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VERTICAL FISCAL IMBALANCES IN INDIA: CONCEPT AND MEASUREMENT

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ABSTRACT

India is a federation whose roots can be found in the colonial period. Indian federal setup is clearly divided between centre, state and local government and likewise, the sources of revenue and responsibilities are also divided between them. The decentralization process in India is asymmetrical in the sense that decentralization of expenditure has been much more than the revenue decentralization as provided by the Constitution, thereby creating an imbalance in states' income and spending. When this mismatch between the two is measured at different levels of government, we call it Vertical Fiscal Imbalance. In this paper, I have presented various definitions and measures of VFI given by several economists over the years and tried to measure the extent of VFI that exist in India since 1990-91 to 2014-15. We have used twenty five years data to make an analysis based on the data available in Finance Commission reports and Indian Public Finance Statistics. Our results show that the amount of revenue that has been decentralized over the period of study falls much short of the expenditure requirements that are expected to be met by the state governments. The situation is so intense that the state governments are left with no option other than relying on central transfers for financing their needs and that where the central government enjoys an upper hand and an authoritative power over the internal matters of the states.

KEYWORDS: ***Expenditure, Decentralization, Indian federation, Revenue, Vertical Fiscal Imbalance.***

INTRODUCTION

India possesses a federal structure with a clear distinction between the Centre and the State's functions. India is the largest democracy with federal form of government. The fiscal arrangements in India have evolved in a quasi-federal system to meet the requirements of centralized planning in a mixed economy framework. Indian federal system is about seventy years old, compared to more than two centuries of the United States or Switzerland or Canada. The founding fathers of our Indian Constitution were deeply concerned about ensuring the unity and integrity of the country. They were aware of the forces of disruption and disunity working within the country. Keeping this in mind, the framers designed the Indian Federal structure in a form which gives more authoritative power in the hands of the central government and the state government, although, will have a separate identity but will be the subordinate to the centre in the sense that for major decisions as well as financial help, it will have to depend on the centre. Thus, the dangers at the time of independence were handled by a strong government at the Centre. The federal system has served extremely well for India to promote our democracy to strengthen the national unity and to achieve economic progress to the nation completely. But, it cannot be ignored that this type of asymmetrical distribution made India to suffer from the problem of fiscal imbalance.

Before starting with the analysis of fiscal imbalance, we need to examine its underlying concept because much of the confusion and debate, especially with regard to vertical fiscal imbalance, has arisen from a misconception of what defines a fiscal balance. Here it is important to distinguish between 'accounting definitions' and 'economic definitions'. Measuring a gap between spending and revenues is the accountants' role. Determining whether taxes and expenditure are too high or too low is the economists' role. In any economic model of resource allocation, whether something is too high or too low depends on the gap between marginal costs and marginal benefits, and not on the gap between revenue and expenditure. Thus, we may say that fiscal imbalance is a term used for denoting a mismatch in the revenue powers and expenditure responsibilities of a government. It is a term used to describe a situation of monetary imbalance between the national government and the smaller subordinate government such as state and local government. In the literature of Fiscal Federalism, there are two types of fiscal imbalances, viz, horizontal fiscal imbalance and vertical fiscal imbalance.

TAX AND EXPENDITURE ASSIGNMENTS

In India, the first systematic attempt at defining the roles of central and state governments was done in 1918, when the Montague-Chelmsford reforms were implemented. However, it was the Government of India Act, 1935, which clearly demarcated the roles of the two levels of government, and in many respects, the present constitutional assignment closely follows that demarcation. The constitution, in its seventh schedule, assigns the powers and functions of the center and the states. The schedule specifies the exclusive powers of the center in the Union list; exclusive powers of the states in the State list; and those falling under the joint jurisdiction are placed in the Concurrent list. All the residuary powers are assigned to the centre.

The major responsibility of the central government is to provide public and merit goods and services with benefits spreading across different states using appropriate fiscal instruments. In the provision of public services it would have a predominant role in macroeconomic stabilization, poverty alleviation, provide public services with national spillovers like defense. It is common to allocate functions of international character to the central government; matters pertaining to operation of railways, posts and telegraphs, national highways, shipping and navigation on inland waterways, air transport, atomic energy, space, regulation and development of oilfields and major minerals, inter-State trade and commerce and regulation and development of inter-state rivers are the major functions assigned to the centre for reasons scale economies and spillovers in respect of services with benefits spreading over different states. The major subjects assigned to the states under State List comprises of public order, police, public health, agriculture, irrigation, land rights, fisheries and industries and minor minerals. As far as the concurrent list is concerned centre again plays a dominant role by holding a number of additional items from the this list such as economic and social planning, commercial and industrial, trade unions, social security, employment and unemployment, welfare of labor, price control and trade and commerce in and production of certain basic goods such as foodstuffs, cotton and any other goods if the Parliament decides to bring it into this category. States do have considerable amount of jurisdiction over concurrent items and can take initiatives with regard to these subjects but in the event of conflict between the center and the states, the former has superseding powers. Subjects like public health, agriculture and irrigation involve considerable governmental intervention and expenditures. In regard to the subjects in the concurrent list like education and transport, social security and social insurance, in a democratic polity, being proximate to the people, the states would be compelled to assume a significant role.

Tax revenue is generally the main source of financing public expenditure at different levels of the government. In most democratic countries taxation powers of central, state and local governments are mentioned in the constitution itself. Taxation powers of the government at separate levels may be mutually exclusive or overlapping depending on the nature of taxes. Undoubtedly, in almost all the federations it is the central government that has larger resources in its basket as compared to the responsibilities. Further it has been observed that centre enjoys dominance at comparatively more elastic sources of revenue which includes taxes on income and wealth from nonagricultural sources, corporation tax, taxes on production (excluding those on alcoholic liquors, opium, hemp and other narcotics) and customs duty whereas states are assigned with those tax handles which are relatively less elastic in nature such as taxes on agricultural income and wealth, taxes on the transfer of property (stamp duties and registration fees), taxes on motor vehicles, taxes on the transportation of goods and passengers, sales tax on goods, excises on alcoholic beverages, entertainment tax, taxes on professions, trades, employment, property tax and taxes on the entry of goods into a local area for consumption, use or sale (octroi). Moreover the centre has also been assigned all residual powers which suggests that those taxes which are not mentioned in any of the lists also falls under the jurisdiction of the central government by default. Thus we may sum up in the form that taxes with inter-state base in which all-India uniformity is desirable are vested with the central government whereas location specific taxes and which are generally related to local consumption have been assigned to the states. One thing worth appreciating in this allocation is the absence of joint occupancy which successfully minimized the problem of double taxation, tax rivalry between centre and the states which is a major problem in centre-state financial relations in federations such as that of Canada.

But that does not mean that Indian Federation does not suffer from any loophole. The basic distribution of revenue sources and expenditure, as we discussed above, has some serious limitations. The states in India suffer largely in terms of asymmetry between the two and often fall short of revenue in comparison to the spending heads that have been assigned to them.

VERTICAL FISCAL IMBALANCE

Before conducting a thorough study, let us consider few conventional definitions of vertical fiscal imbalance:

- Walter 2004 describes vertical fiscal imbalance as "The inability of one level of government to fund its own responsibilities from its own revenue streams without monies from elsewhere".
- "The mismatch of own revenues and expenditures of governments located at various jurisdictional tiers and the consequent flow of funds among governments" (Breton 1996, 97).
- According to Wagner (1973), VFI exists when "the national government has an excess supply of revenue while state and local governments have an excess supply of needs."
- Hunter (1977) separates revenues controlled by state governments from revenues controlled by the federal government. He measures VFI as one minus the ratio of federally to state controlled revenues.

In general, a vertical fiscal imbalance describes a situation where revenue does not match with expenditures for different levels of government. Basically when the imbalance between the revenue and the expenditure assignments is measured between two levels of government (Centre and State in the case of India), it is called vertical fiscal imbalance. There has been limited progress in formalizing the concept of vertical fiscal imbalance in relation to vertical fiscal gap, which we take to be the optimal relationship between federal and regional government expenditure and revenue raising capacities."Perhaps the most striking feature about fiscal powers in nearly all the federal systems is that the majority of the revenue have been placed under the Federal authority" (Herperger 1991:34). On the top of it the revenue from these sources grows faster than the revenue from the tax sources administered by the state government. These factors put the union government in an exalted position over the state government in terms of financial resources. Looking at the governmental functions, usually the union government is allocated the redistributive and stability functions whereas the state government is left with the allocative function which necessitates the state government to spend more than the former. Thus there is an inverse relationship between the quantity of revenue and the size of the expenditure at the different levels of the federal government. Therefore, the division of financial powers between different layers of government gives rise to a typical type of fiscal imbalance commonly referred to as Vertical Fiscal Imbalance. In order to correct these imbalances, federal fiscal transfers in the form of shared taxes, responsibilities, grants etc are initialized.

MEASURING VERTICAL FISCAL IMBALANCES

After defining the concept of vertical fiscal imbalance as a difference in the degree of revenue and expenditure decentralisation in Indian context, it is further required to measure the extent of that imbalance. The word 'imbalance' is regarded as something negative as it indicates asymmetry in some form or the other and thus it is important for any entity to remove that imbalance from the system. But before discussing the methods already adopted or should be adopted to remove or for that matter minimize this asymmetry, we should first measure these imbalances in order to determine the seriousness of the issue.

There are various methods to calculate Vertical Fiscal Imbalance. Hunter in his pioneering study calculated "the coefficient of vertical balance" for the four federal countries he studied. He devised three such coefficients for four federations. These coefficients were defined as follows:

$$V_1 = 1 - \frac{G_c + E}{E}$$

$$V_2 = 1 - \frac{G_u + G_c + B}{E}$$

$$V_3 = 1 - \frac{G_u + G_c + B + T_s}{E}$$

Where: G_C = Conditional federal grants to states
G_U = unconditional federal grants to states
B = net borrowing by states
E = state expenditure (including transfers to local governments)
T_S = shared taxes

The above measures show, if all state expenditures were entirely centrally controlled, the coefficient thus calculated would be zero, and if none were controlled, it would be one. In other words, the higher the coefficients, the more balanced are the federal finances in the sense of being closer to a situation in which governments at each level can command the financial resources necessary for them to carry out their expenditure responsibilities and to be held accountable for both spending and taxing decisions. He holds that if the state's fiscal autonomy is more; lesser will be the Vertical Fiscal Imbalance.

J. Martinez-Vazquez, L. Schroeder and P. Smoke measured the coefficients of Vertical Fiscal Imbalance as

$$CVI_1 = 1 - \frac{R^*_{SNG}}{E_{SNG}} = 1 - \frac{R_{SH} + G_e + G_o}{E_{SNG}},$$

or $$CVI_2 = 1 - \frac{G_e + G_o}{E_{SNG}},$$

or $$CVI_3 = 1 - \frac{G_o}{E_{SNG}}$$

Where: CVI = Coefficient of vertical fiscal imbalance,
R^*_{SNG} = total sub-national resources not under sub-national control,
E_{SNG} = total sub-national expenditure,
R_{SH} = common income,
G_e = equalization transfers and
G_o = other transfers

The World Bank prepared the following formula for measuring vertical fiscal imbalance using Fiscal Decentralization indicators:

$$CVI = \frac{G_l^* + G_r^*}{E_l + E_r}$$

Where: G_l^* = transfers from other levels of government to local governments,
G_r^* = transfers from other levels of government to regional governments,
E_l = total expenditures of local expenditures,
E_r = total expenditure of regional governments

Luc Eyraud and Lusine Lusinyan while preparing a publication for International Monetary Fund proposed that vertical imbalance depends on the mismatch between revenue and income decentralization and amount of government deficit. According to them:

$$CVI = 1 - \left(\frac{dec\,R}{dec\,E}\right)^* (1 - D_{GG})$$

$$decR = \frac{R_{wSNG}}{R_{GG}}$$

$$decE = \frac{E_{wSNG}}{E_{GG}}$$

Where: decR = revenue decentralization,
decE = spending decentralization,
D_{GG} = general government deficit,
R_{wSNG} = sub-national level own revenue,
E_{Wsng} = sub-national level own spending,
R_{GG} = general government revenue,
E_{GG} = general government spending.

Govinda Rao and Nirvikar Singh proposed four separate measures to calculate VFI in percentage terms which are as follows:

- Percentage of states' own current revenue to total current revenue.
- Percentage of states' own current expenditure to total current expenditure.
- Percentage of states' own current revenue to states' current expenditure.
- Percentage of states' expenditure to total expenditure of centre and states.

As can be seen from the above discussion, the relevant literature failed in evolving a single standard measure to calculate the degree of vertical fiscal imbalance in a federal setup. The various formulae presented above revolves around the generally accepted assumption that vertical fiscal imbalance is nothing but the mismatch in the income generating capacity and incurring of expenditure responsibilities at different governmental levels.

In our study, we define VFI as the lack of congruence between the states' share in revenue and its share in the expenditure responsibilities as elaborated by the Constitution. There are several sources of raising revenue such as tax revenue through different variety of taxes levied on the people of a nation, non tax revenue which comprises of fees, fines and all sort of charges not falling under tax revenue, capital receipts etc. On the other hand, government has to perform various duties in order to give the people of the nation a life worth living and cherishing. Some of the major expenditure heads are defence, maintaining law and order within the nation, providing education, health, employment and various other services which serve as main pillars of human development, social security, salary to its employees and the list goes on and on. Of these services, some are of national importance whereas some are region specific due to which the latter ones are assigned to the sub-national governments. When this system of sharing revenue sources and expenditure liabilities faces the problem of centripetal bias that is when the problem of vertical fiscal imbalance arises. Thus in our opinion, vertical fiscal imbalance is the ratio of states' share in revenue to its share in spending. In other words, when the degree of decentralisation of revenue and expenditure differs, we call it vertical fiscal imbalance. In a federation like India, where major decision making powers lies in the hands of central government, a situation where revenue decentralisation exceeds expenditure decentralisation is unlikely to cross our path, not at least in the near future as doing such a sort of thing will reduce centre's control over the states. Thus we may define vertical fiscal imbalance as a situation where

Revenue Decentralisation < Expenditure Decentralisation

The extent to which they both differ is a matter of concern which will be discussed in the following section. Table 1 below provides some relevant figures for India with column (4) and (7) highlighting the degree of decentralization of both receipts and expenditure.

Table 1: Trends in Vertical Fiscal Imbalances in India

Years (1)	States' own receipts (in Rs. Crores) (2)	Total receipts of centre and states (in Rs. Crores) (3)	Percentage of states' own receipts to total receipts of centre and states (4)	States' total expenditure (in Rs. Crores) (5)	Total expenditure of centre and states (in Rs. Crores) (6)	Percentage of states' own expenditure to total expenditure of centre and states (7)	Percentage of States' own receipts to States' expenditure (8)	Ratio of revenue decentralization to expenditure decentralization (9)
1990-91	35658.30	99281.93	35.91	81310.77	153152	53.09	43.85	0.67
1991-92	44898.69	120859.6	37.14	97800.35	175171.9	55.83	45.90	0.66
1992-93	54139.07	142437.2	38.00	114289.9	197191.8	57.95	47.37	0.65
1993-94	63379.46	164014.9	38.64	130779.5	219211.7	59.65	48.46	0.64
1994-95	72619.84	185592.5	39.12	147269.1	241231.6	61.04	49.31	0.64
1995-96	81860.23	207170.2	39.51	163758.7	263251.4	62.20	49.98	0.63
1996-97	87069.23	234059.8	37.19	184100.5	321165.5	57.32	47.29	0.64
1997-98	98036.13	257993.7	37.99	209464.3	369194.3	56.73	46.80	0.66
1998-99	107062.1	274768.9	38.96	247223.6	444511.4	55.61	43.30	0.70
1999-00	124236	327085.25	37.98	292649.2	515095.8	56.81	42.45	0.66
2000-01	136865	349979	39.10	306689.4	546348.1	56.13	44.62	0.69
2001-02	150116.4	379371.4	39.56	341236.6	606581.7	56.25	43.99	0.70
2002-03	165223	423008	39.05	361948.1	658481.1	54.96	45.64	0.71
2003-04	188504	496699.3	37.95	429978.9	748475.6	57.44	43.84	0.66
2004-05	219041.9	587766.7	37.26	465066	825686.6	56.32	47.09	0.66
2005-06	256012.3	696285	36.76	522369.5	935647.7	55.82	49.00	0.65
2006-07	316390	870543.1	36.34	619328.3	1091734	56.72	51.08	0.64
2007-08	331447	1007221	32.90	665101.4	1245391	53.40	49.83	0.61
2008-09	365596	1052670	34.73	779230.4	1513363	51.48	46.91	0.67
2009-10	440995	1175444	37.51	956329	1814530	52.70	46.11	0.71
2010-11	542075	1548424	35.00	1090665	2109915	51.69	49.70	0.67
2011-12	642023	1650846	38.89	1259447	2359645	53.37	50.97	0.72
2012-13	763984	1933187	39.51	1445003	2646918	54.59	52.87	0.72
2013-14	836507	2169193	38.56	1615870	2953261	54.71	51.76	0.70
2014-15	966006	2588292	37.32	2168374	3503415	61.89	44.54	0.60

Source: Various issues of Indian Public Finance Statistics

To examine the degree of Vertical Fiscal Imbalance, we have taken data of Indian Federation from 1990-91 to 2014-15. In the history of federal finance, one issue which has attracted maximum amount of attention is the mismatch between the distribution of taxing powers and expenditure responsibilities between Centre and the States. We have tried to find the extent of VFI with the help of few determinants such as States' own receipts (which include current as well as capital receipts) and its ratio to total receipts of Centre and States which will give us the idea as to how much the revenue has been decentralized in the recent years. Further, in order to determine the level of expenditure decentralization, we have taken the ratio of states' expenditure to total expenditure of Centre and States combined which will give us a peek into the amount of decentralization that has been done by the government on the expenditure side. And the mismatch between the two types of decentralization is what we call as Vertical Fiscal Imbalance. In a federation like India which is suffering from centripetal bias from the day it has been formed, it is quite obvious that revenue decentralization has always been less as compared to expenditure responsibilities assigned to the states. In the table above, we can clearly see that the states have been receiving almost one-third of the total receipts attained by the centre and the states combined. If we concentrate on column 4, we will get an idea that out of the total receipts, states have never received more than forty percent revenue receipts at its disposal. In fact, in 2007-08, it has gone down to thirty two percent and in the same year the share of expenditure responsibilities assigned to states were fifty three percent which clearly marks an alarmingly high degree of Vertical Fiscal Imbalance which can be largely attributed to the powers that has been granted to the Centre by our Constitution since the very beginning. As a matter of fact, the Central Government has always had an upper hand in the decision making power and the States, despite of being so large in number have always been on the receiving end. They do have powers to put forward their demands in the decision making process and also has the bargaining power as and when required. But the final decision always rests in the hands of the Centre. A scrutiny of the taxation powers and expenditure responsibilities mentioned in the Union and the State List reveals that highly buoyant and elastic sources of tax revenue belong to the Centre while relatively less elastic sources which are bound to generate less revenue are contained in the State List. Moreover, Centre has a vast purview of borrowings from domestic as well as international market whereas States had been put with several restrictions to deal with while undertaking borrowings. The VFI is thus inherent in Indian Fiscal Federal structure and the problem is even more agitating as the Union's own revenue grows much faster than States' own revenue and States' expenditure grows faster than States' own revenue. Talking about the ground reality since 1990-91, it is evident from the table that States' share of expenditure has invariably been high with no marks of improvement over the period of twenty five years. In 1990-91, States received around thirty five percent of total receipts whereas the expenditure responsibilities levied upon them was fifty three percent which suggests that the States have no other option than to resort upon the Centre for financial help or to borrow from the market. The degree of Vertical Fiscal Imbalance has always been remarkably high. The ratio of revenue decentralization to expenditure decentralization has always been less than one which affirms that states are rested with greater burden of responsibilities. Moreover, the inability of the states to finance their expenditure from their own sources of revenue is a serious matter of concern. In 1990-91, the position of states was such that they were able to finance only forty three percent of their spending from their own sources of revenue and for the remaining fifty seven percent they either had to depend on Centre's transfers or on market borrowings. This dependence hits the backbone of states' development as the money they receive in the form of transfers is either tied up with several restrictions or project based. As we can see from the table, this figure has gone up to maximum fifty two percent in 2012-13 which is again worrisome as it says that only about fifty percent of states' total expenditure has the ability to be financed by state itself. This gruesome situation of states' fiscal health is not a new chapter in Indian Federal Structure. It has been in the roots since the very beginning and no government whosoever is serious enough to work towards it. Centre's command over total revenue resources has always been very high. It was sixty four percent in 1990-91 and went up to around sixty eight percent in 2007-08 whereas on the other hand the expenditure responsibilities shared by them have been around forty seven percent in both the years mentioned above. States have always commanded less than forty percent of total receipts. As against this, they had to shoulder the responsibility of financing revenue expenditure more than fifty percent in all the twenty five years studied above. The major reason for the existing vertical imbalance is of course the constitutional assignment of higher expenditure responsibilities to the States in line with the well known 'decentralization theorem' (Oates,1972). Besides this, the other reasons for this which comes under traditional purview are the uneven distribution of natural resources, relative advantage of the federal government in collecting taxes and the possibility of tax avoidance through socially inefficient regional shifts by mobile tax bases when taxed by regional government whose biggest example was the substitution of the State sales tax on cigarettes by a Centrally levied additional excise duty. Apart from these, there are several other reasons which plays under the table and ultimately contributes in the ever growing VFI such as the control of the Central government over the monetary policy of the country. A rise in inflation has a direct impact on the expenditure of the states whereas the more inflation elastic taxes such as income tax are levied by the Centre. Thus, after knowing the extent and major reasons of VFI in 1990-91 to 2014-15, we now move ahead with the forecasting of these imbalances for next fifteen years i.e. 2015-16 to 2029-30 on the basis of past figures. This will give us an idea as to how much imbalances will exist in the Indian Fiscal Federal setup and will try to suggest some measures to minimize these imbalances as it directly hampers the economic as well as social growth of the States and ultimately the country as a whole.

CONCLUSION

In this paper, we have discussed the formation of Indian Federal System and the distribution of items under revenue and expenditure heads as mentioned while the framing of the Constitution. Since then, several minor changes have been made in the system keeping the basic crux same. as we can see from the reports of several finance commissions, the government has tried to made changes (it would not be appropriate to call these changes 'corrections' because whether some had worked in the favor of the state governments, most of them have worked against them), the basic distribution has remained more or less same during the period of study. We have used secondary data on the central and state governments' revenue and expenditure position collected from several authentic sources such as report of finance commissions, Indian public finance statistics, RBI handbook of statistics, etc. Through various related literature, we got to know that this is a topic that has been debated ever since the formation of this system as the basic system of distribution suffer from several loopholes. Indian states have always faced the problem of VFI due to the uneven decentralization process adopted by the government of India. While dealing with this topic, we realized that several efforts have been said to be made in order to correct these imbalances but these efforts are only done on the shallow basis with no intention to solve the issue permanently. As we can see from the analysis, after almost seven decades of formation of Indian Federation, the problem of VFI is still persistent and even increased several times.

This is the sole reason that the state governments even today is highly dependent on the central transfers recommended by the Finance Commissions every five years. This leads to a centripetal bias and therefore the states have to deal with the centre's interference in their internal matters and thus it would not be correct to call them a separate entity as expected in a proper federal framework.

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