue has drastically declined to less than half of the initial year under reference. All these indicators and many other expenditure indicators such as per capita development expenditure, per capita plan expenditure discussed elsewhere in the report reveal that Karnataka's fiscal performance has been sound.

Table 5.6: Select Fiscal Sustainability Indicators

YEARS	Interest payments/GSDP	Interest payments/Rev Exp	Interest payments/Rev Rec	Interest payments/Own Tax Rev
2002-03	2.56	17.50	20.36	31.53
2003-04	2.66	17.43	17.87	29.51
2004-05	2.28	15.22	14.28	23.61
2005-06	1.92	13.43	12.40	20.21
2006-07	1.86	12.67	11.27	18.18
2007-08	1.66	12.06	10.95	17.34
2008-09	1.50	10.88	10.47	16.39
2009-10	1.55	10.97	10.61	17.05
2010-11	1.47	10.39	9.65	14.59
2011-2012	1.40	9.31	8.68	13.04
2012-13 RE	1.32	8.16	8.07	12.81
2013-14 BE	1.41	9.08	9.02	13.93

While it is gratifying to note that the overall debt position in terms of GSDP and the interest payments are well within the stipulated levels, an important area of concern is the huge impending debt repayment, which are expected by grow almost ten times during 2018-22. Government borrowings are expected to be productively used such that the debt servicing and repayments are made possible through the returns of the capital investments made with such resources. In the present context it is not very clear as to how these resources are used, the available evidence suggests that as on March 2012 GoK had invested INR 44295 crore in government companies, corporations etc., and the return from these investments, although on increase from INR 23.4 crore in 2007-08 to INR 60.56 crore constitutes hardly 0.1 percent of the investment. (CAG, 2013) Given these current trends in the returns from investments, the government will be forced to raise fresh loans to repay the old loans and there is every possibility that such practices can result in debt spiral and the government has to take early precautionary measures to prevent such fiscal crisis in future times.

Chapter 6

Impact of Power Sector Reform on Fiscal health of Karnataka

Barun Deb Pal

Introduction

Energy is one of the key inputs for every economic activity and power sector is one of the key sources of energy input for every segment of the society. Thus this sector plays important role for the economic growth and the state Karnataka is not exception from this fact. The official data reveals that almost 47% of its total power supply in Karnataka is generated by the Karnataka Power Corporation Limited (KPCL), 30% by the private generating companies and rests are imported from the central projects and other states in the year 2010-11 (Economic Survey, 2013). On the other hand the most of power supplied by KPCL are generated from Thermal power plants and Hydro projects. In the year 2010-11 almost 25% of total power supply is obtained from Hydro Power projects and 22% from thermal power plants. The Karnataka power corporation limited (KPCL) is the largest power generating company in Karnataka owned by its government and it was established in the year 1970 with its installed capacity 132 mw. Later on it has added additional capacity and in the year 2011-12 the installed capacity of KPCL is around 12051 MW. Apart from the generation, the transmission and distribution of power is under control by the government of Karnataka. Prior to 1999 the state electricity board (SEB) of Karnataka was the sole authority to look after the transmission and distribution of power across the Karnataka state.

However, the above mentioned model of power generation, transmission and distribution had suffered from various financial, technical and non-technical threats like, technical T&D losses (32.8% in 1998-99); average revenue realization was lower than the average cost, lack of power supply to meet peak demand, revenue losses due to power theft, gradually decreasing industrial demand for electricity, higher variation in cross subsidisation. As a result of these threats the power sector had experienced severe financial losses and imposed subsidy burden to the Karnataka state government which in turn affects the fiscal health of the Karnataka. Realising this fact government of Karnataka had initiated reform policy in the power sector in the year 1999.

The reform of the power sector in Karnataka was initiated by its government through the general policy statement announced on 30.01.1997 and detailed policy statement later in January 2001. The key objective of this reform was to provide equitable access to electricity at reasonable prices and electricity for all by the year 2010. As a part of this reform policy, Karnataka Electricity Reform Act was enacted in the year 1999, which provides for legal, structural and policy changes including the formation of a regulatory commission was passed and came into effect from 1.6.1999. Subsequently the Karnataka Electricity Regulatory Commission (KERC) was constituted with effect from 15.11.1999 and the Karnataka Electricity Board (KEB) was corporatized and Karnataka Power Transmission Corporation Limited (KPTCL) was established effective from 1.4.2000. The KPTCL has been further unbundled into a transmission company (KPTCL) and four distribution companies viz. Bangalore Electricity Supply Company (BESCOM); Mangalore Electricity Supply Company (MESCOM); Hubli Electricity Supply Company (HESCOM); and Gulbarga Electricity Supply Company (GESCOM). Further the MESCOM has been bifurcated into two companies' viz. MESCOM and Chamundeshwari Electricity Supply Company (CESCOM) in the year 2004. In addition to these distribution companies the Hukkeri Rural Electric Co-operative society is functioning in the state since 1970 distributing electricity in Hukkeri Taluk and Belgaum District. Apart from this restricting of electricity industry, the government of Karnataka had proposed privatisation strategy on the basis of distributive margin (DM) approach concept for successful privatisation of Electricity Supply Companies (ESCOMs).

Scope of the study

As the sole intention of this power sector reform was to improve financial performance of the power sectors, no clear picture is available on that till date. Therefore in this study we have planned to understand the financial implications of the power sector reform in the power sector in Karnataka. Again as the power sector gets huge amount of financial support from the government, understanding the above issue would also help us to understand its implication on state's fiscal health of Karnataka. Now, to understand these issues we have set our focus on the following indicators described in the below Table 6.1.

Table 6.1: Performance indicators of the power sector and their implications

Sr.No.	Indicators	Implications
1.	Change in Revenue and cost gap of the power sector in pre and post reform period	Helps us to understand financial performance of the power sector in two phases. Higher this gap would imply lower the performance
2.	Variation in cross subsidisation	Minimum this variance implies minimum the discrimination among the consumers
3.	Subsidy per unit of electricity sold	Declining trend of this would Indicate the decrease in share of subsidy in total revenue. This would imply the financial efficiency of the power sector and would also have a

		favourable implication on fiscal health
4.	Capital Expenditure	Direct implication on fiscal health
5.	T&D losses	Revenue loss of the power sector
7.	Demand & supply situation of the power sector	Quality supply
8.	Growth in consumption by consumer category	Would help us to understand causes of increasing subsidy bill, growth in power sale and revenue of the power sector
9.	Item wise cost of power supply	Indicators which threats most to the power sector's financial performance
10.	Generation efficiency	Causes of increase in cost of power supply

Revenue-cost gap in power sector

The following Table 6.2 and figure 6.1.1 shows that both the unit cost and revenue of electricity supply is increasing without any significant variation in this increasing trend even after the power sector reform period. The gap between revenue and cost was higher during the years 2001 to 2004 which was the transition phase of the reform process in the power sector. Apart from this transition period, we have observed minimum gap in both pre-reform and post transition period. Due to this high gap between revenue and cost, the subsidy released by the government was also higher during this transition period as compared to other periods. Though the gap between revenue and cost implies increase in subsidy, it does not necessarily mean that financial performance of the power sector is poor. As government of Karnataka supplies electricity at subsidized rate for the irrigation pump sets and the households belonging to below poverty line, the increase in consumer in this category can be a reason for increasing the government subsidy. It has also observed from the following Figure 6.1.1 that the revenue from non-subsidized sources has been increasing since the year 1999-00 whereas a decline trend of this revenue was observed before this year. On the other hand the increasing cost of power supply may be another reason for increasing the revenue-cost gap of the power supply.

However, this can be understood by analysing various components of revenue and cost of power supply in Karnataka.

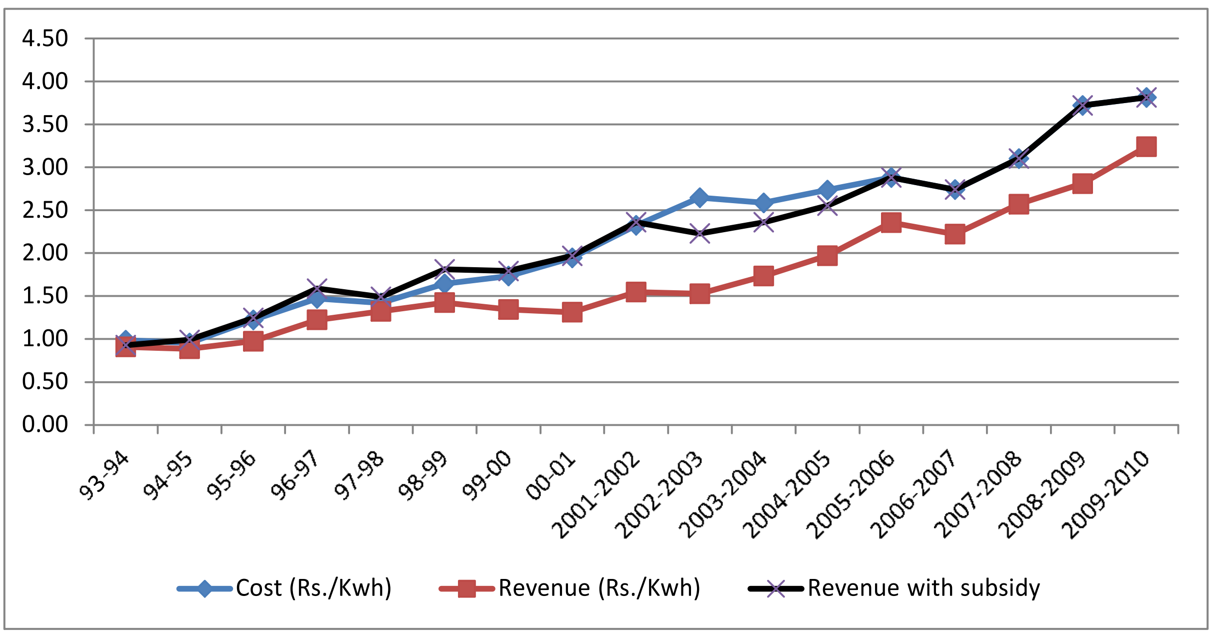
Table 6.2: Gap between Revenue and Cost of power supply in Karnataka

Year	Cost (Rs./Kwh)	Revenue (Rs./Kwh)	Revenue with subsidy	% 0f subsidy in total revenue
1993-94	0.99	0.91	0.93	0.022
1994-95	0.95	0.89	0.99	0.103
1995-96	1.22	0.97	1.25	0.218
1996-97	1.47	1.22	1.59	0.229
1997-98	1.42	1.32	1.49	0.114
1998-99	1.64	1.42	1.81	0.214
1999-00	1.73	1.34	1.79	0.250
2000-01	1.94	1.31	1.97	0.334
2001-02	2.32	1.55	2.36	0.345
2002-03	2.65	1.53	2.23	0.315
2003-04	2.59	1.73	2.36	0.265
2004-05	2.73	1.97	2.55	0.228
2005-06	2.88	2.35	2.88	0.182
2006-07	2.74	2.22	2.74	0.189

2007-08	3.10	2.57	3.10	0.171
2008-09	3.72	2.81	3.72	0.245
2009-10	3.81	3.24	3.81	0.150

Source: KPTCL & KERC various annual report, Economic Survey of Karnataka

Figure 6.1.1: Trend in revenue and cost of power supply in Karnataka



Source: KPTCL & KERC various annual report, Economic Survey of Karnataka

Cost recovery from the sale of power

The following Table 6.3 explains that over the years the percentage of cost recovery from commercial consumers is highest followed by the industrial consumers. Whereas the revenue received from other category of consumers like domestic, public lighting and Irrigation Pump (IP) sets are far below than the cost of power supply to them. Moreover the amount of subsidy received for supplying power to the IP sets is not at all recovering the cost of power supply for this. Therefore it is clear from the Table 6.3 that there is cross subsidization in the power tariff in Karnataka.

Table 6.3: Percentage of cost recovery from power sale in Karnataka

Year	Industries	Domestic	Commercial Lighting	Public lighting	IP sets
1993-94	194.2	0.6	617.4	0.2	0.05
1994-95	227.1	0.5	843.4	0.1	0.19
1995-96	198.5	0.5	737.6	0.1	-
1996-97	188.4	0.7	532.3	0.2	0.72
1997-98	257.3	0.6	741.5	0.2	0.25
1998-99	235.3	0.8	651.5	0.4	0.75
1999-00	209.7	1.0	593.7	0.2	0.99
2000-01	198.2	1.1	540.0	0.3	1.07
2001-02	180.9	1.5	364.9	0.6	1.13
2002-03	169.5	1.8	356.1	0.8	-
2003-04	173.5	1.7	364.4	0.8	0.79
2004-05	170.5	1.2	488.4	1.0	0.70
2005-06	163.1	2.2	286.2	1.3	0.64

2006-07	170.1	1.9	324.6	1.0	0.65
2007-08	150.0	2.3	317.8	1.2	0.58
2008-09	126.7	3.8	192.0	1.7	0.80
2009-10	128.0	3.9	197.2	2.1	1.37

Source: KPTCL, Economic Survey of Karnataka, www.indiastat.com

Further it has been observed from the Table 6.3 that percentage recovery from industrial consumers had increased significantly from 191.62% to 235% between the years 1993-94 to 1998-99 and same had also increased significantly for commercial consumers from 617.4% to 651% during the same time period. In contrast to that the percentage recoveries from industrial and commercial consumers have started declining from 1999-00 onwards. Subsequently the percentage recoveries of cost of power supply to other consumer categories have started increasing trend. This again implies the reduction in cross subsidization in power tariff in Karnataka. This issue can be better understood in the following section.

Cross Subsidization and its implications on power consumption

The Table 6.4, given below, shows that the average tariff rates for industrial and commercial consumers have been increased at a slower rate, with CAGR 6% and 5% respectively as compared to the same for the domestic (CAGR, 10%), IP sets (CAGR, 23%) and public lighting (CAGR 9%). Moreover the coefficient of variation (CV) of the tariff rates among different categories of consumers has declined from 61.2% to 29.3%. The above fact clearly indicates lower variation of tariff rates among various consumer categories and this in turn implies the reduction in cross subsidization in power tariff rates in Karnataka.

Table 6.4: Cross Subsidization of Power tariff in Karnataka

Year	Industries	IP Sets	Domestic	Commercial Lighting	Public lighting	CV
1993-94	191.6	2.75	107.9	342.9	97.8	61.2
1994-95	216.6	2.09	106.8	396.7	103.3	66.9
1995-96	242.5	2.10	107.7	400.1	103.8	65.6
1996-97	277.3	5.00	131.6	371.9	131.9	51.6
1997-98	365.3	12.00	165.9	478.0	165.9	52.7
1998-99	386.1	23.57	196.2	543.4	235.2	46.5
1999-00	363.5	32.00	202.0	572.0	106.0	65.6
2000-01	385.6	30.09	212.6	579.1	135.4	60.1
2001-02	420.2	54.47	265.4	535.3	224.3	39.7
2002-03	448.5	68.00	299.0	628.0	301.0	37.2
2003-04	448.5	68.00	299.0	628.0	301.0	37.2
2004-05	466.0	68.00	207.0	593.0	493.0	37.4

2005-06	469.5	63.00	355.0	623.0	384.0	26.3
2006-07	466.0	62.00	319.7	609.9	332.1	31.5
2007-08	465.2	58.40	338.4	716.9	371.9	36.2
2008-09	471.2		483.3	732.3	322.8	33.8
2009-10	487.9		505.0	777.7	412.1	29.3
CAGR	**0.06**	**0.23**	**0.10**	**0.05**	**0.09**	

Source: KPTCL, Economic Survey of Karnataka, www.indiastat.com

Since government has taken steps to reduce cross subsidization, it has positive implication on the increase in consumption by the non-subsidized consumer categories and this can be observed from the following Table 6.5. The Table 6.5 shows that there is substantial increase in industrial power consumption after the power sector reform period as compared to a negative compound annual growth before the implementation of power sector reform in Karnataka. The high tariff rate and un- reliable power supply were the major causes behind this negative growth in power consumption by the industries. On the other hand the power consumption for commercial purpose has been increased substantial after this reform with CAGR of 20% as compared to that of 11% before the reform had started. The growth in consumption for other consumer category has not shown significant improvement in both pre and post reform period. Hence, we can argue that there are two serious implication of this above mentioned decrease in cross subsidization rate by the govt. of Karnataka and these are (i) increases in consumption for commercial and industrial consumers and (ii) increase in revenue from the subsidized power supply by increasing volume of sale. In sum, these both effects increase the total revenue of the power sector from the sale of power.

Table 6.5: Category wise power consumption in Karnataka

Year	Domestic	Commercial	Industrial	IP sets	Public light	others	Total
1991-92	1929	280	5527	4585	151	10	12482
1992-93	2054	295	4902	5340	153	213	12957
1993-94	2262	374	4965	6077	155	212	14044
1994-95	2503	377	5301	7298	157	261	15896
1996-97	2897	428	4503	6913	159	291	15192
1997-98	3173	510	4285	9117	160	344	17589
1998-99	3342	580	4434	7008	161	385	15910
1999-00	3635	649	4632	6309	432	494	16151
2000-01	3909	732	4894	7353	448	523	17860
2001-02	4072	811	5264	7462	447	582	18639

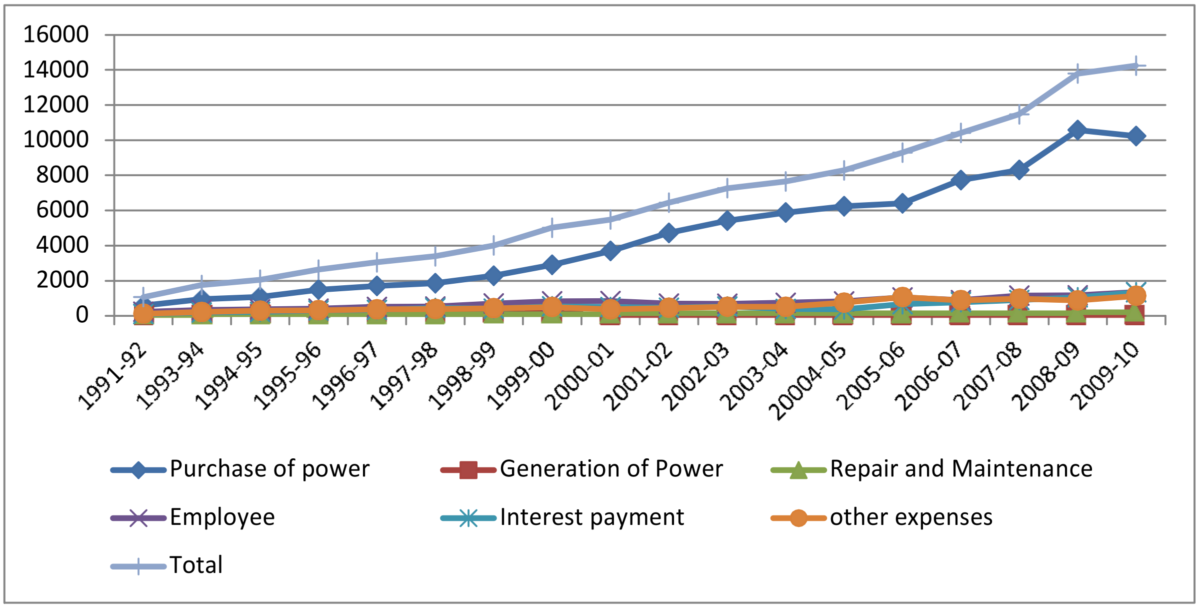
CAGR (Pre-Reform)	**0.08**	**0.11**	**-0.005**	**0.05**	**0.11**	**0.50**	**0.04**
2003-04	4537	1614	5809	8929	579	57	21525
2004-05	4909	1923	6412	9231	581	117	23173
2005-06	5113	2263	6770	9173	681	130	24131
2006-07	5815	2966	7836	11009	633	195	28454
2007-08	6328	3550	8632	10809	510	141	29970
2008-09	6710	4010	8992	11217	493	599	32020
CAGR (Post-Reform)	**0.08**	**0.20**	**0.09**	**0.05**	**-0.03**	**0.60**	**0.08**

Source: KPTCL, Economic Survey of Karnataka, www.indiastat.com

Cost of Power Supply

The item wise cost of power supply and its trend is described in the Figure 6.1.2. It is observed from the Figure 6.1.2 that the total cost of power supply has been increasing throughout the year since 1991-92 and this rate of increase is significant during the post reform period. The major cause of this increase in cost of power supply is the cost of power purchase as it has rising trend over the years (see Figure 6.1.2). However, no significant variation has observed for other items of cost of power supply in Karnataka. The increase in power purchase cost is mainly due to lack of own supply of the sate and purchasing of power from the other states and private power generating companies and this is described in the following section.

Figure 6.1.2: Trend of item wise cost of power supply in Karnataka



Source: KPTCL, Economic Survey of Karnataka,

Installed capacity and generation

The following Table 6.6 shows that the total installed capacities in KPCL and Private generating companies for power generation are increasing every year. The installed capacity in the year 2009-10 is almost 3 times higher than the same in the year 1991-92. This increase in overall installed capacity is mainly due to increase in private sectors interventions in power generation business in Karnataka. The share of private sectors in total installed capacity has been increased significantly from 6% in the year 1999-00 to 24% at the end of the year 2009-10. This implies government of Karnataka has successfully encouraged private sector to participate in the power generation in Karnataka. However, the overall utilization of the installed capacity has been declined by almost 50% from 1991-92 to 2009-10 (See Table 6.6). Again this decline in capacity utilization is due to substantial decline in generation efficiency in the private sectors. The Table 6.7 shows that the private sector is utilizing only 13% of its installed capacity for power generation in Karnataka. On the other hand, KPCL is utilizing only 50% of its total capacity which is also significantly lower than that was in 1991. As a result of this inefficient use of installed capacity the state is purchasing a significant amount of power from central projects and other states to meet its own power demand across the state. Hence, we can argue that though the power sector reform has significant implication on increasing volume of sale, the in-efficient use of installed capacity increases cost of power supply to the consumers across the state.

Table 6.6: Electricity Generation, Transmission and distribution (Million Units)

Year	Installed capacity (MW)	Generation in Full capacity (MU)	Actual Generation	Generation Efficiency (%)	Power Purchase	Energy Available (MU)	% of power purchase
1991-92	2760	24176	15540	64.28		15130	
1992-93	3011	26376	16385	62.12		15498	
1993-94	3283	28756	14256	49.58	1695	15951	10.63
1994-95	3493	30596	16854	55.09	343	17197	1.99
1995-96	3510	30745	15534	50.52	4008	19542	20.51
1996-97	3550	31098	12948	41.64	6664	19612	33.98
1997-98	3637	31864	17145	53.81	1494	18639	8.02

1998-99	4052	35498	17245	48.58	5500	22745	24.18
1999-00	4424	38753	21092	54.43	5025	26117	19.24
2000-01	4525	39640	21119	53.28	6579	27698	23.75
2001-02	4412	38645	19214	49.72	9806	29020	33.79
2002-03	4699	41164	18105	43.98	11174	29279	38.16
2003-04	4714	41294	18032	43.67	11523	29555	38.99
2004-05	5836	51123	22677	44.36	8800	31477	27.96
2005-06	6279	55001	24070	43.76	8764	32834	26.69
2006-07	6563	57493	30719	53.43	7536	38255	19.70
2007-08	7279	63764	30344	47.59	9897	40241	24.59
2008-09	8146	71359	27580	38.65	12440	40020	31.08
2009-10	8616	75478	29161	38.63	13414	42575	31.51

Source: KPTCL, Economic Survey of Karnataka, www.indiastat.com

Table 6.7: Composition of Public and Private Sectors in Power generation in Karnataka

	Installed Capacity			Share		% of Utilization		
Year	**KPCL**	**Private**	**Total**	**KPCL**	**Private**	**KPCL**	**Private**	**Total**
1999-00	4164	260	4424	94.12	5.88	56.20	26.08	54.43
2000-01	4157	368	4525	91.87	8.13	53.58	49.85	53.28
2001-02	3824	588	4412	86.67	13.33	47.92	61.45	49.72
2002-03	4111	588	4699	87.49	12.51	41.44	61.78	43.98
2003-04	4126	588	4714	87.53	12.47	41.71	57.43	43.67
2004-05	4884	951	5836	83.69	16.31	46.22	34.82	44.36

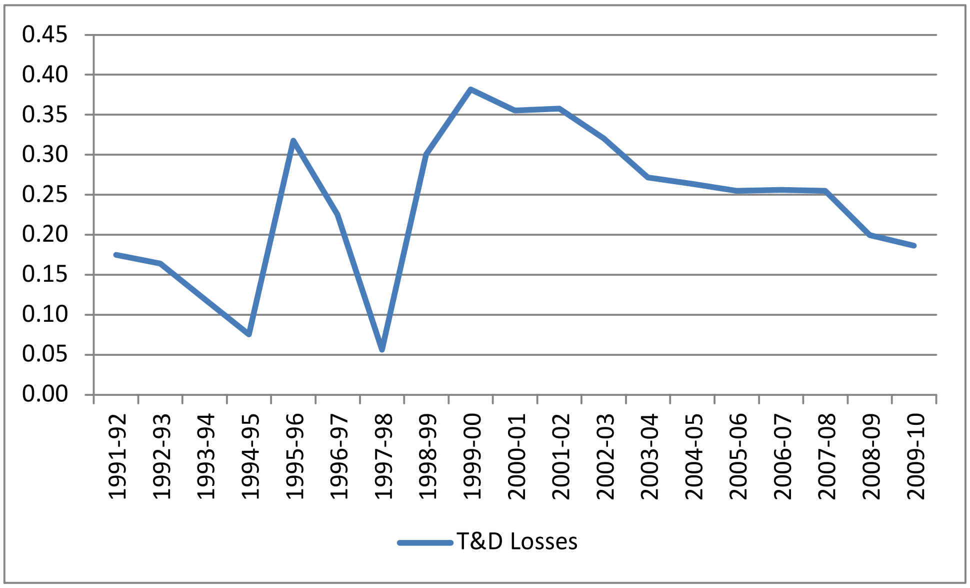
2005-06	4995	1267	6279	79.55	20.45	47.17	30.91	43.76
2006-07	4995	1442	6563	76.10	23.90	60.87	32.32	53.43
2007-08	5510	1769	7279	75.70	24.30	53.07	30.53	47.59
2008-09	5740	2406	8146	70.46	29.54	49.88	11.86	38.65
2009-10	6014	2602	8616	69.80	30.20	49.66	13.16	38.63

Source: KPTCL, Economic Survey of Karnataka, www.indiastat.com

Transmission & Distribution Losses

The transmission and distribution losses (T&D) are one of the crucial aspects of revenue cost gap in the power sector in Karnataka. The year on year trend of this T&D loses is shown is the following Figure 6.1.3. As it is observed from the Figure 6.1.3 that the T&D loss was below 20% before 1999-00 except the years 1995-96 and 1996-97 when it had reached up to 30% and 25% respectively. But this had increased drastically in the year 1999-00 and then followed a declining trend over the years. But the T&D loss in the year 2009-10 is still higher than that was in the year 1991-92. However, the point to be noted here that, this falling trend of T&D losses during post reform period is more consistent than the pre-reform period. This continuously fall in T&D losses implies the increase in transmission and distribution efficiency of the power sector in Karnataka. Therefore, the formation of electricity distribution companies as a part of the power sector reform in Karnataka has achieved its target of increasing power distribution efficiency across the Karnataka state.

Figure 6.1.3: Transmission and Distribution Losses

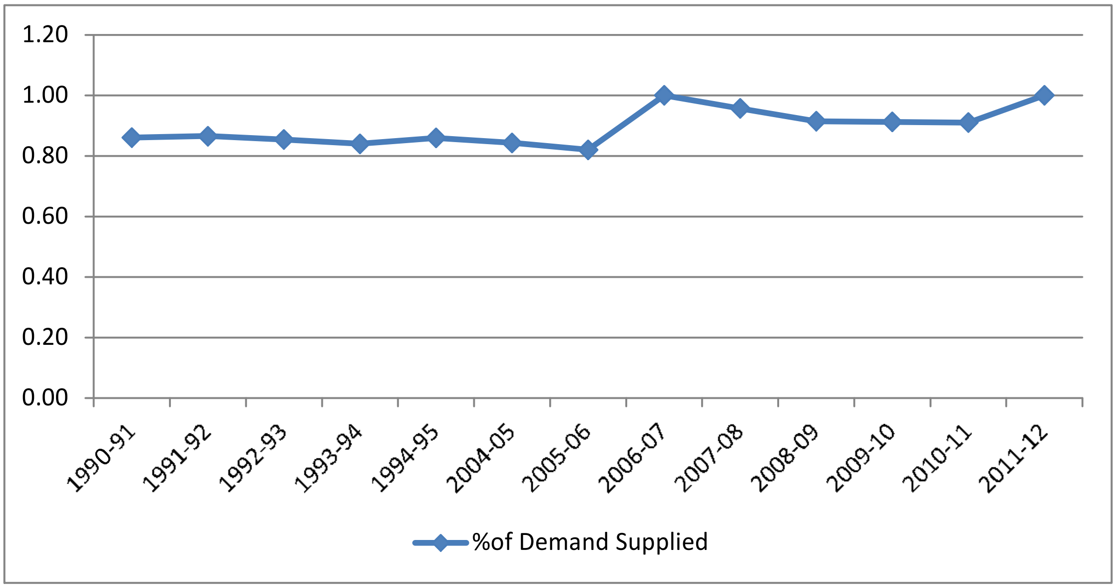


Source: KPTCL, Economic Survey of Karnataka, www.indiastat.com

Quality of Power Supply

Apart from this increase in distribution efficiency of power supply in Karnataka the power sector reform has significant impact on quality of power supply across the state. The Figure 6.1.4, given below, shows that the percentage of energy demand met by the supply of energy has been increased after 2005-06 onwards. Prior to 2005-06 the average met of demand was around 80% which has increased up to 100% in the years 2006-07 and 20011-12 with slight decline in between these two years. The increase in distribution efficiency is one of the major causes of increasing this quality of power supply in Karnataka.

Figure 6.1.4: Percentage of energy demand supplied



Source: Economic Survey of Karnataka, www.indiastat.com

Fiscal Situation of Government of Karnataka

The item wise government expenditure data presented in Table 6.8 and its trend shown in Figure 6.1.5. Both the Table and Figure reveal that the subsidy burden to the government of Karnataka has started declining after the end of transition period of power sector reform. Prior to reform, government expenditure for power sector in the form of subsidy was most and even higher than the revenue expenditure but the reverse scenario has observed after reform (See Figure 6.1.5). The increase in volume of sale to the non-subsidized consumer is one of the crucial factors behind this fall in subsidy expenditure of the government. On the other hand, the huge gap between the subsidy demand (difference between revenue and cost) and supply is observed in the post reform period. But point to be noted here that the subsidy demand by the power sector is continuously declining after this reform which ensures the declining trend of subsidy burden to the government of Karnataka. Apart from this subsidy the government of Karnataka also bears capital expenditure to improve infrastructure of the power sector, install new power projects etc. However, the official data reveals that the capital expenditure has not increased significantly even after the reform periods. The encouraging private investment for electricity supply from non-conventional sources and enacting Independent Power Producer

(IPP) policy from the year 2000-01 helped to replace government capital expenditure for power sector in Karnataka.

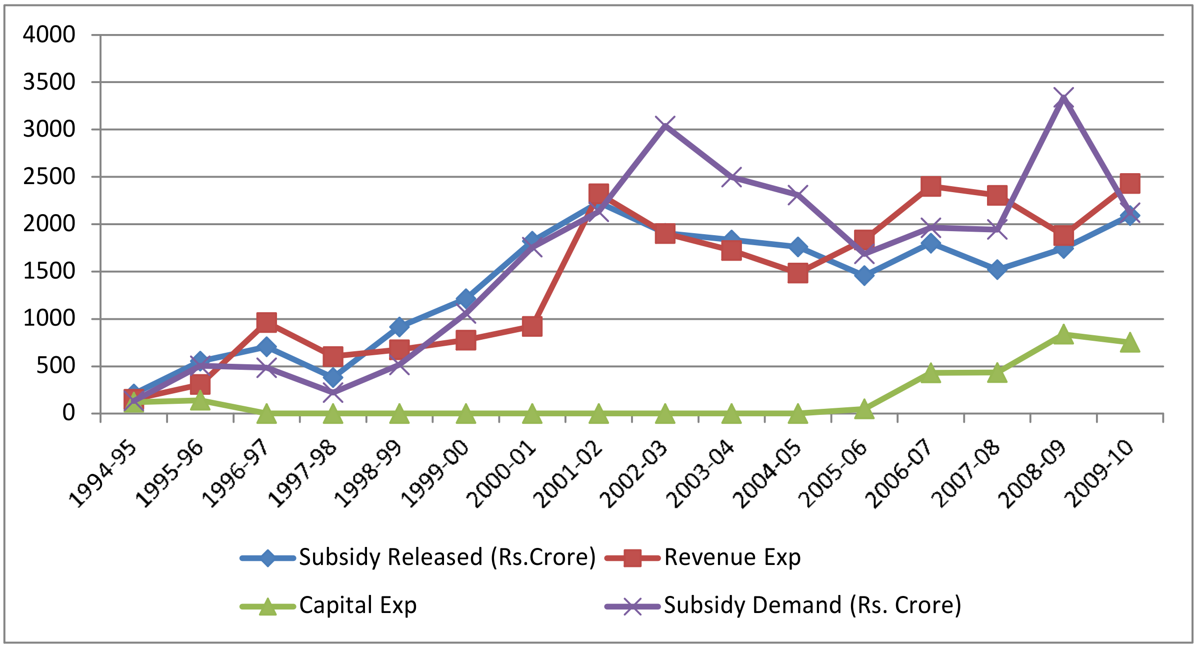
Therefore it is clear from the above that the power sector reform has positive implication on improvement of fiscal situation in Karnataka. But this amount of subsidy may increase with the increase in number of subsidized consumer especially the irrigation pump sets. In that case policy relating to agricultural power subsidy will help to reduce the fiscal burden to the government of Karnataka.

Table 6.8: Government Expenditure and subsidy demand for power sector

Year	Subsidy Released (Rs.Crore)	Subsidy Demand (Rs. Crore)	Revenue Exp	Capital Exp	Total	%of subsidy
1994-95	207	134	151	120	478	0.43
1995-96	554	505	307	141	1001	0.55
1996-97	706	484	961	0	1666	0.42
1997-98	380	222	602	0	982	0.39
1998-99	915	514	673	0	1588	0.58
1999-00	1213	1058	776	0	1989	0.61
2000-01	1821	1757	920	0	2741	0.66
2001-02	2231	2131	2321	0	4552	0.49
2002-03	1904	3036	1901	0	3805	0.50
2003-04	1834	2497	1722	0	3556	0.52
2004-05	1760	2307	1483	0	3243	0.54
2005-06	1457	1686	1833	50	3340	0.44
2006-07	1800	1961	2399	430	4629	0.39
2007-08	1520	1944	2304	433	4257	0.36
2008-09	1743	3339	1880	838	4461	0.39
2009-10	2091	2121	2429	753	5273	0.40

Source: Economic Survey of Karnataka,

Figure 6.1.5: Trend in Government Expenditure and Subsidy payment by the government of Karnataka



Source: Economic Survey of Karnataka

Conclusion and Recommendation

Since Power sector is a key sector for economic development government intervention is necessary to ensure its growth and equitable distribution of power among the various category of consumers. In this regard government subsidy to the power sector plays important role and government of Karnataka provides subsidy to distribute power to the poor households as well as irrigation pump sets across this state. Hence it is quite expected that the increase in consumption of power by these category of consumers will increase the subsidy burden to the government. However, with this reform policy government of Karnataka has achieved efficiency improvement in power distribution by consistently minimizing the T&D losses during this reform period.

Prior to the power sector reform in Karnataka there was severe threat in the power sector due to continuous decline in consumption by the industries and their unwillingness to join the power grid to fulfil their power requirement. But after this reform the improvement in quality of power supply and reducing the cross subsidy across various types of consumers started attracting power consumption by the industry. With this special effect the power sector in Karnataka is now maximizing the volume of power sale which in turn reduces the gap between cost and revenue of the power sector. Moreover it is interesting to observe that the growth in power sale to the industry and commercial users are significantly higher than the other category of consumers. As a result of this we have observed a decline trend of subsidy burden to the government. Not only that the implicit subsidy demand by the power sector is also declining after the reform.

Therefore we can argue that the power sector reform has brought three major changes in Karnataka, first, it improves the quality of power supply; secondly, it has attracted industrial and commercial consumption by reducing cross subsidization; thirdly, gradual but consistent increase in distribution efficiency in power supply . The formation of ESCOMs and competition among them is playing vital role behind this quality and distribution efficiency improvement. Prior to reform it was only the state electricity board which was responsible for the power distribution across the state. Due to this reason it was challenging to manage entire power network in the state and the monopoly power to the board did not encourage improve quality and efficiency. Hence it can be argued that if government did not take this reform, subsidy burden to the government would have increased to compensate the loss due to decline in non-subsidized power sale in the state.

Though there are some positive impacts of power sector reform, the most important lacunae has observed in the form in efficiency in power generation. Despite of increasing private sector intervention in power generation, the power sector reform could not improve the production efficiency resulting of which dependency on other states is increasing to meet the increasing demand for the power. Due to this serious lacuna in the power sector, the sustainability of positive implications of power sector reform is a challenge to the government of Karnataka. To achieve this sustainability, priority must be given on improving power generation efficiency especially on the technological interventions in power generation.

Extremely Preliminary Draft

Chapter 7

Performance of State Public Enterprises in Karnataka

Meenakshi Rajeev

ISEC

Introduction

Economists, advocating pro-reform policies, base their views and arguments on the proposition that market eventually makes the best allocative decisions. However, a (competitive) market equilibrium, which is Pareto efficient, can be achieved efficient only if several stringent conditions on the functioning of the markets are essentially met including the existence of all markets with large number of buyers and sellers having complete information. "We need a sufficient variety of commodity and financial instruments traded in the market to allow the market mechanism to do the job. Usually it requires many more active markets than are actually in use in real economies. The message of this family of models is that a rich enough array of active markets can result in a successful allocation over time and uncertainty.[2]" "Thus if the market structure is not complete in the sense of Arrow-Debreu, there is a scope for government intervention."[3] Public intervention is justified in situations where markets may not function efficiently for a variety of reasons. For example, there are certain goods which are characterized by natural monopoly. There are others that are by definition public goods- private provision of which may involve a free riders' problem. Because of this lack of information there is a need for social insurance (Hemming (1991))[4]. The presence of transaction costs can distort the equilibrium outcome in such situations. However, the resulting equilibrium achieved by conditions of perfect competition, though would be efficient, but the distribution implications of the equilibrium may not be socially desirable or acceptable. There can certainly be a meaningful argument for government intervention; but, the extent and the form of such interventions remains debatable.

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[2] Ross M Starr, 1997, General Equilibrium Theory, Cambridge University Press.

[3] Srinivasan, T. N., 1992, Privatisation and Deregulation, Economic and Political Weekly, XXVII, No.s 15, 16, 11-18 April. Also republished in Economic Policy and State Intervention, selected papers by T N Srinivasan, Edited by N S S Narayana, Oxford University Press, 2001.

[4] Public Expenditure Handbook , Edited by Ke-Young Chu and Richard Hemming, IMF, Washington D.C., 1991.

Moving on to the public sector enterprises in India we observe that at the time of independence investment potential in the country by the private sector was negligible. Thus, bringing efficiency through private sector was not feasible and potentially not possible. As a result, the industrial development in the country during the post-independence era had to be initiated through substantial domestic investment by the state. Thus, the large public sector in our country has its origin in such state investments. Fiscal deficit at that time was not envisaged as a major problem. As Bimal Jalan writes[5], "In the line with our socialistic traditions, a commitment to the expansion of the public sector was viewed as being synonymous with a commitment to the welfare of the poor. As a means of distancing India from the colonial powers, these views had some merit at the time of independence in 1947." However, any planning process has to evolve over time accommodating changes for the changed economic environment. Therefore, any policy matter warrants a meaningful debate and discussion, centered on a careful cost benefit analysis in the macroeconomic sense, essentially focusing on its intended relevancy considering the present economic scenario of the nation.

Historically, the erstwhile state of Mysore which forms a major part of present state of Karnataka, was quite rich in natural resources and, in order to utilize the same, industrialization in the state had begun in the early 1900s. Sir M Visvesvaraya (then Dewan of Mysore) who started the notion of "*Industrialize or Perish*" was a pioneer in the establishment of a large number of basic and consumer goods industries. Commencement of the flow of electricity from the Sivasamundram Dam, which was constructed in 1902, marked the beginning of a new era in the State's industrialization (Economic Development of Mysore, 1970). Though government investment created a strong industrial base in the State, but over time the policy on public enterprises lost its direction. Poor performance of many of the enterprises started imposing heavy financial burden on the State. Given the poor financial condition of the Government coupled with the current state of the economy marked by the IT boom etc. with a number of

[5] Jalan, Bimal (1996), India's Economic Policy, Viking Penguine Books India Ltd.

private firms flourishing, the State Government holds the view that ' It is no business of the government to do business'[6] (Rajeev, 2002, 2004).

Though the Central Government as well as the (Karnataka) State Government wished to have vigorous and rapid disinvestments drive, going forward, the actual process of disinvestment has proven to be rather slow, time consuming process, and political and legal viabilities among other reasons seem to be the major hurdles in achieving the desired objective. Unfortunately, the process of reforms has increased unemployment rate and this, logically, is politically unacceptable. Further, since the private sector does not have a social welfare goal, privatization is deemed as a process which reduces social wellbeing by enhancing income inequality and other such evils. Even proponents of privatization now accept that in some areas it is necessary to have a public sector than private sector. However, necessary as it is to have public intervention in some of the sectors it is equally important to understand that given the poor financial health of the government, it is no longer possible to provide financial aid regularly to the loss-making public units.

In this backdrop the current paper examines critically the performance of state PSEs in the state of Karnataka and attempts to highlight the costs to the State Government arising out of ownership of some of these PSEs. The paper unfolds as follows. The next section provides a brief review of literature. Section 3 presents certain concerns pertaining to non-availability of data for a detailed analysis of the performance of state enterprises and the costs they impose on the state exchequer. The next section provides a macro overview of the PSEs and the following section presents a disaggregated analysis of sector-wise performance of the enterprises and is analyzed considering some of the relevant financial indicators. Apart from the data generally made available by the enterprises there are also certain hidden costs burden of which eventually falls on the Government. Some of these examples are presented in Section 6. A concluding section follows thereafter

A Brief Review of Literature

[6] From interviews with different government officials

There is a huge volume of available literature on the issues related to the public sector, in general and its reform and privatization, in particular. There have been number of studies that have looked at various issues in India as well as in the international context and the relevant ones, accordingly, have been highlighted in this paper. In addition, we have presented a brief survey below. Problems of multiple objectives of public enterprises have been discussed by Bos (1986) and Jones (1984). Bos (1986), in fact, examines through theoretical framework various efficiency related problems associated with the public sector enterprises. However, the reforms in the Public Sector Enterprises, PSEs, are usually centered on the pace and range of reforms of the PSESs. Dewantripont and Roland (1992) talk about the process of gradual reform in newly democratized countries. Concentrating on country specific experiences Joskow (1994) takes up the reform process in Russia which unlike India was not gradual but rather rapid. Mekenzie and Mookherjee (2001) have showed that the reform process with some of Latin American countries showed that that privatization led to better access of services by the poor. Interestingly, it was also observed that privatization, contrary to the theoretical understanding of raising poverty, was not found to have raised poverty and inequality. China's experience with regard to public sector reform also reveals some interesting features. Since 1984, the State owned firms benefited from incentive contracts which accorded fair degree of autonomy to the managers in matters of internal management. Essentially, the managers were allowed to retain a part of the profits generated. In fact, they remitted to the Central government a certain average percentage of the profits generated up to a certain ceiling. Additionally, marginal rate of tax was applied to profits generated beyond the specified ceiling, a limit set by the Central Government. As a result, the profits retained by the firms rose from 17 per cent in 1980 to 39 per cent in 1989, [Lixin, 1997]. Lee [2002] discusses the regulatory reform and the impacts of reform relating to the telecommunication sector in Malaysia.

Several authors have written on public sector enterprises in the Indian context too (see Krishnaswamy, 1981 and Narain, 1981) especially focusing on the problems they face as a Public Sector Units. Jalan (1996) highlights the seriousness of the financial problems faced by the government, both at the State and at the center, due to continuous loss making by some of the PSEs. G. Ganesh (2001), in his book on public enterprises, touches upon different issues relating to PSEs including the report of various committees for its reform. It delineates the problems concerning various government efforts like Memorandum of Understanding. The government's attitude of loose approach in bringing efficiency to the PSEs and reluctance to give autonomy are some of the crucial elements for their failure. Pricing mechanism in public enterprises, which neither brings equity or enhances welfare nor maximizes profit. The issues related to price have been discussed in detail in Gouri (1989) and Sankar (1989) and the issues pertaining to management problem has been highlighted by Ray (1989). Sankar (1989) brings out the point that a necessary condition for the public enterprises underperformance is its presence in a wide range of activities, unrealistically expecting them to pursue multiple goals, which has led to operational and management constraints. Further, social welfare policies framed by the Government, of which the Public Sector was an important part, suppressed an essential motivation for cost minimization and profit generation, a necessary pre-requisite for the survival of the organization and emphasized a greater role of Public Sector for health and housing sectors. Nadkarni and Rao (1989) also examine the viability of introducing public sector into the fuel wood sector. Baijal (2002) in his articles effectively highlights the positive effects of reforms on labor and argues of improved labor condition in wages and better working environment under privatization than other wise conceived by a populist belief. Citing different examples, he argues with great conviction that it is not necessary that laborers always suffer from privatization. Evidently, in more than one privatized PSEs the laborers have become better off in terms of wages after privatization and no laborer and no labor has lost job.

Available literature on the aspects of state level public enterprises is also quite large. However, there is not enough available written literature on the performance and related issues of the PSEs in the state of Karnataka after the reform measures have been initiated. Several papers in Aziz (1989) cover various problems faced by the state public enterprises in the state of Karnataka. In particular, the management problems of PSEs in Karnataka have been discussed by Ram Mohan (Aziz, 1989) and their financial performances by Thimmaiah (Aziz, 1989). Labor related problems and work stoppage due to labor strikes reduces the productivity of state public enterprises [Shetty *et al* (1989)]. Rayappa and Thippaiah (1989) recommend a certain kind of criteria to evaluate the performance of PSEs in Andhra Pradesh. In the post liberalization era public enterprises reform programs are going on in almost all states in varying extent and speed. While Gopalakrishna (2002) looks at the PSE reform program in Andhra Pradesh, Sawhney (2002) examines the problem of restructuring the state public enterprises in Punjab. Examining Public Sector Reform Program in Orissa, Mishra and B. Navin (2002) talks about rationalization done by merging Hira Cables and Hirakud Industrial Works, closing of ABS spinning mills, Orichen Ltd. In fact out of 77 enterprises 37 are under reform and 34 are under liquidation and closure in Orissa. Similarly, other states are also carrying out their reform program.

Data Issues Pertaining to State Public Enterprises in Karnataka

The primary source of data for the state public enterprises (PSE) comes from the Karnataka State Bureau of Public Enterprises that used to publish the Public Enterprises Survey on a regular basis. Later as the reform drive got certain amount of momentum the bureau was given the name as Department of disinvestment and State Public Enterprises Reforms which (as per our knowledge) brought out a Public enterprises survey (2000-01) and Performance Report of State Public Enterprises (2003-04). These reports contained the detailed balance sheets of the PSEs even though lacked certain essential information regarding Government provided loans that were converted to equity sales tax waived etc. After 2004, however, there was a gap of almost nine years in publication of the reports and the Department of Public Enterprises brought out its report titled: State Level Public Enterprises in Karnataka at a glance , only recently in July 2013. It is important to note that this latest report provides only a snap shot of the financial details of the PSEs not a proper balance sheet contrary to the case with reports published prior to the year 2004 which contained balance sheet of the PSEs. In other words, it lacks information on a large number of important indicators and is highly inadequate for the purpose of computing the costs to the Government including tax paid, subsidies received and other such variables. **<u>This important data gap needs to be taken note of.</u>**

State Public Enterprises in Karnataka: A Brief Overview

The erstwhile Mysore State began its industrial activities well before Independence (of India) through the directed effort of the State. Due to the availability of large base of natural resources, mining became an important industrial activity. The Kolar Gold Fields turned into a town bustling with industrial activities with about 10,000 laborers engaged in the production of gold that touched the figure of 16,325 ounces in 1886-87[7]. Further, to improve communication networks the facilities of postal system was also modernized and priority was accorded to education. As part of infrastructure development, railway lines were constructed and the early 1900s saw the further expansion of railways in Mysore. In 1917 Government decided to install a distillation plant to manufacture coal and a blast furnace for smelting iron. "In August 1905 the electric lighting scheme for Bangalore city was completed and Bangalore became the first city in India to be lighted by electricity. In the same year, it was finally settled that the Tata Institute, now known as the Indian Institute of Science, was to be established in Bangalore"[8].

Any account of the industrial history of Karnataka would remain incomplete unless one mentions the contribution of Sri Mokshagundam Visvesvaraya who propagated the motto 'industrialize or perish'. After his retirement from the service he became the Dewan of Mysore in 1912. One of the noteworthy initiatives of Sir M Visvesvaraya was to carry out a survey of natural resources, the report on which was published in 1913. In 1922 the Department of Industries and Commerce was reorganized in order to give a greater emphasis to the development of industries in the state. The decade 1931-41 recorded the highest degree of industrial activity in the State (Economic Development of Mysore, 1970). Apart from gold mining, Mysore Iron and Steel Works, the Aircraft Factory, the Mysore Chemicals and Fertilizers, Mysore Sugar Enterprise and Mysore Paper Mills were *directly owned or aided by the*

[7] Mysore Gazetteer, Vol II, part IV, Edited by G Hayavadana Rao.
[8] Mysore Gazetteer, Vol II, Part IV, Edited by G Hayavadana Rao.

government. 'In the absence of a coordinated policy, Mysore has had to evolve an individual policy of her own, in order to encourage and help private effort and direct Government enterprise in fields beyond the capacity of private effort. As a result of this policy there were 29 major industrial concerns (not including the hydroelectric works, the textile mills and the gold mining enterprises) during 1920s with a total investment of about Rs 500 lakhs and employing 16,500 persons. The number of large industrial establishments during the year 1944 was 605 employing about 77,518 persons' (Economic Development of Mysore, 1970). The availability of power to all parts of the state directed the government's policy reform in a way that carved out small-scale and minor industries from the large scale industries. Therefore, it was the small-scale and minor industries that were targeted by the government for growth.

Further, the beginning of Second World War created new production activities and opportunities. For example, the new opportunities included manufacture of starch for textile purposes, vegetable dye stuff, potash salts from molasses, caustic soda, radio sets, cement etc. Thus, with Government initiative there was substantial growth of large and small industries in the state. However, the zeal and motivation with which Government developed the public sector enterprises lost its direction in the subsequent period.

Later, various committees were formed to look into reform measures. However, nothing much has been achieved in the decade of the 1990s. As of 31.03.2000 there were 80 State Public Sector enterprises under the purview of the Karnataka State Bureau of Public Enterprises (Public Enterprises Survey, '99-'00). On the basis of the commodities and services they deal with they are classified into 7 groups, which include

1. Public Utilities: 5 enterprises
2. Financial Institutions: 2 enterprises
3. Development Enterprises (noncommercial): 5 enterprises
4. Development Enterprises (commercial): 12 enterprises
5. Service Enterprises: 18 enterprises
6. Manufacturing Enterprises: 30 enterprises

Marketing and Advertising Enterprises: 8 enterprises

Performance of State PSEs in Karnataka till 2000: Certain Broad Aggregates

This section discusses the *historical* performance of Karnataka State PSEs by considering certain important indicators while the recent picture and findings of PSEs will be presented in the next section. For any enterprise, investment is the most critical variable and the analysis of the aggregate data relating to all the Public Sector enterprises seems to suggest historically of a steady increase of investment in terms of current prices; but at constant prices a very fluctuating trend is apparent (table 7.1). Secondly, contribution

Table 7.1 Selected indicators for State PSEs in Karnataka, (Rs crores) 1981-2000

Year	Current Total investment (share capital and loans)	Constant investment constant at 1980 as the base year	GOK's contribution (including PSEs)		Share of GOK to total investment
			At Current Price	At constant prices	
1981	1540.75	1427.80	849.32	787.06	0.55
1982	1909.05	1632.20	1040.99	890.03	0.55
1983	2136.91	1620.72	1157.94	878.23	0.54
1984	2450.07	1776.19	1354.57	982.00	0.55
1985	2820.79	1859.18	1489.34	981.62	0.53
1986	3263.15	2048.33	1696.10	1064.67	0.52
1987	3821.02	2227.93	1923.48	1121.53	0.50
1988	3976.57	2173.14	2117.09	1156.96	0.53
1989	4255.60	2163.43	2179.56	1108.03	0.51
1990	4534.99	2010.12	2331.48	1033.42	0.51
1991	10275.60	3955.83	2571.27	989.87	0.25
1992	10522.78	3791.34	3412.83	1229.64	0.32
1993	11351.95	3844.16	3909.71	1323.96	0.34
1994	11895.23	3681.89	4053.19	1254.57	0.34
1995	12527.44	3641.58	5426.94	1577.55	0.43
1996	13894.53	3046.87	5434.07	1191.61	0.39
1997	14547.54	3077.80	6140.93	1299.23	0.42
1998	16049.21	3168.16	6251.08	1233.98	0.39
1999	16780.53	3181.19	7345.67	1392.57	0.44
2000	24732.83				

*Constant prices at 1980-81 as base.

Source: Computed using data from Public Enterprises Survey, different issues

of the state Government used to constitute a substantial part (above 50%) which has evidently seen considerable decline in the post reform period, lying between 25 to 40 percent. And, therefore, in the light of such high investment regime, it is important to understand and find out if the government is indeed earning due return on its investments.

An examination of profits of the enterprises in this period shows that loss of the loss making enterprises in most years exceeds the total profit. This clearly indicates the overall financial burden on the Government.

Table 7.2 gives an idea of the profits and losses of the state PSEs over the years at current and constant prices (Rs crores).

Table 7.2 Profit and Losses of State PSEs (in Rs Crores)

Year	Profit at current price	Loss (current)	Net profit*= profit - loss(current prices)	Profit at constant prices	Loss at constant prices	Net profit*= profit-loss (at constant prices)
1987	24.70	-158.95	-134.25	14.40	-92.68	-78.28
1988	24.87	-178.08	-153.21	13.59	-97.32	-83.73
1989	180.34	-72.72	107.62	91.68	-36.97	54.71
1990	109.94	-35.17	74.77	48.73	-15.59	33.14
1991	165.91	-55.28	110.63	63.87	-21.28	42.59
1992	71.41	-155.18	-83.77	25.73	-55.91	-30.18
1993	110.17	-167.14	-56.98	37.31	-56.60	-19.30
1994	207.58	-142.18	65.12	64.25	-44.01	20.16
1995	226.09	-142.66	84.43	65.72	-41.47	24.54
1996	157.12	-206.40	-49.28	34.45	-45.26	-10.81
1997	287.84	-208.56	79.28	60.90	-44.12	16.77
1998	273.82	-274.84	-1.02	54.05	-54.25	-0.20
1999	318.06	-287.64	30.42	60.30	-54.53	5.77
2000	242.75	-360.28	-117.53	46	-66.93	-21.83

* Negative figures indicate losses. Constant prices at 1980-81 base.

Source: Computed using data from Public Enterprises Survey, different issues

At current prices there is an increasing trend for profits (except for a few years), however, the constant price figures over the years suggests that there no indication of consistent positive growth over the years with relatively lower variation in the profits. The aggregate net profit (at current prices) levels over the years from 1987-2000 is negative with a net loss of Rs 43.77 crores. Further, the net profit performance is even worse for the last 5 years i.e., 1996-2000, in consideration where the aggregate net profit at current prices drops to Rs – 58.13 crores. Therefore, the negative net profit over the thirteen year period is indicative of the negative returns earned by the government till the year 2000 on investments in the PSEs.

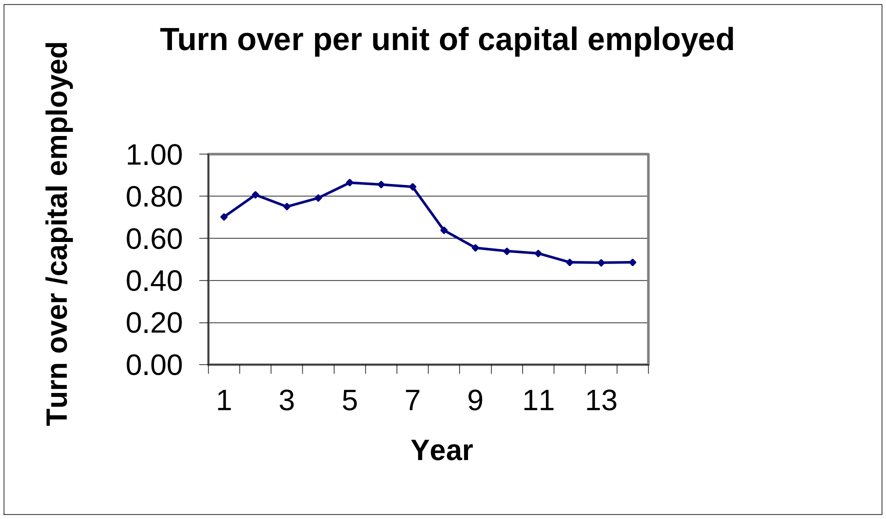
We next consider another important indicator of performance viz., turnover to capital employed ratio (Table 7.3, Fig. 7.1.1). One important observation from this computation is that turnover as a percentage of capital employed is falling over the years. This scenario is clearly depicted through Fig. 7.1.1 and *falling turnover per unit of capital employed is no doubt a serious matter of concern.*

Table 7.3 Capital, Turnover and Turnover to capital Ratio

Year	Capital employed (current price)	Turnover (current price)	Capital employed (constant price)	Turnover (constant price)	Turnover/capital employed
1987	3300.07	2314.90	1924.18	1349.76	0.70
1988	3144.77	2537.17	1718.58	1386.53	0.81
1989	3793.67	2848.64	1928.60	1448.17	0.75
1990	4123.98	3265.08	1827.94	1447.23	0.79
1991	4423.98	3825.16	1703.11	1472.58	0.86
1992	5208.46	4456.10	1876.60	1605.53	0.86
1993	6235.49	5264.92	2111.55	1782.88	0.84
1994	9524.62	6081.36	2948.12	1882.34	0.64
1995	12282.23	6817.68	3570.30	1981.82	0.56
1996	13604.51	7328.07	2983.27	1606.94	0.54
1997	15931.56	8417.63	3370.62	1780.91	0.53
1998	18306.83	8899.70	3613.83	1756.83	0.49
1999	21141.01	10236.10	4007.84	1940.52	0.48
2000	23691.34	11512.34	4401.50	2138.82	0.49

Source: Computed using data from Public Enterprises Survey, different issues

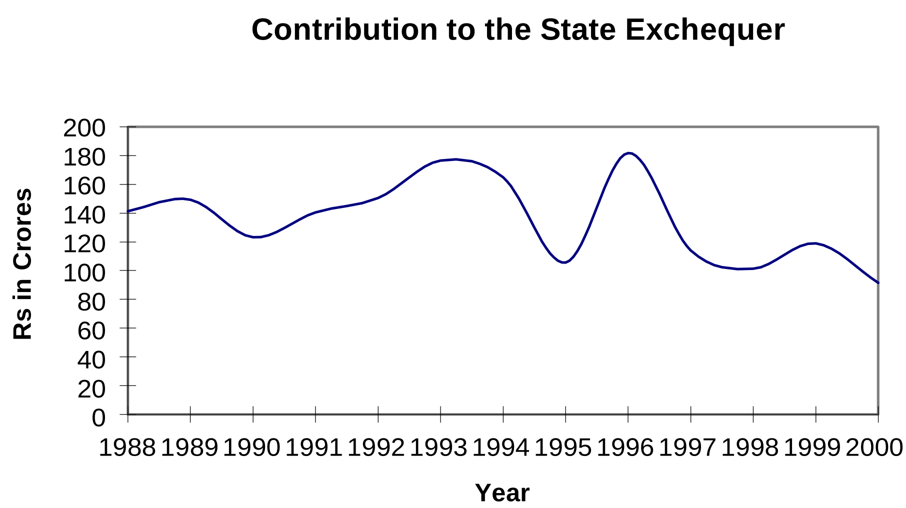
Fig 7.1.1 Turnover to Capital Employed Ratio



Source: Computed using data from Public Enterprises Survey, different issues

It is imperative for the state government, the major equity holder in the PSEs that they earn adequate returns and this can be seen among other indicators, through the contributions of the enterprises to the state exchequer. A close examination of data during this period reveals that at current prices there appears to be some increase in contribution to the state exchequer, however, converting it to constant prices (fig 7.1.2) we observe fluctuations and in the later years a steady decline especially from 1997 after a slight increase in the second half of the year 1998 and then a steady decline afterwards.

Fig. 7.1.2 Contribution to the State Exchequer (1988-2000) in Rs crores and at constant prices



*Constant prices at 1980-81 base

Source: Computed using data from Public Enterprises Survey, different issues

Similarly if we look at the dividend paid by these enterprises we observe there is a drastic fall from 1997 onwards.

Table 7.4 Dividend Paid by the State PSEs

Year	At Current prices	At Constant prices
1992	609.24	219.5083
1993	547.46	185.3889
1994	682.72	211.3198
1995	667.69	194.0894
1996	680.8	149.2894
1997	197.63	41.81232
1998	167.53	33.07095
1999	166.07	31.48298

Source: Computed using data from Public Enterprises Survey, different issues

In this context it may be argued that many of these enterprises are driven by social welfare motives rather than profit motive; hence it is essential to not to judge their performances based on usual financial indicators. And, therefore, in the light of such understanding it is crucial to do a sector-wise analysis of the PSEs. Table 7.5 present a few indicators related to PSEs sector-wise.

Table 7.5 Sector-wise performance of the PSEs ('99-'00)

Year '99-'00		Rs in crores	
Sectors	Net worth	Capital Employed	Profit*
Public Utilities	8556.32	8556.32	207.37
Financial Institutions	-4822.54	2658.07	-155.83
Development Enterprises(non Commercial)	185.7	307.07	-4.9
Development Enterprises(Commercial)	31.4	140.26	-27.91
Service enterprises	2130.88	7459.08	35.36
Manufacturing enterprises	122.53	847.97	-38.54
Marketing and advertising enterprises	121.41	329.79	13.39

* Profit after income tax and prior period adjustments

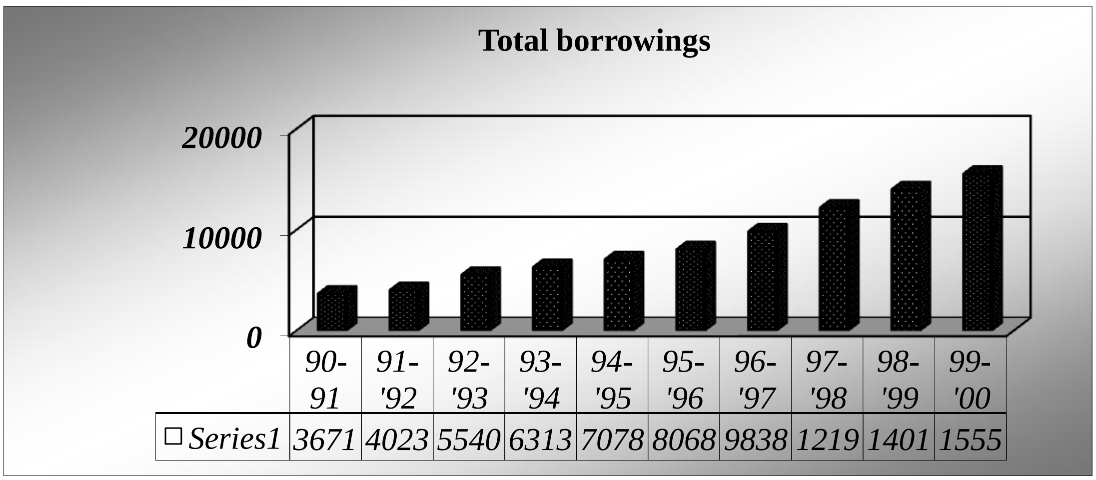
Source: Computed using data from Public Enterprises Survey, different issues

Interestingly we observe that development (*commercial*) enterprises and manufacturing enterprises are loss making sectors in the aggregate sense and both these sectors are mainly commercial in nature. Therefore, considering the dismal financial track record of these sectors the government should seriously consider selling a part its share in these three commercial sectors. Furthermore, financial institution sector and development (noncommercial) sector are also incurring net losses.

Further if we look at the total borrowings we observe an increasing trend (Fig. 7.1.3). This is a matter of concern because usually the borrowings of the PSEs are from the state government

<u>and when they are unable to repay the loan, the government has no choice but to treat the loan as an investment. Thus, the total loss shown by an enterprise may be greater than what it actually amounts to in their book of accounts.</u>

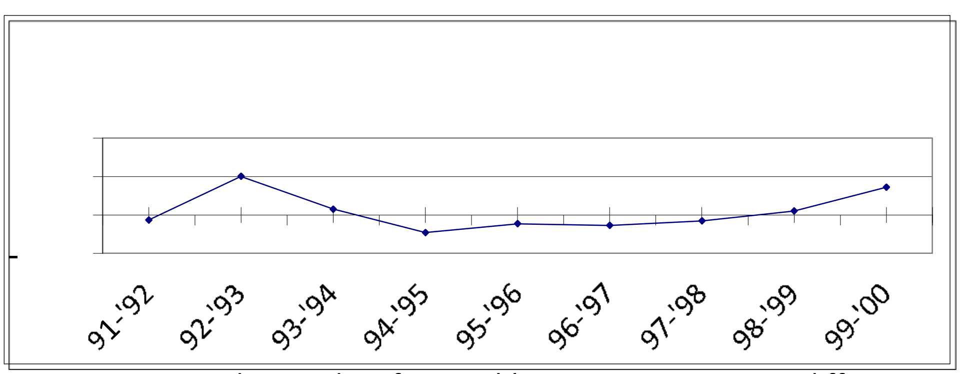
Fig 7.1.3 Total Borrowings of State PSEs



Source: Computed using data from Public Enterprises Survey, different issues

As far as employment is concerned (Fig. 7.1.4), even after the initiation of big-bang reform we observe positive growth rates of employment in PSEs till '94 which however has started falling (negative growth rate). While the growth rate of decline of total employment was falling over the years till '97-'98, we observe further increase in employment from '98-'99 to '99-'00. This forces one to re-think about the government's commitment to reform measures that were initiated during this period with respect to the PSEs.

Fig 7.1.4 Growth rate of employment (percent increase)



Source: Computed using data from Public Enterprises Survey, different issues

Performance of State PSEs in Karnataka: Recent Macro Scenario

According to most recent data available from the Department of Public enterprises, Government of Karnataka there are 80 PSU's. Further, they have been classified and grouped in accordance with the basis of commodities and services they deal with, into the following categories:

1. Manufacturing (9)
2. Electricity (8)
3. Mining (6)
4. Construction (6)
5. Transportation (6)
6. Trading (10)
7. Financial corporation's (5)
8. Social sector (28)

For the growth of an enterprise investment is a necessary pre-requisite Taking all the categories together recent figures available seems to highlight that (see Table 7.1) the investment has not increased greatly in respect to earlier years figure . It is worth noting that increase in investment is not seen in terms of current prices, if we compare figures of the last decade. Thus at constant prices there will be in fact decline in investment.

Table 7.6 Total Investment in PSEs (in Rs lakhs)

Year	Investment (at current prices)	Investment (at constant prices, 2004-05 base year)
2007-08	2360538.86	2007417.73
2008-09	2635532.78	2066595.35
2009-10	2828435.25	2093013.34

Source: Computed using data from the State Level Public Enterprises of Karnataka at a Glance, Department of Public Enterprises.

Comparing the recent figures from table 7.6 we can observe some degree of growth (11%, in 2008-09 and 7% in 2009-10) in the investment at current prices, but when calculated at constant prices there has been only a marginal increase in the growth rate of investment made in PSEs.

Correspondingly with the increase in investment we observe an increase in total profit after tax as well and the rates of increase in profit (at current prices) at 24% during 2008-09 and 38% during 2009-10 are much higher than that of investment (Table 7.7). However, side by side it is disturbing to note that there is large amount of loss is also incurred by the loss making enterprises. The encouraging fact is that unlike earlier years, in the present day scenario, loss of the loss making enterprises does not exceed total profit. Nonetheless they do impose financial burden on the state.

Table 7.7 Profit and loss made by PSEs (in Rs lakhs)

YEAR	Profit after tax at current prices	Total loss at current prices	Constant after tax at constant prices:2004-05 base year	Loss at Constant prices: 2004-05 base year
2009-10	35744.15	32912.49	30397.05971	27988.99746
2010-11	44331.62	11797.23	34761.66967	9250.539733
2011-12	61168.42	20966.41	45264.00924	15514.93035

Source: Computed using data from the State Level Public Enterprises of Karnataka at a Glance, Department of Public Enterprises.

The profits made by PSEs have grown both at current as well as constant prices, whereas the losses incurred has been showing a fluctuating trend.

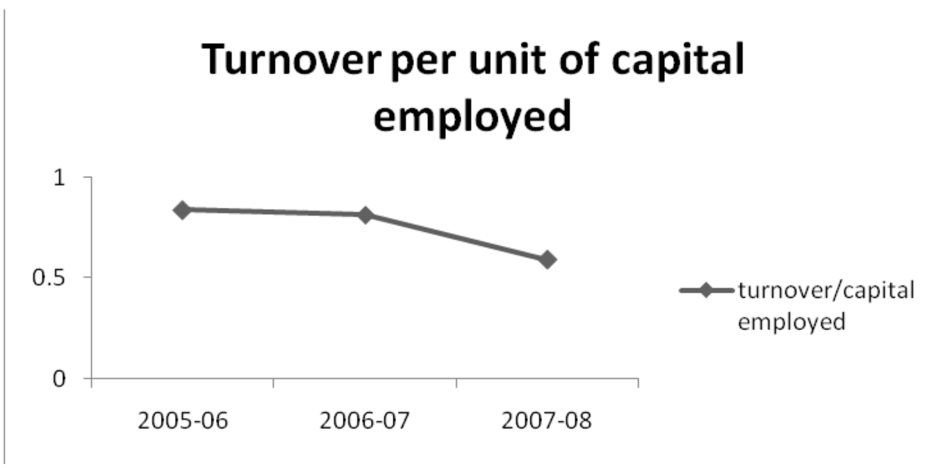
The examination of turnover to capital employed ratio shows a declining trend but the ratio in the last decade (compare with Fig. 7.1.1) has increased substantially in respect with the corresponding ratio in the 90s. H l (Table 7.8, Fig 7.1.5).

Table 7.8 Turnover to Capital Ratio (in Rs Lakhs)

Year	Turnover (Current prices)	Capital employed (Current prices)	Turnover (Constant at 2004-05 base year)	Capital employed (Constant at 2004-05 base year)	Turnover/ capital employed
2005-06	1579914	1888638	1515874.068	1812084.309	0.84
2006-07	1631317	2008828	1470832.694	1811205.24	0.81
2007-08	1999219	3397561	1700148.956	2889308.168	0.59

Source: Computed using data from the State Level Public Enterprises of Karnataka at a Glance, Department of Public Enterprises.

Figure 7.1.5 Turnover per unit of Capital Employed



Source: National survey on SLPEs, 200

Table 7.9 gives an over view of contribution made by the PSEs to the GoK.

Table 7.9 Contribution to the state exchequer (in Rs lakhs)

Year	At Current prices	At Constant prices (Constant at 2004-05 base year)
2005-06	25801	**24755.18**
2006-07	27429	24730.61
2007-08	32433	27581.23

Source: National survey on SLPEs, 2008

The contribution to the state exchequer by the PSEs at current prices shows a consistent year on year growth, but when calculated at constant prices the contributions were found to be fluctuating.

Of course as mentioned in the previous section performance and contributions thereby of the PSEs differs across sectors and enterprises in the developmental areas need not operate in a complete commercial basis. Table 7.10 provides a few selected indicators for the PSEs sector-wise.

Table 7.10 Sector wise performance of PSEs

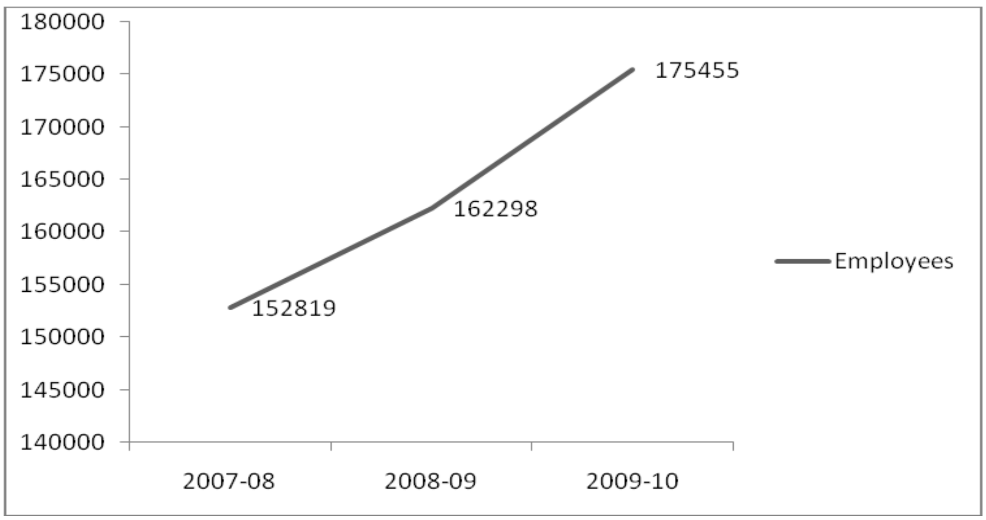
Year :2007-08	In Rs lakhs at Current prices		
Sector	Net Worth	Capital Employed	Profit
Manufacturing	6766	9544	2205
Financial	-19848	120739	6217
Mining	59201	57160	28210
Energy generation transmission/distribution	536794	1465598	29269
Road transportation	1565	69369	-4248
Marketing and trading	17830	27150	-827
Tourism	1304	1382	188
Irrigation and water resource	1574582	1265872	-41313
Public works/road development industrial infrastructure	103999	190012	4300
Agro and food beverages based	13090	14487	381
Forest development	7283	4591	812
Community development non-commercial	2263	2261	22
Community development commercial	2679	23154	1012
Housing	41948	143186	-351
Miscellaneous	3172	3056	1757

Source: National survey on SLPEs, 2008

From table 7.10 we can observe that in 2007-08 Road transportation, Marketing and trading, Irrigation and water sources and Housing sectors are the sectors that have incurred losses and some of this sector operates on non-commercial basis. Our earlier analysis had showed us that (see previous section) manufacturing sector is a net loss making one but this trend is reversed in the recent years (Table 7.10). Further analysis is done enterprise-wise and presented in the next section on the performance of PSEs based on their net profit or losses.

The employment in public enterprises shows a steady growth in the state of Karnataka. The number of employees grew by 6.2 per cent and 8.10 per cent in 2008-09 and 2009-10 respectively.

Fig 7.1.6: Total number of employees in PSEs, Karnataka



Source: Report by department of PSE, Karnataka

1. Understanding Financial Implication to the State:

A Disaggregate Analysis of PSEs

In the previous two sections we presented certain important financial indicators in an aggregate framework over the past 3 decades. In this section we consider these indicators and provide a disaggregate analysis which will provide us insights into the sectors and enterprises that are creating financial burden on the state.

<u>Contribution to state exchequer: Sectoral Picture</u>

State exchequer is the government treasury from where the government collects and manages the state revenue. The contribution made by the public enterprises to the state exchequer adds to the government revenue. While the more the enterprise contributes to the exchequer the better is it for the exchequer, not all enterprises contribute to the state exchequer. Thus the PSEs which fails to make a contribution to the state treasury, becomes an unnecessary burden and an added cost to the government in a sense, as it fails to receive returns made on the investment. Table 5.1 shows the average contribution made by PSEs between the years 2005-08. Of course it is necessary to note here that certain enterprises are established with pure development motive and not for enhancing the earnings of Government.

An aggregate picture provided in the previous section reveals a growth in contribution made by the PSEs (at current prices) towards the state exchequer (see Table 4.9). The contribution made by 45 PSEs towards the state exchequer has increased by 6.3% between 2005-06 and 2006-07, and the following year it increased further by 18%.However, calculating the same at constant price we witness a fall of -0.09% in 2006-07 and a further increase of 11.5 % in 2007-08 respectively. For a disaggregate scenario we analyze further contribution to the state exchequer by the PSEs sector-wise, which is presented in table 7.11

Table 7.11 Sector-wise Contribution to the State Exchequer (in Rs lakhs)

	Current prices			**Constant Prices(2004-05)**		
Sector	**2005-06**	**2006-07**	**2007-08**	**2005-06**	**2006-07**	**2007-08**
Manufacturing	487	548	2085	467.2	494	1773
Financial	16	74	46	153	66	39.1
Mining	911	1019	1170	874.0	918	994.9
Energy Generation transmission/distribution	12923	11669	12926	12399	10521	10992
Road transportation	8384	10364	11536	8044	9344	9810
Marketing and trading	227	312	532	217.8	281	452.4
Tourism	24	30	26	23.0	27	22.1
Irrigation and water resource	1913	2285	3058	1835.4	2060	2600.5

Public works/road development industrial infrastructure	146	275	263	140.0	247	223.6
Agro and food beverages based	199	201	213	190.9	181	181.1
Forest development	207	232	228	198.6	209	193.8
Community development non-commercial	0	0	0	0	0	0
Community development commercial	353	400	336	338.6	360.6	285.7
Housing	0	0	0	0	0	0
Miscellaneous	11	20	14	10.5	18.0	11.9
TOTAL	**25801**	**27731**	**27634**	**24755**	**24730**	**27581**

Source: National survey on state level public enterprises, 2007-08

- The manufacturing enterprises has been showing an increasing trend in contribution to the state exchequer, as we witness a growth of 12 % in 2006-07 from Rs.487 lakhs in 2005-06 and a further leap of 280% in 2007-08.Among all the manufacturing enterprises *Karnataka soaps and detergent ltd* has been the leading contributor, contributing 84% of the total share whereas *Karnataka silk industries* has contributed only a marginal amount of 3%.
- The contribution made by the financial enterprises led by *Karnataka state financial corporation*, increased by 362.5% between 2005-06 and 2006-07, but fell by 37.83% to Rs.46 lakhs during 2007-08, depicting instability in the sector.

- The mining enterprises have shown considerable growth in its performance at current prices as well as at constant prices and it has made substantial contribution to the state exchequer. Mysore minerals ltd contributes a major share of around 53% to the total share and the remaining 47% was contributed by Hutti Gold Mines Enterprise ltd.

It is here to be noted that neither of the above three mentioned sectors has received any kind of subsidy/grant by the government.

- The energy sector involving energy generation transmission and distribution has been one of the leading contributors, contributing about 43% to the state exchequer, with Karnataka Power Corporation making the largest. Though there was a decline by 9.7% between 2004-05, the following year it increased to 10.77%. However, when calculated at constant prices the contribution made by energy sector towards state exchequer declined by 15.14% between 2004-05 and 2005-06, and then increased by a mere 4.47% between 2006-07 and 2007-08.It is also to note here that the *energy sector is the leading profit maker among all the other PSEs in Karnataka. In fact, the profit of the energy sector exceeds the overall profit made by all the PSEs by 64%.* But, importantly; it also receives the larger share of subsidies and grants provided by the government.

- *The road transportation sector holds the second largest share in contributing to the state exchequer,* and has been showing a tremendous growth over the years. Between 2005-06 and 2006-07 there has been a 23.6% increase in the contribution, and between the year 2006-07 and 2007-08 it further increased to Rs.11563 lakhs by 11.3%.North Western Karnataka state transport corporation contributes 70% of the total share whereas , Karnataka state road transport corporation has not contributed.
- *The irrigation and water resources enterprises being the third largest contributor* holds a share of 8.47% of the total contribution to the state exchequer. And it has only been increasing over the years as we witness a growth of 19.4% and 33.8% between 2005-06&2006-07 and 2006-07&2007-08 respectively. Cauvery Neeravari Nigam ltd. has been the only contributor among all the other enterprises in this sector.

- The public work enterprise has been showing a fluctuating trend in its contribution to the exchequer. Though between 2005-06 and 2006-07 there was about 88% rise in the contribution made, but the following year the contribution reduced by 4% to Rs.263 lakhs. *Karnataka state small industrial development Ltd*.is the major contributor in this sector contributing 75% of the share, but the entire subsidy amount allotted by the government of Rs.1264 lakhs has been received by this enterprise alone. On the other hand Karnataka *state industrial development ltd* despite receiving no subsidy managed to make a contribution of Rs.64 lakhs which is 25 % of the total share of the contribution in 2007-08.

- The agro and food beverages enterprises has been showing only a marginal growth of 1% and 5% in 2006-07 and 2007-08 respectively in its contribution to the state exchequer. Karnataka state seeds corporation ltd is the major contributor here holding 53% of the share, on the other hand Karnataka state agricultural corporation ltd has contributed only 2% despite receiving 88% of the subsidy allotted for agro and food beverages based enterprises.
- The Forest development enterprise has also been following a fluctuating trend in making its contribution to the state exchequer. During 2006-07 it made a contribution of Rs.232 lakhs which was 12% more than the previous year. But in 2007-08 there was a decline of 1.7% to Rs.228 lakhs.
- The tourism enterprises, consisting of Jungle *lodges and resorts ltd,* has only made a small contribution to the state exchequer despite a growth of 25% between 2005-06 and 2006-07. It's contribution to the state exchequer declined by 13.34% in 2007-08.
- Despite receiving a certain amount of subsidy the community development (non-commercial) enterprises consisting of Karnataka *state women Development Corporation* has not made any contribution to the state exchequer and this trend is same even with the housing enterprises led by *Rajiv Gandhi rural housing corporation; this is not unusual considering that these enterprises are not for profit.*
- However as expected commercial community development enterprises have performed better by making a considerable contribution to the state exchequer. The contribution made to the state exchequer increased by 13% in 2006-07 from Rs.353 lakhs in 2005-06, but further declined by 16% in 2007-08.

<u>Micro level Enterprise-wise Scenario</u>

A further analysis of the enterprise level performance of PSEs based on their contribution to the state exchequer, we observe high level of concentration.

Table 7.12: Enterprise wise contribution to state exchequer: 2007-08

Sl.no	Performance level	Percentage or share Contribution to the state exchequer	Number of enterprises
1.	High performing enterprises	80%	5
2	Medium performing enterprises	19%	20
3.	Low performing enterprises	Less than Rs.10 lakhs	11
4.	Very low performing	0	11

Source: National survey on state level public enterprises, 2007-08

From table 7.12 we see that the contribution of 5 enterprises constitute 80% of the total contribution to the state exchequer. Each of these enterprises has been discussed below.

- *The north- west Karnataka road transport* is the leading contributor to the state exchequer holding a share of 24.67% to the total contribution. The time period between 2005-06 and 2006-07 saw a rise by 22% in its contribution to the exchequer, which further increased by 10% to Rs.8073 lakhs in 2007-08 from Rs.7188 in 2006-07.
- The second major contributor is *Hubli electricity supply corporation Ltd.,* which holds a share of 22% of the total contribution. But there has been a decline in its total contribution, as we observe that the contribution made by this enterprise was Rs.7095 lakhs in 2005-06 which declined by 14% in 2006-07 to Rs.6194. This downward trend continued even in the following year where there was a further decline of 13% in the year 2007-08.
- The *Mangalore electricity corporation ltd* is the third largest contributor to the state exchequer, having a share of32% of the total contribution. Between 2005-06 and 2006-07 though the amount contributed declined by 36%, it increased by 26 % in 2007-08.

- The *North eastern Karnataka road transport corporation* is another major contributor to the state exchequer contributing 11.18%, and its share has increased over the years. For example, there was a growth of 11 % in its contribution between 2005-06 and 2006-07, but the year following this growth had slipped to 8%.
- Following this is the *Cauvery Neeravari Nigam ltd* which made a contribution of 8.59% to the total state exchequer. In the year 2007-08 it deposited Rs.3058 lakhs which is 25% more of Rs.2285 lakhs in 2006-07, which again was more by 16% in 2005-06.

Following these are the 29 enterprises which holds the remaining 20% of the total contribution to the state exchequer. Some of these enterprises include *Karnataka power corporation ltd* has a share of 7.63% towards the total contribution which it makes to the state exchequer. From Rs.1792 lakhs in 2005-06 there was a growth of 26% to Rs.2443 lakhs in 2006-07. But by 2007-08 it made 10% less contribution than the previous year. *Karnataka Vidyut Karkhane* started making its deposits to the state exchequer only in the year 2007-08, which amounted to Rs.1207 lakhs.

They also include enterprises which have made only a marginal contribution the state exchequer, like The *Karnataka soaps and detergent ltd, Mysore minerals ltd, The Hutti goldmines enterprise ltd* which has made an average contribution of 1.80%, 1.94% and 1.72% respectively. All these three enterprises has been showing an increasing trend in their contribution made to the state exchequer except for the *Hutti gold mines enterprise ltd* which showed a decline of 10% in its contribution to the state exchequer.

On further analysis we also noted that more than 1/3rd of the enterprises have contributed less than 10 lakhs to the state exchequer.

Though the above stated enterprises have made certain contribution to the state exchequer, there are also enterprises which have made zero payments. These enterprises account to more than 1/4thof 45enterprises under PSEs and include *Karnataka state power loom corporation ltd. ,Karnataka state road corporation ltd, Karnataka asset management enterprise ltd, Karnataka* *trustee management ltd, Karnataka Neeravari nigam ltd ,Karnataka road development ltd ,Karnataka urban infrastructure and financial corporation ltd ,Karnataka cashew development corporation ltd ,Karnataka state women's development corporation ,Rajiv Gandhi rural housing development corporation etc.*

Profit and Losses of PSEs

To understand the profit or loss made by PSEs in Karnataka we have analyzed the net of losses made by each of the sector consisting of various enterprises. First looking at the aggregate picture on profit vs. loss (Table 7.13) we observe that unlike in the last decade (see Table 7.2) there is improvement in the sense that for 4 out of five years net profit (net of losses) is positive. However in one year (2008-09) we still observe negative net profit and very low net profit thereafter.

Table 7.13 Profit-loss to the GOK (in Rs lakhs, at current prices)

Year	Total Profit	Total Loss	Total profit-Loss
2005-06*	49238	46020	3218
2006-07*	67573	39842	27731
2007-08**	97721.67	17177.24	80544.43
2008-09**	80107.12	156636.9	-76529.78
2009-10***	35744.15	32912.49	2831.66
2010-11***	44331.62	11797.23	32534.39
2011-12***	61168.42	20966.41	40202.01

Source: Computed using data from Department of public sector enterprises (Different issues)

Note: (*) data for 45 Enterprises, (**) data for 56 enterprises

(***) data on profit of 45 enterprises and loss of 15 enterprises

At current prices the net of profits grew by 1048.95% between 2009-10 and 2010-11 and at constant prices the growth was 959.91 per cent. The following year there was only a marginal difference in the growth at current and constant prices of 23.56% and 14.38 % respectively. It is heartening to note that the PSEs as a whole have resulted to be a profit making entity to the government.

But sector wise disaggregated analysis show that some sectors are at net loss and imposing burden on state resources (table 7.14).

Table 7.14 Sectoral analysis of Profit-Loss (in Rs lakhs, at current prices):2011-12

	Year :2011-12	Profit-Loss (in Rs lakhs)	
SL.NO	Enterprises	Current prices	Constant prices (2004-05 base)
1	Manufacturing	-4732.21	-2990.46
2	Financial	1109.02	700.8303
3	Mining	20601.86	13019.07
4	Energy generation transmission/distribution	11396.81	7202.061
5	Road transportation	-68.01	-42.978
6	Marketing and trading	4740.81	2995.891
7	Tourism	-73.61	-46.5169
8	Irrigation and water resource	-5337	-3372.65
9	Public works/road development industrial infrastructure	4017.39	2538.736
10	Agro and food beverages based	1034.2	653.5488
11	Forest development	786.23	496.8475
12	Community development non-commercial	1505.18	951.1783
13	Community development commercial	66.05	41.73941
14	Housing	1893.55	1196.604

Source: Department of PSEs, Karnataka

Ironically some of the sectors which one expects to run on a commercial basis such as manufacturing or road transport or tourism are the net loss making sectors.

A further enterprise wise desegregation shows that there were 15 loss making PSEs in Karnataka in 2011-12.The total loss made by these enterprises is given below in table 7.15.

Amongst the loss making enterprises there are PSEs that also make contributions to state exchequer.

Table 7.15 Total loss made by 15 Loss making PSEs

	Total loss(in Rs. Lakhs)	
Year	Current prices	Constant prices(2004-5 base year)
2009-10	32912.49	24354.90
2010-11	11797.23	8053.29
2011-12	20966.41	13249.44

Source: Department of Public sector enterprises, Bangalore

From above table we see that there has been a fluctuating trend in the losses made by the 15 PSEs in Karnataka. When estimated at current prices between 2009-10 and 2010-11, the loss made by these enterprises fell by 64.15%, but in 2011-12 it increased by 77.72% to Rs.20966.41 lakhs. Whereas at constant prices the total loss fell by 66.93% in 2010-11, and then increased by 64.52% from Rs.8053.29 lakhs in 2010-11 to Rs.13249.44 lakhs in 2011-12 (Table 7.16 lists out the enterprises).

Table 7.16 Trend in losses of 15 loss making PSEs (at current prices, in Rs lakhs)

ENTERPRISES	**2009-10**	**2010-11**	**2011-12**
Mysore Paper Mills Ltd.	7723	8478	7687
Krishna BhagyaJalaNigama Ltd.	3200	2747	5337
North West Karnataka Road Transport Corporation Ltd.	5780.72	3044.4	2343.55
North East Karnataka Road Transport Corporation Ltd.	3386	1205	1807
Mysore Sugar Enterprise Ltd.	7021	802	1364
Karnataka state tourism development corporation ltd	552.38	63.7	546.61
Gulbarga Electricity Supply Enterprise Ltd.	3111	+6130	462
N.G.E.F.(Hubli) Ltd.	199.14	39.52	377.24
Rajiv gandhi rural housing corporation ltd	499.5	299.98	274.76

Karnataka handloom development corporation ltd	1123.12	998.56	259.28
Dr. BabuJagjeevan Ram Leather Industries Development Corporation Ltd. (LIDKAR)	136.84	119.66	165.15
Chamundeshwari electricity supply corporation ltd	73.25	+11.38	123.45
Karnataka state coir development corporation ltd	+7.6	+4.48	99.63
Karnataka Fisheries Development Corporation Ltd.	51.82	60.87	69.13
Karnataka sheep and wool development corporation	62.32	84.4	50.61
Total	**32912.5**	**11797.2**	**20966.4**

Source: Department of Public sector enterprises, Bangalore

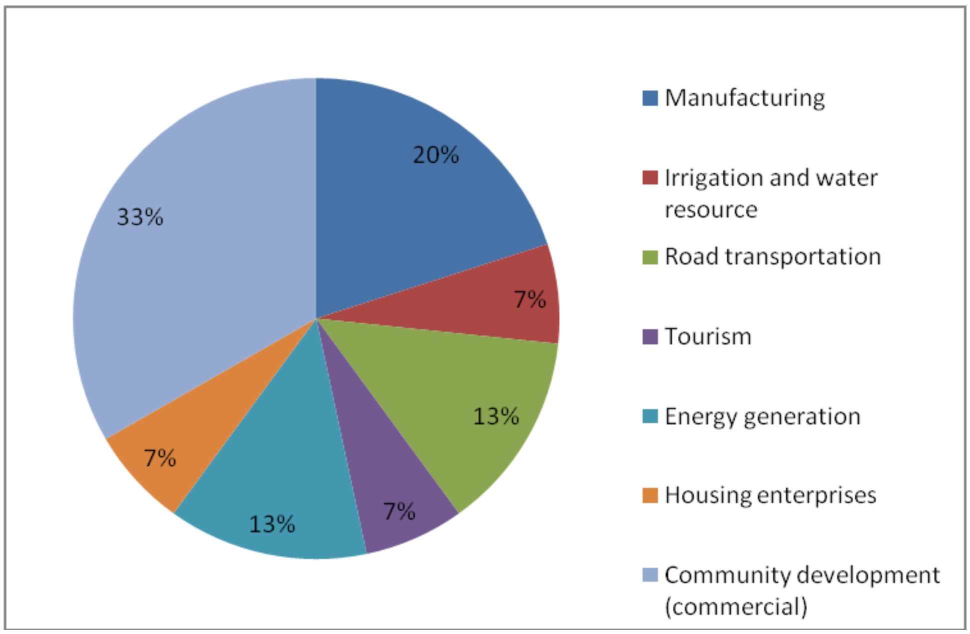
- Based on 2011-12 estimates we observe that *Mysore paper mills Ltd has* been the highest loss making enterprise as in 2009-10 it made a loss of Rs.7723 lakhs, which grew by 9.77% in 2010-11 but fell by 9.33% in 2011-12.
- This was followed by Krishna BhagyaJala nigam ltd which made a loss of Rs.3200 lakh in 2009-10, and fell by 14.15% in 2010-11 and increased to Rs.5337 lakhs in 2011-12.
- The *North West Karnataka road transportation corporation ltd* is the third most loss making enterprise. The amount of loss made by this enterprise has decreased over the years as we observe a fall of 47.33% in 2010-11, and 23.02% in 2011-12.
- Following this is the *North east Karnataka road transportation corporation ltd* whose losses fell by 64.41% in 2010-11, but later increased by 49.95% in 2011-12 from Rs.1205 lakhs in 2010-11.
- The Mysore sugar enterprise ltd is the fifth largest loss making enterprise. The loss making trend of this enterprise has been very fluctuating as from Rs.7021 lakhs in 2009-10, it reduced by 88.57% in 2010-11, and again increased by 70.07% in 2011-12.
- Considering the loss making behaviour the performance of the *Karnataka state tourism development corporation ltd.* was better in 2010-11 as it made a loss of Rs.63.7 lakhs which was 88.46% less than its previous year losses. But from Rs.63.7 lakhs in 2010-11, its losses grew by 758.10% in 2011-12.

- Recovering from its losses of Rs.3111 lakhs in 2009-10, the *Gulbarga electricity supply corporation ltd* made a profit of Rs.6130 lakhs in 2010-11, but failed to maintain this profit making trend for a longer period and thus made a loss of Rs.462 lakhs in 2011-12.
- The net loss made by NGEF ltd (Hubli) fell by 80.15% to Rs.39.52 lakhs in 2010-11, but then increased by 854.55% in 2011-12.

Sectoral analysis of loss making enterprises:

Figure 7.1.7 shows the sectoral distribution of loss making enterprises.

Figure 7.1.7: Sector wise share of loss making enterprises (in %)



Source: Department of PSEs, Karnataka

- Here we can observe that the majority of the loss making enterprises are from *the Community development (non-commercial) enterprises,* which are 5 out of 15 loss making enterprises *.However* from Rs. 1366.5 lakhs in 2009-10 the losses made by this enterprises fell by 7.86% in 2010-11, and further fell by 48.86% to Rs.643.8 lakhs in 2011-12.

- The second most shares of losses come from the *Manufacturing sector* consisting of 3 loss making enterprises. The loss made by this sector increased by 7.51% in 2010-11 from Rs.7922.14 lakhs in 20091-10.The following year in 2010-11 there was a fall by 5.32% in its losses to Rs.8064.24 lakhs. Thus while in aggregate sense manufacturing sector shows net profit a disaggregate analysis shows that picture is not uniform across enterprises.

- The road transportation sector and the Energy generation sector have two loss making enterprises each. Loss making trend of the road transportation sector has decreased over the years as we witness a fall of 53.64% in its losses in 2010-11 and a further fall by 2.32% in 2011-12.On the other hand the energy sector had a more fluctuating trend in making losses. Though it was making a loss of Rs.3184.25 lakhs in 2009-10, the following year it resulted as a profit making sector as both *Gulbarga Electricity Supply Enterprise Ltd* as well as *Chamundeshwari electricity supply corporation ltd* turned up making profits in 2011. However the following year it failed to maintain its profit making trend and thus made a loss of Rs.585.45 lakhs.
- The loss made by the *Irrigation and water resource enterprises* has shown fluctuating trend, as its losses incurred fell by 14.15% between 2009-10 and 2010-11 and increased by 94.28% in 2011-12.
- The losses incurred in *Tourism sector* led by *Karnataka state tourism development corporation ltd* has been unsteady as the amount of losses made by this enterprise fell by 88 per cent in 2010-11 .but then increased to Rs. 546.61 lakhs in 2011-12.
- The *Housing sector* consisting of *Rajiv Gandhi rural housing corporation ltd* has shown a declining trend in its losses as its losses fell by 39.94 per cent between 2009-10 and further fell marginally by 8.40 per cent in 2011-12.
- ***Profit vs. Accumulated Losses***

The above analysis provides a comparative picture of current profit and current losses. Enterprises however incur losses over the years and accumulated losses pile up. The important question that arises is do the profit making state PSEs earn sufficiently to cover their accumulated losses? An analysis current profit as against accumulated losses show that

Current profit levels are too low to cover the accumulated losses of the PSE sector in general (Table 7.17).

Table 7.17 Total profit –Accumulated losses (in Rs lakhs, at current prices)

Year	Profit after tax	Accumulated loss	Profit-Accumulated loss
2005-06*	6143	314281	-308138
2006-07*	27731	346845	-319114
2007-08**	97721.67	234206.21	-136485
2008-09**	80107.12	355270.96	-275164
2009-10**	89714.98	393051.72	-303336.74

Source: Computed using data from Public sector enterprises report (different issues)

Note: * is the data of 45 PSEs, ** is the data of 56 PSEs

Sector-wise scenario too shows no sector is able to cover its accumulated losses through current profit and some of the sectors like road transport or manufacturing which should run on profit do show high level of accumulated loss **(Table 7.18).**

Table 7.18 Sector wise profit net of Accumulated loss (in Rs lakhs, at Current prices)

	Profit-Accumulated loss(in Rs lakhs, at current prices)				
Sector	2005-06*	2006-07*	2007-08**	2008-09**	2009-10**
Manufacturing	29052	33656	-35185.5	-32742.1	-48981.1
Financial	-48672	-47044	-47657.8	-57858.6	-57266.3
Mining	526	1295	28130.7	21850.14	22743.56
Energy generation transmission/distribution	-4789	6051	28741.3	-70078.2	-76149.7
Road transportation	-40016	-41998	-49002.8	-61002.9	-59074.9
Marketing and trading	-880	564	-235.22	-508.77	-1529.25
Tourism	406	1049	286.82	311.39	-283.59

Irrigation and water resource	-134970	-174906	-6518.58	-15623.2	-19960
Public works/road development industrial infrastructure	-56972	-49408	-48608.8	-47470.3	-48105.7
Agro and food beverages based	-23	1194	316.28	946.64	1315.07
Forest development	-37	147	859.05	884.81	987.6
Community development non-commercial	-5	-27	-3970.67	-4189.98	-5709.94
Community development commercial	-9054	-9046	-6362.6	-6887.86	-7275.8
Housing	-5799	-2512	966.06	-3198.57	-3145.73
Miscellaneous	-36905	-38129	1757.16	403.69	453.32

Source: Computed using data from Public sector enterprises report (different issues)

Note: * is the data of 45 PSEs

** is the data of 56 PSEs

Apart from losses incurred by the PSEs which possibly put strain on state's resources in order to support the costs incurred by the loss making PSEs, subsidy that goes to the enterprises is another major component of cost for the state.

An Analysis of Subsidy

Subsidies are provided by State Government in various forms for the assistance and support of the state PSEs and, thus, they are indeed a strain of state resources. From an aggregate analysis presented in Table 7.19

Table 7.19 Total Subsidies Received by PSEs in Karnataka (In Rs lakhs)

Year	Current prices	Constant prices
2005-06	**112913**	108336.2061
2006-07	121158	109238.8221
2007-08	131020	111420.2677

Source: Computed using data from National survey on SLPEs, 2008

We witness an increasing trend in the allocation of subsidies over the years, most importantly in the constant prices, indicating a real increase in the level of subsidy based support to the PSEs. . This is subsequent to the observation that at current prices the amount of subsidy allocated increased by 7.30 per cent from Rs.112913 lakhs in 2005-06 to Rs.121158 lakhs in 2006-07.And further between 2006-07 and 2007-08 the amount of subsidy allocated increased by 8.13 per cent.

Given the high level of subsidy based support to the PSEs it is useful to compare state subsidies to the PSEs vis-à-vis contribution of PSEs to the state exchequer.

Table 7.20 Selected Indicators of State PSEs (in Rs lakhs, at current prices)

Information	**2007-08**	**2006-07**	**2005-06**
Subsidies	131020	121158	112913
Contribution to state exchequer	32433	27429	25801
Net profit/losses(-)	27634	27731	6143
Cost to the govt.	-98587	-93729	-87112
Profit/loss net of subsidies	-103386	-93427	-106770

Source: Computed using data from *National survey on SLPEs, 2008*

In table 7.20 we present an indirect indicator of cost to the government as the difference between the amount spent by the government on allocating subsidies and the contribution to state exchequer made by PSEs where the negative difference depicts, in a sense, the net cost for the government.

Indeed when we calculate net profit i.e., profit –losses, we observe positive net profit for certain sectors. However, once subsidy is deducted from profit one observes huge negative figures for profit net of subsidies. This clearly indicates that many of the enterprises that show profit actually do due to indirectly receiving subsidy from the Government. In other words from our analysis we find that over the years the cost to the government has increased as the government expenditure on PSE in the form of providing subsidies is greater than the revenue received.

Further for a more disaggregated picture so that sector specific policies can be formulated we present a sector wise scenario of subsidy allocation (table 7.21)

Table 7.21 Sector wise Amount of Subsidy Allocation (in Rs lakhs at current prices)

ENTERPRISES	**2005-06**	**2006-07**	**2007-08**
Energy generation transmission/distribution	104377	107143	114608
Road transportation	7453	11468	11420
Agro and food beverages based	66	221	1734
Public works/road development industrial infrastructure	381	1203	1264
Community development non-commercial	405	635	1036
Community development commercial	98	145	758
Housing	0	67	200
Manufacturing	0	0	0
Financial	0	0	0
Mining	0	0	0
Marketing and trading	0	0	0
Tourism	133	276	0
Irrigation and water resource	0	0	0
Forest development	0	0	0
Miscellaneous	0	0	0
Total	112913	121158	131020

Source: Computed using data from *National survey on SLPEs, 2008*

- From table 7.21 we observe that *Energy sector* receives highest amount of subsidy .The amount of subsidy allocated to this sector has increased by 2.65% and 6.96% in 2006-07 and 2007-08 respectively. However, it is worth noting that this sector has been the highest profit making sector. But it is important to note that the cost borne by the state on this sector amounts to Rs.101682 lakhs. During 2007-08.*Hubli electricity supply corporation ltd.* is the major recipient of subsidy in this sector as it received almost 59.29% of subsidy allocated to this sector.
- The *Road transportation sector* receives the second highest amount of subsidy. The growth rate of subsidy allocated for this sector increased by 53.87% between 2005-06 and 2006-07 and fell by 0.41 % between 2006-07 and 2007-08, but this has been a loss making sector. The *North West Karnataka road transport corporation holds* a major share of the subsidies received by this sector, but the subsidy has not helped much it has resulted to be a loss making enterprise making a loss of Rs.6706 lakhs in 2007-08.

- Following this is the *Agro and the food based enterprises* whose growth in the share of subsidy received has increased by a considerable rate. From Rs 66 lakhs in 2005-06 the amount of subsidy increased by 215.74 per cent to Rs.221 lakhs in 2006-07, and further increased to Rs.1734 lakhs in 2007-08.But despite a larger amount of subsidy being allotted for this sector its profits declined from Rs.2350 in 2005-06 and to Rs.543 in 2006-07 and further to Rs.381 lakhs in 2007-08.Apart from this we have also witnessed an increasing cost to the government incurred from this sector as the cost to the government increased from Rs.20 lakhs in 2006-07 to Rs.1521 lakhs in 2007-08.The *Karnataka state agriculture development ltd* receives almost 88 per cent of the subsidy allocated for this sector ,and the remaining 12 per cent is received by *Karnataka state seeds development corporation ltd.*
- Enterprises belonging to the *Public works/road development industrial infrastructure* receive the fourth major share of subsidies allocated for PSEs. There has also been a substantial growth of 215.74 % between 2005-06 and 2006-07 in the amount of subsidy received by this

sector, which further grew by 5.07% in 2007-08.The *Karnataka state small industries development corporation ltd.* Is the only recipient of subsidy in this sector but the profit since the year 2005-06 has been fluctuating mainly due to the decline in profits from Rs.514 lakhs in 2005-06 to Rs.233 lakhs in 2006-07, which further increased to Rs.747 lakhs in 2007-08. In spite of fluctuating profits, the cost incurred to the government from this sector has increased which added up to Rs.1001 lakhs in 2007-08.

- The subsidy allocated for *Community development (non-commercial) sector* led by *Karnataka state women Development Corporation* increased by 56.79% between 2005-06 and 2006-07 and further increased by 63.14 per cent in 2007-08.From being a loss making enterprise in 2005-06 and 2006-07, its financial standing transformed to post a marginal profit of Rs.22 lakhs in 2007-08.Regardless of its profit made in 2007-08, the cost to the government from this sector amounted to Rs.1036 lakhs.
- The amount of subsidy received by *Community development (commercial) enterprises* grew by 47.95% between 2005-06 and 2006-07, and the following year i.e.in 2007-08 there was a considerable growth of 422.75 per cent in the amount of subsidies allocated for this sector. Till 2006-07 it was generating surplus as its contribution to the state exchequer exceeded the amount it receives as subsidy, but in 2007-08 it costed the government an amount of Rs.422 lakhs. The *Karnataka handloom development corporation* receives almost 90 per cent of the subsidy allocated for this sector.
- The housing sector was not supported by subsidy in the year 2005-06 *but* received a subsidy amounting to Rs.67 lakhs in 2006-07 ,which further increased by 198.50 per cent to Rs.200 lakhs in 2007-08.The cost to the government from this sector increased from Rs.67 lakhs in 2006-07 to Rs.351 lakhs in 2007-08.

An Enterprise level analysis

Further we have conducted a more disaggregated analysis to study the cost incurred to the government by individual enterprise by comparing the amount allocated for subsidy and the contribution made to the state exchequer (Table 7.22).

Table 7.22 Enterprise wise analyses, 2007-08 (in Rs lakhs at current prices)

SECTOR	Subsidies	Contribution to the state Exchequer	Net profit/loss(-)	Cost to the government	net of profit
Hubli electricity supply corporation ltd	67888	5473	885	-62415	-67003
Gulbarga electricity supply corporation ltd	46720	129	310	-46591	-46410
NWKRTC	8715	8073	-6706	-642	-15421
NEKRTC	2705	3463	-1596	758	-4301
Karnataka state agricultural development co ltd	1533	5	10	-1528	-1523
Karnataka state small industries development co ltd	1264	199	747	-1065	-517
Karnataka state women's development co ltd	1036	0	22	-1036	-1014
Karnataka handloom development co ltd	688	33	92	-655	-596
Karnataka state seeds development co ltd	201	114	28	-87	-173
Rajiv Gandhi rural housing development co ltd	200	0	-351	-200	-551
Karnataka state handicraft development co ltd	49	156	359	107	310
Karnataka state warehousing corporation	21	140	629	119	608
Total	**131020**	**17785**	**-5571**	**-113235**	**-136591**

Source: Computed using data from National survey on SLPEs, 2008

Note: 1.Cost to the government=Contribution to the state exchequer – subsidies

2. Net of profit = Net profit/loss (-) - Subsidies

In 2007-08 a total of Rs.131020 lakhs was granted as subsidies to the PSEs, which was shared by just 12 enterprises. From the above table *negative differences between the contribution to the state exchequer and the amount of subsidies depicts the cost to the government*. Despite granting such huge amount of subsidy the contribution made to the state exchequer by these enterprises was 13 per cent of the total amount spent by government on granting subsidies.
A further brief analysis is made on the distribution of subsidies among the 12 above mentioned enterprises, which is represented in table 7.23.

Table 7.23 Comparative analysis of distribution of subsidies

Details/Enterprises	High subsidized	Moderate Subsidized	Low Subsidized
No of enterprises	2	6	4
Total amount of subsidy(in Rs lakhs)	114608	15941	471
Contribution to state exchequer(in Rs lakhs)	5602	11773	410
Net profit/loss(-) (In Rs lakhs)	1195	-7431	665
Cost to the government(In Rs lakhs)	-109006	-4168	-61

Source: Computed using data from National survey on SLPEs, 2008

Hubli electricity supply corporation ltd and Gulbarga electricity supply corporation ltd are the highly subsidized enterprises which receives almost 87 per cent of the total amount allocated as subsidy for the PSEs. These two enterprises in return make a contribution of 17 per cent of the total contribution to the state exchequer made by the PSEs.

On the other hand enterprises subsidized by moderate amount have made a return payment of 73 per cent of their subsidies in the form of contribution to the state exchequer. Additionally, two enterprises out of the six enterprises are loss making ones namely: North *West Karnataka road transport corporation (NWKRTC) and North east Karnataka road transport corporation (NEKRTC),* and the other enterprises yield only a marginal profit. However, the overall contribution made by these enterprises to the state exchequer amounts to 66 % of the total contribution made by PSEs.

Enterprises receiving very low amount of subsidies has given back almost 87 per cent of their subsidies to the government in the form of contribution to the state exchequer, therefore the cost to the government from this sector accounts to a very marginal amount.

On the other hand enterprises which have had no support from the government in terms of subsidies still generated positive revenue to the government as they have made a considerable contribution to the state exchequer. The revenue to the government from these enterprises in the form of contribution to the state exchequer has amounted to Rs.13487 lakhs which is 43 per cent of the total contribution to the state exchequer made by all the PSEs.

In the previous section we have only emphasized on the sign of certain essential indicators such as contribution to exchequer net of subsidies or profit net of losses and so on. Where positive return is absolute minimum one expects from investment especially for the enterprises that are run with commercial motives, as a next step it is necessary to check whether state investment in such endeavors earns a reasonable rate of return. The report on state enterprises published by the Planning Commission, Government of India specifies certain reasonable rate of return for state enterprises operating in various sectors. We compare some of this desired rate as mentioned in the report with the actual rates for the state PSEs in Karnataka.

Analyzing Certain Indicators pertaining to Rate of return

State Government, the primary investor in the state PSEs, should earn certain minimum return on its investment. However, the desired rate of return will naturally vary across sectors, as a sector that predominantly contains development enterprises run with welfare motives and therefore it is expected to earn much lower return compared to the enterprises that are in manufacturing sector, where most PSEs operate with profit motive. We examine the rate of return of Karnataka state PSEs across sectors and evaluate their performance in terms of the desired rate of return mentioned in the *Report of the Study Group on Reforms in State PSEs*[9] *(henceforth Planning Commission Report)*.

Rate of return on Investment

The first indicator we consider in this context is the rate of return on investment which is computed as *net profits divided by capital investments (and the quotient multiplied by 100).*The planning Commission Report mentioned above provides certain desirable rate of return sector-wise which are mentioned in Table 7.24. The actual rates of return calculated are then compared with the desired rate and presented (Table 7.24).

Table 7.24 Sector wise analysis of rate of return on investment (in %)

Actual rate of return (RoR) in %				
Sector	**Desired RoR (in %)**	**2007-08**	**2008-09**	**2009-10**
Manufacturing	12	4.97	7.28	3.24
Financial	9	4.93	0.00	0.21
Mining	12	131.64	113.08	120.12
Energy generation transmission/	12	3.40	2.92	3.56

[9] Study Group on Reforms in State Public Undertakings, Volume I, Final Report, Planning Commission, Government of India, August 2002.

distribution				
Road transportation	12	7.46	3.88	3.46
Marketing and trading	10	36.98	16.51	17.60
Tourism	10	3.09	4.54	3.83
Irrigation and water resource	8	0.00	0.00	0.00
Public works/road development industrial infrastructure	na	54.98	41.02	29.21
Agro and food beverages based	na	1.18	3.08	4.31
Forest development	5	7.25	7.07	6.93
Community development non-commercial	5	1.39	1.57	0.82
Community development commercial	na	5.48	3.71	5.81
Housing	5	87.74	104.04	140.86
Miscellaneous	na	15.51	3.56	3.34

Na: not available from the Report

Source: Computed using data from National survey on SLPEs

We observe from the above computation that those sectors, especially those that are run with profit motive such as manufacturing, transport, tourism etc. have higher desired rate of return, are remarkably under-performing. Mining is one of the sectors with high rate of return, followed by housing.

2. Financial Implication to the state government: the Hidden Costs

While analyzing the financial aspects of PSEs it is important to note that though a public sector enterprise may show profit, it need not necessarily be true that there is positive financial gain to the state government from that enterprise. This is because there are other ways government resources get spent in the enterprise which often do not get reflected in the published balance sheets. For example many of these enterprises take loans and when they unable to repay they are converted into equity by the government. This is essentially a cost/loss for the government and should be deducted from the net profit. Similarly when government provides guarantee for a loan taken by a PSE ideally there is a commission that accrues to the government. If government waives this commission it is indeed a loss of resources to the government. Below we make a list of some such costs to the government in running a factory which is not apparent from the published balance sheet.

i) Government provided loans converted to equity

ii) GOK loans outstanding/deferred for more than five years

iii) Interest waived or converted to equity

iv) Sales tax outstanding/waived/deferred

v) Subsidy/ concession provided

vi) Guarantee commission waived/converted to loan/converted to equity

vii) Various dues outstanding in the case of to be closed enterprises e.g.,

   a) suppliers dues

   b) loans due to financial institutions

   c) Interest due on (a) and (b) above.

It is important to note that data for these indicators are not available to the researchers and we were unable to get any information regarding these variables for the recent years. However in one of our earlier studies we could get access to information pertaining to some of these indicators for selected enterprises. We present below the case of Mysore Electricals Ltd based on the data made available to us earlier. This case is presented here to give an idea about the hidden costs incurred by the enterprises.

Mysore Electrical Industries Ltd [MEI]

Highlights of the Last 10 Years Financial Performance:

- The enterprise has never paid dividend during the last 10 years
- Loans taken 5 out of 10 years but repaid only one year
- Interest accrued on loans never repaid
- Guarantee commission never paid

- Outstanding loans, interests and sales tax were converted to equity

Table 7.25: An Estimate of Financial Loss to GoK from Mysore Electrical Industries Ltd

Year	Item	Amount [Rs. Lakhs] Rate	Total [Rs. Lakhs]
1995-96	Loans converted to equity	146	146
1996-97	Loans converted to equity	150	150
1996-2002	Interest foregone due to loan converted to equity	Rs.146 L@14% for 6 years	122.64
1997-2002	Interest foregone due to loan converted to equity	Rs.150 L @14% for 5 years	105.0
1992-2002	Loans outstanding		190.00
1995-96	Interest waived		103.41
1992-2002	Interest outstanding		55
1996-97	Interest converted to equity		31.67
1992-2002	Guarantee commission due		42.80
1992-2002	Sales tax converted to loan which is still outstanding		1,011.50
1997-98	Sales tax converted into equity		162.05
1998-2002	Interest foregone due to sales tax converted to equity	For Rs.162 L @14% for 4 years	90.72
1998-99	Sales tax converted to equity		79
1999-2002	Interest foregone due to Sales tax converted to equity	For Rs.79 L @14% for 3 years	33.18
1999-2002	Total revenue loss		2,322.97

Source: Compiled from Data Provided by the Enterprise

These estimates show that substantial amount of state resources go into the state PSEs which do not get reflected in the balance sheets of the enterprises. While obtaining the appropriateness of PSE reform program these estimates should be taken into consideration.

Summary of Financial Implications to GoK for the Last 10 years from Mysore Electrical Industries Ltd
Total Revenue loss during the last 10 years = Rs. 2, 322.97 Lakhs Revenue received as sales tax = Rs.607.66 L Dividend paid for the last 10 years = Rs.0 Net loss to GoK = Rs.1,715.31 L In addition to outstanding loans from other sources and suppliers dues which adds up to Rs.1431.44 L. Contribution from GoK for VRS : Rs.500L

Concluding Remarks

Industrial history of the state of Karnataka was quite extraordinary as the state began its industrial activities well before independence. Later the State had made remarkable progress due to the efforts of the visionaries like Sir M Vishveshwaraiah and the state of Karnataka housed a number of Central and State public enterprises. However the motivation and vision with which Government developed the PSEs lost its directions in the subsequent periods. Political interventions often led to over-employment and malfunctioning and consequently many of these enterprises that were commercial in nature no longer remained profitable. Many giant organizations that became loss making units started imposing considerable strain on the state resources. Though the state began with certain reform and disinvestment measures subsequent to the liberalization period, this drive also cannot be described as successful.

This paper analyses the performance of state PSEs to understand how many of these organizations underperformed and became burden of the state exchequer. Though our analysis shows that overall profit scenario has improved in the recent decade, even when several commercial enterprise remained loss making. If one considers accumulated losses, then loss far exceeds profit for a number of enterprises belonging to sectors such as road transport, manufacturing or financial which are non-developmental in nature. Our analysis also shows for many of these sectors subsidy far exceeds contributions to the state exchequer. We also highlight in this study that there are a number of hidden costs that do not get revealed in the published reports such as loan converted to equity and others. Without the availability of detailed data and figures on financial indicators pertaining to the PSEs a comprehensive analysis cannot be done.

Nonetheless the present analysis reveals that there is a need to have a close scrutiny of the state PSEs and their returns and to consider carefully whether some of the enterprises that are purely commercial in nature such as soap manufacturing should be kept under the state purview.

Chapter 8

Decentralization in Karnataka:

Resources, Reforms and JNNURM Programme

Introduction

In India, local governing institutions were in existence since ancient days in one form or the other. After independence these institutions acquired a definite shape and democratic tag. There was no mandate in the Constitution for establishment of local democratic bodies. However, some states on the basis of an Expert Committee Report (Government of India, 1957) took interest and established local bodies (panchayats) in the year 1959. The local bodies are of two types – one, the rural and the other, urban.

After initial years of euphoria, the states have lost interest in the rural local body system and for a long period they remained powerless and namesake institutions. As against this, the urban local bodies somehow survived and maintained continuity. However, a concern for decentralization was aroused in a few states in the 1980s.

In Karnataka, the new government in early 1980s began exercise towards decentralization and in that direction it passed a legislative Act in the year 1985. Based on this Act elections were held for rural local bodies in the year 1987. The success of reforms in decentralization in Karnataka in a way paved the way for 73^{rd} and 74th Amendment Acts to the Constitution in the year 1992.

Among many pre-requisites for the success of decentralized governments, resources occupy an important place. Within resources, questions such as fiscal powers entrusted; extent of resources/grants devolved; nature of grants transferred; role of State Finance Commission etc. needs to be understood while analyzing financial relation in a multi-governmental system.

In the above background, this section attempts to study the extent of fiscal decentralization carried out in Karnataka state.

Local Government System

Karnataka as per 73rd Constitutional mandate established a three-tier panchayat raj institutions (PRIs) during 1994 and 1995. Since then elections were held periodically once in five years. The latest (fourth after 73rd Amendment) election was held in the year 2010. At present there are 30 Zilla Panchayats (ZP), 176 Taluk Panchayats (TP) and 5628 Grama Panchayats (GP) in the state. The state government has transferred a large number of functions to PRIs. The state Panchayat Raj Act, 1993 has three separate Schedules containing the list of functions to be performed by the three tier panchayats. Schedule-I has roughly about 29 sectors/programmes entrusted to GPs; Schedule-II with 28 functions meant for TPs and Schedule-III with 31 sectors/ programmes for Zilla Panchayats. The total number of schemes (plan and non-plan) transferred to PRIs from the above sectors/Departments account for 435. The 11th Schedule under Article 243(G) of 73rd Constitution Amendment Act lists 29 subjects for consideration of states to be transferred to PRIs. Karnataka has transferred almost all the subjects listed under the above Article to PRIs. The structure of ULBs is different from that of rural ones. The state government has reconstituted the ULBs according to the 74th Constitution Amendment Act. At present there are 8 City Corporations, 43 City Municipal Councils, 94 Town Municipal Councils 68 Town Panchayats, and 6 Notified Area Committees thus totaling 219 ULBs. The categorization of these ULBs is done on the basis of size of the population. The ULBs have been performing some vital functions such as construction and maintenance of roads and bridges, water supply, street lights, public health and sanitation, solid waste management and many other amenities required by the community. The 12th Schedule of the 74th Constitutional Amendment Act has listed 18 functions for delegation to ULBs. Out of this, the state has transferred almost all the functions to ULBs.

Fiscal Powers

In Karnataka, among the three tier panchayats only Grama Panchayats have been entrusted with some tax powers. No other tier is bestowed with this power. On the other hand the ULBs are empowered with taxing powers. Further both rural and urban bodies are empowered to collect non-tax revenues from their own assets and properties. Apart from this the state government is providing grants to both PRIs and ULBs in the form of a share from its own revenues. The Centre also provides grants for its sponsored schemes and on the recommendations of Union Finance Commission. Again both rural and urban bodies are empowered to raise loans for developmental purposes. Thus various income avenues have been provided to decentralized local governments (rural and urban) in the state.

Resource Position of Local Governments

In the light of the above fiscal powers, it is important here to analyses the structure and growth of resources of local governments in the state. In this direction the issues such as own revenue, transfers from state and center and the overall status needs to be studied.

The source-wise resource availability of PRIs in Karnataka is presented in Table 8.1. It can be seen from the table that the total resources available during 2002-03 was Rs.4357.25 crore and the same has risen to Rs.21592.77 crore in the year 2012-13. Among different sources of income of PRIs a large share is from assigned and devolved grants from the state. On an average 85% of PRIs income constitute state transfers. Central transfers mainly for centrally sponsored schemes account for 12%. The share of own revenue is negligible and this is understood from the fact that only GPs have a few taxation powers.

Table 8.1: Details of Income PRIs (three- tiers) in Karnataka (Rs.Crore)

Year	Own Revenue	% to Total	Central Government Transfers	% to Total	Central Finance Commission Transfers	% to Total	Assigned/ Devolved Grants From the State	% to Total	Total Income/ Revenue
2002-03	66	1.51	575.45	13.21	75.53	1.73	3710.27	85.15	4357.25
2003-04	116	2.39	616.02	12.69	75.53	1.56	4126.93	84.98	4856.09
2004-05	81.22	1.60	528.15	10.38	65.23	1.28	4525.40	88.96	5087.11
2005-06	125.81	1.75	779.23	10.82	177.3	2.46	6491.55	90.16	7199.89
2006-07	161.49	1.92	1048.19	12.49	388.23	4.63	7290.54	86.90	8389.57
2007-08	202.88	1.88	1423.47	13.16	56.83	0.53	9524.99	88.03	10819.88
2008-09	223.71	1.66	1696.41	12.60	65.71	0.49	11460.20	85.15	13459.53
2009-10	221.19	1.41	2679.2	17.05	179.12	1.14	12281.02	78.14	15715.67
2010-11	256.95	1.48	2486.66	14.36	421.43	2.43	13401.32	77.40	17313.35
2011-12	312.08	1.64	1910.31	10.07	734.79	3.87	15411.59	81.23	18972.80
2012-13	269.09	1.25	1796.32	8.32	782.91	3.63	17848.80	82.66	21592.77

Source: 1) From 2002-03 to 2006-07 – Finance Department, `Information furnished to the Thirteenth Finance Commission in respect of Local Bodies pertaining to PRIs and ULBs', January 2009, Government of Karnataka..

2) From 2007-08 to 2012-13 – Rural Development and Panchayat Raj Department (RDPRD), `Information on Panchayat Raj Institutions (PRIs) to Fourteenth Finance Commission, no date, Government of Karnataka.

The pattern of resource position of ULBs is slightly different from that of PRIs. The source-wise availability of resources is shown in Table 8.2. It may be observed from the table that the total income of all the ULBs in the state during 2002-03 was Rs.1602.84 crore and the same has risen to Rs.5223.91 crore in the year 2012-13. Of the different sources, assigned/devolved grants from the state account for the largest share.

Table 8.2: Details of Revenue and Expenditure of all ULBs in Karnataka (Rs.Crore)

Year	Own Rev	% to Total	Central Govt Transfers	% to Total	Central FC Transfer	% to Total	Assigned/ Devolved Grants From the state	% to Total	Others (loans)	% to Total	Total Income /Revenue
2002-03	782.35	48.81	79.97	4.99	6.02	0.38	553.22	34.51	181.28	11.31	1602.84
2003-04	476.79	24.2	41.73	2.12	25.17	1.28	678.97	34.46	430.91	21.87	1970.22
2004-05	411.21	19.06	128.85	5.97	82.15	3.81	882.28	40.89	206	9.55	2157.75
2005-06	462.07	18.9	33.34	1.36	96.76	3.96	1221.59	49.97	246.17	10.07	2444.63
2006-07	475.37	14.89	164.06	5.14	156.29	4.9	1844.93	57.79	234.14	7.33	3192.74
2007-08	NA	-	348.95	14.62	111.61	4.68	1926	80.7	0	0	2386.56
2008-09	NA	-	290	10.21	175.03	6.16	2374.09	83.62	0	0	2839.12
2009-10	NA	-	343.85	11.7	120.41	4.1	2474.01	84.2	0	0	2938.27
2010-11	NA	-	306.81	8.84	185.46	5.34	2978.49	85.82	0	0	3470.76
2011-12	NA	-	607.78	13.41	573.73	12.66	3350	73.93	0	0	4531.51
2012-13	NA	-	797.25	15.26	651.66	12.47	3775	72.26	0	0	5223.91

Note: NA – Not Available

Source: 1) From 2002-03 to 2006-07 – Finance Department, `Information furnished to the Thirteenth Finance Commission in respect of Local Bodies pertaining to PRIs and ULBs', January 2009, Government of Karnataka..

2) From 2007-08 to 2012-13 – Rural Development and Panchayat Raj Department (RDPRD), `Information on Panchayat Raj Institutions (PRIs) to Fourteenth Finance Commission, no date, Government of Karnataka.

While studying the resources of local governments it is also important to understand the financial relationship between the state and local governments. The devolution from the state to local governments is largely guided by the recommendations of the state finance commission

(SFC).So far the state has constituted three SFCs and all of them submitted their reports to the government. The details of constitution of SFC and submission of their reports, main recommendation etc. is presented in Table 8.3. One striking feature from the Table is that every succeeding SFC recommended larger devolution from the state to local governments. Secondly, the First and Second SFCs recommended a share from the state's gross own revenue whereas the Third SFC recommended a share from the net revenue. The state had accepted the recommendation of the FSFC to share 36% from Non-Loan Gross Own Revenue Receipts (NLGORRs). In the case of SSFC the state slightly modified the recommendation and accepted to devolve from the net revenue instead of gross revenue. The state had accepted the TSFCs' recommendation of NLNORRs.

Table 8.3: Main Recommendation of State Finance Commissions of Karnataka

SFC	Date of Constitution	Date of Submission	Date of Submission of ATR	Period Covered	Recommended Devolution Share
First SFC	10-6-1994	5-8-1996	31-3-1997	1997-98 - 2001-02	36% of NLGORRs (30.6% for PRIs and 5.4% for ULBs)
Second SFC	25-10-2000	30-6-2002	29-6-2006	2005-06 – 2010-11	40% of NLNORRs (32% for PRIs and 8% for ULBs)
Third SFC	28-8-2006	December 2008	31-10-2011	2011-12 - 2015-16	42% of NLNORRs (32% for PRIs and 10% for ULBs)

Having accepted the main recommendation of SFC's by the state, it is to be seen the extent of devolution made to local governments in the state over the years. This information is presented in Table 8.4. It can be seen from the Table that the devolution to local governments has been increasing over the years. In the year 2002-03 the total grants devolved was Rs.4263.49 crore and the same has increased to Rs.21623.80 crore in 2012-13 (BE). In percentage terms it accounts for 29.40% and 38.86% respectively in both the years. On an average the state has devolved 40% of the state's own net revenue as recommended by SSFC. During TSFC period i.e.

2011-12 and 2012-13 the devolution from the state is less than the recommended share of 42%.

Table 8.4: Devolution from State to Local Governments (PRIs and ULBs) in Karnataka (Rs. Crore)

Year	Assigned/Devolution From the state (PRI's)	Assigned/Devolution from the state (ULB's)	Total Devolution from state	State's Own Revenue	% of Devolution from State's own Revenue to PRIs & ULBs
2002-03	3710.27	553.22	4263.49	14503.38	29.4
2003-04	4126.93	678.97	4805.9	18773.5	25.6
2004-05	4525.4	882.28	5407.68	24422.66	22.14
2005-06	6491.55	1221.59	7713.14	20065.2	38.44
2006-07	7290.54	1844.93	9135.47	24941.02	36.63
2007-08	9524.99	1926	11450.99	28187.16	40.62
2008-09	11460.2	2374.09	13834.29	29637.32	46.68
2009-10	12281.02	2474.01	14755.03	32681.68	45.15
2010-11	13401.32	2978.49	16379.81	40775.3	40.17
2011-12 (RE)	15411.59	3350	18761.59	47598.44	39.42
2012-13 (BE)	17848.8	3775	21623.8	55650.7	38.86

Note: State's own revenue till 2004-05 represent gross and from 2005-06 onwards net.

Source: Same as in Table 8.1.

Reforms in Decentralization

The state from time to time brought in reforms in local government system (both PRIs and ULBs). Karnataka is perhaps the only one state in India which had devolved all 29th subjects listed under Eleventh Schedule to PRIs and 18 subjects listed under Twelfth Schedule to ULBs. It has deputed a large number of its personnel and staff to serve in PRIs and ULBs. Similarly, a large share of its revenue is devolved to these local bodies since 73rd and 74th Amendment Acts.

It has been on the path to have panchayat own cadre as is evident from the recent recruitments made to GPs such as Panchayat Development Officers, Accounts Assistants.

Activity Mapping of functions of three tier PRIs was completed as far back as in 2003-04. Besides, to have flexibility in the plans, rationalization of programmes and schemes of PRIs were undertaken during 2004-05 and 2005-06. This exercise resulted in discontinuation of uneconomic and unviable schemes and now they have been implementing about 435 schemes (Plan and Non-plan) instead of 665.

It has also introduced double entry accounting system both in rural and urban local governments. The state permitted the local governments to hire the services of chartered accountant temporarily to switch over from traditional accounts maintenance to double entry system and to learn its operation on self-basis.

The devolution from state to PRIs consisted largely of tied grants (except GPs) and heeding to the pressure from below and other experts the state took a decision to provide untied grant to the tune of Rs.1 crore to each of the ZPs and TPs from 2011-12.

E-governance was introduced in both rural and urban local government level to bring in transparency and accountability.

JNNURM

The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched in December 2005. It is the first national Flagship programme for Urban areas. The period of the programme as envisaged in the beginning was seven years from 2005-06 to 2011-12. However, the programme has been extended after the completion of seven year period. It has the following components:

1) Sub-Mission I on Urban Infrastructure and Governance;
2) Sub-Mission II on Basic Services to the Urban Poor;
3) Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT);
4) Integrated Housing and Slum Development programme (IHSDP);
5) The National Urban Information System;
6) Development of Satellite Cities/Countermagnet Cities;
7) Pooled Finance Development Fund;
8) E-governance in Municipalities; and
9) Swarna Jayanti Shahari Rozgar Yojana.

Mandatory Reforms

The states which are entitled for assistance from JNNURM programme have to bring in certain reforms in the seven years period. The major reforms expected are as follows.

1. Adoption of modern accrual-based double entry system of accounting in ULBs and parastatal agencies
2. Introduction of a system of e-governance using IT applications
3. Reforms of property tax with GIS (to reach 85% of collection by 7 years period)
4. Levy of reasonable user charges (covering full cost of O&M or recurring cost)
5. Internal earmarking within local bodies budgets for basic services to the urban poor
6. Provision of basic services for the poor

In Karnataka two cities namely Bangalore and Mysore were selected for assistance under the JNNURM programme. These two cities prepared plans to the tune of Rs.24486 crore for the seven years period.

Keeping the conditions that have to be fulfilled under JNNURM, the state has brought in certain reforms in urban local body system. As stated earlier, for proper maintenance of accounts, double entry system was introduced. Another important reform adopted in all the ULBs is e-governance. With regard to reforms in tax collection, self-assessment scheme (SAS) was introduced in place of annual rental basis. However, it is yet to move towards replacing SAS with capital value system (CVS) as basis for fixing tax rate on properties in ULBs. Another reform to be achieved under the programme is GIS based assessment of properties for bringing under tax net. This exercise is yet to be completed.

Chapter 9

Public Expenditure and Financial management reforms

Karnataka state had pioneered many fiscal reform initiatives during the last decade. The State had framed legislations for Transparency in Procurement; Ceiling on Government Guarantee, Fiscal Responsibility and also implemented Treasury computerization to tone up the financial management and accountability. The state had also constituted revenue reforms commission and more recently Expenditure reforms commission. Thus the level of enthusiasm in the state regarding the need to tone up the fiscal performance has been quite high. A detailed effort was also made to identify the daunting public financial management challenges in collaboration with the World Bank (The World Bank, 2004) that needed to be addressed and also an action plan drafted to improve the public financial management. In this backdrop, this chapter discusses the various initiatives conceived by Government of Karnataka in the areas of public expenditure and financial management, especially since the framing of Karnataka Fiscal Responsibility Act and also addresses the impending challenges.

One of the fiscal management principles laid down in the KFRA is to pursue expenditure policies that would provide impetus for economic growth, poverty reduction and improvement in human welfare. (KFRA, 2002) There has also been emphasis on expenditure reforms, stressing on the need to adopt a threefold approach of outcome linkage-program prioritization and designing and rationalization of schemes and programs on the basis of a medium term performance evaluation. (MTFP 2003-07)

The two important strategies that seem to have been pursued by Government of Karnataka to achieve these objectives a) is to enhance allocations for the high priority development sectors identified by the government year on year ever since the FRA, b) Introduce frameworks that enable the government to track the outputs and outcomes of the programs.

With reference to the first strategy, government has listed some sectors as high priority development sectors. These sectors (as listed in various MTFPs) include Agriculture, Rural development, Power among the Economic services category and Health and Education from the Social services category. Expenditure details for these sectors along with their rates of growth are presented in various MTFPs in the section on Expenditure management and projections reflecting the increases in the levels of priority sector spending. The expenditure analysis presented in chapter three of the present report too highlights the increases that have occurred in select development sectors. This is a welcome development given the human and infrastructure development challenges of the state. Government also has constituted Expenditure Reforms Commission (ERC) in 2009, with wide terms of reference to tone up public expenditure in Karnataka. This is a major initiative, probably one of the first Indian states to examine the aspects of growing public expenditure and the corrective measures required. In all four reports were submitted by the ERC providing wide ranging recommendations (totaling 292 recommendations) pertaining to aspects of inter sectoral prioritization, organizational structure and review of departmental schemes. Many of these recommendations have been accepted and implemented by the GoK (MTFP, 2013-17). Among the measures that attempted to promote economy and ensure transparency was the introduction of e-procurement in all departments with effect from, 3-12-2012, by the e-governance department. Independent Directorate of Social Audit has been set up to ensure social audit of schemes identified by the Planning department. Karnataka evaluation policy has been announced and Karnataka Evaluation Authority (KEA) set up in 2011 to streamline program evaluation.

With reference to the second strategy too there has been a constant effort by the Government of Karnataka to put in place appropriate frame work that would enable systematic tracking of the performance of government programs and eventually help in toning up the quality of public spending. The frameworks attempted by GoK include Departmental Medium Term Framework; Program Performance budgets (PPBs); Monthly Program Implementation Calendar; Results Framework Document. In addition GoK has for long been preparing the annual Performance Budget report for all the development departments regularly. While the first two frameworks have been at the instance of the international aid agencies, MPIC has been conceived by the Finance department, GoK. Government of Karnataka has adopted the Results framework of Government of India to track the results of government programs and ensure accountability. The broad features and the issues associated with these frameworks are discussed below.

Departmental medium term fiscal plan (DMTFP):

An important reform initiative introduced by the Government of Karnataka in 2003 as a logical continuation of the provisions of the Fiscal Responsibility legislation related to the preparation of Departmental Medium Term Fiscal Plan (DMTFP) by some departments. DMTFP encompassed reform features such as a medium term program approach, strategies for achieving the goals and objectives of the programs, 'outcomes' and information related to them. The state government officers also received training inputs from the international experts and the DMTFPs were prepared by select departments for a couple of years. Preparation of these reports became irregular in the wake of yet another technical support that was provided by the United States Aid for international development (USAID) in the form of state fiscal development program. The reform initiative in the field of expenditure was termed as "Program Performance Budgeting"

Program Performance Budgeting (PPB):

USAID-REFORM project provided technical assistance to Government of Karnataka covering a number of state's fiscal aspects. In the area of public expenditure, technical support was provided to frame budgets with performance focus. PPB is a form of budgeting that was aimed at integrating policy, expenditure and outcomes/results of all the government activities in one place and is expected to serve as a basis for making informed expenditure decisions. This framework was developed based on the international best practices to suit the state's requirements. To start with the state government initiated the PPB process on a pilot basis in eight departments. The technical team comprising of international experts not only aided in the development of the PPB framework, but also provided extensive training to the officers from the select pilot departments. Government of Karnataka had a Cabinet note approved for the extension of PPB statewide. However, with the completion of the USAID project term, gradually the PPB initiative too faded.

Monthly Program Implementation Calendar (MPIC):

Finance department of Government of Karnataka conceived yet another framework, Monthly Program Implementation Calendar. MPIC is basically an improvised version of the Monthly Monitoring and review (MMR) used to review the performance of departmental schemes. MPIC provides a detailed monthly scheme implementation progress both with reference to physical and financial targets. This has replaced the Monthly monitoring review (MMR) reports prepared by the departments for plan schemes. MPIC extends to non-plan schemes and aims at a comprehensive review of all the departmental schemes. Individual schemes and the related activities (monthly) are reported in addition to the physical and financial targets and achievements. Scheme wise 'intended outcomes' are listed, which is a rich value addition to the existing reporting practices, however lacked any outcome information. This framework provides for information on the progress of financial performance as well as physical performance on a monthly basis. This framework is being used currently by all the departments and the reports are posted on the departmental websites.

Results framework:

Results framework" is increasingly becoming popular among many nations, a tool to monitor/ track the performance of governmental programs for their results/outcomes. Government of India too has adopted a "Performance Monitoring and Evaluation System" (PMES) in 2009 (vide PMO I.D. No. 1331721/PMO/2009-Pol dated 11.9.2009) requiring each department to prepare a Results-Framework Document (RFD). RFD is expected to provide a summary of the most important results that a department/ministry expects to achieve during the financial year. Two main purposes that RFD is expected to serve are (a) move the focus of the department from process-orientation to results-orientation, and (b) provide an objective and fair basis to evaluate department's overall performance at the end of the year. (GOI) Three basic questions addressed by the departments in the RFD are I) what are the main objectives of the department for the year? ii) What actions are necessary to achieve these objectives and finally iii) what are the success indicators necessary to evaluate these actions? The matrix that results from this exercise is locked into an online MIS system which is then tracked through the year. The department's progress against these set targets is first reviewed after 6 months and finally evaluated at the end of the year (31 March). Recently the state governments too have initiated the RFD process and Government of Karnataka is among the forerunners. Government of Karnataka has more or less adopted the GOI framework and about 40 departments have prepared the document for 2011-12. This framework is proposed to be carried forward with the timelines suggested in the guidelines.

Issues:

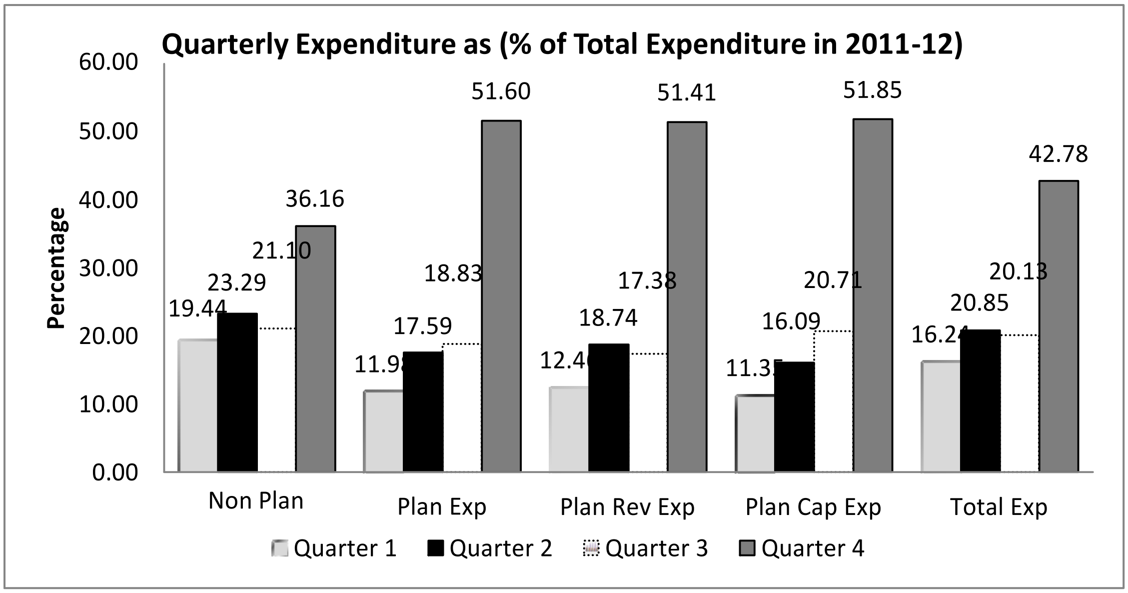
The discussion presented above clearly reveals that Karnataka has been a very progressive state as the government has been quick to adopt the global best practices as and when mooted and also there has been an in-house effort to improve the practices. There are however certain issues that need to be addressed on a priority basis to ensure that these reform initiatives deliver the expected results of strengthening the performance orientation of programs, expenditure planning, management and accountability. These attain special significance in the context of sustaining the revenue led fiscal recovery of the state by prudent spending. Some of these issues are discussed below.

Incomplete experiments: The state government ventured into four different approaches within a span of eight years (with some element of commonality among them) in its attempts to provide performance orientation to budgets and strengthening of accountability without formally abandoning any one of them. These frame works in addition to the existing ones such as Performance Budgets and Annual Reports that largely duplicate the information has resulted in multiple reporting formats. DMTFPs were prepared by couple of departments for a few years and there were also efforts to build the capacity of officers in the preparation of these reports. Even as this process continued, Program performance budgets were initiated with no formal discontinuation of the earlier effort. PPBs were attempted on a pilot basis in eight departments with elaborate training in place during the period 2003-08. Status of these reports is not known despite a cabinet decision to have them prepared by departments, albeit without much progress in performance orientation to departmental budgets. MPIC followed suit in December 2008, the overarching as stated in MTFP 2009-13 is to improve the quality and pace of expenditure and minimize the asymmetry in the flow of revenue and expenditure. Guidelines for these have been evolved after extensive consultations. It is also stated that key officials from line departments have been given intensive orientation in the use of prescribed formats. Benefits of this framework in the manner of better budget management and also avoidable rush of expenditure in the last month of financial year were expected by 2009-10.

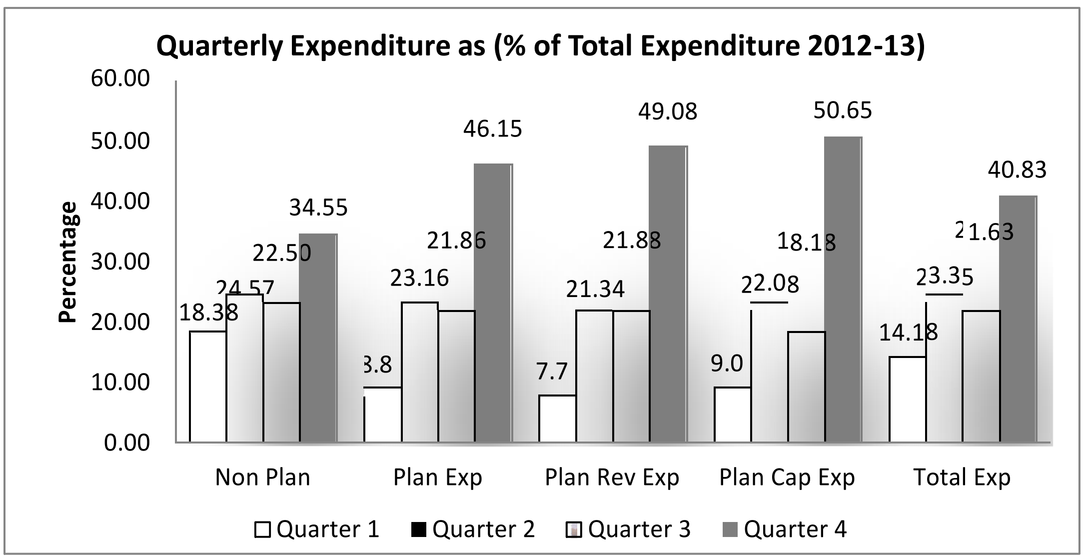
In order to examine if MPIC has helped in resolving the issue of bunching of expenditure, an attempt has been made in the present study to analyze the distribution of expenditure by each quarter using the quarterly information available on the Finance department's website. The quarterly data however is available for a limited number of variables such as plan and Non plan by revenue and capital expenditure categories. Distribution of expenditure by each quarter has been worked out to examine if bunching of expenditure is happening. The Quarterly Expenditure as a percentage to total Expenditure, 2011-12 and 2011-12 reveals that a much larger share of the expenditure especially that of plan expenditure gets spent in the last quarter (Graph 9.1 and 9.2). In fact the last two quarters together constitute more than 70 percent of the total expenditure with the last quarter itself accounting for about 50 percent share. These findings are borne out by a primary survey undertaken as a part of study (Gayithri, 2010) revealing that there are instances wherein the grass root health facilities have received the allotted amount in the month of March under NRHM. There were also instances wherein the grass root implementing agencies had kept the bills ready even before the execution of the program just to ensure that the money does not lapse. These practices are largely a fall out of the releases which reach them at the far end of the financial year. The delays could be both on account of administrative procedures involved in the release of funds or related to the availability of funds. These practices need to be arrested at the earliest to ensure effective service delivery.

It is not surprising that non-plan expenditure is more evenly distributed as most of it relates to committed expenditure in the form of salaries, pensions and other maintenance expenditure and their payments invariably happen on a monthly basis as per the demand. There is need to ensure timely release of plan expenditure in achieving the expected results of the program, otherwise the beneficial effects of higher allocations for development sectors get nullified by untimely releases and expenditure.

Graph 9.1.1-Bunching of Public expenditure – 2011-12



Graph 9.1.2- Bunching of Public expenditure – 2012-13



Poor performance data base:

Government of Karnataka's current performance assessment method has to shift from inputs to outputs and outcomes. While detailing the future steps needed to strengthen the public financial accountability, the World Bank had suggested the need to focus on outcomes. (The World Bank, 2002) In any effort to render performance orientation to government programs, it is very important that performance information is available. Various frameworks as discussed earlier in the chapter have been attempted guided by a growing recognition of the need to move away from the conventional public expenditure analysis limited to the size of 'outlays' to 'outcomes'. These reporting formats comprising of Annual reports, performance budgets, Departmental Medium fiscal plans, Monthly Program implementation Calendar etc., and more recently the Results framework document largely report physical and financial targets and the former relating to the activities and at the best output achievements. Thus the review of the existing reports reveals that while there is no dearth of information pertaining to the 'inputs' i.e. the money spent and the staff employed for the purpose, 'outcomes' of government schemes and programs have not been meaningfully tracked and the effectiveness of government schemes and programs in delivering the expected results has not been adequately assessed.. While it is very important to have information relating to 'outputs' which by and large amounts to listing out of goods and services provided by the government agencies, they are not tantamount to the final impact or the end result expected of a program. On the other hand 'outcomes' indicate the final impact or the end results. Due to lack of adequate information regarding the results of such investments lead to inadequately informed decision making.

MPIC is a monthly reporting former unlike all the other three annual reports referred to above**.** A quick review of some MPICs reveals that most of the columns are blank and the manner in which the objectives and outcomes listed indicate lack of proper understanding of the concepts and need for in-depth training of the officers concerned. (Gayithri, 2011) These aspects need to be addressed in improving the current scheme performance assessment practices.

Yet other important operational aspects that need to be considered seriously while making the departments prepare such lengthy and complicated reporting formats relates a) to the practical utility of such detailed activity information devoid of the outcome indicators and their data ? b) Figuring out how scheme monitoring has to be attempted in a system that has three administrative layers below the state level- i.e. district, taluks and panchayats levels. It makes sense to monitor all the activities for their progress at the grassroots level at brief time intervals such as a month to help initiate corrective action during the program implementation. Such detailed month wise and activity wise reporting at the state level would amount to waste of manpower and financial resources. At the state level it may be more meaningful to monitor the outputs- district wise on a quarterly or six monthly time intervals and outcomes on an annual basis. The monitoring of detailed activities and their progress are best left in the jurisdiction of district and below. Many countries that have tried to collect too much of performance indicator related information have realized the futility of such exercises.(Gayithri, 2012)

Program approach:

In view of the fact that outcomes are generally caused by a set of related schemes rather than an individual scheme, it is appropriate to group schemes in to meaningful programs and subprograms rather than attempting logical framework at an individual scheme level. This would also help avoid tedious preparatory work for the department officers concerned as there are innumerable schemes currently implemented by departments. There is also a risk of having too many blank columns in the template as there may not be much to report at an individual scheme level as it is currently the case with MPIC. The USAID REFORM Program performance budgets prepared for Government of Karnataka provide a good starting point. This offers a very meaningful grouping of schemes into programs as the senior officers concerned themselves spent considerable amount of time in doing so.

Capacity building:

Government of Karnataka has been training officers in the preparation of these formats. However, there is need to undertake massive capacity building of officers at all the administrative levels- state, ZP, Taluks and Gram Panchayats level in any effort to provide appropriate orientation to outcomes of the program intervention and streamline the performance assessment and monitoring activities

Third party verification:

There is need to have an external agency performance audit to ensure that the results reported are correct and reliable. Many nations have a third party doing this and other countries have used the Comptroller and Auditor General to do this. The latter option may be good to adopt.

Innumerable duplicative reporting formats: There is an urgent need to review the current reporting formats and consolidate them into one meaningful performance report. Too many reporting formats can cause considerable amount of wastage of manpower and financial resources without commensurate gains.

The above analysis reveals that Karnataka has been highly proactive in attempting fiscal reforms announced from time to time. Any detailed analysis of trends and composition expenditure and the corrective measures based on such trends without addressing the fundamental issues of expenditure planning and management would amount only to tinkering of the surface rather than bring about any sustainable gains in the effectiveness of expenditure per se. Effectiveness of service delivery is to a large extent dependent on all the important stages of public intervention –expenditure planning, execution and monitoring and evaluation. These aspects gain considerable amount of importance in the context of fiscal reforms that are underway in the country. As discussed earlier in the study, the fiscal recovery in the state of Karnataka is largely revenue led and sustaining this to a large extent depends on the expenditure reforms that can be put in place

Chapter 10

Conclusions and future challenges:

Karnataka's own tax performance has been good over time and the state compares well with the other Indian states. A major challenge however is to sustain the high tax effort which is largely linked to the state's overall economic growth. Non-tax performance is very poor and needs to be strengthened substantially. ERC has recommended 'User charge policy' for each department. Studies have revealed that users are willing to pay if the quality and assured supply of services are available.

There is substantial scope to enhance 'fiscal space' on the expenditure front. Sustaining the sound fiscal health of the state in the long run and further promotion is possible mainly through public expenditure reforms. There is an urgent need to reprioritize expenditure to more productive sectors and weed out expenditure programs that have outlived their utility. There are many schemes with small allocations and the ERC has made a number of recommendations regarding the merger of schemes wherever possible. Emphasis should be on strengthening of exiting schemes by allotting adequate funds for maintenance purpose rather than announce new schemes.

A complete review of the nature and execution of explicit subsidies provided by the government is required on a priority basis. This is in view of the fact that a large portion of the subsidy is from the economic services category, the services that can be provided by the private sector on commercial basis as opposed to the social services that are associated with large-scale externalities and social benefits. This certainly narrows down the scope of cost recovery by way of user charges. In the context of performance of Public sector enterprises, it has been observed that amongst the number of loss making enterprises that creates burden on state resources as high as 20% are from manufacturing sector and 13% are from the road transport sector. Ironically these two sectors are the ones that are expected to operate on a commercial basis. There are also flaws in execution of subsidy schemes with instances of excess provisioning (social housing in the districts of Yadgir and Uttara Kannada) and issues of targeting need immediate attention.

The social and economic infrastructure needs to be periodically ascertained and appropriate strategies such as partnering with the private sector or direct provisioning to be adopted to address the infrastructure inadequacies of the state.

The current importance attached to enhancement of 'outlays' has to be shifted to the 'outcomes'. State's While there are monitoring tools such as 'Results framework' used to track the results, the focus still is on the outputs as very sparse database is available on the outcomes and they need to be generated.

The economic infrastructure inadequacies, slow progress in human development index in the state (even as compared to the states that have lesser per capita expenditure than Karnataka) and the glaring regional inequalities among many other concerns are worrisome. The state needs to address these issues on a priority basis by toning up public expenditure planning and management.

The fiscal reform process has still not focused on redefining the 'Role of State' in the changing times. This is the right opportune time to make a systematic delineation of the responsibility of the state in terms of direct provision, facilitation; regulation etc., Distribution of resources to religious institutions is by no means an important responsibility of the state. On the contrary, the religious intuitions have a great role to supplement the state's developmental activities. Expenditure reprioritized on these lines would not only right size the government but also help enhance fiscal space and allocative efficiency of public spending. State's development policies should not be subjected to political economy gains in the long term interest of the state.

References

Ashauer, D.A 1989, Is public expenditure productive? Journal of Monetary economics, Vol 23

Aziz, A. (ed.), (1989).*Management Problems of State Public Enterprises* .Jaipur: Printwell Publishers

Baijal, Pradip (2002).*Privatisation: Compulsion and Options for Economic Reforms,* Economic and Political Weekly, XXXVII (41)

Bos, D (1986).*Public Enterprises Economics,* North Holland Publishers.

Bos, Dieter (1993) .*Privatization in Europe: A Comparison of Approaches*, Oxford Review of Economic Policy, 9, (1), pp.53-74

Comptroller and Auditor General of India, 2013, Report on State finances, Report No 1.

Chu, Ke-Young and Richard Hemming (eds.), (1991).*Public Expenditure Handbook.* Washington D.C.: IMF

Devarajan, S, Vinanya Swaroop and Heng-fu Zou 1996, The composition of public expenditure and economic growth, Journal of monetary economics, No 106, 407-43

Ganesh. (2001).*Privatization in India. Delhi*: Mittal Publications

Gopalakrishna, M (2002).*Public Sector Reforms-Industrial development in Andhra Pradesh,* The Journal of Institute of Public Enterprises,25,pp.17-26

Gouri, Geeta(1989).*Equity in Pricing of Public Enterprises ,*In Aziz(ed.),(1989)

Government of Karnataka (2013), “Economic Survey of Karnataka (2012-13)”.

Government of India, *Public Enterprises survey, Different* issue

Government of India , *National survey on State Level Public Enterprises,* 2007-08, Vol. 2, pp.187-232, http://dpeslpe.gov.in/DOC/SLPE_Vol-II_Part1.pdf

Government of Karnataka (2013),*State Level Public Enterprises of Karnataka at a Glance*,2007-10

Government of Mysore (1970).*Development of Mysore 1956-69*

Gayithri, 1988, Growth and pattern of state expenditure A Case study of Karnataka, an unpublished PhD dissertation, University of Mysore

----------, 2011, Public expenditure review, A research report commissioned by the Expenditure Reforms Commission, Government of Karnataka.

----------, 2012, Government subsidies in Karnataka, A research report commissioned by the Expenditure Reforms Commission, Government of Karnataka.

----------, 2012, Results framework document – An appraisal, A research report commissioned by the Karnataka Evaluation Authority, Government of Karnataka.

Heller,Peter, 2005, Understanding fiscal space, IMF policy discussion paper, PDP/05/4, Washington,D.C.

Jalan,Bimal,(1996).*India's Economic Policy*, New Delhi :Viking Penguin Books India ltd.

Jones,L(ed 1984).*India's Economic Policy,* New Delhi: Viking Penguin Books India ltd

Joskow, Paul, (1994).*Privatization in Russia: What should be a firm? Actes de Colloque: Economies des Couts de Transaction,* Paris, Mai 1994

Kannan Elumalai and Khalil Shah, 2010, Determinants of stagnation in productivity of important crops in Karnataka, Research Report XI/ADRT/127, Institute for Social and Economic Change, Bangalore.

Kannan Elumalai, 2010, Subsidies in Food, agriculture and allied sectors in Karnataka, Draft report on Subsidies in Karnataka submitted to the Expenditure Reforms Commission, Government of Karnataka.

KERC (2005), “Progress of Power Sector Reforms in Karnataka 1999-2004”, Government of Karnataka.

KERC (Various Tariff Orders), “Tariff Orders of Karnataka Electricity regulatory Commission”, Government of Karnataka.

KPTCL (Various issue), “Annual Financial Statement of Karnataka power transmission and corporation limited”.

Krishnaswamy,K.S.(1981).*What Ails the Public Sector?*Bombay:CMIE.

Lee, C (2002).Telecommunications Reforms in Malaysia, *The Journal of Institute of Public Enterprises, 25, pp.1*-16

McKinsey, D.and Mookherjee, D. (2003).The Distributive Impact of Privatization in Latin America: Evidences from Four Countries, *Economia , spring 2003,* pp.161-218

Nandkarni,M V. and G.V.K.Rao,(1989).*Public Sector for Basic Needs-The Case of Fuel Wood,* In Aziz(1989).

Narain ,Lakshmi (1981).*Managing Public Enterprises :Reflections on Three Decades of Indian Experiences ,*The Journal of the Institute of Public Enterprises ,23 ,1

Patnaik, R.K.et al, Public expenditure and emerging fiscal policy scenario in India,

Planning Commission (GoI), (2002).*Study group on reforms in State Public Sector Undertakings,* Vol.1, pp.67-74

Rajeev, Meenakshi (2005) : Karnataka Public Enterprise Reform Programme, Project Report, ISEC.

Rajeev,Meenakshi and B.P.Vani (2004).*Performances of Public Enterprises in Karnataka Panel Data analysis,* Working paper ,152 ,Institute for Social and Economic Change, Bangalore

Ram Rati, 1986, Government size and economic growth: A new framework and some evidence from cross section and time series data, American Economic Review, March, 76, 191-203

Ray , Amal (1989).*Public Enterprises in India: Their Managerial aspects,* In Aziz(ed.).(1989)

Rayappa P H and Thippiah P.(1989).*Criteria to Evaluate the Performance of Public Sector Undertakings in Karnataka,* In A.Aziz(ed.),(1989)

Sankar,U.(1989),*Problems in Pricing the Public Sector Products and Services with special reference to India,* In Aziz (ed.) (1989)

Sawhney, Upinder,(2002).*Restructuring of State Level Public Enterprises in Punjab,* The Journal of Institute of Public enterprises,25,pp.70-76

Shetty V K, Babu,D, Aziz,A(1989).*Industrial relations in Karnataka State Public Undertakings: Some issues* In Aziz(ed.),(1989)

Starr ,Ross M(1997), *General Equilibrium Theory*, Cambridge :Cambridge University Press

Appendices

Chapter Two

A 2.1: Relative Tax potential and Tax Efforts of the States

Sales Tax

(Actual & Estimated values in Rupees Crore & Rev efforts in %)

	2007-08				2008-09			
States	Actual	Estimated	Rev Efforts	Rank	Actual	Estimated	Rev Efforts	Rank
AP	17593.4	13495.04	130.4	1	20596.47	15963.46	129.0	2
Assam	2691.44	2595.23	103.7	8	2768.82	2848.54	97.2	10
Bihar	2490.51	4166.38	59.8	16	2979.42	5106.14	58.3	16
Goa	879.28	707.09	124.4	5	1072.15	854.71	125.4	4
Gujarat	13199	12170.88	108.4	7	15143.86	13685.23	110.7	6
Haryana	6364.34	5568.74	114.3	6	7035.15	6612.20	106.4	7
Karnataka	12631.9	9987.26	126.5	4	13573.96	11468.82	118.4	5
Kerala	8355.55	6441.05	129.7	2	10951.75	7375.39	148.5	1
MP	5488.14	5934.78	92.5	12	6323.22	7167.67	88.2	13
Maharashtra	24368.2	25459.80	95.7	11	27966.37	28814.46	97.1	11
Orissa	3567.16	4742.76	75.2	14	4268.73	5337.66	80.0	14
Punjab	5014.04	5592.78	89.7	13	6166.41	6293.58	98.0	9
Rajasthan	7345.84	7170.92	102.4	9	8442.02	8441.12	100.0	8
TN	16434.1	12973.34	126.7	3	19029.05	14977.53	127.1	3
UP	13638.1	14174.26	96.2	10	16044	16659.57	96.3	12
West Bengal	7262.92	11060.99	65.7	15	8134.07	12684.19	64.1	15

	2009-10				2010-11			
States	Actual	Estimated	Rev Efforts	Rank	Actual	Estimated	Rev Efforts	Rank
AP	22278.14	17289.45	128.85	2	27443.24	22074.36	124.3	3
Assam	3225.94	3154.087	102.27	9	3952.19	4073.77	97.0	11
Bihar	2611.49	5589.405	46.72	16	4527.6	7341.65	61.7	16
Goa	1064.08	889.6564	119.60	5	1280.59	1158.17	110.6	6
Gujarat	15651.2	15540.99	100.7	11	20226.78	20445.77	98.9	7
Haryana	7942.22	7739.548	102.61	8	9818.06	9935.68	98.8	8
Karnataka	14389.74	11981.3	124.32	3	19360.59	15501.37	124.9	2
Kerala	12477.95	8048.424	155.03	1	15522.69	10108.87	153.6	1
MP	7153.83	7900.677	90.54	13	9574.04	9747.22	98.2	10
Maharashtra	29970.7	32644.9	91.8	12	38934.47	42351.46	91.9	12
Orissa	4914.99	5531.722	88.85	14	6221.28	7200.25	86.4	14
Punjab	7264.31	6784.287	107.07	6	9642.42	8452.03	114.1	5
Rajasthan	9681.38	9299.206	104.1	7	11901.24	12947.43	91.9	13
TN	20985.74	17400.5	120.6	4	26363.56	21890.63	120.4	4
UP	19427.67	19086.36	101.7	10	22868.72	23278.86	98.2	9
West Bengal	9647.43	14305..45	67.43	15	12216.58	18234.17	67.0	15

	2011-12RE			
States	Actual	Estimated	Rev Efforts	Rank
AP	33585.47	26682.47	125.9	4
Assam	4986.4	5095.89	97.9	10
Bihar	6458	9971.34	64.8	16
Goa	1606	1434.58	111.9	5
Gujarat	24780.86	24902.73	99.5	8
Haryana	12322	12462.72	98.9	9
Karnataka	23510	17636.11	133.3	3
Kerala	19098.62	12772.77	149.5	1
MP	10900	12547.62	86.9	12
Maharashtra	45903.59	51068.38	89.9	11
Orissa	7556.35	8726.06	86.6	13
Punjab	11466	10490.19	109.3	6
Rajasthan	13956.44	16920.03	82.5	14
TN	34731.01	26020.04	133.5	2
UP	29290.91	27871.43	105.1	7
West Bengal	14782.06	22137.96	66.8	15

Data Source: 1.CSO 2.RBI Handbook of statistics on Indian Economy, 2010 & RBI State Finance: a Study of Budgets, Various issues

A 2.2: Stamp Duty

(Actual & Estimated values in Rupees Crore & Rev efforts in %)

	2007-08				2008-09				2009-10				2010-11				2011-12RE			
States	Actual	Estimated	Rev Efforts	Rank	Actual	Estimated	Rev Effor	Rank	Actual	Estimated	Rev Effor	Rank	Actual	Estimated	Rev Effor	Rank	Actual	Estimated	Rev Effor	Rank
AP	3086.06	3338.61	92.4	11	2930.99	3352.53	87.4	12	2638.63	3485.49	75.7	13	3833.57	4667.61	82.1	13	4140	5640.48	73.4	13
Assam	109.91	382.19	28.8	16	111.16	346.87	32.0	16	108.45	350.73	30.9	16	122.84	465.52	26.4	16	135.97	537.85	25.3	16
Bihar	654.15	712.11	91.9	12	716.19	747.81	95.8	10	997.9	759.21	131.4	5	1098.68	1039.66	105.7	9	1600	1394.77	114.7	9
Goa	117.59	69.17	170.0	1	115.37	71.13	162.2	3	111.25	63.55	175.1	1	151.79	83.71	181.3	2	151.11	88.96	169.9	2
Gujarat	2018.43	2914.75	69.2	13	1728.5	2737.47	63.1	13	2556.72	3018.36	84.7	12	3666.24	4204.25	87.2	11	4500	5113.99	88.0	11
Haryana	1763.28	1042.78	169.1	2	1326.39	1050.86	126.2	6	1293.57	1177.98	109.8	9	2319.28	1570.90	147.6	5	2800	1914.25	146.3	5
Karnataka	3408.83	2247.53	151.7	4	2926.72	2169.46	134.9	4	2627.57	2124.67	123.7	7	3531.08	2881.83	122.5	6	4750	3133.65	151.6	4
Kerala	2027.97	1262.64	160.6	3	2002.99	1213.35	165.1	2	1896.41	1241.87	152.7	3	2552.49	1608.37	158.7	4	3120.42	1982.20	157.4	3
MP	1531.54	1133.81	135.1	6	1479.29	1168.57	126.6	5	1783.15	1211.20	147.2	4	2514.27	1530.39	164.3	3	2800	1932.78	144.9	6
Maharashtra	8549.57	7691.11	111.2	9	8287.63	7293.96	113.6	9	10773.65	8219.06	131.1	6	13515.99	11353.45	119.0	8	14000.88	14174.94	98.8	10
Orissa	404.76	844.36	47.9	15	495.66	792.76	62.5	14	359.96	748.65	48.1	15	415.82	1012.44	41.1	15	510	1154.15	44.2	15
Punjab	1567.84	1048.70	149.5	5	1730.29	984.72	175.7	1	1550.94	986.10	157.3	2	2318.46	1259.89	184.0	1	2900	1498.91	193.5	1
Rajasthan	1544.35	1454.00	106.2	10	1356.63	1449.23	93.6	11	1362.94	1509.20	90.3	11	1941.05	2254.29	86.1	12	2500	2954.58	84.6	12
TN	3804.74	3169.98	120.0	7	3793.68	3082.69	123.1	7	3662.16	3515.74	104.2	10	4650.59	4614.69	100.8	10	6467.55	5442.74	118.8	8
UP	3976.68	3561.25	111.7	8	4138.27	3546.26	116.7	8	4562.23	3983.11	114.5	8	5974.66	5018.46	119.1	7	7629.5	6000.57	127.1	7
West Bengal	1416.96	2570.44	55.1	14	1509.49	2477.01	60.9	15	1814.22	2699.06	67.2	14	2265.21	3596.38	63.0	14	2491.74	4327.21	57.6	14

Data Source: 1.CSO 2.RBI Handbook of statistics on Indian Economy, 2010 & RBI State Finance: a Study of Budgets, Various issues

A2.3: Electricity Duty

(Actual & Estimated values in Rupees Crore & Rev efforts in %)

	2007-08				2008-09				2009-10			
States	Actual	Estimated	Rev Efforts	Rank	Actual	Estimated	Rev	Rank	Actual	Estimated	Rev	Rank
AP	195.36	612.27	31.9	13	218.54	765.66	28.5	15	159.26	641.57	28.8	13
Assam	4.62	15.21	30.4	14	22.36	27.90	80.1	9	27.07	38.58	70.1	9
Bihar	64.05	30.11	212.7	6	67.62	53.18	127.1	7	66.63	70.39	94.6	8
Gujarat	2046.52	540.68	378.5	1	2369.91	636.41	372.4	1	2346.65	538.40	435.8	2
Haryana	107.45	178.83	60.1	10	106.31	241.24	44.1	12	119.58	253.21	47.2	12
Karnataka	449.5	392.43	114.5	9	370.59	484.93	76.4	10	678.69	395.70	171.5	7
Kerala	39.04	103.48	37.7	12	56	144.44	38.8	14	24.78	157.61	15.7	14
MP	626.08	246.33	254.2	4	343.06	274.82	124.8	8	2146.49	248.00	865.5	1
Maharashtra	2687.87	924.44	290.8	3	2394.86	1063.77	225.1	3	3289.32	829.66	396.4	3
Orissa	327.56	98.12	333.8	2	365.03	138.41	263.7	2	459.96	138.60	331.8	4
Punjab	603.8	331.12	182.3	7	631.33	383.69	164.5	5	230.13	343.73	66.9	10
Rajasthan	584.23	247.21	236.3	5	654.04	346.01	189.0	4	699.99	336.63	207.9	5
TN	37.22	677.03	5.5	15	355.69	754.83	47.1	11	37.06	621.25	5.9	15
UP	206.65	440.23	46.9	11	216.72	539.31	40.1	13	272.16	452.91	60.1	11
West Bengal	506.69	281.50	179.9	8	587.52	362.55	162.0	6	664.57	345.47	192.3	6

Data Source: 1. CMIE 2. All India Electricity Statistics, Central Electricity Authority, Ministry of Power, GoI. 3. RBI Handbook of statistics on Indian Economy 2010 & RBI State Finance: a Study of Budgets, Various issues.

A2.4: Motor Vehicle Tax

(Actual & Estimated values in Rupees Crore & Rev efforts in %)

	2007-08				2008-09				2009-10				2010-11			
States	Actual	Estimated	Rev Efforts	Rank	Actual	Estimated	Rev	Rank	Actual	Estimated	Rev	Rank	Actual	Estimated	Rev	Rank
AP	1603.8	1330.81	120.5	5	1800.62	1437.33	125.3	4	1995.3	1399.27	142.6	2	2626.75	2127.17	123.5	3
Assam	138.62	152.52	90.9	11	145.21	186.87	77.7	13	177.26	227.87	77.8	12	231.99	311.47	74.5	12
Bihar	273.21	256.37	106.6	8	297.74	354.49	84.0	12	345.13	513.78	67.2	13	455.43	621.28	73.3	13
Goa	81.96	72.22	113.5	7	90.15	76.21	118.3	6	105.12	79.36	132.5	3	130.4	94.88	137.4	2
Gujarat	1310.09	1246.00	105.1	9	1381.66	1187.27	116.4	7	1542.64	1420.61	108.6	9	2003.68	1876.57	106.8	8
Haryana	233.79	666.77	35.1	15	239.3	659.05	36.3	15	277.07	743.30	37.3	15	457.36	906.18	50.5	15
Karnataka	1650.13	1151.27	143.3	1	1681.16	1486.24	113.1	9	1961.6	1208.44	162.3	1	2550.02	1470.00	173.5	1
Kerala	853.17	664.59	128.4	4	937.45	716.32	130.9	3	1131.1	857.42	131.9	4	1331.37	1107.10	120.3	4
MP	702.62	787.58	89.2	12	772.56	846.50	91.3	11	919.01	998.96	92.0	11	1198.38	1344.93	89.1	11
Maharashtra	2143.1	1829.03	117.2	6	2220.22	1910.09	116.2	8	2682.3	2233.22	120.1	6	3532.9	2927.01	120.7	5
Orissa	459.42	351.34	130.8	3	524.43	381.84	137.3	1	611.23	508.98	120.1	7	727.58	654.62	111.1	7
Rajasthan	1164.4	882.14	132.0	2	1213.56	970.79	125.0	5	1372.87	1086.06	126.4	5	1612.25	1358.60	118.7	6
TN	1483.21	1487.31	99.7	10	1709.57	1612.26	106.0	10	2024.64	1914.00	105.8	10	2660.05	2670.14	99.6	10
UP	1145.84	1472.79	77.8	14	1124.66	1764.49	63.7	14	1403.5	2373.92	59.1	14	1816.89	2734.42	66.4	14
West Bengal	532.07	669.24	79.5	13	608.01	452.80	134.3	2	774.34	694.91	111.4	8	936.01	915.57	102.2	9

Data Source: 1.Ministry of Road Transport & Highways, GoI. 2. RBI handbook of Statistics on State Government Finance 2010 & RBI State Finance: a Study of Budgets, Various issues.

A2.5: Land Revenue + Agriculture Income Tax

(Actual & Estimated values in Rupees Crore & Rev efforts in %)

	2007-08				2008-09				2009-10				2010-11				2011-12RE			
States	Actual	Estimated	Rev Efforts	Rank	Actual	Estimated	Rev Effort	Rank	Actual	Estimated	Rev Effort	Rank	Actual	Estimated	Rev Effort	Rank	Actual	Estimated	Rev Effort	Rank
AP	144.39	234.68	61.5	14	130.35	272.68	47.8	14	221.6	284.69	77.8	12	170.74	394.58	43.3	14	146	320.09	45.6	13
Assam	82.9	62.82	132.0	7	131.54	83.67	157.2	8	195.25	91.01	214.5	5	243.07	102.24	237.8	5	257.24	102.88	250.0	5
Bihar	82.1	100.18	82.0	11	101.74	144.98	70.2	12	123.97	137.72	90.0	9	139.02	176.91	78.6	11	125.2	189.63	66.0	11
Goa	7.19	5.35	134.4	6	9.39	9.21	102.0	10	10.61	8.83	120.2	7	8.32	6.35	131.0	8	10.96	12.81	85.6	9
Gujarat	683.09	171.46	398.4	2	543.5	185.63	292.8	3	1161.2	194.90	595.8	1	1788.79	326.91	547.2	1	1600	294.33	543.6	3
Haryana	9.38	116.07	8.1	16	8.58	155.10	5.5	16	9.43	158.17	6.0	16	10.02	191.13	5.2	16	14.66	189.46	7.7	16
Karnataka	148.35	136.56	108.6	8	264.93	156.47	169.3	6	136.58	164.40	83.1	11	186.86	211.65	88.3	9	202.03	191.49	105.5	7
Kerala	69.26	84.82	81.7	12	59.53	108.78	54.7	13	81.66	105.01	77.8	13	102.94	132.14	77.9	12	133.92	137.75	97.2	8
MP	129.15	127.36	101.4	10	338.84	166.11	204.0	5	180.03	181.46	99.2	8	360.81	208.43	173.1	7	475	213.69	222.3	6
Maharashtra	512.27	209.42	244.6	4	546.22	207.16	263.7	4	714.04	231.01	309.1	3	1094.98	387.92	282.3	4	1564.74	287.80	543.7	2
Orissa	276.15	98.28	281.0	3	348.79	114.03	305.9	2	292.17	115.07	253.9	4	390.66	123.93	315.2	3	465	114.48	406.2	4
Punjab	17.31	155.95	11.1	15	15.44	189.25	8.2	15	15.31	191.64	8.0	15	19.24	229.62	8.4	15	19	210.98	9.0	15
Rajasthan	155.3	146.28	106.2	9	162.52	176.49	92.1	11	147.66	173.86	84.9	10	222.17	282.48	78.6	10	196.06	283.73	69.1	10
TN	78.14	126.80	61.6	13	207.74	154.53	134.4	9	116.6	183.84	63.4	14	113.29	230.50	49.1	13	70.98	203.15	34.9	14
UP	392.53	283.58	138.4	5	549.28	346.07	158.7	7	663.14	364.40	182.0	6	1134.16	492.26	230.4	6	245.87	416.22	59.1	12
West Bengal	1036.98	185.60	558.7	1	987.29	210.19	469.7	1	937.78	237.12	395.5	2	1269.51	305.02	416.2	2	1520.56	266.52	570.5	1

Data Source: 1. CSO 2. RBI handbook of Statistics on State Government Finance 2010 & RBI State Finance: a Study of Budgets, Various issues.

A2.6: Excise Duty

(Actual & Estimated values in Rupees Crore & Rev efforts in %)

	2007-08				2008-09				2009-10				2010-11				2011-12RE			
States	Actual	Estimated	Rev Efforts	Rank	Actual	Estimated	Rev Effor	Rank	Actual	Estimated	Rev Effor	Rank	Actual	Estimated	Rev Effor	Rank	Actual	Estimated	Rev Effor	Rank
AP	4040.69	2195.93	184.0	5	5752.61	2694.87	213.5	3	5848.59	3108.46	188.2	4	8264.67	3637.83	227.2	2	9014.4	4324.98	208.4	4
Assam	188.71	366.32	51.5	15	198.68	385.66	51.5	15	239.19	504.27	47.4	15	323.12	653.95	49.4	14	480	794.24	60.4	15
Bihar	525.42	612.60	85.8	11	679.14	744.95	91.2	10	1081.68	929.60	116.4	9	1523.35	1189.38	128.1	8	1790	1579.02	113.4	8
Goa	75.94	89.22	85.1	12	88.7	99.19	89.4	11	104.46	130.35	80.1	13	139.16	182.32	76.3		159.99	216.98	73.7	13
Gujarat	47.2	1962.90	2.4	16	48.71	2265.18	2.2	16	65.94	2773.63	2.4	16	62.97	3365.43	1.9	15	66.58	4029.91	1.7	16
Haryana	1378.81	839.54	164.2	7	1418.53	997.13	142.3	8	2059.02	1316.43	156.4	7	2365.81	1617.20	146.3	6	2800	1984.00	141.1	7
Karnataka	4766.57	1583.49	301.0	1	5749.57	1855.86	309.8	1	6946.32	2100.29	330.7	1	8284.74	2540.61	326.1	1	9500	2830.75	335.6	1
Kerala	1169.25	983.31	118.9	9	1397.64	1127.89	123.9	9	1514.81	1372.67	110.4	10	1699.54	1645.83	103.3	9	2087.84	2034.54	102.6	10
MP	1853.83	899.65	206.1	4	2301.95	1092.12	210.8	4	2951.94	1345.75	219.4	2	3603.43	1586.06	227.2	2	4200	1997.84	210.2	3
Maharashtra	3963.05	4376.02	90.6	10	4433.76	5246.34	84.5	12	5056.63	6132.30	82.5	12	5961.85	7050.50	84.6	12	8500	8405.94	101.1	11
Orissa	524.93	705.18	74.4	13	660.07	783.16	84.3	13	849.05	919.35	92.4	11	1094.26	1166.12	93.8	10	1350	1377.47	98.0	12
Punjab	1861.52	843.48	220.7	3	1809.95	943.10	191.9	5	2100.92	1143.51	183.7	5	2373.08	1372.26	172.9	5	3250	1663.18	195.4	5
Rajasthan	1805.12	1104.92	163.4	8	2169.89	1313.36	165.2	7	2300.48	1601.88	143.6	8	2861.41	2116.10	135.2	7	2950	2713.15	108.7	9
TN	4764.06	2103.87	226.4	2	5755.52	2507.88	229.5	2	6740.68	3129.81	215.4	3	8115.94	3607.08	225.0	3	9891.01	4215.09	234.7	2
UP	3948.4	2316.24	170.5	6	4720.01	2827.80	166.9	6	5666.06	3455.02	164.0	6	6723.49	3839.50	175.1	4	8252.69	4522.37	182.5	6
West Bengal	935.47	1769.24	52.9	14	1082.94	2079.17	52.1	14	1443.81	2538.57	56.9	14	1783.34	2996.06	59.5	13	2229.18	3572.52	62.4	14

Source: 1.CSO 2. RBI handbook of Statistics on State Government Finance 2010 & RBI State Finance: a Study of Budgets, Various issues.

A2.7: Entertainment Tax

(Actual & Estimated values in Rupees Crore & Rev efforts in %)

	2007-08					2008-09					2009-10					2010-11			
States	Actual	Estimated	Rev Efforts	Rank		Actual	Estimated	Rev	Rank		Actual	Estimated	Rev	Rank		Actual	Estimated	Rev	Rank
AP	61.95	57.06	108.6	8		65.83	47.98	137.2	8		71.56	35.33	202.5	6		86.71	46.57	186.2	5
Assam	2.65	1.67	159.0	5		2.22	2.48	89.4	13		2.63	7.25	36.3	12		2.65	10.50	25.3	14
Bihar	14.24	4.60	309.8	2		13.66	6.77	201.8	7		18.03	12.35	146.0	8		22.45	17.64	127.3	10
Goa	0	0.10	0.0	16		0.96	0.31	305.7	3		37.11	2.23	1663.8	1		43.7	3.46	1262.1	1
Gujarat	28.76	45.73	62.9	12		34.11	36.83	92.6	12		47.28	31.99	147.8	7		66.19	43.52	152.1	8
Haryana	17.43	8.56	203.6	3		24.4	10.56	231.2	6		35.55	16.72	212.7	5		35.09	23.04	152.3	7
Karnataka	352.9	29.93	1178.9	1		157.75	27.19	580.2	1		116.14	25.11	462.5	4		97.7	34.10	286.5	4
Kerala	1.23	11.69	10.5	15		0.17	12.73	1.3	16		0.48	17.34	2.8	16		0.24	23.39	1.0	16
MP	12.42	9.81	126.6	7		14.88	12.12	122.7	9		3.44	17.04	20.2	14		29.43	22.65	129.9	9
Maharashtra	409.74	222.41	184.2	4		436.96	132.35	330.2	2		491.6	63.86	769.9	2		530.46	82.72	641.3	2
Orissa	2.22	6.07	36.6	13		18.58	7.31	254.3	4		9.28	12.23	75.9	10		28.62	17.34	165.0	6
Punjab	5.44	8.64	63.0	11		0.81	9.70	8.4	15		1.2	14.79	8.1	15		2.88	19.97	14.4	15
Rajasthan	15.5	14.72	105.3	9		17.59	16.06	109.6	11		14.03	19.83	70.7	11		20.81	29.09	71.5	12
TN	9.09	52.44	17.3	14		12.24	43.00	28.5	14		10.8	35.54	30.4	13		13.51	46.23	29.2	13
UP	94.34	63.39	148.8	6		129.85	51.63	251.5	5		186.6	38.74	481.7	3		238.85	48.80	489.4	3
West Bengal	30.07	37.26	80.7	10		38.19	32.32	118.2	10		41.6	29.62	140.5	9		37.71	39.35	95.8	11

Data Source: 1.CSO 2. RBI handbook of Statistics on State Government Finance 2010 & RBI State Finance: a Study of Budgets, Various issues.

Chapter seven

Debt equity ratio: The next important ratio we consider is the debt-equity ratio which provides information regarding sources of funding for the enterprise. More precisely, this is expressed as a relationship between the long term debt and the equity as a fraction of the latter. That is, **Debt-Equity ratio =(Long term debt/Equity)*100**

Based on the benchmark of ratio's commissioned by planning commission, the following section gives the detail of actual and the desired debt equity ratio of each sector:

Table A7.1: Sectoral analysis of equity-debt Ratio

Sector	2005-06	2006-07	2007-08
Manufacturing	1.53	1.08	0.98
Financial	12.8	11.95	4.59
Mining	0.35	0.16	0.06
Energy generation transmission/distribution	9.68	10.03	12.8
Road transportation	1.65	13.96	10.97
Marketing and trading	3.08	5.92	3.74
Tourism	0	0.13	0.12
Irrigation and water resource	6.13	3.89	2.71
Public works/road development industrial infrastructure	3.12	3.45	2.12
Agro and food beverages based	0.86	0.07	1.27
Forest development	0.08	0.06	0.05
Community development non-commercial	0	0	0
Community development commercial	1.55	1.1	3.82
Housing	0	1.12	2.4
Miscellaneous	0	4.39	0

As prescribed by the Report of the Planning Commission *mentioned in the report……the desirable equity debt ratio for marketing and trading sector is 1:4 or 0.25.*From our analysis we find the actual equity-debt ratio at 0.20 for this sector is actually exceeding the desirable ratio.

From our analysis we witness a greater equity debt or debt equity???? Ratio than the desirable ratio.

The minimum equity debt ratio of *tourism sector* is recommended to *1:4 or 0.25.*However from our analysis we find the actual equity debt ratio of this sector lower than the desirable ratio.

The minimum equity debt ratio for *Irrigation and water resource* enterprise are expected to be *1:1*,in other words equal to 1.Based on our analysis we however find this sector having a greater equity debt ratio, though it has been falling over the years.

The *Forest sector* is suggested to attain an optimum ratio of *1:1*.But the equity debt ratio of this sector from our analysis is lower than desirable ratio.

Similarly the *Community development (non-commercial)* enterprise has also failed to maintain a minimum level of *equity debt ratio of 1:1.*

On the other hand the *Housing sector* has maintained an equity debt ratio greater than the *desirable ratio of 1:1.*

The second indicator we consider is the rate of profit per rupee of turnover.

Rate of Profit per Turnover

The minimum rate of profit per turnover is the percentage of profit attained out of the total turnover of the enterprises. This is calculated as:

(net profit/gross turnover)*100

The desirable minimum rate of profit per turnover differs from sector to sector.

The following table gives an overview of actual rate of profit of each sector.

Table A7.2: Sectoral analysis of actual rate of profit per turnover

Sector	2005-06*	2006-07*	2007-08**	2008-09**	2009-10**
Manufacturing	7.7	31	3.9	5	2.6
Financial	3	7.7	23.4	0	1.4
Mining	60.2	76.1	42.8	35.8	34.1
Energy generation transmission	19.6	18	2.1	2.1	2.6
/distribution					
Road transportation	-12.5	-5.1	4.4	2	1.8
Marketing and trading	1.6	2.2	0.3	0.3	0.1
Tourism	0	7.9	5.5	5.9	5.2
Irrigation and water resource	-3373.5	-2914.7	0	0	0
Public works/road development	-54.1	110.7	20.6	19.5	15.8
industrial infrastructure					
Agro and food beverages based	2.1	3.4	0.4	0.9	0.8
Forest development	17.4	36.8	10.8	10.7	12.1
Community development	0	0	3.9	3.8	1.8

non-commercial					
Community development	-18.8	8.5	5.6	3.9	5.9
commercial					
Housing	0	0	12.8	15.1	12
Miscellaneous	0	184.8	34.1	5.3	3.8

Source: Department of Public enterprises (Different issues)

Note: * is the data for 45 enterprises

** is the data for 56 enterprises

The Tourism sector is expected to attain a *minimum profit of 1%.*From our analysis we find the actual rate of profit exceeding the minimum rate from 2006-07. Though the rate of profit was 0 in 2005-06, it has considerably increased in the following years.

The minimum rate of profit on turnover is 3% for the enterprises on financial sector

Appendix Tables: Chapter eight

A8.1: Details of Transfers to Grama Panchayats in Karnataka (Rs.Crore)

Years	Own Revenue (Tax)	Own Non-Tax	Central Govt transfers	Central FC Transfers	Assigned/ Devolution from the state	Total	Rev Exp.	Capi Exp.
2000-01								
2001-02								
2002-03	66	NA	114.02	52.88	124.55		287.45	48.58
2003-04	116	NA	124.91	52.88	283.96		499.36	49.5
2004-05	81.22	NA	128.8	45.67	282.65		425.45	79.1
2005-06	125.81	NA	217.94	124.32	1062.51		1156.58	280.3
2006-07	161.49	NA	455.86	124.32	1153.79		1396.58	304.1
2007-08	127.19	75.69	**	12.43	1534.66		1361.68	267.89
2008-09	138.84	84.87	**	12.43	1548.41		1798.05	94.63
2009-10	143.93	77.26	**	124.32	1322.88		2023.53	106.5
2010-11	185.56	71.39	**	286.63	1269.05		2559.62	134.72
2011-12	204.97	107.11	**	525.94	1015.63		2457.68	129.35
2012-13	161.11	107.98	**	548.04	1100.95		2813.73	148.11

Note: NA – Not Available; ** included in the Zilla Panchayat

Source: 1) From 2002-03 to 2006-07 – Finance Dept, Information furnished to the Thirteenth Finance Commission in respect of Local Bodies pertaining to PRIs and ULBs, January 2009, GoK.

2) From 2007-08 to 2012-13 – RDPR Dept, Information Panchayat Raj Institutions (PRIs) to Fourteenth Finance Commission, no date, GoK.

Appendix Table A8.2: Details of Transfers to Taluk Panchayats in Karnataka (Rs.Crore)

Years	Own Revenue (Tax)	Central Govt transfers	Central FC Transfers	Assigned/Devolution from the state	Total	Rev Exp.	Capi Exp.	Tot Exp.
2000-01								
2001-02								
2002-03	*	126.6	15.1	2151.43		2130	48.37	
2003-04	*	134.58	15.1	2440.4		2363	48.84	
2004-05	*	115	13.04	2708.5		2601	46.95	
2005-06	*	128.1	35.22	3207.28		3148	53.74	
2006-07	*	129.43	35.52	3559.92		3483	55.75	
2007-08	*	116.46	35.52	4594.33		3933	2.57	
2008-09	*	**	35.52	5799.7		5030	1.86	
2009-10	*	**	35.52	6680.09		6054	1.58	
2010-11	*	**	81.89	7494.4		7009	0.61	
2011-12	*	**	150.27	9115.24		7516	0.94	
2012-13	*	**	156.58	10564.95		6837	1.13	

Note: * No Tax Powers to TPs

Source: 1) From 2002-03 to 2006-07 – Finance Dept, Information furnished to the Thirteenth Finance Commission in respect of Local Bodies pertaining to PRIs and ULBs, January 2009, GoK.

2) From 2007-08 to 2012-13 – RDPR Dept, Information Panchayat Raj Institutions (PRIs) to Fourteenth Finance Commission, no date, GoK.

Appendix Table A8.3: Details of Transfers to Zilla Panchayats in Karnataka (Rs.Crore)

Years	Own Revenue (Tax)	Central Govt transfers	Central FC Transfers	Assigned/Devolution from the state	Total	Rev Exp.	Capi Exp.	Tot Exp.
2000-01								
2001-02								
2002-03	*	334.83	7.55	1434.29		1463	208	
2003-04	*	356.53	7.55	1402.57		1467	233	
2004-05	*	284.35	6.52	1534.25		1566	201	
2005-06	*	433.19	17.76	2221.76		2137	402.8	
2006-07	*	462.9	228.39	2576.83		2674	431.1	
2007-08	*	1307.01	8.88	3396		4253	38.61	
2008-09	*	1696.41	17.76	4112.09		4801	19.91	
2009-10	*	2679.2	19.28	4278.05		7419	8.11	
2010-11	*	2486.66	52.91	4637.87		7631	3.65	
2011-12	*	1910.31	58.58	5280.72		7259	4.54	
2012-13	*	1796.32	78.29	6182.9		8444	4.27	

Note: * No Tax Powers to ZPs

Source: 1) From 2002-03 to 2006-07 – Finance Dept, Information furnished to the Thirteenth Finance Commission in respect of Local Bodies pertaining to PRIs and ULBs, January 2009, GoK.

2) From 2007-08 to 2012-13 – RDPR Dept, Information Panchayat Raj Institutions (PRIs) to Fourteenth Finance Commission, no date, GoK.

Appendix Table A8.4: Details of Revenue and Expenditure of all Municipal Corporations in Karnataka (Rs.Crore)

Years	Own Revenue (Tax)	Own Revenue (Non-Tax)	Central Govt transfers	Central FC Transfers	Assigned/Devolution from the state	Others (loans)	Total	Rev Exp.	Capi Exp.	Tot Exp
2000-01										
2001-02			60.31	0.16	147.1	94.2		655.31	241.18	
2002-03	363.06	179.82	66.12	1.1	277.3	173		718.15	146.72	
2003-04	353.26	213.96	21.6	7.79	338.4	426		670.15	689.73	
2004-05	279.96	283.88	3.65	10.28	446.9	206		615	677.81	
2005-06	343.77	278.91	3.51	42.61	497.6	246		572	759.9	
2006-07	393.69	161.14	145.62	24.53	811.1	234		972.15	1112.13	
2007-08	521.18	347.96								
2008-09										
2009-10										
2010-11										
2011-12										
2012-13										

Source: From 2002-03 to 2007-08 – Finance Dept, Information furnished to the Thirteenth Finance Commission in respect of Local Bodies pertaining to PRIs and ULBs, January 2009, GoK.

Appendix Table A8.5: Details of Revenue and Expenditure of all CMCs/TMCs in Karnataka (Rs.Crore)

Years	Own Revenue (Tax)	Own Revenue (Non-Tax)	Central Govt transfers	Central FC Transfers	Assigned/Devolution from the state	Others (loans)	Total	Rev Exp.	Cap Exp	Tot Exp
2000-01										
2001-02										
2002-03	113.13	104.2	10.96	4.12	234.3	7.76		268.49	50.1	
2003-04	114.6	92.52	16.37	13.38	288.9	4.89		276.93	65.24	
2004-05	118.56	149.32	95.29	50.4	347.1	-		503.69	255	
2005-06	110.88	89.8	22.87	43.98	546.1	-		435.56	375.12	
2006-07	73.73	140.68	13.37	97.78	769.2	-		479.12	620	
2007-08	81.1	154.74	48.67	42.21	888.5	-		527.03	688.15	
2008-09										
2009-10										
2010-11										
2011-12										
2012-13										

Source: From 2002-03 to 2007-08 – Finance Dept, Information furnished to the Thirteenth Finance Commission in respect of Local Bodies pertaining to PRIs and ULBs, January 2009, GoK.

Appendix Table A8.6: Details of Revenue and Expenditure of all Town Panchayats in Karnataka (Rs.Crore)

Years	Own Revenue (Tax)	Own Revenue (Non-Tax)	Central Govt transfers	Central FC Transfers	Assigned/Devolution from the state	Others (loans)	Total	Rev Exp.	Cap Exp	Tot Exp.
2000-01										
2001-02										
2002-03	12.99	9.15	2.89	0.8	41.65	0.33		25.95	12	
2003-04	8.93	10.17	3.76	4	51.66	0.38		27.79	9.4	
2004-05	12.69	14.06	29.91	21.47	88.29	-		88	75	
2005-06	7.42	15.99	6.96	10.17	177.9	-		63.88	154	
2006-07	7.95	16.13	5.07	33.98	264.6	-		58.39	270	
2007-08	13.58	17.74	14.24	9	205.7	-		64.23	195	
2008-09										
2009-10										
2010-11										
2011-12										
2012-13										

Source: From 2002-03 to 2007-08 – Finance Dept, Information furnished to the Thirteenth Finance Commission in respect of Local Bodies pertaining to PRIs and ULBs, January 2009, GoK.