

## A Study on Fiscal Consolidation Strategy of Karnataka

**Dr. B. N. Harisha**

Associate Professor,

Department of PG Studies in Economics,

Government First Grade College, Shikaripura

Affiliated to Kuvempu University, Shivamogga, Karnataka

Email: [harishabn@gmail.com](mailto:harishabn@gmail.com) ;

### Abstract

In Karnataka fiscal forms were brought to the forefront with the medium term fiscal plan (MTFP) during 2000-05. MTFP is an annual document which has fiscal targets and policies for budgetary exercise. The most important thing is, in 2002, Karnataka is the first state to establish Karnataka Fiscal Responsibility Act (KFRA). It is the statutory backup to the MTFP. Karnataka is on a fiscal consolidation path and borrowed money public findings at the time of Economic slowdown. after implementing KFRA. It had recorded revenue surplus and fiscal deficit was within 3 per cent of GSDP. As per the government of India guidelines state devoted to fiscal consolidation path.

**Key words:** *Medium Term Fiscal Plan, Karnataka Fiscal Responsibility Act, GSDP*

---

### 1. Introduction

In Karnataka fiscal forms were brought to the forefront with the medium term fiscal plan (MTFP) during 2000-05. MTFP is an annual document which has fiscal targets and policies for budgetary exercise. The most important thing is, in 2002, Karnataka is the first state to establish Karnataka Fiscal Responsibility Act (KFRA). It is the statutory backup to the MTFP. Karnataka is on a fiscal consolidation path and borrowed money public findings at the time of Economic slowdown. after implementing KFRA. It had recorded revenue surplus and fiscal deficit was within 3 per cent of GSDP. As per the government of India guidelines state devoted to fiscal consolidation path.

### 2. Importance of the Study

The constitutional assignment in India will lead to an imbalance between state-level revenue capabilities and

expenditure demands. The Constitution allows for the assignment of funds, the sharing of some centrally imposed taxes' earnings with the States, and the distribution of grants from the Consolidated Fund of India to the States. The Karnataka state has made significant efforts to rationalize and simplify the tax and non-tax resources since 1996-97. There has been some improvement in the state's budgetary resources in the recent years. The proposed study examined the state's tax and non-tax revenue resources and the policies pursued to rationalize the tax and non-tax revenue system. Karnataka derives its finances mainly from the own tax, own non-tax revenue, public debt, capital resources, share in central taxes, grants from the centre, public account and contingency account. The present study attempted to analyze how fiscal transfers have helped the process of fiscal consolidation through fiscal correction strategy with the help of KFRA and MTFP in respect of Karnataka.

### 3. Objectives of the Study

The study is devoted to the following objectives

1. To examine the trends of financial transfers from the central government to Karnataka.
2. To study the problems and issues relating to revenue sharing and grants-in-aid between Centre and the State on the recommendations of successive finance commissions and to find out how these transfers have affected the equity and efficiency.
3. To analyse how the reform process has impacted the centre-state financial relations in India, especially in Karnataka.
4. To analyse how fiscal transfers have helped the process of fiscal consolidation through fiscal correction strategy in respect of Karnataka.
5. To summarize the recommendations of State Finance Commissions of Karnataka and suggests measures for restructuring their working in a liberalized regime.

### 4. Hypothesis of the Study

Following were the hypothesis framed for the study:

1. In the post reforms period, Karnataka is on the path of fiscal consolidation
2. Fiscal transfers from center have helped Karnataka in terms of attaining fiscal health
3. The recent finance commissions have given scientific devolution criteria.
4. Present federal fiscal setup leads to both vertical as well as horizontal fiscal imbalances.

### 5. Methodology of the Study

### Data Source

The present study was based on secondary data. The data was collected from various sources like Statistical Abstracts of India; Indian Public Finance Statistics; Reports of successive Finance Commissions; State Finance Commissions Reports; Economic Surveys of Government of India; Annual Budgets of the Central and State Governments; Five-Year Plan Documents; Bulletins published by Reserve Bank of India and so on.

### Time Period

The present study covered a time period of 18-19 years from 2000-01 to 2017-18. This entire time period is called as economic reforms periods. During this period various ups and downs have taken place in different macroeconomic indicators, not only in India but also world over. Impact of these fluctuations are covered in the present study.

### Analytical Techniques

Statistical tools like Ratios, Percentages, and Growth rates were used along with them Correlations, Regression, and different indices were worked. For pictorial presentation meaningful graphs, diagrams were depicted and Paired 't' test was used for testing of hypothesis.

### 6. Conceptual Framework

Fiscal consolidation at the sub-national level in India has been undertaken under a rule based framework through the enactment of Fiscal Responsibility and Budget Management (FRBM) legislations by states. There are subtle variations across the states in terms of design and features of the Acts. This study discusses (a) the key aspects of the fiscal consolidation process of the State (b) the literature on fiscal consolidation and its link with growth (c)

the impact of fiscal consolidation on growth in the states (d) sources and composition of fiscal consolidation. The mainstream advocacy for fiscal consolidation has essentially hinged around prudent housekeeping, especially in the aftermath of periods of fiscal profligacy either to accelerate growth or to reduce public debt and limit its adverse impact on output and growth after the fiscal stimulus. A cut in government spending, if perceived as durable, implies a permanent reduction in the future tax burden, generating positive expectations among various economic agents. Empirical evidence suggests that design and timing are critical to the success of fiscal consolidation. Fiscal adjustment is found to have a higher likelihood of success if it is expenditure based. However, expenditure-based fiscal consolidation is also found to slow growth down when there are credit supply restrictions. A gradual fiscal consolidation based on a mix of revenue and expenditure measures can support growth, while reducing public debt. Higher initial levels of debt may also increase the probability of government pursuing successful fiscal consolidation. Recent 73<sup>rd</sup> and 74<sup>th</sup> constitutional amendments in India providing more powers in making policy desertion to the local governments, Village Panchayath, municipality and corporations metropolitans may demand for the sources or transfers from centre to the local level for providing public good and merit goods. Conditional resource transfers from the centre to the states can be made for this purpose hens state finance commission can facilitates transfers down to the local governments.

**Fiscal Responsibility Legislation (FRL)**

Main objective of FRL is to ensure fiscal sustainability, equity and fiscal

management and achieving sufficient revenue surplus, greater transparency in fiscal operations and conduct of fiscal policy in a MTFP. The fiscal responsibility and budget management (FRBM) act, 2003 implemented 2004, mandates the union government to eliminate revenue deficit by 2009 and to reduce fiscal deficit to 3 per cent by 2008. The rules under FRBM act notified the target for reduction in revenue and fiscal deficit. Karnataka was the first state to implement fiscal responsibility legislation followed by Tamil Nadu, Kerala and Andhra Pradesh. There is only one limitation with Karnataka’s FRL that is obscene of independent assessment body to review the fiscal scenario. Karnataka was able to reduce non developmental expenditure growth after the reforms. State did achieve fiscal consultation for better economic growth.

**The Fiscal Responsibility and Budget Management (FRBM) Act, 2003**

The committee on fiscal responsibility legislation was Constituted on 17<sup>th</sup> January, 2000 to go into various aspects of the fiscal system and recommended a draft legislation on fiscal responsibility. This was followed by an announcement in the budget 200-2001 for a strong institutional mechanism embodied in a fiscal responsibility act and to bring necessary legislative proposals Accordingly, fiscal responsibility and budget management bill 2000 was introduced in Lok Sabah in December 2000.

**Karnataka fiscal responsibility (KFRA) Act, 2002**

Karnataka is the active state which initiated many fiscal reforms. KFRA is also a one among them. The main objective of the Karnataka fiscal responsibility act is to bring revenue deficit to zero, fiscal deficit

to 3 per cent of the GSTP and another important objective of the fiscal reforms is to target at minimize in the deficit and debt as a proportion to the GDP. Karnataka Fiscal Responsibility Act amended in 2011. The act provided that the fiscal deficit during the year 2010-11 can exceed the limit but not more than 3.44 per cent of GSDP as a part of counter crisis measures.

**Indian Constitution** is designed beautifully for federal sector. On the one hand it provides Supremacy to the federal government, on the other hand it contains provisions to state governments to fight with central government for their needs. So Constitution is both rigid and flexible for the attainment of fulfilling national interest as well as local needs. In the same way federal fiscal system also has been designed and reformed over the period of time according to the necessity of Indian federal system.

## 7. Results, Analysis and Discussion

### Finance Commissions' Recommendations

The third state Finance Commission had recommended that the devolution of sources to local self governments must be 36 per cent (Rs. 4701 crores in 2001-02) of non-loan gross own revenue receipts. Out of this 15 per cent is meant for urban local bodies and 85% to the PRIs. This is recommended for the period from 1996-97 up to 2001. Non Loan Gross Own revenue receipts of Karnataka has increased from Rs. 8024 crores in the Year 1997-98 to Rs. 13059 crores in the year 2001-02. Devolution to ULBs projected for the year 2001-02 was Rs. 705 crores, Plan devolutions to PRIs was Rs. 1297 crores, non-Plan was Rs. 2699 crores to PRIs. Proportion of ULB devolution in SFC

recommendation raised from 10% in 1997-98 to 15 per cent in the year 2001-02.

### Fourth State Finance Commission Recommendations

The fourth state finance commission FSFC was formed by the Karnataka Government under the constitutional provision of article 243 (1) and (y) in December 2015 with the chairmanship of Sri. C.G. Chinnaswamy, Sri. H.D. Amarnathan and Dr. H Shashidhar were the members.

**Table 1. Criteria and Weightage**

Sr. No	Criteria	Weightage (%)
01	Population	40
02	Area	20
03	Scs and STs Population	20
04	Illiteracy rate	20

*Source: Fourth State Finance Commission Report, 2015. GoK*

The finance commission made attempt to analyze following issues.

- ◆ State's revenue capacity
- ◆ Development commitment
- ◆ Strengthening democracy
- ◆ Financial management

First state finance commission was on the view of federal fiscal relations at the state and decided to have gap filling method from transfers so it adopted pragmatic normative approach which observes the philosophy that "any person living anywhere in karnataka should get atleast basic needs average transfers worked out in this commission was 38.98%. The second state finance commission modified the concept of the non-loan net own revenue resources and implemented it. Second State Finance Commission evolved a devolution frame work allocation from the 11<sup>th</sup>

Finance Commission of India. Second Finance commission adopted a balanced financial allocation approach. The third state finance commission recommended separate devolution component to PRIs. Fourth State Finance Commission considers some measures to mobilise resources based on the available fiscal data. Fiscal and non-fiscal measures cover some aspects. The dependence on the state government for the funds to its financial autonomy. Importance source of revenue is property tax which has to be reformed. Tax based must be widened. Revenue from enterprises and non tax is expected reforms in audit and accounts must be done. Measures to be taken to improve the revenues of PRIs. The biggest challenge before the 4<sup>th</sup> state Finance Commission is the inconsistency of data from fragmented sources of information. The commission recommended reforms in tax administration by tax regulation authority (TRA).

### Research Findings

In Karnataka fiscal forms were brought to the forefront with the medium term fiscal plan (MTFP) during 2000-05. MTFP is a annual document which has fiscal targets and policies for budgetary exercise. The most important thing is, in 2002, Karnataka is the first state to establish Karnataka Fiscal Responsibility Act (KFRA) It is the statutory backup to the MTFP.

Main objective of FRL is to ensure fiscal sustainability, equity and fiscal management and achieving sufficient revenue surplus, greater transparency in fiscal operations and conduct of fiscal policy in a MTFP. The fiscal responsibility and budget management (FRBM) act, 2003 implemented 2004, mandates the union government to eliminate revenue deficit by 2009 and to reduce fiscal deficit to 3 per

cent by 2008. The rules under FRBM act notified the target for reduction in revenue and fiscal deficit. Karnataka was the first state to implement fiscal responsibility legislation followed by Tamil Nadu, Kerala and Andhra Pradesh. There is only one limitation with Karnataka's FRL that is obscene of independent assessment body to review the fiscal scenario. Karnataka was able to reduce non developmental expenditure growth after the reforms. State did achieve fiscal consultation for better economic growth.

Karnataka is the active state which initiated many fiscal reforms. KFRA is also a one among them. The main objective of the Karnataka fiscal responsibility act is to bring revenue deficit to zero, fiscal deficit to 3 per cent of the GSTP and another important objective of the fiscal reforms is to target at minimize in the deficit and debt as a proportion to the GDP. Karnataka Fiscal Responsibility Act amended in 2011. The act provided that the fiscal deficit during the year 2010-11 can exceed the limit but not more than 3.44 per cent of GSDP as a part of counter crisis measures.

According to thirteenth Finance Commission recommendations Karnataka's inter se share was 4.328 per cent. Average devolution as percent of GSDP in Karnataka was 2.69. The deferent between 13<sup>th</sup> finance Commission and Twelfth Finance Commission was 0.48 per cent. Share in service tax was 4.397 per cent. Karnataka's pre devolution non plan revenue surplus (deficit) was Rs. 24652.CrorePost devolution non plan revenue surplus (deficit) of Karnataka was Rs.41640 crores. Karnataka state government and had sought assistance to rehabilitees more than 30,000 miner irrigation tanks. Commission recommended an amount of Rs. 350 crores for this

purpose. Total Finance Commission transfers to Karnataka state was Rs. 74376.3 crore.

Considering all Factors, The Fourteenth Finance Commission (FC-XIV) increased the share of tax devolution to 42 per cent of the sharable tax pool which serve the too objectives of increasing the flow of non conditional transfer to the states. Inter se the share of Karnataka state, according to the recommendations of 14<sup>th</sup> Commission, was 4.713 per cent from divisible pool. Share of Karnataka state in service tax from divisible pool was 4.822 per cent. Pre Devolution revenue deficit of Karnataka Projected for the year 2019-20 is Rs. 4125 crores out of total state deficit will be Rs. 634347 crores. Post devolution revenue deficit (surplus) for the year 2019-20 will be Rs. -44874 crore. Out of total all state deficit of Rs. 34206 crores.

### **Fiscal Targets**

For the union government, the limit on fiscal deficit will be 3 per cent of GDP From the year 2016-17. Fiscal deficit of all states must be of 3 per cent of GSDP.

### **Karnataka's Share in Transfers by the Fourteenth Finance Commission**

For the Year 2015-16, the transfers to Karnataka was Rs. 448554 crores and it would be Rs. 202368 crores in 2019-20. The Important thing in the Fourteenth Finance commission is that almost eighteen states including Karnataka will not get any revenue deficit grants according to the recommendations.

### **Karnataka's Major Fiscal indicators (Projected relative shares to total transfers from Union)**

- ◆ The total revenue receipts of the state have raised from Rs. 78176 crore to Rs. 146033 crores in 2017-18.
- ◆ State's own tax revenue registered an annual growth rate of 11.77% in 2012 and 12.02% in 2018.
- ◆ State own tax revenue was 62.81% in 2017-18. State non tax revenue was 4.68 %.
- ◆ Devolution from finance commission was 21.74%. and grants from the centre was 10.77% in the year 2017-18.
- ◆ The share of the devolution from the Centre to state has been increased over the period of time.
- ◆ The revenue expenditure was 82.15% in 2012-13 and it has decreased to 80.25% in total expenditure share in the year 2017-18.

Fiscal responsibility and budgetary management act mandates for center and states to limit their gross fiscal deficit to 3 per cent of GDP and GSDP respectively. Revenue deficits are to be neutral are negative according to the norms of FRL. Karnataka is one among the states which are sustaining these fiscal targets. Karnataka is procuring progressive fiscal health by adapting the guidelines of Karnataka fiscal responsibility act. And the state has achieved GFD to 3 per cent of its GSDP and negative revenue deficit to its GSDP.

### **Major Findings**

- ◆ Tax revenue as percent of total revenue receipts was very high as 83.9% in 2016-17 compared to non-tax revenue which is only 16.1% in total revenue receipts. So the tax revenue is playing a great role in the fiscal scenario of the state.

- ◆ Compound annual growth rate of State's Own Tax Revenue (SOTR) for the period of 19 years was 16.3%.
- ◆ In social services revenue of education as percent to social services has increased from 32.6% in 2000-01 to 39.8% in 2016-17. Revenue of health raised from 23.8% in 2000-01 to 31.3% in 2016-17.
- ◆ Industries have the revenue of 77.8% of total revenue in economic services in 2016-17
- ◆ Efforts to attain grater inclusion of development, Karnataka's expenditure on social sector jumped by about 268% in this decade (March 31<sup>st</sup> 2019). In fact the first five years of this decade the expenditure made by the India government, jumped by 20%.
- ◆ The ratio of social sector expenditure in development expenditure is very high of 57.4% in 201-17 compared to 41.3% for total expenditure. It can be concluded that the proportion of social sector expenditure has ratio to development expenditure is very high as more than half. In total expenditure also the share of social sector expenditure is very much considerable which indicates Karnataka's focus on social security and welfare of the society.
- ◆ In terms of capital account social sector expenditure accounts for nearly ¼ of the development expenditure and also nearly same in the total capital outlay.
- ◆ Capital expenditure concentrated more on education other than other components of social sector over the period of time.
- ◆ Non-tax revenue receipts of housing were 59% to non-plan revenue expenditure in 2000-01 and declined to 25% in 2014-15. The year 2014-15

onwards we don't have any category of plan and non-plan expenditure as per the guidelines from FC and expert committee. Karnataka has made a year marked achievement by maintaining its fiscal indicators below the targeted level. Among southern states Karnataka is in the forefront for achieving fiscal targets by FRBM Act.

- ◆ Gross Fiscal Deficit as a percent of GSDP in Karnataka as been declined from 3.9% in 2000-01 to 2.5% inn 2016-17 except the year 2001-02 which was raised to 5.2%. Revenue deficits as a percent of GSDP accounts for 1.7% in 2000-01 and it declined to -1.0 % in the year 2004-05. From their onwards revenue deficits of Karnataka had negative trend are neutral. There was -0.1% of RD in 2016-17. It is clear from the data that Karnataka is on the track with over coming fiscal deficit as well as revenue deficit at the prescribed level given by the Karnataka fiscal responsibility act 2002.
- ◆ Over the period of time there has been a drastic change in transfers from union to Karnataka. Share in central taxes has percent share of gross devolution and transfers was raised from 49.5% in 2000-01 to 62% in 2016-17. The same trend is repeated in grants also. Grants from the center as percentage share of gross devolution and transfers increased from 29.8% in 2000-01 to 33.9% in 2016-17. But the trend in loans from the center was reversed. Loans from the center was 20.7% in 2000-01 which was drastically declined to 4.1% in 2016-17.

The share in central tax to the state governments limit is raised from 32% in 13<sup>th</sup> Finance Commission to 42% in 14<sup>th</sup>

Finance Commission recommendation. By this way all the states are eligible to get maximum share from the center. Karnataka is one among these states which achieved fiscal targets by its own revenue as well as shares from center.

### 8. Testing of Hypothesis

Following is important Hypothesis framed for the study. And it was tested with statistical technique of Paired ‘t’ test with MINITAB Software.

Fiscal transfers from center have helped Karnataka in terms of attaining fiscal health  
**Null Hypothesis (H<sub>0</sub>)**: There is no difference between Pre-Devolution Transfers and Post Devolution Transfers.

$$\mu_1 = \mu_2$$

**Alternative Hypothesis (H<sub>1</sub>)** :: There is a significant difference between Pre-Devolution Transfers and Post Devolution Transfers.  $\mu_1 \neq \mu_2$

$$H_0: \mu_1 = \mu_2$$

$$H_1: \mu_1 \neq \mu_2$$

Paired T-Test and CI: Before Transfers, After Transfers

#### Descriptive Statistics

Sample	N	Mean	S.D.	SE Mean
After Transfers	19	68355	48234	11066
Before Transfers	19	45762	30455	6987

#### Estimation for Paired Difference

Mean	Std Dev	SE Mean	95% CI for $\mu_{\text{difference}}$
22593	18034	4137	(13901, 31285)

$\mu_{\text{difference}}$ : mean of (After transfers – Before transfers)

#### Test

Null hypothesis	H <sub>0</sub> : $\mu_{\text{difference}} = 0.05$
Alternative hypothesis	H <sub>1</sub> : $\mu_{\text{difference}} \neq 0.05$

T-Value	P-Value
5.46	0.05

Mean difference between After transfers and Before Transfers are not equal. Calculated T –Value is 5.46 % with 95% Confidence Interval (CI). P-Value is 0.05 which is highly significant. So the Null Hypothesis (H<sub>0</sub>) could be rejected.

#### Conclusion

Karnataka is the 8<sup>th</sup> Largest state in India in terms of geographical area and also 8<sup>th</sup> Largest state by population. The state population is 6.11 crore according to 2011 census. AS decadal Growth of population is 16 per cent. GSDP in 2015-16 is rupees 7,35,975 crore. Karnataka is on a fiscal consolidation path and borrowed money public findings at the time of Economic slowdown. After implementing KFRA it had recorded revenue surplus and fiscal deficit was within 3 per cent of GSDP. As per the government of India guidelines state deviated from fiscal consolidation path.

Karnataka’s FRL is unique when it comes to fiscal management principle. Karnataka Fiscal Responsibility Act specifies 17 principles which include maintaining debt at prudent level, managing guarantees and liabilities prudently and borrowings to be used for capital formation, maintaining integrity of tax system and pursuing expenditure policies that would provide impetus to economic growth, poverty reduction and improvement in human

welfare. It also includes aspects of inter-generational equity, publishing the information. Fiscal Responsibility principles of other states suggest the fiscal targets to be achieved. FRLs specifies targets on Revenue deficit, primary deficit and Gross fiscal deficit prescribed by the governments.

Karnataka Government amended Karnataka Fiscal Responsibility Act during 2009 and 2011. Fiscal deficit target as per cent of GSDP increased to 3.5 per cent for 2008-09 as single time relaxation to meet the expenditure. Further target is raised to 4 % in 2009-10.

First state finance commission was on the view of federal fiscal relations at the state and decided to have gap filling method from transfers so it adopted pragmatic normative approach which observes the philosophy that “any person living anywhere in Karnataka should get atleast basic needs average transfers worked out in this commission was 38.98%. The second state finance commission modified the concept of the non-loan net own revenue resources and implemented it. Second State Finance Commission evolved a devolution frame work allocation from the 11<sup>th</sup> Finance Commission of India. Second Finance commission adopted a balanced financial allocation approach. The third state finance commission recommended separate devolution component to PRIs. Fourth State Finance Commission considers some measures to mobilise resources based on the available fiscal data. Fiscal and non-fiscal measures cover some aspects. The dependence on the state government for the funds to its financial autonomy. Importance source of revenue is property tax which has to be reformed. Tax based must be widened. Revenue from enterprises and non tax is expected reforms

in audit and accounts must be done. Measures to be taken to improve the revenues of PRIs. The biggest challenge before the 4<sup>th</sup> State Finance Commission is the inconsistency of data from fragmented sources of information. The commission recommended reforms in tax administration by tax regulation authority (TRA).

In the federal country like India federal transfers policies affect the state revenue and expenditure policies. State’s optimum fiscal policy based on the rules applied by the transferring funds to the state level governments. Three important criteria such as revenue effort, distance criteria and deficit financing are considered to estimate the weight assigned to the states. Our constitution provides independent revenue raising capacities and spending power state governments. The universal truth is that vertical imbalance and horizontal imbalances in taxing power is the common phenomena. To overcome these lag, the Constitution itself makes provision for transfers to states. Special category states get maximum benefits in terms of specific grants by the center. In Karnataka also revenue effort has been made by the government to tackle all types of deficits. Revenue maximization mechanism and expenditure minimizing policy is the key instrument for government to achieve the fiscal targets and make fiscal health in the state. The entire thing can be explained in the table 4.16. This table shows how fiscal transfers made Karnataka to be fiscally prudent. Over the period of time there has been a drastic change in transfers from union to Karnataka. Share in central taxes has percent share of gross devolution and transfers was raised from 49.5% in 2000-01 to 62% in 2016-17.

The same trend is repeated in grants also. Grants from the center as percentage share of gross devolution and transfers increased

from 29.8% in 2000-01 to 33.9% in 2016-17. But the trend in loans from the center was reversed. Loans from the center was 20.7% in 2000-01 which was drastically declined to 4.1% in 2016-17. According to the 11<sup>th</sup>, 12<sup>th</sup> Finance Commission recommendations all the states should avoid getting loan from center so that they would be far away from debt trap. So that 2005-06 onwards loans from the center was negative and some extent very negligible in the recent years. At the outset loans from

the center were not promoted. Alternatives to this center raised grants to the state governments. The share in central tax to the state governments limit is raised from 32% in 13<sup>th</sup> Finance Commission to 42% in 14<sup>th</sup> Finance Commission recommendation. By this way all the states are eligible to get maximum share from the center. Karnataka is one among these states which achieved fiscal targets by its own revenue as well as shares from center.

### References:

1. Bank, W. (2004). *Fiscal Policy in India- Sustaining Reforms, Reducing poverty*. New Delhi: Oxford University Press.
2. Nanjundappa, D. M. (1974). *Inter-governmental Financial Relations in India*. New Delhi: Sterling Publishers Private Limited.
3. Panda, C. P. (2009). Central Fiscal Transfers and States' Own Revenue Efforts in India. *Margin, The Journal of Applied Economic Research*.
4. Rao, M., & Tapas, K. (1996). *Fiscal federalism in India: Theory and practice*.
5. Rao, M., Amarnath, H. K., & Vani, B. P. (2003). *Rural fiscal decentralization in Karnataka*.
6. Rao, M., & Singh, N. (2000). *The Political Economy of Centre-State Fiscal transfers in India, Working Paper Number 107*. California.
7. Rangarajan, C., & Srivastava, D. K. (2008). Reforming India's Fiscal Transfer System: Resolving Vertical and Horizontal Imbalances. *Economic and Political Weekly, XLII (23)*.
8. Rupak, R. L. (2007.). *Emerging Issues in fiscal federalism*.
9. Srivastava, D. (2000). *Fiscal Federalism in India: contemporary challenger*.
10. Srivastava, D. K. (2008). *Approach of the Twelfth Finance Commission- An Insiders view*. New Delhi: APH Publishing Corporation.

\*\*\*