International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 6.4 Website: https://ijarmt.com ISSN No.: 3048-9458

Evaluation of Sub-National Expenditure in India: A Composite Index Approach

VINEET
Research scholar, Department of Economic, MD University, Rohtak
vineet.rs.eco@mdurohtak.ac.in

ABSTRACT

The proposed Composite Index comprises of ten Minor Fiscal Indicators that make an empirical analysis of the fiscal health of states. The major Indices of the study are Debt Index, Debt Sustainability Index, Revenue Efficiency Index, Expenditure Quality Index, Deficit Index. In this study, 17 states and 2 union territories with legislature namely Delhi and Puducherry are taken into analysis from the time period of 2012 to 2020. The progress of states under the analysis are ranked throughout the time period and shows the consistent retrogression in the Fiscal Performance of the states. Relative Distance method is used in construction of the Index. The paper focuses on articulating the causes of changes in the ranks of states based on the values derived from the composite Fiscal Performance Index (FPI). Major factors that influence the performance of the states were efficiency in allocation of expenditure, increase in revenue generating capacity of the state, decrease in debt stock and simultaneous decrease in fiscal and Revenue Deficit (RD) of the states. The most influential factor was the increase or decrease in the debt sustainability ratio of the state which is measured as DSI. The observation highlights Odisha as the most outstanding performer, consistently securing a position within the top five rankings across all time intervals. The analysis indicates that Punjab, Kerala, Haryana, and West Bengal exhibited the least favourable performances within the studied time period.

KEYWORDS: Fiscal Performance, Ranks, Composite index, state finances

INTRODUCTION:

For the last two decades, there has been some focus on the fiscal performance of the government not only at the central level, but at the state level also. Fiscal performance refers to the ability of a government to manage its finances effectively. It was the Tenth Finance Commission (TFC) that first suggested the importance of fiscal balance. But, the Eleventh Finance Commission (EFC) was the first to mention terms relating to fiscal restructuring in its terms of reference. First step to encourage states towards fiscal discipline by the EFC was the Fiscal Reform Facility (FRF) scheme under which their performance was measured based on a single indicator and the non-plan grants given to states were based on their fiscal performance. The EFC identified five major fiscal indicators i.e., Expansion of tax revenue, Increase in non-tax revenue, Upsurge in remuneration and disbursements, Debt service outlays, and Diminution of subsidies as indicators of the fiscal performance of states under the FRF scheme. Then the Twelfth Finance Commission introduced the Fiscal Self-reliance and Improvement Index

(FSRII) as the Index to estimate the fiscal performance of the states, it was also a single indicator-based index given as ratio of own Revenue Receipts (RR) to own Revenue Expenditure (RE). Later, both Thirteenth and Fifteenth finance commission have included fiscal performance of states as the criteria for horizontal devolution. The former having assigned a weightage of 15% to fiscal discipline, whereas the latter having assigned a measly 2.5% to the index of tax and fiscal efforts. This shows the growing importance of fiscal discipline as a large influencer in the public finance in India. However, before mentioned indices like FRF and FSRII were single indicator indexes, which made it easy for state governments to increase their fiscal performance by manipulating only one aspect of finance.

The assessment of fiscal performance typically centres around the relationship between Fiscal Deficit (FD) and the Gross State Domestic Product (GSDP). Additionally, various indices have been created to evaluate how states manage their finances. For example, the fiscal prudence index, introduced by Bhide and Panda (2002), employs the ratio of fiscal deficit to total expenditure to gauge state fiscal performance. Similarly, the composite index of fiscal performance, proposed by Dholakia and Solanki (2001), utilizes the ratio of fiscal deficit to gross domestic state product, alongside six fiscal indicators. Noteworthy is the Fiscal Performance Index developed by the Confederation of Indian Industry, which amalgamates six fiscal indicators.

These aforementioned indices collectively consider key fiscal metrics, including, FD, RD, Interest Payments (IP), Debt Stock (DB), Tax and Non-Tax Revenue, Revenue Expenditure (RE) and Development Expenditure (DE). Importantly, the methodologies underpinning these indices draw inspiration from the United Nations' Human Development Index (HDI). This method adopts a multi-dimensional approach, measuring both scarcity and growth indicators. This approach facilitates the assessment of the extent of resource abundance and insufficiency across diverse fiscal indicators. This framework establishes guidelines governing the execution of fiscal policies and the management of public finances. A Complex tool used to evaluate the overall fiscal health of government operations is the FPI.

In all methodologies to calculate FPI, the most common indicators used are three main components: FD, RD, Primary Deficit (PD), and Gross Fiscal Deficit (GFD). A higher FPI indicates better fiscal performance, while a lower FPI indicates weaker fiscal performance.

In recent years, India has made significant progress in improving its fiscal performance. The government has been able to reduce its RD and PD, and has also been able to control its GFD. This can be seen in the decreasing trend of the FPI over the years. However, there are still areas where improvement is needed. For example, India's debt-to-GDP ratio is still high, and the government needs to continue to work on reducing this ratio in order to ensure long-term fiscal sustainability.

One of the major challenges in improving fiscal performance in India is the need to balance competing priorities. The government needs to focus on increasing revenue while also keeping a check on expenditure. This is particularly challenging in a developing country like India, where there is a need to increase spending on social welfare programs, infrastructure development, and poverty reduction. There can be efficient allocation on resources based on the performance of the various fiscal indicators and the level of fiscal discipline helps improve the economic growth of the states. The Fiscal performance of the states can be directly linked to their economic conditions and major economic indicators like Unemployment, Poverty and growth in GSDP. Therefore, Rao (2004) suggests that central transfers should be linked to the fiscal performance of the states with a large incentive fund to influence the states to be fiscally prudent.

Recently, the focus has shifted from fiscal discipline to environmental protection, as the criteria devolution for grants provided by the Fourteenth Finance Commission has dropped fiscal discipline and instead have given 7.5% weightage to forest cover. Also, the Fifteenth Finance Commission has also assigned a meagre 2.5% weightage to the Tax and Fiscal efforts in its horizontal devolution criteria.

Criteria Devolution for Grants Finance Commission (Table-1)

CRITERIA	11th Finance Commission	12th Finance Commission	13th Finance Commission	14th Finance Commission	15th Finance Commission
Population 1971	20	10	25	17.5	-
Population 2011	-	-	-	10	15
Income Distance	60	62.5	47.5	50	45
Fiscal Discipline	-	7.5	15	-	-
Area	5	7.5	10	15	15
Forest cover	-	-	-	7.5	-
Demographic Performance	-	-	-	-	12.5
Forest & Ecology	-	-	-	-	10
Index of Infrastructure	5	7.5	-	-	-
Tax effort	10	5	-	-	2.5
TOTAL	100	100	100	100	100

As we can see from above table, that the government ha shifted the focus from the fiscal discipline to forest cover and forest and ecology in the criteria devolution by the 14th Finance Commission. Also the tax effort was given 10% weightage by the 11th Finance Commission

International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 6.4 Website: https://ijarmt.com ISSN No.: 3048-9458

and it was decreased to 5% by the 12th Finance Commission. Later on, it was dropped by the 13th and 14th Finance Commission. Fortunately, the 15th Finance commission has added it to its criteria devolution and given it a weightage of 2.5%. Though it is still not enough, but it is somewhat acceptable after omitting it for the last two commission.

Although, it is commendable of the government to promote environmental protection by incentivizing through grants. However, it should not be at the expense of neglecting fiscal imbalances. NITI Aayog has also accentuated on strengthening fiscal federalism of Indian states and to promote fiscal balancing mechanisms in the states.

OBJECTIVES

The main objective of this study is to rank 17 states and 2 union territories namely National Capital Territory of Delhi and Puducherry according to their fiscal performance based on the composite index known as Fiscal Performance Index by Mohanty et al, (2016-17) and show the importance of fiscal discipline and its encouragement by central government. FPI (Fiscal Performance Index) is a composite index having 10 fiscal indicators which represents the performance of the management of states finances by the legislatures. It can help promote efficiency in the management of expenditure and revenue based on the interpretation of data provided by the FPI. The two union territories were included in the ranking because of existence of their legislature.

The measurement of the fiscal performance of sates can help promote efficient fiscal management by the state government. It is important to follow a set of rules as provided by the Fiscal Responsibility and Budget Management Act (2003) to rectify the fiscal imbalances of the state finances.

Indian Fiscal federalism is fundamentally weak in it's nature, as the federal government exacts more financial control than the state government. Therefore, to strengthen the Fiscal federalism of the nation, states should become fiscally prudent and exact efficient economic governance at their level. FPI can provide valuable data to the authorities such as Finance commission to formulate criteria devolution for grants and help articulate fiscally sustainable actions for the governments.

METHODOLOGY

The performance of states finances was assessed based on the Performance Index constructed with the help of using indices of Fiscal Performance Index by Mohanty et al, (2016-17) having five sub-indices having ten minor components viz, Deficit Index (DI), Debt Index (DBI), Expenditure Quality Index (EQI), Debt sustainability Index (DSI) and Revenue Efficiency Index (REI). These major indices are further divided into ten sub-indices. According to Mohanty et al, (2016-17), the methodology used in FPI is the borrowed from the HDI methodology i.e., the relative distance method which helps in covering several indicators.

There has been various Indices that measures the Deficit Index as the ratio of Fiscal Deficit to the Total Expenditure of the states such as the Fiscal Performance Index by Dholakia (2005). While the methodology has yielded comparable outcomes, this research adopts an alternative perspective in quantifying the Fiscal Deficit. It utilizes the ratio of Fiscal Deficit to Gross State Domestic Product, emphasizing the deficit in relation to revenue rather than Total Expenditure.

International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 6.4 Website: https://ijarmt.com ISSN No.: 3048-9458

This approach sheds light on the fiscal expansion of states and variations in the state's public debt burden.

The five Sub-Indices are following: -

(a) **DI**: - It has two minor indices as follows
  (i) **RDI**: Here RD is taken as a percentage of the GSDP. (RD = RE - RR)
  (ii) **FDI**: Here GFD is taken as a percentage of the GSDP. (GFD = Total Expenditure – Total Receipts)

(b) **REI**: It also consists of two minor indices, namely
  (i) **SOTRI**: It is constructed by the taking ratio of state own tax revenue to GSDP in a year.
  (ii) **SONTRI**: It is constructed by the taking ratio of state Own non-tax revenue to GSDP in a year.

(c) **EQI**: This Sub index also has minor two components, viz
  (i) **DREI**: It is defined as the ratio of developmental revenue expenditure to revenue receipts.
  (ii) **DCEI**: It is defined as the ratio of Developmental Capital Expenditure Index.

(d) **DBI**: This Index also consists of two minor components, namely
  (i) **IPRRI**: This is defined as Interest payments as percentage of Revenue Receipts in a year. It articulates the debt servicing position of the state.
  (ii) **DRI**: This is defined as the ratio of debt stock to GSDP. This Index reflects the debt burden of the state.

(e) **DSI**: It is constructed by two minor indices.
  (i) **DSI**: It is constructed by the Indexing the difference of growth rate of GSDP and growth rate in debt stock.
  (ii) **RSI**: It is constructed by taking the difference of growth rate of GSDP and the average cost of borrowing.
  Average cost of borrowing = Interest Payments / Average Debt stock.

Mohanty et al, (2016-17), had adopted a relative distance methodology to construct the fiscal parameters. All of the previously mentioned indices are normalized to a value ranging from 0 to 100. This methodology is borrowed from the HDI constructed by the UNDP. This method is preferred because it takes into account both positive and negative aspects of the indicators i.e., if the value of an indicator is preferred to be high, then it has improvement index and if the value of another indicator is preferred to be low than it uses the deprivation index, but in both cases, it measures the indicators value as 0 to 100, where 100 implies best performance and 0 implies worst performance.

Also, from the before mentioned minor indicators, FDI, RDI, IPRRI and DRI comes under the Deprivation Index as higher values for these parameters are not desired. SOTRI, SONTRI, DREI, DCEI, DSI, and RSI are formulated under Improvement Index as higher values for these parameters are highly coveted. The Deprivation Index is constructed in such a way that the lower the values of the indicators used under it, the higher the value will be assigned to its resulting Index from 0 to 100. Whereas, the Improvement Index is designed in such a way that the higher the value of the indicator the higher the value will be assigned to the resulting Index from 0 to 100.

For the Final Composite Fiscal Performance Index, all of the sub-indices were equally weighed and their average were taken to form the major sub-indices and similarly the major sub-indices were used to form the Composite FPI. The range of FPI is similar to the deprivation and Improvement Index i.e., 0 to 100, with higher value signifying greater importance.

ANALYSIS AND FINDINGS

Ranks of States based on FPI (Table-2)

State/Union Territory	2012-13 to 2013-14	2014-15 to 2015-16	2017-18 to 2018-19	2019-20 to 2020-21
1. Andhra Pradesh	10	9	14	16
2. Bihar	12	11	12	11
3. Chhattisgarh	2	5	4	10
4. Goa	16	2	5	2
5. Gujarat	6	10	9	9
6. Haryana	15	16	13	15
7. Jharkhand	8	14	6	5
8. Karnataka	5	6	7	7
9. Kerala	17	17	18	18
10. Madhya Pradesh	4	4	3	6
11. Maharashtra	11	12	8	8
12. Odisha	1	1	2	4
13. Punjab	18	18	19	19
14. Rajasthan	7	15	15	13
15. Tamil Nadu	13	13	16	14
16. Uttar Pradesh	14	8	10	1
17. West Bengal	19	19	17	17
18. NCT Delhi	3	3	11	12
19. Puducherry	9	7	1	3

To compare the rankings determined by the performance of states, the time period of 2012 to 2021 has been divided into four parts. Period one is from 2012-2014 and the second period is from 2014-2016, Third and fourth period are 2017-19 and 2019-21 respectively. The year 2016-17 is omitted from the periods to make the time gap equal and also due to the non-availability of accounts data for DREI and DCEI index in the year 2016-17. To determine the FPI values for the given periods, a simple average of the FPI values of all the two years is calculated. The FPI Ranks for the four Periods is given above in (Table-2) and the data of major indices is given in the Appendix in the end of this paper. The ranks for period one is designated R1 and similarly for consecutive periods R2, R3 and R4, respectively. The Index is calculated using the Relative Distance Method. Hence, the values closer to 100 shows the best performance. It is gathered from the data given in the table that the best performing state in all of the four periods are different. However, Odisha should be considered the best performing state as it has been among the top five highest FPI scores in all four periods as seen from Table-2. Similarly, the state of Punjab can be considered the worst performing state as it has ranked in the bottom two places for the last two years. The FPI scores of the states and the UTs are given below in (Table-3). The FPI scores for a period are calculated by taking average of the FPI score of two years.

Fiscal Performance Index (Table-3)

State/Union Territory	2012-13 to 2013-14	2014-15 to 2015-16	2017-18 to 2018-19	2019-20 to 2020-21
1. Andhra Pradesh	51.5	50.3	45.2	42.9
2. Bihar	49.3	48.7	51.4	49.8
3. Chhattisgarh	63.6	54.2	57.2	52.8
4. Goa	40.0	61.1	55.3	60.9
5. Gujarat	55.3	50.1	52.0	54.8
6. Haryana	47.8	37.1	47.2	45.1
7. Jharkhand	52.3	42.0	54.2	58.0
8. Karnataka	56.5	53.9	54.1	57.6
9. Kerala	31.5	32.4	34.2	36.4
10. Madhya Pradesh	57.0	54.3	57.8	57.8
11. Maharashtra	51.1	44.7	52.6	54.8
12. Odisha	66.0	62.1	65.7	60.0
13. Punjab	31.3	24.4	25.0	34.1
14. Rajasthan	54.2	37.7	43.7	47.4
15. Tamil Nadu	48.8	43.7	40.4	46.1
16. Uttar Pradesh	48.2	51.1	51.8	66.1
17. West Bengal	22.0	23.9	36.6	37.6
18. NCT Delhi	58.2	56.2	51.7	49.1
19. Puducherry	52.0	52.2	66.2	60.4

Analysis of major changes in ranks of the states in the consecutive time periods is concluded on the basis of change in their FPI scores as well as the changes in the major and minor sub-indices to better clarify the cause of the change in the rankings. Major factors that influence the performance of the states were efficiency in allocation of expenditure, increase in revenue

International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 6.4 Website: https://ijarmt.com ISSN No.: 3048-9458

generating capacity of the state, decrease in debt stock and simultaneous decrease in fiscal and revenue deficit of the states. The most influential factor was the increase or decrease in the debt sustainability ratio of the state which is measured as DSI in this study. The major changes in the rankings are given below in Tables-4,5,6,7. Also in the given tables, reasons are explained for the changes in the ranks of states that are equal to change in three or more places in the consecutive time periods.

State/Union Territory	R1-R2	Reasons
1. Andhra Pradesh	1	
2. Bihar	1	
3. Chhattisgarh	-3	(-) DSI, DBI, EQI
4. Goa	14	(+) DSI, DI
5. Gujarat	-4	(-) DSI, DBI, DI
6. Haryana	-1	
7. Jharkhand	-6	(-) DSI, DI, DBI
8. Karnataka	-1	
9. Kerala	0	
10. Madhya Pradesh	0	
11. Maharashtra	-1	
12. Odisha	0	
13. Punjab	0	
14. Rajasthan	-8	(-) DSI, DI, EQI
15. Tamil Nadu	0	
16. Uttar Pradesh	6	(+) EQI, REI, DSI, DBI
17. West Bengal	0	
18. NCT Delhi	0	
19. Puducherry	2	

Changes in Ranks from 2012-13 to 2013-14(Table-4)

NOTE: Positive and negative signs show increase and decrease in ranks, respectively.
It can be observed from the Table-4, that the reasons column has multiple Indices written consecutively. The rate of change in the Indices decreases from left to right. Hence, the firstly stated Index from the left had greater change than the latter and also had the most impact in

changing the rankings of the states. Goa is the state that had the highest increase in its ranking from Period 1(2012-13) to Period 2(2013-14). Its rank has increased by 14 places from 16th to 2nd in Period 2. The major causes for this change are the improvement in debt sustainability ratio of the state and decline in the Fiscal and Revenue deficit of the state. Simultaneously, it can be seen that the worst performer was Rajasthan, whose rank went down by 8 places from 7th to 15th. As can be seen from the table, that the most significant factor in the change of rank of Rajasthan was the debt sustainability ratio along with the increase in fiscal and revenue deficit. Also, the expenditure efficiency in development sector decline in the state from 2012-13 to 2013-14. UP and Jharkhand also had significant changes in their ranks, both ranks changed by 6 places. Former's rank improved from 14th to 8th, whereas latter deteriorated from 8th to 14th. The major cause in case of the former was increase in expenditure in the development sector and the latter's rank declined due to decrease in debt sustainability ratio.

In the transition from period 2 to 3, the most significant improvement was the change in rank of Jharkhand, which went up by 8 positions from 14th position to 6th. The major causes for the changes in ranks were the improvement in debt sustainability ratio and the increase in efficiency in allocation of expenditure in the development sector. Also, a minor factor was the change in efficiency of revenue generating capacity of the state.

Changes in Ranks from 2014-15 to 2015-16 (Table-5)

State/Union Territory	R2-R3	Reasons
1. Andhra Pradesh	-5	(-) REI, DI, DBI
2. Bihar	-1	
3. Chhattisgarh	1	
4. Goa	-3	(-) DSI, DI
5. Gujarat	1	
6. Haryana	3	(+) EQI, DSI, REI
7. Jharkhand	8	(+) DSI, EQI, REI
8. Karnataka	-1	
9. Kerala	-1	
10. Madhya Pradesh	1	
11. Maharashtra	4	(+) REI, DSI, DI, DBI, EQI
12. Odisha	-1	
13. Punjab	-1	
14. Rajasthan	0	
15. Tamil Nadu	-3	(-) DI, DBI

International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 6.4 Website: https://ijarmt.com ISSN No.: 3048-9458

16. Uttar Pradesh	**-2**	
17. West Bengal	**-2**	
18. NCT Delhi	**-8**	**(-) DSI, EQI, DI, REI**
19. Puducherry	**6**	**(+) DSI, DI, DBI**

Puducherry also had a significant change in its rank by 6 positions from 7th position to 1st. Here also, the major causes were the increase in debt sustainability of the state and reduction in debt stock. Alongwith, the decline in fiscal and revenue deficit.

In the transition from period 3 to 4, the major changes in the ranks are given in Table-6. The most significant increase in the rank was of UP, which went up by 9 places from 10th to 1st. The most significant factor was the reduction in fiscal and revenue deficit and increase in state's own tax and non-tax revenue. Also, minor influencers were, the decline in debt stock and the increase in debt sustainability of the state. The state which had the worst performance was Chhattisgarh, which went down by 6 ranks from 4th position to 10th position. Its rank declined because of the decrease in fiscal deficit and increase in outstanding liabilities of the state. Apart from these two states, other changes in ranks were less than significant.

Changes in Ranks from 2017-18 to 2018-19 (Table-6)

State/Union Territory	R3-R4	Reasons
1. Andhra Pradesh	**-2**	
2. Bihar	**1**	
3. Chhattisgarh	**-6**	**(-) DI, DBI, EQI, REI**
4. Goa	**3**	**(+) DSI, REI, DI**
5. Gujarat	**0**	
6. Haryana	**-2**	
7. Jharkhand	**1**	
8. Karnataka	**0**	
9. Kerala	**0**	
10. Madhya Pradesh	**-3**	**(-) DI,EQI, REI**
11. Maharashtra	**0**	
12. Odisha	**-2**	
13. Punjab	**0**	

14. Rajasthan	2	
15. Tamil Nadu	2	
16. Uttar Pradesh	9	(+) DI, REI, DSI, DBI
17. West Bengal	0	
18. NCT Delhi	-1	
19. Puducherry	-2	

As seen from Table-7, Despite the time period of nine years, there were significant improvements in only 3 states viz, Goa, UP and Puducherry. In case of Goa, the major influencer was the ratio of debt sustainability of the state and the major influencer in case of UP and Puducherry was the increase in efficiency in revenue generating factors of the state.

Four states had major changes in performance in terms of deterioration viz, Andhra Pradesh, Chhattisgarh, Rajasthan and National Capital Territory of Delhi. In case of Andhra Pradesh, the separation of Telangana as a state from Andhra Pradesh in 2014 can be considered the major cause in decline in its performance. As this caused a decline in state's tax & non-tax revenue and also the expenditure capacity of the state. In case of Chhattisgarh and Rajasthan, the major factor was the reduction in fiscal and revenue deficit. In case of NCT Delhi, improvement in debt sustainability was the most important factor.

Changes in Ranks from 2012-13 to 2020-21 (Table-7)

State/Union Territory	R1-R4	Reasons
1. Andhra Pradesh	-6	(-) REI, DI, EQI
2. Bihar	1	
3. Chhattisgarh	-8	(-) DI, DBI, EQI
4. Goa	14	(+) DSI, DI, REI, DBI
5. Gujarat	-3	(-) EQI, REI
6. Haryana	0	
7. Jharkhand	3	(+) REI. DSI
8. Karnataka	-2	
9. Kerala	-1	
10. Madhya Pradesh	-2	
11. Maharashtra	3	(+) REI, DSI, DBI
12. Odisha	-3	(-) DSI, DI, DBI

13. Punjab	**-1**	
14. Rajasthan	**-6**	**(-) DI, DBI**
15. Tamil Nadu	**-1**	
16. Uttar Pradesh	**13**	**(+) REI, DI, DSI, EQI**
17. West Bengal	**2**	
18. NCT Delhi	**-9**	**(-) DSI, DI, REI**
19. Puducherry	**6**	**(+) REI, DSI, DI, DBI**

CONCLUSION

The assessment of the composite FPI for 17 states and 2 Union Territories revealed significant shifts in rankings during the timeframe spanning 2012 to 2021. The observation highlights Odisha as the most outstanding performer, consistently securing a position within the top five rankings across all time intervals. The analysis indicates that Punjab, Kerala, Haryana, and West Bengal exhibited the least favourable performances within the studied time period. Significant Improvements were also seen in the two states viz, Goa and UP, whose ranks improved by 14 and 13 positions respectively. Goa improved its position by increasing its efficiency in debt sustainability and UP improved its position by increasing its revenue. Also, significant deteriorations were seen in the state Chhattisgarh and the NCT of Delhi. Delhi's position deteriorated because of decline in debt sustainability of the state and Chhattisgarh's position declined because of its neglect towards the increase in fiscal deficit of the state. This fiscal performance index can be crucial in determining the criteria devolution for grants to states, also various facilities like Fiscal Reform Facility and Medium-Term Fiscal Restructuring Programme. FPI can also help improve prove credibility of states for criteria for Central government's loans to states. States with higher FPI scores can get loans at low interest rates and can bargain to lower the cost of borrowing.

REFERENCES

- Mohanty, A and Mishra, B (2016), Fiscal Performance Index of the States in India, Prajnan, Vol. XLV, No. 3, 2016-17, 247-266.
- Archana Dholakia. (2005). Measuring Fiscal Performance of States: An Alternative Approach, *Economic and Political Weekly*, *40*(31), 3421–3428.
- Bhide, S and Panda, M (2002), Evaluating Quality of Budgets with a Composite Index, Economic and Political Weekly, March 30.
- Rao, M. G. (2004), Linking Central Transfers to Fiscal Performance of States, *Economic and Political Weekly*, *39*(18), 1820–1825.
- Ravindra H. Dholakia. (2003), Measurement Issues in Comparing Fiscal Performance of States, *Economic and Political Weekly*, *38*(10), 991–994.
- GoI (2000), Report of the Eleventh Finance Commission, Ministry of Finance, Government of India, July.

- GoI (2004), Report of the Twelfth Finance Commission, Ministry of Finance, Government of India, Nov.
- GoI (2009), Report of the Thirteenth Finance Commission, Ministry of Finance, Government of India, Dec.
- GoI (2014), Report of the Fourteenth Finance Commission, Ministry of Finance, Government of India, Dec.
- OECD (2008), Handbook on Constructing Composite Indicators: Methodology and User Guide.
- Mishra, R N; Mohan, G and S Sanjay (June, 2012), Systemic Liquidity Index for India, RBI Working Paper Series, 10/2012.
- Government of India. (2004). FRBM Rules. Ministry of Finance, July 2.
- Finance Commission. 1995. Report of the Tenth Finance Commission 1995-2000. New Delhi: Government of India.
- Finance Commission. 2000. Report of the Eleventh Finance Commission 2000-2005. New Delhi: Government of India.
- Finance Commission. 2004. Report of the Twelfth Finance Commission 2005-10, November. New Delhi: Government of India.
- Dash, S. P. (2007). INDIAN FEDERALISM & DISTRIBUTION OF RESPONSIBILITIES. The Indian Journal of Political Science, 68(4), 697–710.
- growth. *Journal of macroeconomics*, *30*(4), 1407-1422.
- Bagchi, A. (2003). *Fifty years of fiscal federalism in India: An appraisal*. New Delhi, India: National Institute of Public Finance and Policy.
- Ahluwalia, M. S. (2002). Economic reforms in India since 1991: Has gradualism worked? *Journal of Economic perspectives*, *16*(3), 67-88.
- Musgrave, R. A., & Peacock, A. T. (Eds.). (1958). *Classics in the theory of public finance*. Springer.
- Musgrave, Richard A. (1959). The Theory of Public Finance: A Study in Public Economy.