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Vertical Devolution of Central Shared Taxes: Methodological Issues

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ABSTRACT:

The devolution of Central Shared Taxes (CST) in India has persisted for over more than seventy-five years, with successive Finance Commissions progressively increasing the proportion transferred from the Centre to the states to mitigate vertical fiscal imbalance. However, the prevailing subjective method of determining states' shares in CST has remained independent of horizontal devolution criteria, overlooking critical factors such as fiscal capacity deficiency, tax effort, expenditure decentralization, and developmental needs of the states, as well as the Centre's own tax effort. This approach has contributed to the persistence of fiscal imbalance despite continuous adjustments. This paper advocates for an objective method based on the resource responsibility gap of states, complemented by a weight optimum criterion for horizontal distribution drawing the framework proposed by Mahamallik and Sahu (2015). Such a mechanism incentivizes states to enhance their own revenue mobilization, thereby reducing their resource responsibility gap, while simultaneously motivating the Centre to expand its tax effort as lower CST proportions are required for devolution. The proposed model offers a more balanced and equitable approach to fiscal federalism in India, with potential to strengthen both vertical and horizontal fiscal equity.

Keywords: Vertical Devolution, Central Shared Tax, Vertical Fiscal Imbalance, Finance Commission, State, Public Goods

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Introduction:

The vertical devolution of Central Shared Taxes (CST) recommended by the Finance Commission (FC) from the Central to state governments in India has been in discussion in the fiscal federalism literature (Ramakumar, 2024.; Mohan, 2023, pp. 10-13). Despite the continuous rise in state's share in CST (Table 1), vertical fiscal imbalance between the Centre and state increased over last fifteen Commissions [Government of India (GoI), 2020, p 28; Sahu, 2024, p. 22]. Literature advocating to correct the imbalance (Economic and Political Weekly, 2023, pp. 7-8) through increasing the proportion of CST devolution appeared in academic publications before submission of the report of 16th FC (Mohan 2023, pp. 10-13). The 16th FC more or less followed the same line of devolution method for vertical devolution as used by 15th FC (Mohan, 2026, p; 80). CST devolution to states is considered as the only way to correct vertical fiscal imbalance to ensure efficient performance in stabilization, distribution and allocation functions of the government¹. The rationale behind the above argument is as follows, (i) CST is a sizeable chunk of total FC transfers to states (on an average 83 percent from 1990-91 to 2023-24), (ii) it guarantees fiscal autonomy to states without imposing conditions on its use, (iii) it ensures certainty in the revenue of state being formulae-based in nature and mediated by an independent constitutional body, and (iv) central transfers other than CST are discretionary, iniquitous and uncertain. Vertical and horizontal fiscal imbalances are often interdependent (Rao and Sen, 1996, p. 93). Any method used, that has the capacity to rectify only one imbalance, may lead to a state of non-conclusiveness. In other words, the probability of corrections only through measures of vertical imbalance may bring little impact. This study examines the issues associated with the method of vertical devolution of CST from the Centre to state used by successive FCs from 1st to 16th FC and prescribe a measure that has combined impact.

Literature on fiscal federalism discussed (i) the biasedness of vertical devolution method used by successive FCs [from 1st to 10th FC (Sarma, 1997, pp.1719-1723), 1st to 11th FC (Mukhopadhyaya, 2003, p. 64) and during 12th FC (Rangarajan, 2005, pp. 3396-3398)], (ii) composition of CST from 1st to 9th FC (Gurumurthi, 1998, pp. 2396-2401) and (iii) deviation of the actual from the prescribed devolution [from 11th to 15th FC (Mohan 2023, pp. 10-11) and 13th to 15th FC (Ramakumar, 2024)]. Deficiency in fiscal capacity, and developmental expenditures of state and tax effort of the Centre and expenditure decentralization were overlooked in the literature. Little attention was given to develop an appropriate criterion to reduce the vertical imbalance. This study observed that no significant step was undertaken by any of the FCs to address the weakness of the vertical devolution method. A method judiciously combining (i) resource responsibility gap of the Centre and state, and (ii) optimum weight criterion for horizontal distribution of state's share as proposed by Mahamallik and Sahu (2015) may help to reduce vertical fiscal imbalance.

How does Vertical Devolution Evolve?

In a federal structure of governance, Government functions in a multiple layer. For smooth functioning of these levels, resources and responsibilities are divided formally between different layers. Keeping in mind macroeconomic stability and distributional equity functions of the government, broad based progressive taxations are allocated to central government while minor levies to state. Larger expenditure responsibilities are given to state considering the microeconomic efficiency function of the government. Larger resources remaining on the

Central government and larger responsibilities on the state creates vertical fiscal imbalance between the Centre and state. Vertical fiscal imbalance ranges from on an average 6 percent in Germany to 82 percent in Mexico (GoI, 2020, p. 27). Fiscal imbalance also exists across the same levels of government due to differences in tax effort, geographical and climatic conditions, population composition, resource endowments and level of development across the same levels.

In order to provide a common minimum level of public goods across states level, the fiscal imbalances have to be reducedⁱⁱ. Vertical fiscal imbalance can be reduced to some extent through increasing tax efforts and public expenditure management by the state. With the maximum tax effort potentials of states alone cannot meet the expenditure responsibility on account of narrow base. State also cannot manage its expenditure independently in an operationally efficient way with limited resources. The problem can be addressed through resource sharing between the levels of government. Resources can be shared by dividing tax powers, tax base, tax proceeds and grants; with due considerations of the principles of state autonomy, efficiency, fiscal discipline and equity. Optimum tax power sharing may address the revenue-expenditure mismatch with greatest degree of autonomy and fiscal discipline. However, it may invite inefficiency and inequity. Tax base sharing cannot be applied in countries with wide income disparities. It increases inequality because poorer states are not capable to generate adequate revenue to meet the expenditure responsibility, while richer states generate revenue surpluses. Fiscal balance between different levels of the government can only be maintained by vertical devolution of CST and grants from Center to stateⁱⁱⁱ (Chelliah *et al*, 1992, pp. 2539-2550). Vertical transfers maintain the balance between expenditure responsibility and revenue capacity, equalize fiscal capacities of states, neutralize fiscal externalities, and ensure stable fiscal capacities during shocks (GoI, 2009, p 114). Vertical sharing of CST with varying degrees is observed across countries of the globe (Bahl and Wallace, 2007, pp. 1-37).

In the Indian federation, three levels of government namely the Central, state and local government exist. Functions of the Central and state governments are enumerated in three lists, (union, state and concurrent) while taxations powers are stated as in the Union and State List of the Seventh Schedule of the Constitution under Article 246. The taxation powers and responsibilities of the local government are enshrined in the Eleventh and Twelfth Schedule of the Constitution of India. The union list, vested with central government, has exclusive power over 97 areas. Tax revenue under this list includes income tax (excluding agricultural income), customs, union excise duties, corporation tax, wealth tax, Central Goods and Service Tax (GST) and taxation on other goods and services. The state list, vested with state government, has exclusive power over 66 items. State can generate taxes from land revenue and agriculture, taxation dividends, trade and calling, profit and profession, goods and passengers, entertainment tax, electricity duty, sales tax and SGST. The concurrent list containing 47 items, commonly shared by both the Centre and state governments. Assignment of larger expenditure responsibility on the state governments and higher taxation power on the Central government gives rise to vertical fiscal imbalance.

Fiscal imbalance across states also occurs due to (i) differences in their tax effort, (ii) geographical and climatic differences, (iii) population composition, (iv) resource endowments, and (v) level of development. In order to ensure balance between resources and responsibilities

of the Centre and state, provision under article 280 of Indian constitution was made to devolve fund from the Centre to state in the recommendation of the FC (constituted in every five years or earlier with necessity)^{iv}. The FC transfers consist of CST and grants^v. The taxes included in the CST are fixed by the Constitution. Initially, two taxes, namely income tax excluding agricultural income (article 270 (1)) and union excise duties (UED, article 272) were incorporated in CST.

Income tax was compulsorily shareable, while share of UED was decided (by the law of the parliament). In due course of time, the Central government emphasized more on revenue generated from non-shareable central taxes compared to CSTs (Gurumurthi, 1998, pp. 2396-2401). The 80th Constitutional Amendment Act 2000 allowed to include all central taxes except cess and surcharge in CST since the 11th FC.

Vertical Devolution Method

The methods for sharing/allocating anything between two or more entities may be subjective or objective depending on the nature of measurement and factors or things to be shared/allocated. If both variables are cardinal in nature, the objective criterion may be more effective compared to subjective criterion, and vice versa. An inappropriate selection of method gives rise to misallocation.

The methodological determination for vertical sharing of revenue has been controversial. Objective methods measuring (i) revenue and expenditure gap and (ii) expenditure norms between different levels of government were used in few countries. Transitional countries estimated the expenditure needs in terms of norms. The budget calculations of these countries often ignored the estimates. Japan and the United Kingdom explicitly calculated this figure each year. South Africa used an index of expenditure needs to distribute grants among local governments (Bahl and Wallace, 2007, pp. 1-37). Difficulties arose in the cost calculations of the minimum provisions of basic public goods and the normal tax effort of the state government. Capability problems with the Central and State-level governments arose in regards to filling the gap of normal tax effort (along with determining it), when tax bases could not be measured in developing countries.

Alternatively, subjective methods were often claimed on the grounds of vertical devolution certainty (Bahl and Wallace, 2007, pp. 1-37). Still, deviations were observed in the measurement of revenues and expenditures of the government levels and the federal transfer intermediaries. The governments in India manipulated resources and responsibilities in their own favour (Bhaskar, 2015, pp. 36-40; Bhaskar, 2018, pp. 39-46). Chakraborty (2025) argued for transferring required resources from the Centre to meet the total revenue expenditures of states. This would meet the bare necessities of the lower government body (77 percent of total expenditures from 1990-91 to 2022-23). However, this could also discourage states from increasing their tax effort and burdening people with higher taxation.

Vertical Devolution Method in India: Some Problems

The Indian Constitution does not prescribe any rule or criterion for the vertical devolution of CST from the Centre to the states. It left the sharing rule decision on the hands of the FC, treating it as an independent, impartial and a semi-judicial body. The Commission

independently determined the state's share in CST during the first four Commissions. Commissions after the 4th FCs were directed to consider a few matters while determining the share of states in CST. For instance, the 5th and 6th FCs were directed to consider the resources, defense and debt related expenditures of the Centre. Along with the matters of consideration during 5th and 6th FCs, the 7th and 8th FCs also considered state plan assistance, non-plan revenue account resources, responsibilities of state, development of backward states, management of public expenditures and returns on investment.

Thereafter, all successive Commissions were directed to investigate revenue and expenditure responsibilities on the non-plan account and the tax effort of the Centre and states. GST and environmental factors were added into the matter of considerations after the 12th FC. Revenue and expenditure responsibilities of state and revenue surplus of the Centre (5th, 11th, 12th, 13th and 14th FCs), fear of unwillingness of the Centre in effective mobilization of CST (6th, 7th, 8th, 9th and 10th FCs), declining share of state in the CST (13th and 14th FC) and stability of state resources (15th FC) were all matters of consideration. The Commission was not able to determine an appropriate share of state due to explicit/implicit conditions imposed on one or the other in the terms of reference of the commission (Sahu, 2024, pp. 22-25).

So, to determine the shares of states, the revenue expenditure gap of the states was used. However, the actual gap was not realized. Significant deviations were found in the estimations of the FC, state government, and government of India reports. The FC underestimated the gap of the state and overestimated the revenue of the Centre (Bhaskar, 2015, pp. 36-40; Bhaskar, 2018, 39-46 pp.). The real figures of determinants of vertical devolution [fiscal capacity deficiency of state, expenditure decentralization, and revenue mobilization of the Centre (Bahl and Wallace, 2007)] were hidden. Vertical sharing was determined independent of methods used for horizontal distribution of CST (Rao and Sen, 1996, p. 93). The method was often criticized on the ground of value judgment (Rangarajan, 2005, p. 3396), trial and error (Sarma, 1997, p. 1719) and as a gamble of five persons (a majority of FC members) (Mukhopadhyay, 2003, p.64).

The share of states in the total tax collection of the Central government is on an average 19 percent in industrialized countries, more than 20 percent in Denmark and Australia, less than 10 percent in France and Portugal and 13.3 percent in developing countries. This has remained constant through 1972-2001. Notably, this figure is increasing in less developed countries (Bahl and Wallace, 2007, pp. 1-37). In India, the provided share is higher than that of both industrialized and transitioning countries. It has also persistently increased over the successive FCs (Table 1). It rose from 55 percent (1st FC) to 85 percent (9th FC) in income tax. In a similar manner, the share in UED increased from 40 percent of three commodities (first FC) to 40 percent of all Commodities (10th FC). Subsequent to 10th FC, the proportion of states in all CSTs increased from 29.5 percent to 42 percent during 14th FC. The average percentage growth rate (14.7 percent) of CST (1990-91 to 2023-24 periods) is relatively higher than revenue expenditures (13.4 percent), total expenditures (13.8 percent) and own revenue (13.5 percent) of state.

Table 1: Vertical Devolution to States from Central Shared Taxes

Finance Commission	percent of Income Tax	percent of Union Excise Duty	percent of All Central Taxes
1 st	55	40 (Tobacco, matches and vegetable products)	NA
2 nd	60	25 (Tobacco, matches and vegetable products, sugar, coffee, tea paper and vegetable non-essential oils)	NA
3 rd	66	20 (All commodities on which exercise duties levied in 1960-61 except those whose yield is below 50 lakhs rupees per year and motor spirit)	NA
4 th	75	20 (All commodities excluding regulatory duties, special excises and earmarked cesses)	NA
5 th	75	20 (All commodities excluding regulatory duties and earmarked cesses, special excises to be included from 1972-73 onwards)	NA
6 th	80	20 (All commodities excluding auxiliary duties of excise from 1974-75 and 1975-76. However, from 1976-77 onwards auxiliary duties of excise but excluding cesses)	NA
7 th	85	40 (All net proceeds of union excise duty on generation of electricity besides all excise duties)	22.39
8 th	85	40 (All excise duties excluding excise duties on electricity)	20.25
9 ^{th-1}	85	40 (All Commodities)	NA
9 ^{th-2}	85	45(All Commodities)	21.37
10 th	77.5	47.5(All Commodities)	21.40
11 th	NA	NA	29.5
12 th	NA	NA	30.5
13 th	NA	NA	32
14 th	NA	NA	42
15 ^{th-1}	NA	NA	41
15 ^{th-2}	NA	NA	41
16 th	NA	NA	41

Note: NA = Not Available

Source: For share of state in all central shared taxes from 7th to 10th Finance Commission (FC) GoI, 2004, p. 125.

For data from 1st to 10th FC, Prakash and Raikhy, 2003, pp. 139-142.

For data from 11st to 15th FC, GoI, 2020, p. 151.

For 16th FC, GoI, 2025, p. 143.

The shares of state in CST as percentage of revenue expenditures and total expenditures are increased by 4.85 percent and 3.25 percent respectively between 9th and 15^{th-2} FC. However, it declined by 0.8 percent in each case from 14th to 15^{th-2} FC. As percentage of GDP, it increased by 1.07 percent from 9th to 15^{th-2} FC. During the same period, revenue expenditures and total expenditures of states (as percentage of GDP) increased by 1.96 percent and 3.02 percent respectively.

The increased share in CST was not capable to cope with the excessive increase in revenue expenditure and total expenditures, which in turn resulted in vertical fiscal imbalances. Lack of adequate CST mobilization effort, an increase in cess and surcharge (Chakraborty and Gupta, 2025, pp. 44-49) and non-development of recommended share for states (Ramakur, 2024) are attributed to this incapability of the CST. Increase in CST effort (0.74 percent) is relatively less compared to cess and surcharges (not included in the CST) effort (0.76 percent) from the 12th to 15^{th-2} FC (Table 2).

Table 2: Trends of All 28 States' Share in Central Shared Taxes

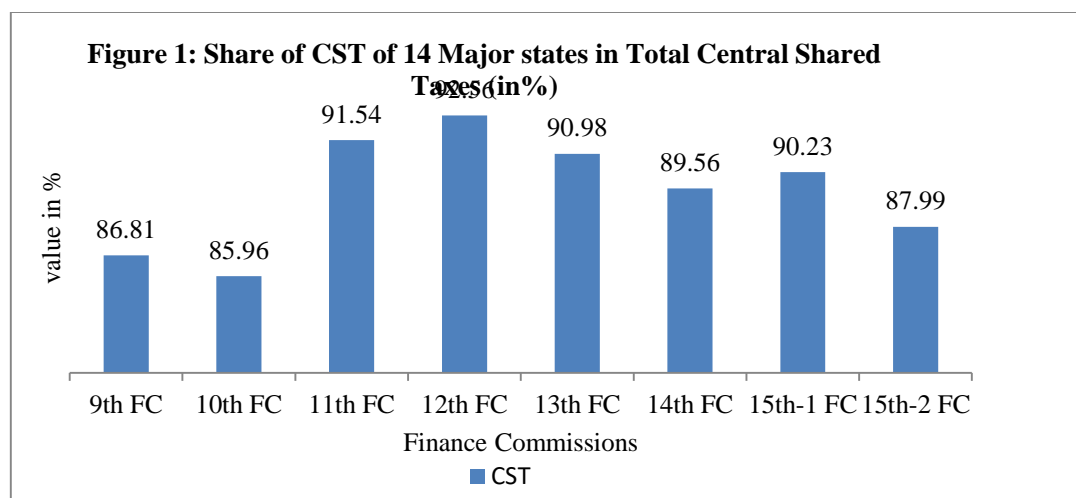
UFC	CST percent of REXPS	CST percent of TEXPS	CST percent of GDP	REXPS percent of GDP	TEXPS percent of GDP	ORS percent of GDP	CSC percent of GDP
9 ^{th-2}	21.23	16.63	2.48	11.69	14.93	7.15	NA
10 th	19.79	16.00	2.33	11.83	14.63	6.63	NA
11 th	18.22	13.25	2.35	12.93	18.01	6.91	NA
12 th	23.32	17.44	2.81	12.08	16.13	7.33	1.12
13 th	21.69	16.85	2.73	12.59	16.21	7.47	1.01
14 th	26.88	20.68	3.62	13.45	17.48	7.18	1.38
15 ^{th-1}	21.78	17.03	3.03	13.91	17.78	6.55	2.07
15 ^{th-2}	26.08	19.88	3.55	13.65	17.95	7.51	1.88

Note: The values of variables of 15^{th-2} Finance Commission are estimated as averages from 2021-22 to 2023-24. CST = Central Shared Taxes, REXPS = Revenue Expenditures of State, TEXPS = Total Expenditures of State, GDP = Gross Domestic Product, ORS = Own Revenue of State, CSC = Cess and Surcharge and NA = Not Available.

Source: Hand book of Statistics on State Government Finances-2010 for data from 1990-91 to 2007-08 and State Finances: A Study of Budget for data from 2008-09 to 2023-24, Reserve Bank of India website.

The tax effort of the Central government in Denmark, Sweden, United Kingdom, and Norway stands at 32.4 percent, 26.2 percent, 25.07 percent, and 24.9 percent respectively. In contrast, India's tax effort is only 9.8 percent. Among the 39 selected countries, India ranks 36th in terms of central government tax effort (Table A1). While India ranks 37th in revenue generation, it occupies 33rd position in expenditure levels (Table A1). States and social scientists have consistently argued for raising the states' share in CST (Gol 2020, pp. 151–152; Mohan 2023, pp. 10–13) and for including cess and surcharges in the divisible pool. However, even if cess and surcharges are incorporated into CST and the states' share continues to rise over time, vertical fiscal imbalance will persist unless the Central government mobilizes CST effectively.

However, the share of 14 un-divided major states in the CST of all states declines from 12th to 15th FC. The total expenditure share of these states constitutes a significant proportion of total expenditure of all states. This may lead to increase in horizontal fiscal imbalance (Figure 1).



Source: Same as Table 1

An objective approach based on a normative approach by an independent institution could be used to determine the vertical devolution and the resource responsibilities gap of states. The expenditure needs of a state seem to be a subjective concept. Thus, a comparison of expenditure need with a standard level is an objective concept. The gap may be estimated as the difference between own receipt, own revenue receipt, own capital receipt without loans and fiscal deficit amounting to 3 percent of Gross Domestic Product (GDP) on one side and total expenditures of the state on the other side. Fiscal deficit amounting to 3 percent of GDP maintains fiscal discipline in the state as per Fiscal Responsibility Budget Management Act 2003 (Rajaraman and Majumdar, 2005, pp. 3413-3420).

The Central government encroachment of state's developmental expenditures needs to be included in the state government's total expenditures. State government developmental expenditures reduce income inequality to a larger extent than that of the Central government (Verma *et al*, 2025, pp. 35-44). However, devolving full amounts of the gap by the Centre will create fiscal laxity among states which in turn continuously increase the gap. The Centre has to

persistently devolve more shares to states which discourage the Centre in raising tax effort. In order to tackle such a situation, the method must be supplemented by a weight optimal criterion for horizontal sharing across states, assigning half weightage of equity to efficiency criterion as prescribed by Mahamallik and Sahu (2015). It reduces horizontal fiscal imbalance through encouragement to states in raising their own revenue which in turn lessens the burden of the Central government to fill the gap and arouse the Centre in raising the tax effort. The combination of the two methods may eventually reduce the fiscal imbalances.

Using the resource–responsibility gap method, an analysis of data from 1990–91 to 2023–24 indicates that approximately 56 percent of CST transfers are required to maintain vertical balance, enabling states to finance 61.76 percent of developmental expenditures within their total expenditure framework. On an average, Indian states generate about 59.7 percent of their total resources from their own sources— 44.7 percent through revenue and 15 percent via manageable public debt. To bridge the remaining gap, the Centre must contribute nearly about 40.3 percent of states’ total expenditures. CST and grants from the Centre, together account for around 29.8 percent of states’ total expenditures. An additional 10.5 percent of resources are still required to meet states’ expenditure needs.. Even when cess and surcharge collections (3.3 percent) are included in the gross tax revenue of the Centre, the Centre has to provide an additional 7.2 percent of total expenditures to fully close the fiscal gap. In other words, the Centre has to transfers around 16 percent of its net proceeds of taxes. Apart from this, the manageable public debt of the states depends on the prerogatives of the Centre as per article 293. In this case the removal of the gap may require additional share of transfers to state.

Conclusion

The CST has been devolved from the Centre to the states for more than seventy-five years. Despite the persistent increase in the states’ share, vertical fiscal imbalance in the country has continued to widen. The determination of the share has been largely subjective, independent of horizontal devolution methods. Critical factors such as deficiencies in fiscal capacity, tax effort, and developmental expenditures of the states, the Centre’s own tax effort and expenditure decentralization have often been overlooked. Notably, none of the FCs has adopted corrective measures in this regard. An objective method based on the resource–responsibility gap of states, combined with a weight optimum criterion for horizontal distribution of CST shares across states proposed by Mahamallik and Sahu (2015) is suggested. Such an approach may help reduce fiscal imbalances. Importantly, the vertical share of states will decline only when horizontal fiscal imbalance is minimized, which in turn would compel the Centre to enhance its tax effort.

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End Notes:

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- i Three approaches exist for vertical devolution namely shared tax approach, Ad hoc approach and cost reimbursement approach. As per the shared tax approach, a pre-defined share of national taxes is assigned to the sub-national government. Discretionary decision determines the vertical share in case of ad hoc approach while in cost reimbursement approach; the national government is required to cover a portion of costs of service provided by the sub-national governments (Bahl and Wallace 2007, pp. 1-37). Efficient performance of stabilization and distribution function calls for assignment of progressive taxation to the national and benefit taxes (minor levies) to sub-national government on the ground of uniformity and efficiency. Microeconomic efficiency is achieved when responsibilities are divided as per Decentralization theorem which states that in the absence of cost differences national public goods should be provided by the national government and local goods by local government. Consequently, larger resources lie with the Centre with lower responsibilities.
- ii Horizontal fiscal imbalance may be alleviated by the proposed weight optimum method of Mahamallik and Sahu (2015) for horizontal sharing of CST among states as stated earlier.
- iii Vertical devolution implies transfers of resources from higher to lower level of government when the latter is unable to generate adequate resources to meet its responsibilities provided the former possess excess revenue over its responsibilities.
- iv Apart from the FC, initially both Planning Commission (PC) and Central Ministries (CM) and subsequent to abolition of PC in 2015, CM mediates the task of revenue transfers from the Centre to states. However, the transfer through the CM is discretionary and unconstitutional (Sahu 2024, p 22-25).
- v FC grants are determined by the members of the FC considering the fiscal position of states and other matters listed in the terms of reference of the Commission.

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Appendices:
Table A1: Finances of Central Government of Selected Countries (percent of GDP)

Country	Tax Effort (TE)	Rank_TE	Revenue	Rank_ Revenue	Expenditure	Rank_ Expenditure
Argentina	10.66	33	28.39	29	30.90	30
Australia	22.51	13	33.91	25	35.97	25
Austria	25.17	3	49.01	6	51.83	5
Brazil	13.94	27	37.09	21	41.96	18
Cambodia	9.67	37	12.80	39	15.37	39
Canada	13.18	29	40.95	16	42.85	17
Chile	17.13	24	23.34	33	23.16	34
China	9.30	38	20.04	36	22.30	36
Colombia	13.86	28	25.50	30	27.94	31
Denmark	32.40	1	54.15	2	53.85	2
Estonia	18.08	21	37.73	19	38.05	22
Finland	21.50	18	53.13	3	53.76	3
France	22.24	15	51.78	5	55.92	1
Germany	11.11	32	45.23	8	47.24	10
Greece	22.82	11	41.26	14	47.85	9
Hungary	22.37	14	44.31	11	49.32	7
Iceland	23.57	9	44.95	9	46.43	11
India	9.80	36	18.96	37	27.27	33
Ireland	22.97	10	33.12	26	35.80	26
Israel	23.95	8	37.56	20	40.98	20
Italy	24.19	7	45.70	7	50.30	6
Latvia	21.89	16	35.19	22	37.32	23
Luxembourg	24.56	6	43.32	13	41.71	19
Mexico	10.47	35	23.36	32	23.14	35
Netherlands	21.60	17	20.61	34	45.95	13
Norway	24.88	5	44.10	12	46.06	12
Poland	17.59	23	54.63	1	44.25	15
Portugal	20.92	19	40.35	17	45.89	14
Russian Federation	13.01	31	41.02	15	33.92	28
Slovak Republic	18.05	22	34.30	24	43.32	16
Slovenia	19.19	20	38.77	18	48.07	8
South Africa	22.70	12	44.74	10	27.62	32
Sri Lanka	13.13	30	24.59	31	20.42	38
Sweden	26.36	2	13.60	38	53.26	4
Switzerland	9.04	39	52.31	4	32.23	29
Thailand	15.36	26	31.72	27	21.51	37
Turkey	16.69	25	20.35	35	34.68	27
United Kingdom	25.07	4	31.16	28	39.32	21
United States	10.66	34	35.01	23	36.46	24

Note: Data relate to average from 1991 to 2022

Source: For Tax-GDP data World Bank website, 2025.

For Revenue and Expenditure data, International Monetary Fund website, 2025.