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India’s Goods and Services Tax: Context, Design and Policy Spillovers

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ABSTRACT

The 2017 Goods and Services Tax (GST) was one of most ambitious tax reforms introduced in India. This paper documents the context in which the GST was introduced – particularly the regional disparities in economic capacity, discusses design challenges in developing the GST, and the basic contours of the newly introduced GST. The paper advances two arguments. First, the he efficacy of India's tax reform must be assessed in the context of federal transfers and larger spillovers of the GST to the economy. Further, there is a compelling necessity to review and recalibrate the entire gamut (and not piecemeal) of federal relations – tax, expenditure and transfers. This is critical to ensure the stability and predictability needed to ensure that India's state driven growth blossoms and attains full fruition.

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"… India's indirect tax structure (prior to 2005) was archaic, irrational and complex – according to knowledgeable experts the most complex in the world" Arindam Bagchi, Kale Memorial Lecture 2002.

I. Introduction

It is a time-honored cliché that India is a country of immense diversity. In operational terms, a well-established and functioning federalism is a dire necessity for effective governance of the country. A fundamental requirement for effective governance is trust between all principal stakeholders in India's federal set-up: the central government, states, regions, villages and Panchayats. This involves *inter alia* that all stakeholders are clear about their responsibilities and rights and that financial flows between these stakeholders are predictable and easily understood. This, of course, does not imply a financial straitjacket but the clear enunciation of rules and circumstances under which departures from the established norms would be undertaken. Figure 1 lays out the structure of fiscal federalism in India.

As indicated in Figure 1 the central government of India delegates some responsibilities to union territories directly controlled and administered by it and to state governments who, in turn, delegate some responsibilities, to urban local bodies, in the case of urban areas, In the case of rural areas some responsibilities are delegated to rural local government following from which there is subsequent delegation to District Panchayats and block Panchayats. Following the 73rd and 74th amendments to the Constitution of India there is a further delegation of responsibilities to village panchayats. Both administrative and financial powers are so delegated. The Constitution of India clearly earmarks areas the areas which fall exclusively within the

purview of (i) the Central government (the Union List), (ii) state governments (the State List), (iii) central and state governments (the Concurrent List).

Figure 1 about here.

This complex delegation of responsibilities has been altered several times since the implementation of the Constitution. In any event, the Constitution permits the central government to bypass state and local governments in the implementation of programs such as centrally sponsored schemes and under exceptional circumstances. Against the background of fundamental indirect tax reform, the implementation of the Goods and Services Tax, (GST) (on July 1, 2017), this paper attempts a broad overview of the current state of Indian federal fiscal relations, particularly with respect to central and state governmental relations and is organized as follows. Section II gives a broad overview of economic disparity across various states of India and discusses the rationale for and modalities of transfers from the central to state governments. It highlights the impact that the GST has had on regional economic inequality. Section III examines the considerations that went into the design of the GST. Section IV examines the rate structure and devolution of proceeds of GST collection. Section V critically assesses the design of the GST. Section VI overviews the evolution of Finance Commissions (FC) with a particular emphasis on the issues of the integration of the indirect tax structure through the introduction of a Goods and Services Tax (GST). Section VII overviews the structure of central transfers to state governments through FC, Planning Commission (PC) and Centrally Sponsored Schemes (CSS) and issue arising therefrom. Section VIII discusses transfers to Panchayati Raj Institutions (PRI) and local bodies. Section IX concludes.

II. Economic Disparity across Indian States: the Impact of the GST

Although there are considerable linguistic, political and cultural variations across states, our focus in this paper is on economic disparities. Table 1 provides summary statistics mean real per capita net state Domestic Product (PCNSDP), standard deviation(SD) and coefficient of variation (CV) of PCNSDP for Indian states using 2004-05 as base for the period 2004-05 to 2014-15 (upper panel of the table) whereas Table the lower panel does the same using 2011-12 as base for the period 2011-12 to 2021-22. The upper panel of Table 1 shows a steady rise in PCNSDP, SD and CV. This becomes even more evident when plotted in Figure 2a. So, during this period there was a rise in regional inequality.

In contrast the lower panel of Table 1 shows a steady rise in PCNSDP (except for the COVID19 period of 2019-20 to 2020-21), a slower rise in SD and a drop in CV, particularly since 2015-16. So, there has been a moderation in regional inequality over the period since 2015-16. Thus, at this level of aggregation, the implementation of the GST has been associated with an amelioration of regional inequality. Figure 2b plots the key data reported in the lower panel of Table 1.

Table 1 and Figure 2 here.

Details of the three series are not included here in order to save space but, suffice it to say that there is considerable persistence in the ranking of states according to real PCNSDP. Hence, Bihar has the lowest real PCNSDP for every year. Uttar Pradesh, Rajasthan and Orissa are also nearly always close to the bottom of this ranking along with some North-eastern states such as Assam and Tripura. Delhi, Goa, Chandigarh, Punjab and Haryana are almost at the top of the

rankings. Hence, economic disparity across Indian states catalogued extensively in the literature (see Jha, 2021) seems well entrenched.

Table 2 and Figure 3 show the extent of the gap in respect of real PCNSDP across states. Three measures of such gaps are reported: (i) the gap between real PCNSDP of richest and poorest state as percentage of mean real PCNSDP across all states (G1); (ii) the gap between real PCNSDP of richest and poorest state as percentage of real PCNSDP of poorest state (G2); and the gap between real PCNSDP of richest and poorest state as percentage of real PC NSDP of richest state (G3). First panel of Table 2 shows that these magnitudes are quite large with G2 rising to more than 900 per cent in 2005-06 before tapering off slightly. As expected, G3 is uniformly lower with G1 in between G2 and G3. It is also worth noting that G2 has accelerated after the onset of the reforms in the early 1990s. Broadly, the lower panel of Table 2 reveals the same trends. Figure 3 (upper panel) maps the trends in the upper panel of Table 2 and shows a sharp rise and then a drop in all three measure whereas lower panel of Figure 3 which maps the data in the lower panel of Table 2 shows a drop, then a rise and then another drop in these measures. Since 2017-18, the year the GST was introduced, a downward trend in regional inequality is revealed.

Table 2 and Figure 3 here.

Table 3 shows that inequality and its persistence across states extends to more comprehensive indicators of human development (such as HDI) than income.[1]

Table 3 here.

[1] In a similar vein Jha and Sharma (2013a) have reported rising inequality using household data for the period 1993-94 to 2009-10.

Sharp differences in the performance of Indian states with respect to private investment and Foreign Direct Investment (FDI) inflows are both cause and effect of the persistence of economic inequality across Indian states. Using Annual Survey of Industries, data Table 4 provides details of private investment in manufacturing in 20 major Indian states for two time periods 1993-99 and 2000-07. States with high economic performance (such as Maharashtra and Gujarat) do well whereas states such as Bihar and Assam are lagging. Mallick (2012) indicates that economic conditions in the states have had a significant effect on private investment.

Table 4 here.

This Table indicates, as would be expected, Foreign Direct Investment (FDI) flows into Indian states are also highly correlated with economic performance.

The 2009 World Development Report (World Bank, 2009) entitled "*Spatial Disparities and Development Policy*", demonstrates that economic activity and growth is spatially concentrated in many developing countries due to agglomeration benefits deriving from networks, technological change and human capital externalities. India does not appear to be an exception to this rule. This report argues that countries should embrace this development rather than insist on geographically balanced growth. However, the report further argues that policy makers should explore opportunities to ensure that the benefits from such spatially concentrated growth are distributed broadly across the population. A well-designed fiscal transfer mechanism that is also spatially redistributive in nature would go a considerable distance in achieving this.

Against this background it is pertinent to inquire into the capacity of Indian states, particularly the less developed among them, to sustain high rates of economic growth. Table 5a shows the deficit/debt positions of various state governments and Table 5b of the central government.

Relatively less well-off states such as Bihar, UP, Rajasthan and West Bengal consistently have debt/SGDP ratios in excess of 40 per cent. Whereas debt levels of all states hover around 20 to 25 per cent and that of the centre and states is in excess of 70 per cent.[2] Fiscal deficits of centre and states alone is in excess of 7 per cent and in each of the post-crisis years 2008-09 to 2011-12 both the central and the state governments were running primary deficits with the combined primary deficit in 2011-12 being in the vicinity of 3 per cent of GDP. In recent times Punjab's burgeoning debt is a cause of significant economic concern.

Tables 5a and 5b here.

Together Tables 5a and 5b reveal that debt/deficit positions of central and state governments are concerning. In particular, it is important to note that these deficits are entrenched and, at the state level, structural in nature with poorer states having persistently high debt ratios. Hence, any tax reform that involves both the state and the central governments, such as the GST, should recognize ensuing changes in state revenue positions may persist for a considerable time.

III. Considerations underpinning India's Goods and Services Tax

In a deservedly celebrated report Amaresh Bagchi (Bagchi, 2002) had described India's indirect tax structure prior to 2005 as "*archaic, irrational, and complex – according to knowledgeable experts, the most complex in the world*". In essence the commodity tax structure involved states imposing sales taxes (at different rates) at the first point of sale within their jurisdiction. In addition, states also imposed a host of other taxes (including state excise on petroleum) at their own discretion.

[2] Until very recent times much of this debt has been in the nature of internal debt with long term maturity. Nevertheless, there are several reasons to be concerned about India's debt situation (Asher, 2012).

Indirect tax reform has historically been constrained by provisions of the Constitution of India, which do not allow either the central government or the state governments the authority to levy taxes on a comprehensive base of all goods and services and at all stages of production and supply. The Central government was not permitted to tax goods beyond the point of manufacturing whereas the states were not permitted to tax services. India's indirect tax structure needed to operate within these constitutional constraints.

Notwithstanding these constraints and in perhaps the most significant indirect tax reform in independent India, state level VAT on goods was instituted in 2005. Unlike Sales tax, this VAT was an intra-state multi-point tax system and was levied on the value added at each stage. Under the VAT regime, the VAT paid by registered persons on goods (including capital goods) purchased from within the state was available for input tax credit. The input tax credit could be used to offset periodic liability either under VAT or the Central Sales Tax (CST). This ensured that the cascading effect of taxes (i.e. tax on tax) was avoided and that only the value addition was taxed. Currently, there is no VAT on imports into India and exports are zero-rated. This meant that while exports are not charged with VAT, VAT charged on inputs purchased and used in the manufacture of export goods or goods purchased for export, is available to the purchaser as a refund. State VAT were at varying rates. For example:0% on natural produce and essentials; 1% on bullion;4% /5% on industrial inputs; and 20% on alcohol. Goods other than those covered under the above rates are charged at a general rate ranging from 12.5% to 15%.

In addition, there was a service tax on specified taxable service. This classified about 114 services as taxable. The initial rate was 12 per cent. Further, there was an education cess of 3 per cent which made the effective rate of tax 12.36 per cent. Service providers could claim credit for certain specified taxes, e.g., service tax, excise tax, a portion of the customs duty paid on capital

goods. It was expected that the structure of this tax would go through a radical overhaul with the implementation of the proposed negative list of services. It was proposed that all services except those specified in the negative list would be exempt from service taxation.

The CST, was an origin-based tax which made it inconsistent with the VAT which is a destination-based tax. Prior to the introduction of the GST in 2017, there were several proposals to merge the CST with the VAT in a proposed harmonized GST. The CST was reduced from 4 per cent to 3 per cent and has been 2 per cent since June 2008. The entire revenue accruing under levy of CST was collected and kept by the State in which the sale originated. The CST Act excluded taxation of imports and exports.

The Central government introduced and took responsibility for a Service Tax with the stipulation that the base for this tax would be expanded considerably. An additional element of the tax reform involved rationalization of the Central Value Added Tax (CENVAT) with a reduction of the number of rates and replacing several specific taxes with *ad valorem* taxes and a new system of CENVAT credits.

CENVAT was an (excise) tax levied at an *ad valorem* rate (expressed as a percentage of the transaction value or the maximum retail price of the good) on the manufacture or production of movable and marketable goods in India. Manufacturers were permitted to claim input tax credit of specified taxes, i.e. service tax, excise duty, a portion of the Customs duty, etc., paid on capital goods, inputs and services procured and used in the manufacture of dutiable goods.

The rationalization of the VAT rate structure across states meant that harmful tax competition among them was reduced. Further, this move eased the cascading of taxes. Application of

CENVAT resulted in a reduction in the number of disputes about classification and in tax cascading as well as making the tax more neutral.

In operational terms, however, not all the anticipated benefits associated with these reforms could be realized. Thus, although the base of the service tax was expanded, services were themselves classified into several categories with consequent disagreement about the scope of each such category. This disagreement was compounded by the expansion in the number and scope of services in recent years and, in contrast to manufactured goods, the absence of a nomenclature for services. As indicated above, states were precluded from taxing services.

In the case of the CENVAT, Poddar and Ahmad (2009) argue, manufacturing has a narrow base in India and there are issues with respect to what constitutes manufacturing and their valuation. Further, the burden of the tax depends on where in the supply chain it is levied relative to value added after that point.[3] A major difficulty with the abovementioned delegation of tax authority between central and state governments with the state governments forbidden from taxing services was that the traditional distinction between goods and services and the separation of the powers of states and the centre to tax these is essentially archaic. Telecommunication services, for example, involve mobile phones which could be considered goods. Several similar examples exist and underscore the importance of integrating manufacturing and services into an integrated GST. Thus, an artificial distinction between goods and services appeared archaic.

[3] Countries such as Australia which are not encumbered by such constitutional restrictions have replaced a tax on manufacturing level by a GST and extending this to the retail level. This was made possible in India with the implementation of the full-scale GST on 1 July 2017.

Further, the fact that states could not tax services (and services remain the most rapidly growing sector of the economy) meant that their tax revenues were less buoyant even when economic growth accelerated. This presented an entirely different set of challenges in light of the debt and deficit burdens of states. Indeed, under current constitutional demarcation of taxation authority state level fiscal deficits would appear to be structural, implying that the fear of states about lost revenue in the aftermath of tax reform, particularly commodity tax reform, was a matter of genuine concern.

A further drawback of the dual structure was that the partial coverage of both state and central taxes led to cascading of both central and state taxes. For example, while several sectors such as oil and gas production, mining, agriculture, wholesale and retail trade and several services were not subject to CENVAT or the Central service tax these sectors still paid both CENVAT and CST on their inputs. They were therefore not permitted to claim any credit for these tax payments, creating a cost disadvantage for these sectors not only in local markets but affecting the competitiveness of these sectors in international markets. A similar logic was extended to state VAT where sectors exempt from state taxes were not allowed any deductions for taxes paid on inputs. Such sectors included the entire service sector, real estate, agriculture, oil, gas production and mining.

Another major distortion resulted from the fact that no deductions were allowed for CST on interstate sales by any level of government.[4] The multiplicity of rates and the irrational structure

[4] Estimates of the extent of cascading in the case of India do not exist. However, estimates for Canada's retail sales tax (similar to India's State VAT) indicate that cascading could be as high as 35 to 40 per cent of tax revenue. This is partly due to the fact that most of such taxes are applied to business to business transactions.

of exemptions and levies in the case of both CENVAT and CST contribute to cascading and exacerbation of cost disadvantage for Indian producers (Thirteenth Finance Commission 2009).

Problems with tje structure of VAT included the classification of goods and assignment of goods to different tax schedules. The complexities under the State VAT related primarily to classification of goods to different tax rate schedules. Partly as a consequence of this, both central and state tax administrations were severely inadequate, which increased the cost of compliance and reduced revenue collection with serious impacts on the fiscal deficits at both central and state levels.

Any proposed reform of the indirect tax structure would have to address these structural constraints and challenges in implementation. From a normative point of view, indirect taxes should be efficient (i.e. mimimise distortions), be simple to administer, neutral in their application, progressive in distribution, and prevent leakages from the system. The tax structure should raise enough revenue that can be allocated across central and state governments and there should be clear, predictable rules for both central and state taxation as well as vertical transfer of funds from the central to the state governments. Sustained practice of tax reform and fiscal federalism along these lines is critical to engender trust across different levels of government in large federal economies such as India, and make country's public financial management system resilient to shocks and better able to capitalize on incipient opportunities.

The need for large and buoyant indirect tax revenues would suggest that the base of a the proposed GST should be large and should comprise all or almost all items in the consumer basket including goods, services, real estate and the like. There are some political economy constraints which necessitate exempting certain goods and services such as life-saving medicines

or taxing them at different rates than, for example, luxury products. Additional considerations arise from the fact that this tax base is to be shared between the central and state governments. First, goods and services that are close substitutes should not be taxed at very different rates in any part of the country. Second, efficiency and neutrality would require that irrespective of the supply chain management and distribution the tax on a good/service should be a uniform percentage of the of its final retail price. Cascading of taxes should be avoided by ensuring that all taxes paid on inputs are creditable. Further, all the tax revenue should accrue to the jurisdiction where final consumption occurs, i.e., taxation should follow the destination principle. These principles suggest a destination-based GST. Clearly multiple tax rates (particularly if these vary across jurisdictions) would go against the canons of simplicity and neutrality of the tax structure. For instance, if the consumer's utility function is weakly separable between leisure and consumption goods then a flat tax on consumption goods approximates a lump-sum tax and is, therefore, efficient (for an elaboration see Jha, 2009). However, such taxes will be regressive. Many countries such as New Zealand, Singapore and Japan have chosen to apply the GST at a low flat rate and address the accompanying redistributive issues through other fiscal instruments (Asher et al, 2015). In any tax reform, simplifying tax administration and reducing the burden of compliance on individuals are critical. The first critical factor for attaining these is the design of the tax itself. A GST levied at a single rate on a very broad base with very exceptions would minimize record keeping, permit easy enforcement and encourage voluntary compliance. However, multiple GST rates often become necessary in the context of a developing economy using direct taxes that are insufficiently progressive and for other political economy reasons.

The extant literature has discussed three approaches to the design of such a tax, viz., (i) *National GST*, (ii) *Concurrent Central and State GST* (iii) *State level GST* (Rangarajan and Srivastava, 2008). All of these would require amendments to the Constitution. In the case of the national GST, the entire tax would be collected by the Central government (similar to that in Australia) with the result that India would become a unified common market. That would be its major advantage. It major disadvantage would be that the current constitutional authority of states to impose taxes on the sale of goods would disappear and states would become overly dependent upon the central government for revenues (disbursements from the GST collected by the central government), i.e., a large vertical imbalance would be created.

The model for concurrent central and state GST has two variants. In the first version both the central and state governments would levy a GST on goods, but the central government alone would impose a GST on services. The central GST would therefore apply to all goods and services whereas the state GST would largely be confined to goods. Another variant (see for e.g. the Kelkar Committee Report, 2012) would have both state and central governments impose GST on goods and services. Taxation would follow the destination principle but since the destination of many inter-state taxation is hard to determine the state GST on services would be collected by the central government and then distributed among the states in some manner. State and central governments would cooperate in the levying and administration of the GST.

The state level VAT is the other extreme from the national GST. The GST is levied exclusively by the state governments (whence vertical imbalances will be sharply reduced) but the central government's power to make equalizing transfers will be reduced (whence horizontal imbalances (i.e. across states) will be exaggerated) unless it can fall back upon a separate excise tax. The

USA is the prime example of a country following this rule where the general sales tax is relegated to the states within the USA. Cascading is eliminated within this arrangement as the states provide input credit for taxes levied by the centre and the central government would provide input credits for taxes collected by the states. In this case the central government could face revenue shortfalls some of which could be neutralized through reduction in central transfers to states. Although this arrangement would lower horizontal imbalances it could widen horizontal imbalances since the better off states would be able to collect more revenue (per capita or per unit of GDP) and hence be better off. Furthermore, the central government would be needed for coordinating state taxes, a role it could play better if it is actively involved in the taxation process. Clearly one of the principal reasons for the difference between the two variants is uncertainty about how to define the destination of inter-state services. It is presumed that state taxes on inter-state services will be collected by the centre and apportioned among states in some manner.

Yet another proposal would have the states collecting all the state GSTs and even the central GST (under the CENVAT) and returning the latter to the central government. Tax returns would be filled out in duplicate with one copy given to the state government concerned and the second to the central government. Thus, a consistent cross-check would be applied. This model has some distinct advantages. By enabling both levels of governments to tax a comprehensive base of goods and service it strikes a balance between the fiscal autonomy of the central and state governments. It allows a ready base for incorporation of other goods and services taxes into the GST, eliminates cascading, and empowers both levels of governments to tax a comprehensive base of goods and services.

Nevertheless, there are several caveats to be considered. First, all these arrangements (including the provision of inter-state services) pertain to the formal sector of the economy whereas the Indian economy has a large, even dominant, informal sector (Jha, 2021). In many cases of inter-state supply, e.g., group health insurance or business to business transactions, destination points are hard to identify. It is also unclear how the treatment of land and property sales and services would be treated.

During multiple rounds of negotiations within and across Ministry of Finance and State governments, it was decided that a single national VAT (applicable on goods and services) would be ideal for the establishment of a common market in India and would eliminate cascading but may not be acceptable to states as they would become too dependent on the central government for their revenue and lose flexibility over their tax sources. States may also have the apprehension that the formula for disbursements of central revenues to states may become prone to political influences and wheeling-dealing. Indian federalism could lose its vitality.

The logic of the GST requires that it be imposed on a comprehensive tax base of all goods and services and at a single rate. However, governments often violate these principles. In Australia, for example, food is exempt from GST. While such exemptions are often granted on the basis of redistributive arguments they create complications for tax administration and can have spillover effects benefiting the rich – although the poor spend a larger proportion of their incomes on food, the rich spend larger amounts and would, hence, benefit more in absolute terms. Redistributive concerns are better addressed through direct taxation and public spending programs. In this context there is considerable scope for improving and revitalizing the Targeted Public Distribution System (see Jha et. al. 2013b).

However, the current debate in India has argued for a dual GST – one for the centre and the second for the states. Under this arrangement tax harmonization between the states and the central government and across state governments becomes important. Whereas the first issue has been much discussed there is need to take cognizance of and address the second issue as well.

Harmonization, itself, is an amalgam of three factors: tax rate, tax base and the tax administration and compliance system. The first two elements would clearly be of considerable interest to the states and have been discussed earlier. In both the central and the state governments administration and compliance are the most important element of tax harmonization. This involves registration of taxpayers, automation of services, ensuring that the size of the informal economy is minimized and adequate IR systems (especially cross-border IT systems).

India's CST provided a good example of tax harmonization. It was a state-level tax on inter-states sales of goods based on the origin principle. Although it was a central tax its proceeds were collected and kept by the states.

The institution of a GST in India in any form requires a paradigm change and, hence, a substantial re-alignment of the taxation powers of the states and the centre (Rao, 2008). Indeed, such paradigm change is long overdue even in cases such as the personal income tax. Separation of tax powers between centre and state governments based on whether the income is non-agricultural or agricultural has been a major source of tax evasion in India, especially because agricultural income is not covered under the income tax and the agricultural sector itself is being rapidly transformed into business.

The Thirteenth Finance Commission (with validity between 2010-2015) argued the case for a "grand bargain" among the central and state governments in the implementation of the GST. This model GST would be entirely consumption based and not distinguish between goods and services. It would be applied at a positive rate on all goods and services with exports being zero rated. The central GST would subsume the following (i) central excise duty and additional excise duty, (ii) service tax, (iii) additional customs duty, and iv) all surcharges and cesses. The state GST would include the VAT, central sales tax, entry tax (octroi), luxury tax, taxes on lotteries and gambling, entertainment tax purchase tax, state excise duties, stamp duty, taxes on vehicles, tax on goods and passengers, taxes on duties and electricity, all state level cesses and surcharges. (Report of the Thirteenth Finance Commission, 2009). The Commission also argued against all exemptions and the zero rating of all inter-state transactions (no tax on inter-state transactions). The tax would be collected by the consuming state consistent with the destination principle (Thirteenth Finance Commission Report, page 68).

Using the Report of the Thirteenth Finance Commission as a part of departure an empowered Committee of the Union Ministry of Finance and State Finance Ministers has considered various proposals for the GST. However, implementation of the GST was put off several times although there was common agreement between the central government and all state governments that it would ultimately be the law. Two principal issues seemed to be deterring the enthusiasm of the state governments for this tax. First, was the states' apprehension that they would lose control and flexibility over their tax and, therefore, revenue structures. Second, and more importantly, in an economy such as India's with a large unorganized sector the implementation of a tax such as the GST could lead to considerable amounts of potential activity going underground.[5] This may

[5] See Emran and Stiglitz (2005) for a lucid discussion of this point.

lead to a sharp drop in states' revenue. The Empowered Committee recommended compensating states for any revenue losses for a limited time period after the implementation of the GST. However, as we have seen, the fiscal deficits of many (particularly less well-off states) are structural. Hence, shortfalls in revenue may persist. If that is the case then state governments may have to increase their public expenditure to attract votes, thus increasing their fiscal deficits. This will, in turn, place additional demands on transfers from the central to the state government and exacerbate pressures on the central government's fiscal deficit.

Hence, whereas the efficiency case for switching over to a GST regime was strong there were several operational caveats to be considered. The fiscal federalism structure of the country needed to be sensitive to such concerns and, in particular, needs to look beyond and modify the formulae determining transfers from the central to state governments.

IV. The Structure of the GST: Base, Rate and devolution of proceeds of GST collections

The GST, which replaced several indirect taxes, both central and state, is a comprehensive, destination-based and multi-stage tax that is levied on every value addition. It was implemented on 1 July 2017 through the 101st amendment to the Constitution of India.[6] Prior to the implementation of the GST (1st July 2017) each state was using its own VAT. Thus, the tax system was fragmented with similar goods being taxed at different rates in different states whence there was considerable cascading of taxes. To collect more revenue some states imposed "entry taxes" or octroi on goods coming from other states. It was routine to see a long convoy of

[6] The constitutional amendment was necessary because before this amendment the constitution did not permit co-occupation of the same tax base by state and union governments.

trucks often at entry points at state borders often waiting between 8-12 hours to pay these "entry" taxes and comply with paperwork. All this was done away with when the GST was imposed.

The 2017 GST tax reform is a system is a set of laws consisting of the following: (a) four central laws, (b) the Central Goods and Services Tax (CGST) Act, the Integrated Goods and Services Tax (IGST) Act, the Union Territories Goods and Services Tax (UTGST) Act, along with the relevant state laws (twenty-four in number). In addition, the GST system includes another central law the Goods and Services (Compensation to States) Act, which allows state governments to levy additional taxation (mainly on luxury and demerit goods) to compensate them for any loss of revenue because of the imposition of the GST. In addition, there is a GST Compensation Fund from which state governments can be compensated for loss of revenue due to the imposition of the GST. Originally, this Compensation Fund was to be operative until 2022, but due the unusual circumstance of the pandemic, this arrangement has been extended to 31 March 2026. Since the GST system requires coordinated action between the centre and states any change can be brought about only by the centre and states acting together through a newly created GST council.[7] Members of this council are the Finance Ministers of all the states as well as the Union Finance minister.

In simple terms, the GST is an indirect tax that is levied on the supply of all goods and services. It is one tax structure that is applied with a common base and rates all across the country. In essence, then, GST is a system replacing many central and state indirect taxes on the same base with a country-wide common framework and minimizes complexity. The GST system largely uses five rates of taxation (0%, 5%, 12%, 18% and 28% and additionally 0.5 % for precious

[7] (Late) Arun Jaitley who was union Finance Minister at the time of the imposition of the GST described the GST Council as India's first truly federal institution.

stones and 3% for gold) along with several exemptions.[8] The union government and each concerned state apply half the tax rate applicable to the sale. The new GST system removes any taxation on inter-state movement of goods. Hence, there are minimum tax-zbased restrictions on trade. India is now fast becoming an integrated common market.[9] The new system also improves tax compliance by requiring strong data reporting requirements digitally and cross-matching of the reported data.

In the case of sales that involve buyers and sellers across different states or in the case of exports the entire rate is applied on the sale and the relevant law applied is the IGST Act. There are several exempted sales and exports are zero-rated.

The union and state governments jointly administer the GST. This includes the powers to administer and audit. To support and facilitate this a shared IT framework called the GST Network, or GSTN, has been adopted. Risk-based selection mechanisms chosen through Artificial Intelligence methods help in maintaining the integrity of the tax network. In doing so it would also support the functions of the Central and State Tax administrations.

Prior to the implementation of the GST exporters did not pay VAT on their inputs that were imported. Under the GST regime exporters are required to pay GST taxes on all inputs including imported inputs and these taxes can be credited. As exports are zero-rated the entire tax so collected is returned to the exporter. But this refund will only be available only if all the input taxes are deposited by the suppliers of these inputs. Exporters are also required to collect tax on

[8] However, as the Appendix Table indicates, the rate structure has not been stable and the GST rate applicable to many goods has changed over time.
[9] Van Leemput (2016) has shown that the welfare gains from internal trade liberalisation in India are higher than those from external trade liberalisation.

exports as if it were a domestic sale if they do not have a Letter of Undertaking or Bond. Implementing this process faced several challenges given the size and scale of India's federal economy. Successive report from the Comptroller and Auditor General (CAG) noted gaps in the implementation phase, particularly on the compliance burden on businesses and the need to simplify verification processes. These teething problems are expected in reforms to large and complex systems such as India's indirect tax system. Other challenges include the poor availability of the GSTN system, non-availability of certain forms and formats. Most of these issues are transitory in nature and have reduced over time. There has also been confusion arising from the multiplicity of tax rates – sometimes on closely related products. As the Appendix Table shows these rates have often been revised. For genuine long-term reform of the GST the number of GST tax rates will need to be reduced.

In addition, there are several exemptions – introduced for political economy and other reasons – that need to be rationalized for the tax to be more consistent and realise its objectives. For instance, the real estate sector is currently out of the purview of the GST and needs to be included. Similarly, the petroleum excise needs to be removed and the petroleum should be made taxable at an appropriate GST rate.

Ultimately, the impact of any tax reform is shaped by the specific design features, and importantly how the tax is administered. The tax administration system that underpins the GST needs be modernized. Modernising the tax administration – developing capacities and disaggregate databases to aid tax reform as has been a common refrain in India's fiscal policy debate (Asher, 2012). Further, entrenched issue around inter-jurisdictions within India's federal system need to be addressed. The risk of fraud, particularly in the context of exports, needs to be

addressed. Research on the impact of the GST, particularly incidence and progressivity analysis, need to be carried out.

V. Performance of the GST

The performance of the GST can be judged according to several criteria including (a) revenue yield, (b) incidence analysis, (c) progressivity analysis, (d)) impact on revenue position of state governments, particularly less well-off states, (e) success in integrating India into a common market. Accurate data on all these categories is not readily available. Table 6 provides aggregate information on GST collection since its inception in 2017.

Table 6 here.

Although GST collections are healthy and maintain an upward trend (except for the COVID19 period) tax collections are highly skewed. Public listed companies total just 0.62% of the entire taxpayer base but contribute roughly 35.29% of the total GST revenues. On the other side, proprietorships with a maximum of 80.18% taxpayer base contribute roughly 13.35% of the total revenue from GST. The contributions of public sector undertakings were also significant as they comprised only 0.02% of the taxpayer base but contributed 9.12% of the total GST revenue.[10]

An RBI report released in January 2023 stated that if the compensation to state governments for shortfall in revenue were terminated in July 2022 the economies of half-a-dozen were set to be “most severely affected". Further, at least 10 states, including Karnataka, Tamil Nadu,

[10] For more GST statistics refer to the GST portal https://www.gst.gov.in/download/gststatistics

Maharashtra, Gujarat and Uttarakhand, are expected to fall short of the expected 14% GST growth, as per their budget estimates.

"*During the five-year transition period, the top five compensation-receiving states were Maharashtra, Karnataka, Gujarat, Tamil Nadu and Punjab. However, the states which are likely to be most adversely affected by the end of the compensation regime are Puducherry, Punjab, Delhi, Himachal Pradesh, Goa and Uttarakhand, for which the share of GST compensation in tax revenue has exceeded 10% of an average, Table 7 provides some details on GST compensation that has been paid to state governments and union territories with legislatures*.

Table 7 here.

However, these the flow of these revenues can only fully be understood in the context of fiscal transfers to various states (Table 8 provides a full description of the transfers to various states for the coming financial year, 2023-24).

Table 8 here.

Under the guidelines of the 15th Finance Commission the central government needs to share 41% of the shareable proceeds of central taxes.

VI. Structure of Transfers from the Central Government to State Governments

Central assistance to state governments occurs through three major channels: (i) Finance Commission Transfers, (ii) Planning Commission Transfers, and (iii) Centrally Sponsored Schemes. The FC is a Constitutional Body, set up every five years to advise the Government of

India on the sharing of central taxes, is the principal means of federal transfers. The FC is answerable to the Parliament.

PC transfers are meant to augment productive capacity and work towards reducing inter-state disparities in economic outcome. The PC is not accountable to Parliament. The PC was set up through an executive order and its discretionary mandate was expanded in 1970s and this involved some dilution of the Finance Commission's constitutional mandate. Among the 28 states of India PC transfers distinguish between special and general category states. The special category states are i) Arunachal Pradesh, ii) Assam, iii) Himachal Pradesh, iv) Jammu and Kashmir, v) Manipur, vi) Meghalaya, vii) Mizoram, viii) Nagaland, ix) Sikkim, x) Tripura, and xi) Uttaranchal. These states have the common characteristics that they are remote (typically these are border states) and would have low potential GDP growth without the help of the Central government. Finally, there are a number of Centrally Sponsored Schemes which are carried out under the auspices of the central government.

Finance Commission Transfers

One of the principal reasons for FC transfers in a federal country is that in the absence of such transfers horizontal equity across states will be compromised. The basic argument in favor of this was put forward by Buchanan (195) and Boadway and Flatters (1982). Thus, income taxes levied by the central government cannot ensure horizontal equity across states since they ignore that redistributive effects of States' fiscal operations. Further, in a country with regional inequality federal transfers will be necessary to ensure broad equality of access to public goods in various parts of the country. Thus, there is a clear rationale for FC transfers.

With respect to the FC transfers the first issue to be considered is the share of central government tax collections and grants in state governments' revenue. Table 9 shows that between 1984-89 and 2009-10 this share first rose (peaking during the period of the 10th Finance Commission, i.e., 1995-2000) and then tapered off to a value, in 2009-10, just above that during 1984-89 but lower than the mean value for the entire period. However, this share has remained broadly unchanged with a coefficient of variation between 1984-89 and 2009-10 of just 0.05. The share of grants in states' total revenue from the centre more than doubled between 1984-89 and 2005-06 (the first year of the 12th FC) before tapering off. However, this value in 2009-10 was substantially higher than during 1984-89 and the mean value for the entire period. As a result, the coefficient of variation of grants over this time period is much higher compared to that of states' revenue from taxes shared (0.26 compared to 0.05). The share of total FC transfers in total central transfers to states hovers around the 2/3 mark. This share rose from 1984-89 (value 60.13) per cent to 2005-06 (value 71.94 per cent) and then fell. Its value in 2009-10 was higher than that in 1984-89 but below the mean value for the entire period. The coefficient of variation over this period was low at 0.06.

The Thirteenth Finance Commission has noted that states have been asking for augmentation of their share in central taxes.[11] Table 9 reveals that over the period 1984-89 to 2009-10 the share of states in central taxes rose to a peak in 2008-09 and then fell, although the latter figure was marginally higher than its value during 1984-89 but lower than the mean for the period 1984-89 to 2009-10. Since the 13th Finance Commission this has maintained an upward trend until 2018-19 but then dropped marginally in 2019-20 and for the award period of the 15th FC. There seems

[11] Although proceeds from most central taxes are included in the pool that is distributed to states revenue from central government cesses (such as the education cess) is not included. The Thirteenth Finance Commission Report , for instance, provides detailed justification for this omission. This practice goes back to the days before the tenth FC when revenue from some taxes were not shared with central governments.

to be considerable stability in the share of central taxes going to states.[12] Outright grants peaked in 2005-06, its value in 2009-10 was higher than that in 1984-89 and the average for the period and the coefficient of variation over the period 1984-89 to 2009-10 was much higher than that of states' share in central taxes (0.26 compared to 0.05).

Table 9 here.

Table 9 leads to some interesting conclusions. The share of central taxes going to states as well states' share in central taxes has remained relatively stable over a 35+ year period. Grants, although marginal in comparison to share in central taxes, are playing a larger role in fiscal transfers. Indeed various Finance Commission reports have advocated the need for stability in central government transfers to states.

This stability, particularly in FC transfers, is all the more surprising since the criteria for FC transfers to states has changed considerably over time. Table 10 depicts the criteria for federal transfers in the last five FCs.

Table 10 here.

The first argument in the transfer function, the population of the state in the 1971 Census of India, clearly needs to be updated in view of major changes in state population growth since 1971. The weight of population in 1971 has ranged from 10 per cent in the 11th FC to 25 per cent in the 12th and 13th FCs. In the 14th FC this share fell to 17.5. Population in in 2011 had a weight of 10% in the 13th FC, 15% in the 14th FC and 15th FC.

[12] Indeed reports of various Finance Commissions have emphasized the importance of stability in FC transfers.

The second argument in the transfer function is Income Distance as a proxy for the fiscal capacity of individual states. The 12th FC measured this by applying a single average tax/GSDP ratio to individual state per capita GSDPs to measure the fiscal capacity distance between states. This argument was substituted for in the 13th FC by a fiscal capacity distance computed as follows. First, three year average per capita GSDPs were worked out for individual states for the years 2004-05 to 2006-07. Second, average tax to comparable GSDP ratio was computed as a weighted mean separately for general category and special category states. These averages are then applied to all states in each of the two categories. This enables one to calculate the potential per capita tax revenue in each state available at the average tax to GSDP ratio. Fiscal distance is obtained for each state as the difference between the potential per capita tax revenue of that state and that of Haryana, the state with the highest per capita tax revenue after Goa. Income distance had a wright of 50 per cent in the 14th FC and 45 per cent in the 15th FC.

Another argument in the transfer function (index of fiscal discipline) is arrived at by relating improvement in ratio of a state's own revenue receipts relative to its total revenue expenditure compared to average ratio across all states. The "area" criterion got a weight of 10 per cent. Small states with less than 2 per cent share in total area of the country were deemed to have an area of 2 per cent.

Infrastructure index, tax effort and income distance were not used as elements of the fiscal transfer function in the 13th FC. It can be argued that the omission of the income distance measure is not a major omission since a proxy is incorporated in the Gadgil-Mukherjee formula

for disbursements by the PC. The omission of the infrastructure index and tax effort is an issue of concern since these factors certainly affect the tax collected by states.[13]

Planning Commission Transfers

India's planning heritage goes back to the First Five Year plan (1951-56) and for a long while, at least until the economic reforms of 1991, planned economic development was a key element of India's economic strategy. The "socialistic" pattern of economic development was ingrained in the Second Five Year Plan. The 11th Five Year Plan completed its term in March 2012 and currently the country is going through the 12th Five Year Plan. (2012-2017). In actual practice FC transfer ceased after the election of the Modi government in 2014.

Table 11 gives the evolution of the formula (known as the Gadgil-Mukherjee formula) for disbursements of PC assistance to states. These transfers are heavily geared towards redistribution to less well off states.

The Special Category States are supposed to receive a pre-determined share (30 per cent). The dominant factor in the division of the rest of the funds among the states is population. Per capita income is the next most significant argument with a quarter of this weightage arising from the "distance" argument already discussed. The performance of states with respect to national priorities such as population control, elimination of illiteracy, on time completion of externally aided projects, and tax effort each get a weight of 2.5 per cent in the latest version of the formula whereas special problems of states get a weight of 7.5 per cent.

[13] There is the further issue of whether the infrastructure index and tax effort, as computed and used by earlier FCs, are meaningful indicators of tax effort (Jha et.al. 1999) and the availability of infrastructure.

Table 11 here.

Table 12 indicates some basic characteristics of PC grants (in nominal and real terms) to State governments. It distinguishes between the 11 special category states and the 17 general category states. RSD11 (the standard deviation of real transfers to special category states) has more than doubled during the period 2002-03 to 2012-13 and Rtotal11 (the total of real transfers to 11 special category states) has gone up by about 2.5 times over the same period. RSD17 (the standard deviation of real transfers to general category states) has, however, shown no real trend. It fell between 2002-03 and 2007-08 and rose thereafter. What is worth noting is that Rtotal17 (the total of real transfers to 17 general category states) has actually fallen over this period. There is a rise in Rtotal28 (the total of real transfers to all 28 states) but this is accounted for by the increase to special category states. The share of general category states in total transfers has fallen steadily from 80.90 per cent in 2002-03 to 62.71 per cent in 2012-13.[14]

Table 12 here.

The Gadgil-Mukherjee formula has been widely criticized for the following reasons. (i) The designation of 30 per cent of the funds to the Special Category states has no explicit rationale. This division was initially meant to cover revenue expenditure on plans and has long since become irrelevant. (ii) Further, shares of transfers based on tax effort are unscaled for size of state. Thus if a large state and a small state have the same tax effort they will receive the same absolute transfer so that the per capita transfer to the small state will be very large in comparison to that for the large state. (iii) There is considerable arbitrariness in the allocation of funds to

[14] It is hardly surprising, therefore, that there is a clamor among some relatively less well-off states, such as Bihar, to have the criteria for special category state tweaked in order to gain entry.

individual special category states from the 30 per cent share allocated to them. (iv) The formula does not monitor costs and benefits of programs already executed in states so that performance in plan expenditure has no impact on the transfer formula used by the PC (Rajaraman, 2007).

Further, there are several issues related to the interaction of transfers through FC and PC. Transfers through FC and PC follow different rules and are uncoordinated. Whereas FC is answerable to the Parliament, PC is not. This is an inefficiency in the system of transfers. Not only is the coordination of current transfers through FC and PC important but there are intertemporal issues to be considered as well since any plan transfer generates three major liabilities for periods beyond the Plan: interest payments on funds borrowed for financing the Plan, maintenance of assets created during the Plan, and salaries of people employed in Plan schemes who remain in government employment after the plan has ended. To service these liabilities after the Plan is over states often look to the FC. This then generates dependence over time between PC and FC which the current structure of transfers does not recognize. The FC is interested only in the non-Plan revenue expenditures whereas the PC only looks at new schemes. The current financial implications of previous Plan expenditures are ignored by both agencies. This lack of coordination, therefore, sets up a system of perverse incentives for both FC and PC.

Another complication with PC transfers is that they mix grants and loans. In principle, these disbursements should be guided by different procedures. When resources are deficient but the social benefits from a project are large, e.g., primary health, education etc., resources should ideally be transferred through grants. With a loan the ability of the state to service the repayments of the loan should also be a key concern. But, the structure of PC grants has not laid down explicit criteria for making such distinctions.

The artificial dichotomy between Plan and non-Plan expenditures also induces a number of inefficiencies. There is an undue emphasis on taking up new schemes, while uncompleted projects of the past Plans and maintenance of assets acquired in the past get little attention. In effect, Plan schemes, as originally envisaged cannot be taken up fully, because the contemplated "balance from current revenues" (BCRs) are often not realized. Plan finances are diverted to non-Plan items, and time overruns increase costs. As a result, many schemes remain half done. The maintenance and efficient operation of existing projects is given inadequate attention.

Any coordination of the FC and PC transfer criteria must recognize that FC and PC transfers are performing entirely different tasks. FC's primary traditional role is to provide equalization transfers to states so that states with relatively similar tax capacity and tax effort get similar public goods outcomes. PC transfers, on the other hand, attempt to equalize over time some indicator of development, e.g., per capita GSDP, across states. Hence, the equalization criterion used for PRC transfers must be different from that used in FC transfers. A high powered body that transcends both the FC and PC should be constituted to look into these issues as well as to provide a forum for states to discuss not just the vertical issue of state-central fiscal policy but also the horizontal issue of coordination of fiscal policies across states. In this context Singh and Srinivasan (2013) advocate the formation of a Fiscal Review Council analogous to the Trade Policy Review Mechanism of the World Trade Organization (WTO).[15] Indeed they go one step

[15] Indeed Singh and Srinivasan (2013) emphasize that such coordination and setting the parameters of centre state transfers on an even keel is essential for macroeconomic stability. In the past Argentina paid a high cost for ignoring this.

ahead and advocate the concentration of federal transfers with the FC with PC transfers being used for facilitating private investment in states. This proposal has much to commend itself.

Centrally Sponsored Schemes

Centrally Sponsored Schemes (CSS) represent yet another form in which central assistance is given to states. Starting with the Second Five Year Plan funds were provided under CSS to States. These CSS were then implemented by states as part of their plan. But, the pattern of financing of these CSS has varied considerably over time. Thus, in the Fourth Five Year Plan there were 90 CSS of which 59 were eligible for 100 per cent funding, 12 for 75 per cent funding 3 for 60 per cent funding and 15 for 50 per cent funding. As Report of the Committee on Restructuring of Centrally Sponsored Schemes (2011) reveals this variation of sources of funding for CSS has persisted over time. As Table 13 indicates the proportions of CSS to other central assistance is high and has grown over time.

Table 13 here.

Clearly the CSS route of the centre influencing state expenditures appeals for its rationale to the "Concurrent" list of the Constitution of India and ambiguities therein. Table 14 indicates the overwhelming importance of CSS in successive five year plans of India whereas Table 15 indicates that, despite the number of CSS coming down, expenditure on CSS has grown very significantly both in nominal and in real terms.[16]

[16] Much of the recent growth in CSS expenditure has been on account of relatively new programs such as the National Rural Employment Guarantee Schemes, Pradhan Mantri Gram Sadak Yojana, Sarva Shiksha Abhiyan and the like.

Tables 14 and 15 here.

State governments naturally view CSS as an infringement on their rights and argue for their curtailment. The 2011 Report of the Committee on Restructuring of Centrally Sponsored schemes argued that smaller CSS should be handed over to the states and recommended the re-classification of other CSS into three broad categories: (i) Flagship schemes[17], (ii) Sub sector scheme where the core element would be supported by the Centre and segments for operation by states could be identified. The report was of the opinion that such sub-sectoral schemes could be particularly in areas such as Education, Animal Husbandry and Health. (iii) Umbrella schemes which are basically small scale schemes. It was recommended that the Central ministries would provide guidelines for the operation of the umbrella schemes (in order to provide uniformity of standards across the country) with the actual operation being conducted by state governments.

The report is, however, silent on how the CSS would fit in with FC transfers and other PC transfers. It also does not deal with spillover effects of CSS. The take away message from this analysis is that not only the structure of indirect taxation but also that of intergovernmental transfers needs overall coordination. At the present point in time lack of clarity on this point leads to the possibility of arbitrariness (particularly political expediency) creeping into the transfer criteria.

VII. Transfers to Panchayati Raj Institutions and Urban bodies

Panchayati Raj Institutions (PRI) form the third tier of India's federal structure and are seen as key to delivering local public goods to Indian villages. In its submission to the 13th FC the

[17] The criteria for identifying a "flagship scheme" are unclear. In 2011 the PC recognized 15 flagship schemes.

Ministry of Panchayati Raj highlighted the importance of PRI in implementing many CSS as well as programs of individual state governments. While the PRI have considerable funds to implement CSS they lack funds for conducting their own administration. In this connection the Ministry asked for 4 per cent of the divisible funds allocated to local bodies be given to PRI for the construction of village infrastructure. Another 1 per cent was to be given as a specific purpose grant-in-aid to panchayats for preparation of data bases and incentivizing state governments to empower panchayats. Table 16 provides details of disbursements to PRI in 2010-11 and 2011-12.

Table 16 here.

For 2010-11 and 2011-12 Table 16 depicts basic grants to states under two headings: General areas and Special areas. General purpose grants are of much larger magnitude than special purpose grants but overall transfers to PRI are relatively modest in comparison to FC and PC grants to states. However, there has been a substantial increase in (real and nominal transfers) over the period 2010-11 to 2011-12. As expected large states get larger shares with that of Uttar Pradesh being dominant.

Gants to municipalities are in a "highly unsatisfactory state" (Mathur, 2013, pg. 23). The Eleventh Finance Commission earmarked Rs, 2,000 crores for municipalities, the Twelfth FC allocated Rs,. 5,000 crores and the Thirteenth Commission Rs. 8,000 crores. The 11th and 12th FCs allocated a fixed amount whereas the 13th FC advocated that a fixed percentage of the divisible pool be given to all states as a grant. Municipal expenditure as a percentage of GSDP was only 1.08 in 2002-03, rising to a meager 1.24 in 2007-08.

However, there have been very few objective evaluations of the impact of two-tier, let alone three-tier decentralization on balanced regional growth. Kalirajan and Otsuka (2012) show that whereas two-tier decentralization (between centre and states) has been helpful in fostering growth through health and education expenditures. However, the performance of PRI and other local bodies has been dismal.

Conclusions

This paper has provided a broad overview of fiscal issues facing various levels of government in India. In a society as complex and varied as India's fiscal federalism is an essential element of the economic landscape. Already it is becoming clear that states are the new engines of India's economic growth. Thus, the *Economist Intelligence Unit* in a report dated 25th June 2013 argued that during 2011-12 over 80 per cent of states had GSDP growth rates of above 6 per cent when he national growth rate was 6. 2 per cent and that this trend is likely to continue. Some traditionally laggard states have been growing well above the national average indicating that nurturing state level economic growth can have considerable payoffs for national economic growth and, hence, poverty reduction.

These factors underscore the benefits of putting centre-state fiscal relations on an even keel to encourage buoyant economic growth. Concurrently, the risks of having adverse incentives in fiscal relations can risk economic crises as the example of Argentina suggests.

Reform of fiscal federalism in India is an on-going process and is currently facing the twin additional challenges of moving to a harmonized central and state GST and addressing a persistent fiscal deficit level problem at both central and state levels. Indeed there is

apprehension, at least on the part of states, that moving to a GST will exacerbate their fiscal deficits and compromise their revenue flexibility.

Against this background this paper has underscored the substantial spatial disparities across India. It has evaluated the case for putting together (various versions) of the GST and also indicated the risks involved in the process. This paper argues that, on balance, there is a case for an appropriately constituted GST but that the federal transfer formula must be sensitive to any fallout from such a move.

The paper also argues that there is an urgent need to review the totality of transfers from the central to state governments and local bodies. This review would include transfers through FC, PC and CSS. There is a compelling necessity to review and recalibrate the entire gamut (and not piecemeal) of federal relations – tax, expenditure and transfers. This is critical to ensure the stability and predictability needed to ensure that India's state driven growth blossoms and attains full fruition.

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Table 1 - – Characteristics of real per capita SGDP at constant prices

Panel A			
Year	Mean per capita SGDP	Standard Deviation	Coefficient of Variation
2004-05	29892.12121	15879.8317	0.531238034
2005-06	32024.48485	17410.82353	0.543672244
2006-07	34522.39394	18907.92646	0.547700327
2007-08	36761.48485	19599.60976	0.533156097
2008-09	38912.15152	20608.45818	0.529614976
2009-10	42115.51515	22250.38166	0.528317927
2010-11	45132.75758	23808.17535	0.527514307
2011-12	47331.72727	25637.10887	0.541647439
2012-13	49303	26613.9802	0.539804478
2013-14	51909.45455	27994.32036	0.53929136
2014-15	48136.86957	26492.18929	0.550351311
Panel B			
Year	Mean per capita PCGDP	Standard Deviation	Coefficient of variation
2011	83298.90909	49355.73555	0.592513589
2012	85002.90909	46385.84992	0.545697205
2013	88365.18182	45703.48434	0.517211456
2014	93983.45455	51199.38507	0.544770197
2015	100861.6061	57686.54352	0.571937586
2016	108496.3333	62240.04919	0.573660393
2017	115232.1212	64925.67092	0.563433791
2018	120815.785	66453.50063	0.550039886
2019	124220.8182	67974.95901	0.547210685
2020	116228	64354.16247	0.553688977
2021	122734.0952	64043.87177	0.521809947

Source Panel A "Computed from data from Handbook of Statistics on the Indian Economy

RBI" . All the values are in INR. Base year for the above data is 2004-05

Panel B: Characteristics of real per capita SGDP at constant prices 2011-12 base. Computed from data from Handbook of Statistics on the Indian Economy.

Table 2 : Percentage gap between mean real SGDP between richest and poorest state – Alternative measure

Year	G1	G2	G3
2004	237.865	96.34146	2633.333
2005	218.2612	95.4955	2120
2006	203.4886	95.05814	1923.529
2007	188.1629	94.54023	1731.579
2008	196.7864	99.42693	17350
2009	183.3041	98.86364	8700
2010	183.8822	99.11243	11166.67
2011	171.8312	98.49397	6540
2012	169.931	97.95918	4800
2013	165.581	97.71429	4275
2014	149.6907	99.71671	35200
SGDP with base year 2011			
2011	160.3332	99.42693	17350
2012	166.044	97.66082	4175
2013	190.8353	98.84393	8550
2014	215.3846	99.11504	11200
2015	209.0699	99.69697	32900
2016	195.6983	96.54179	2791.667
2017	203.1624	97.91666	4700
2018	190.3067	94.54023	1731.579
2019	175.8732	93.67088	1480
2020	190.1093	94.85714	1844.444
2021	131.8809	88.57143	775

Notes : G1 "Gap between real NSDP of richest and poorest state as percentage of mean real NSDP across all states"G2 "Gap between real NSDP of richest and poorest state as percentage of real NSDP of richest state"
G3 "Gap between real NSDP of richest and poorest state
as percentage of real NSDP of poorest state"
Source "Computed from data from Handbook of Statistics on the Indian Economy, RBI"

Table 3: Ranking of States according to HDI Value					
Region	2005	2010	2015	2020	2021
Andaman and Nicobar Islands	0.714	0.7	0.726	0.715	0.706
Andhra Pradesh	0.526	0.574	0.631	0.639	0.63
Arunachal Pradesh	0.53	0.635	0.664	0.674	0.665
Assam	0.526	0.56	0.599	0.606	0.597
Bihar	0.465	0.508	0.558	0.578	0.571
Chandigarh	0.658	0.643	0.737	0.755	0.744
Chhattisgarh	0.581	0.566	0.595	0.614	0.605
Dadra and Nagar Haveli	0.702	0.688	0.665	0.628	0.62
Daman and Diu	0.682	0.669	0.693	0.67	0.661
Goa	0.668	0.731	0.758	0.761	0.751
Gujarat	0.569	0.599	0.654	0.646	0.638
Haryana	0.587	0.628	0.689	0.701	0.691
Himachal Pradesh	0.641	0.661	0.707	0.713	0.703
Jammu and Kashmir	0.583	0.636	0.677	0.709	0.699
Jharkhand	0.582	0.567	0.585	0.597	0.589
Karnataka	0.561	0.599	0.662	0.676	0.667
Kerala	0.675	0.709	0.763	0.762	0.752
Lakshadweep	0.724	0.71	0.735	0.725	0.715
Madhya Pradesh	0.495	0.531	0.585	0.604	0.596
Maharashtra	0.598	0.638	0.683	0.698	0.688
Manipur	0.593	0.674	0.698	0.687	0.678
Meghalaya	0.528	0.613	0.651	0.651	0.643
Mizoram	0.626	0.679	0.7	0.697	0.688
Nagaland	0.553	0.654	0.682	0.679	0.67
New Delhi	0.685	0.702	0.734	0.74	0.73
Orissa	0.489	0.529	0.586	0.605	0.597
Puducherry	0.75	0.736	0.734	0.736	0.726
Punjab	0.611	0.651	0.706	0.703	0.694
Rajasthan	0.505	0.542	0.606	0.647	0.638
Sikkim	0.587	0.628	0.695	0.711	0.702
Tamil Nadu	0.596	0.641	0.693	0.695	0.686
Telangana	0.646	0.631	0.654	0.656	0.647
Tripura	0.557	0.602	0.646	0.637	0.629
Uttar Pradesh	0.498	0.528	0.577	0.6	0.592
Uttaranchal	0.65	0.634	0.666	0.681	0.672
West Bengal	0.534	0.567	0.622	0.633	0.624

Data Source - Global Data lab

Table 4: FDI Equity (Equity capital and component) Inflows to Indian states										
	2008-09	2009-10	2010-11	2011-12	2008-09	2009-10	2010-11	2011-12	2017-18	2018-19
Maharashtra	12,431	8,249	6,097	9,553	45.5	31.9	31.4	26.2	13,423	11,383
Delhi	1,868	9,695	2,677	7,983	6.8	37.5	13.8	21.9	7,656	10,142
Karnataka	2,026	1,029	1,332	1,533	7.4	4	6.9	4.2	8,575	6,721
Gujarat	2826	807	724	1 001	10.3	3.1	3.7	2.7	2,091	1,803
Tamil Nadu	1,724	774	1,352	1,422	6.3	3	7		3,475	2,613
Andhra	1,238	1,203	1,262	848	4.5	4.7	6.5	2.3	1,246	3457
West Bengal	489	115	95	394	1.8	0.4	0.5	1.1	218	1,229
Chandigarh	0	224	416	130	0	0.9	2.1	0.4	108	618
Goa	29	169	302	38	0.1	0.7	1.6	0.1	43	16
Madhya Pradesh	44	54	451	123	0.2	0.2	2.3	0.3	28	32
Kerala	82	128	37	471	1.3	0.5	0.2	1.3	208	257
Rajasthan	343	31	51	33	0.3	0.1	0.3	0.1	117	363
Uttar Pradesh	0	48	112	140	0	0.2	0.6	0.4	90	34
Odisha	9	149	15	28	0	0.6	0.1	0.1	65	69
Assam	42	11	8	1	0.2	0	0	0	13	7
Bihar	0	0	5	24	0	0	0	0.1	10	0.03
Region not indicated	4,181	3,148	4,491	12,782	15.3	12.2	23.1	35	7,491	5,624
Total	27,332	25,834	19,427	36,504	100	100	100	100	44,857	44,366

Table 4-Contd

STATES/UTs ATTRACTING HIGHEST FDI EQUITY INFLOWS	2019-20	2020-21	2021-22	2021-222	Percentage Inflow
				Cumulative	
	Amt. in Rupees Crores/ Amt. in	(October March)	(April March)	(Cumulative April December)	Inflows in terms of US$)
MAHARASHTRA	Rupees in crore	52,073	1,19,734	71,858	26%
	US$ Million	7,263	16,170	9,693	
KARNATAKA	Rupees Crores	30,746	56,884	1,27,565	23%
	US$ Million	4,289	7,670	17,255	
GUJARAT	Rupees Crores	18,964	1,62,830	15,321	21%
	US$ Million	2,591	21,890	2,058	

DELHI	Rupees Crores	28,487	40,464	47,343	13%
	US$ Million	3,973	5,471	6,396	
TAMIL NADU	Rupees Crores	7,230	17,208	17,696	5%
	US$ Million	1,006	2,323	2,378	
HARYANA	Rupees Crores	5,198	12,559	15,151	4%
	US$ Million	726	1,697	2026	
TELANGANA	Rupees Crores	4,865	8,618	9,569	2%
	US$ Million	680	1,155	1,289	
JHARKHAND	Rupees Crores	13,208	5,993	3	2%
	US$ Million	1,852	792	0.42	
RAJASTHAN	Rupees Crores	1,347	2,015	3750	1%
	US$ Million	189	272	504	
WEST BENGAL	Rupees Crores	1,363	3,115	2,358	1%
	US$ Million	190	415	316	

Table 5 a– Debt position of Individual states

State/Union Territory										
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2016-17	2017-18	2018-19	2019-20
Andhra Pradesh	30.9	30.3	29.6	28.9	28.2	27.6	28.1	28.5	26.6	29.8
Arunachal Pradesh	64	61.3	58.2	55.2	52.5	50.1	31.8	28.3	32.1	34.9
Assam	28.1	28.2	28.3	28.4	28.4	28.5	17.1	17.3	17.4	18.8
Bihar	49.4	48.2	46.4	44.6	43	41.6	31.4	32.9	33.4	31.9
Chandigarh										
Chhattisgarh	21.3	22	22.5	23	23.5	23.9	16.8	17.6	19.3	22
Delhi										
Goa	33.7	33	31.9	30.8	29.9	29.1	28.3	26.7	26.8	27.9
Gujarat	30.1	29.4	28.8	28.1	27.6	27.1	21.5	20.8	19.3	19
Haryana	22	22.4	22.6	22.7	22.8	22.9	24.4	26.1	25.3	25.1
Himachal Pradesh	52.1	49.7	47	44.4	42.1	40.1	36.1	37.6	36.9	35.3
Jammu & Kashmir*	56.4	56.1	55.1	53.6	51.6	49.3				
Jharkhand	29	29	28.5	27.8	27.3	26.9	27.4	28.3	28.6	28.2
Karnataka	25.9	26.2	26	25.7	25.4	25.2	16.8	17.5	17.2	17.5
Kerala	33.2	32.8	32.3	31.7	30.7	29.8	28.6	29.9	30.6	30.9
Madhya Pradesh	38.8	38.4	37.6	36.8	36	35.3	25.3	23.7	23.8	23.9
Maharashtra	26.4	26.3	26.1	25.8	25.5	25.3	17.9	18	18.1	16.6
Manipur	68.9	65.8	62.9	60.1	57	54.3	41.6	41.4	37.1	37.5
Meghalaya	33.5	33.1	32.7	32.3	32	31.7	28.5	32.7	32.1	31.7
Mizoram	87.5	87.3	85.7	82.9	79.2	74.8	42.3	39.1	39	37.5
Nagaland	57.7	56.8	55.8	54.9	53.5	52.3	45.7	44	42.5	42.7
Odisha	31.5	31	30.6	30.2	29.8	29.5	18.2	18.2	22.1	22
Punjab	43	42.5	41.8	41	39.8	38.7	33	42.7	41.4	40.3
Rajasthan	41.5	40.4	39.3	38.3	37.3	36.5	30.7	33.5	33.7	33
Sikkim	71.8	68.4	65.2	62.1	58.8	55.9	22	22.6	21	22.1
Tamil Nadu	23.6	24.1	24.5	24.8	25	25.2	19	21.8	22.3	22.6
Telangana							17	20.5	22	22.9
Tripura	44.9	45.2	44.9	44.6	44.2	43.8	27.5	28.5	29.5	29.7
Uttar Pradesh	49.9	48.7	46.9	45.1	43.4	41.9	32.3	32.8	32	31.1
Uttarakhand	43.3	42.2	41.1	40	38.5	37.2	22.1	22.8	23.3	23.6
West Bengal	42	40.6	39.1	37.7	35.9	34.3	38.4	38.7	37	36.1

Data Source - Raghbendra Jha (2013) . Recent numbers are from Fifteenth finance commission report

Table 5b: Debt indicator of Union government

Year	Central government debt, total (% of GDP)
1990	50.78325379
1991	50.01008036
1992	49.68090136
1993	51.75980829
1994	49.5942827
1995	47.4916413
1996	45.7233077
1997	50.36543613
1998	50.31921817
1999	51.35295144
2000	55.0042465
2001	59.0179098
2002	62.5527713
2003	62.1900539
2004	62.59297674
2005	62.2265261
2006	59.66673028
2007	57.49753639
2008	57.29221428
2009	55.25644611
2010	51.5919103
2011	51.55655366
2012	50.67803055
2013	50.31182736
2014	49.90092487
2015	49.96471839
2016	47.63375559
2017	47.58360938
2018	46.52249867

Data Source- World Bank Indicators

Table 6 GST Collection (Rupees in crores)

Year	GST Collection (Rs in crores)
2017-18	7,19,078
2018-19	11,77,370
2019-20	12,22,117
2020-21	11,36,803
2021-22	14, 76, 000

Source: GST Statistics. Government of India.

Table 7: GST Compensation, Cess Collection and Compensation Payment to States/UTs with Legislature (Rs. Crore)

Item	2017-18	2018-19	2019-20	2020-21	2021-22
GST Compensation cess collection (A)	62,611.59	95,080.71	95,553.09	85,191.91	1,04,768.66
GST compensation released to states (B)	41,146.00	69,275.00	1,20,498.29	1,36,988.47	97,500.00
Balance amount in the GST compensation (A-B)	21,465.59	25,805.71	-24,945.20	-51,796.56	7,628.66
Source: Various Budget documents					

Table 8 : State-Wise Distribution of Net proceeds of Union Taxes and Duties for Budget Estimates 2023-24

(Rs. Crore)

State	Share (%)	Corporation Tax	Income Tax	Wealth Tax	Central GST	Customs	Union Excise duty	Service Tax	Grand Total
Andhra P	4.047	13230.89	12871.86	-0.34	13366.77	1311.32	549.22	8.30	41336.02
Arunachal P	1.757	5744.17	5588.30	-0.15	5803.17	569.31	238.44	3.60	17946.84
Assam	3.128	10226.39	9948.90	-0.27	10331.42	1013.54	424.50	6.41	31950.89
Bihar	10.058	32882.69	31990.41	-0.85	33220.39	3259.03	1364.97	20.62	102737.26
Chhattisgarh	3.407	11138.53	10836.28	-0.29	11252.92	1103.95	462.36	6.98	34800.73
Goa	0.386	1261.95	1227.71	-0.03	1274.91	125.07	52.38	0.79	3942.78
Gujarat	3.478	11370.65	11062.10	-0.30	11487.43	1126.95	472.00	7.13	35525.96
Haryana	1.093	3573.35	3476.39	-0.09	3610.05	354.16	148.33	2.24	11164.43
Himachal P	0.830	2713.53	2639.89	-0.07	2741.39	268.94	112.64	1.70	8478.02
Jharkhand	3.307	10811.60	10518.22	-0.28	10922.63	1071.55	448.79	6.78	33779.29
Karnataka	3.647	11923.16	11599.62	-0.31	12045.61	1181.71	494.94	7.48	37252.21
Kerala	1.925	6293.42	6122.64	-0.16	6358.05	623.74	261.24	3.95	19662.88
Madhya P	7.850	25664.06	24967.66	-0.67	25927.63	2543.58	1065.32	16.09	80183.67
Maharashtra	6.317	20652.21	20091.81	-0.54	20864.31	2046.86	857.28	12.95	64524.88
Manipur	0.716	2340.82	2277.31	-0.06	2364.86	232.00	97.17	1.47	7313.57
Meghalaya	0.767	2507.56	2439.52	-0.07	2533.31	248.53	104.09	1.57	7834.51
Mizoram	0.500	1634.65	1590.30	-0.04	1651.44	162.01	67.86	1.03	5107.25
Nagaland	0.569	1860.24	1809.76	-0.05	1879.34	184.37	77.22	1.17	5812.06
Odisha	4.528	14803.42	14401.73	-0.38	14955.45	1467.18	614.50	9.28	46251.18
Punjab	1.807	5907.64	5747.33	-0.15	5968.31	585.51	245.23	3.70	18457.57
Rajasthan	6.026	19700.85	19166.26	-0.51	19903.17	1952.56	817.79	12.35	61552.47
Sikkim	0.388	1268.49	1234.07	-0.03	1281.52	125.72	52.66	0.80	3963.23
Tamil Nadu	4.079	13335.50	12973.64	-0.35	13472.46	1321.69	553.56	8.36	41664.86
Telangana	2.102	6872.08	6685.61	-0.18	6942.66	681.10	285.26	4.31	21470.84
Tripura	0.708	2314.67	2251.86	-0.06	2338.44	229.41	96.08	1.45	7231.85
Uttar P.	17.939	58648.10	57056.67	-1.52	59250.41	5812.65	2434.50	36.78	183237.59
Uttarakhand	1.118	3655.09	3555.90	-0.10	3692.62	362.26	151.72	2.29	11419.78
West Bengal	7.523	24595.00	23927.60	-0.64	24847.59	2437.63	1020.95	15.42	76843.55

Total	100.00	326930.71	318059.35	-8.49	330288.26	32402.33	13571.00	205.00	1021448.16

As per recommendations of 15th Finance Commission the States' share has been fixed at 41% of the net proceeds of shareable Central Taxes.

Source: Budget documents 2023-24, Ministry of Finance, Government of India

Table 9– Percentage composition of revenue transfer from centre to states as percentage of gross revenue receipts to the centre

Years	Share in Central Taxes	Grants	Total FC Transfers2+3	Total other transfers()5+6	Total Transfers (4+7)	Total Transfers as percentage of GDP
FC-VIII(1984-89)	20.25	2.52	22.77	15.1	37.86	
"FC-IX(1989-95	21.37	3.42	24.79	15.55	40.33	
FC-X	22.22	2.34	24.56	11.24	35.79	
FC-XI	20.59	3.88	24.47	10.8	35.27	
FC-XII	21.75	4.45	26.2	12.31	38.51	
2005-06	21.71	5.69	27.41	10.69	38.09	
2006-07	21.97	5.11	27.08	10.85	37.93	
2007-08	21.88	3.8	25.68	11.53	37.21	
2008-09	22.17	3.83	26.01	13.56	39.57	
2009-10 E	21.1	4.42	25.52	13.84	39.35	
GDP: NSO (2011-12 series) and NSO back-series 2004-05 to 2011-12 (Base 2011-12)						
FC-XII	22.03	4.35	26.38	21.01	47.39	6.03
)						
FC-XIII	23.8	3.96	27.75	20.47	48.22	5.76
(2010-15)						
2010-11	21.68	3.12	24.79	23.87	48.66	6.45
2011-12	25.27	4.35	29.62	23.73	53.35	6.17
2012-13	24.84	3.86	28.7	19.96	48.66	5.74
2013-14	23.79	4.03	27.82	17.93	45.75	5.45
2014-15	23.41	4.28	27.7	18.57	46.27	5.35
FC-XIV	31.37	4.51	35.88	14.74	50.62	6.3
(2015-19)						
2015-16	29.66	4.96	34.61	13.24	47.86	5.93
2016-17	30.57	4.8	35.38	13.04	48.41	6.26
2017-18	31.87	4.37	36.24	16.77	53.01	6.55
2018-19	32.88	4.05	36. 92	15.45	52.38	6.39
2019-20RE	26.15	4.93	31.08	18.61	49.69	6.1
FC-XV (2020-21)						
2020-21(BE)	27.93	5.34	33.27	18.22	51.48	6.43

TABLE 10: Criteria and weights for tax devolution Recent Finance Commissions						
Criteria	Weight (per cent)					
	11t Finance Commission(2000-2005)	12t Finance Commission(2005-2010)	13th Finance Commission(2010-2015)	14th Finance commission	15th Finance commission(2020-21)	15th Finance commission(2021-26)
Population(1971)	10	25	25	17.5		
Income Distance	62.5	50		50	45	45
Fiscal Capacity Distance			47.5			
Area	7.5	10	10	15	15	15
Tax Effort	5	7.5			2.5	2.5
Infrastructure Index	7.5					
Fiscal Discipline	7.5	7.5	17.5			
Population (2011)			10	15	15	15
Demographic Performance					12.5	12.5
Forest Cover				7.5		
Forest and Ecology					10	10
Total	100	100	100	100	100	100

Source – 11th ,12th ,13th ,14th and 15th Finance commission reports

Table 11: Gadgil-Mukherjee Formula: Alternative Versions

Weightage: percentage

Criteria		Modified Gadgil Formula (1980)	NDC Revised Formula 1990	NDC revised formula 1991
A.	Special Category States (10)	30% share of 10 States excluding North Eastern Council	30% share of 10 States including North Eastern Council	30% share of 10 States excluding North Eastern Council
B.	General Category States (15)			
(i)	Population (1971)	60.0	55.0	60.0
(ii)	Per Capita income	20.0	25.0	25.0
	Of which			
a.	According to the `deviation' method covering only the states with per capita income below the national average	20.0	20.0	20.0
b.	According to the `distance' method covering all the fifteen states	-	5.0	5.0
(iii)	Performance	10.0	5.0	7.5
	Of which			
a.	Tax Effort	10.0	-	2.5
b.	Fiscal Management	-	5.0	2.5
c.	National Objectives	-	-	2.5
d.	Special Problems	10.0	15.0	7.5
Total		100.0	100.0	100.0

Source: Planning Commission, Government of India

Notes: 1. Fiscal management is assessed as the difference between states' own total plan resources estimated at the time of finalising Annual Plans and their actual performance, considering latest five years.

2. Under the criterion of the performance in respect of certain programmes of national priorities the approved formula covers four objectives, viz.: (i) population control; (ii) elimination of illiteracy; (iii) on-time completion of externally aided projects; and (iv) success in land reforms.

Table 12: Characteristics of Planning Commission Transfers to States

Special category States are i) Arunachal Pradesh, ii) Assam, iii) Himachal Pradesh, iv) Jammu and Kashmir, v) Manipur, vi) Meghalaya, vii) Mizoram, viii) Nagaland, ix) Sikkim, x) Tripura, and xi) Uttaranchal.

Year	SD11	CV11	Total11	SD17	CV17	Total 17	Total 28	RSD11	Rtotal11	RSD17	Rtotal17	Rtotal28	Share (%)
2002-03	630.99	0.71	10349.82	1841.61	0.71	43829.92	54179.74	708.54	11621.83	2067.95	49216.69	60838.52	80.90
2003-04	929.19	0.92	12294.28	1790.28	0.65	46568.41	58862.69	989.41	13091.06	1906.31	49586.49	62677.55	79.11
2004-05	837.33	0.66	13880.23	1773.41	0.60	50343.89	64224.13	837.33	13880.23	1773.41	50343.89	64224.13	78.39
2005-06	1027.03	0.78	14559.73	1845.89	0.61	51499.59	66059.32	982.80	13932.75	1766.40	49281.90	63214.66	77.96
2006-07	1004.68	0.72	15310.34	1841.09	0.57	54820.41	70130.75	901.86	13743.57	1652.68	49210.42	62953.99	78.17
2007-08	1113.95	0.72	17016.96	1055.28	0.61	32375.23	49392.19	955.36	14594.30	905.05	27766.06	42360.37	65.55
2008-09	1240.04	0.66	20551.40	1698.78	0.66	44081.30	64632.70	984.15	16310.63	1348.23	34985.16	51295.79	68.20
2009-10	1945.60	0.76	28336.72	1852.24	0.60	52086.29	80423.01	1487.46	21664.15	1416.08	39821.32	61485.48	64.77
2010-11	1942.89	0.71	30176.59	2128.37	0.62	58826.90	89003.49	1355.81	21058.33	1485.25	41051.57	62109.90	66.10
2011-12	2394.95	0.76	35971.98	2359.10	0.71	66078.75	102050.73	1534.56	23049.11	1511.60	42340.08	65389.19	64.75
2012-13	2685.13	0.64	46255.36	2966.32	0.65	77787.13	124042.49	1564.76	26955.33	1728.62	45330.50	72285.83	62.71

Notes: i) Source: Calculations based on Planning Commission data, ii) SD11= standard deviation across 11 special category states, CV=coefficient of variation across 11 special category states, Total11=total grants to 11 special category states, SD17=standard deviation across 17 regular states, CV 17= coefficient of variation across 17 regular states, Total17=total across 17 regular states, Total28=total across all states, RSD11=standard deviation of real transfers across 11 special category states, RTotal11= total real grants to 11 special category states, RSD17= standard deviation of real transfers across 17 regular states, Rtotal 17=total real transfers across 17 regular states, Rtoal28=total real transfers to all 28 states, share=share of general category states in total transfers.

Deflator used WPI (all commodities), 2004-05 =100. Rupee magnitudes in crores of rupees.

Figure 1: Structure of Fiscal Federalism in India

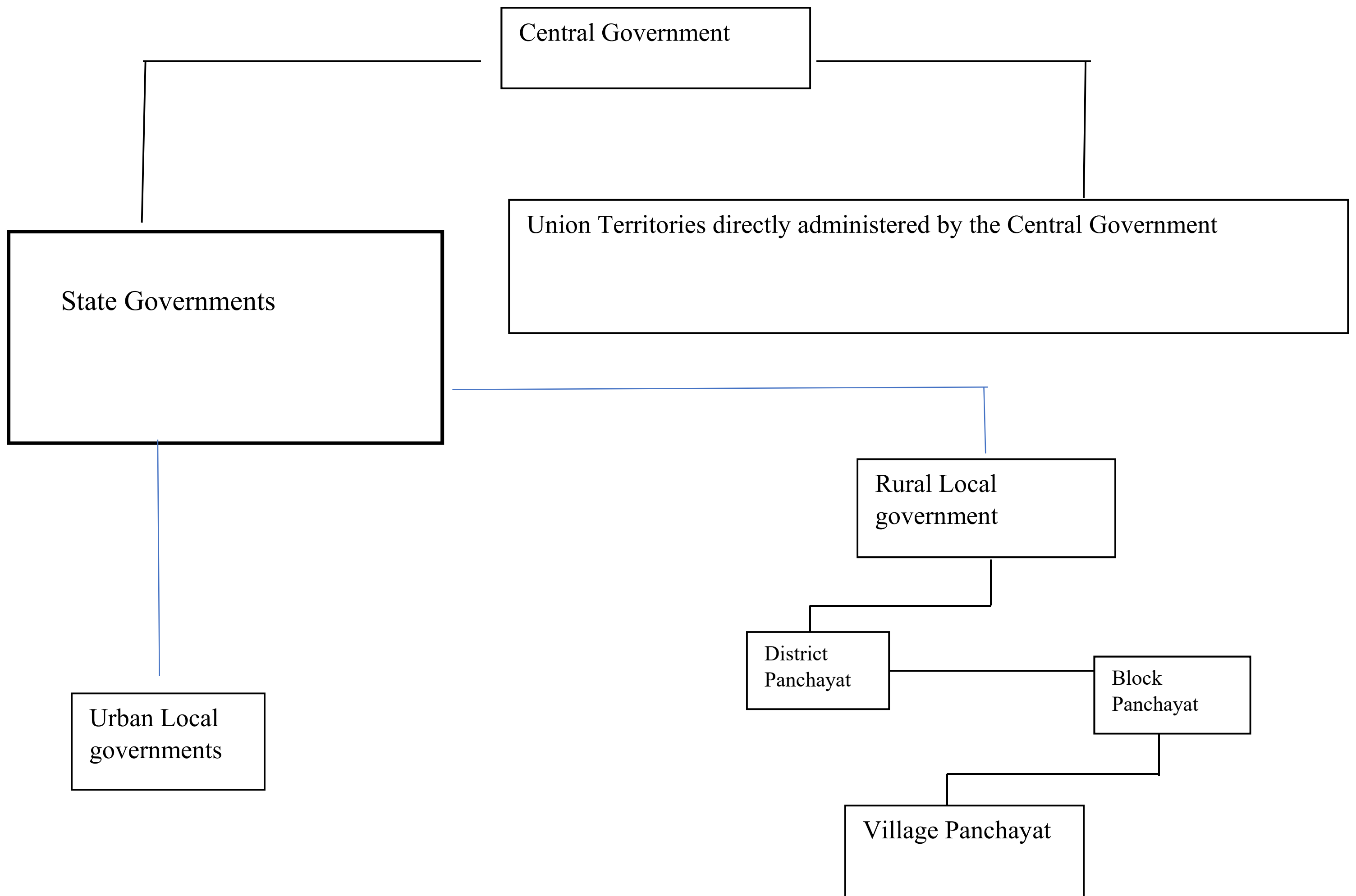
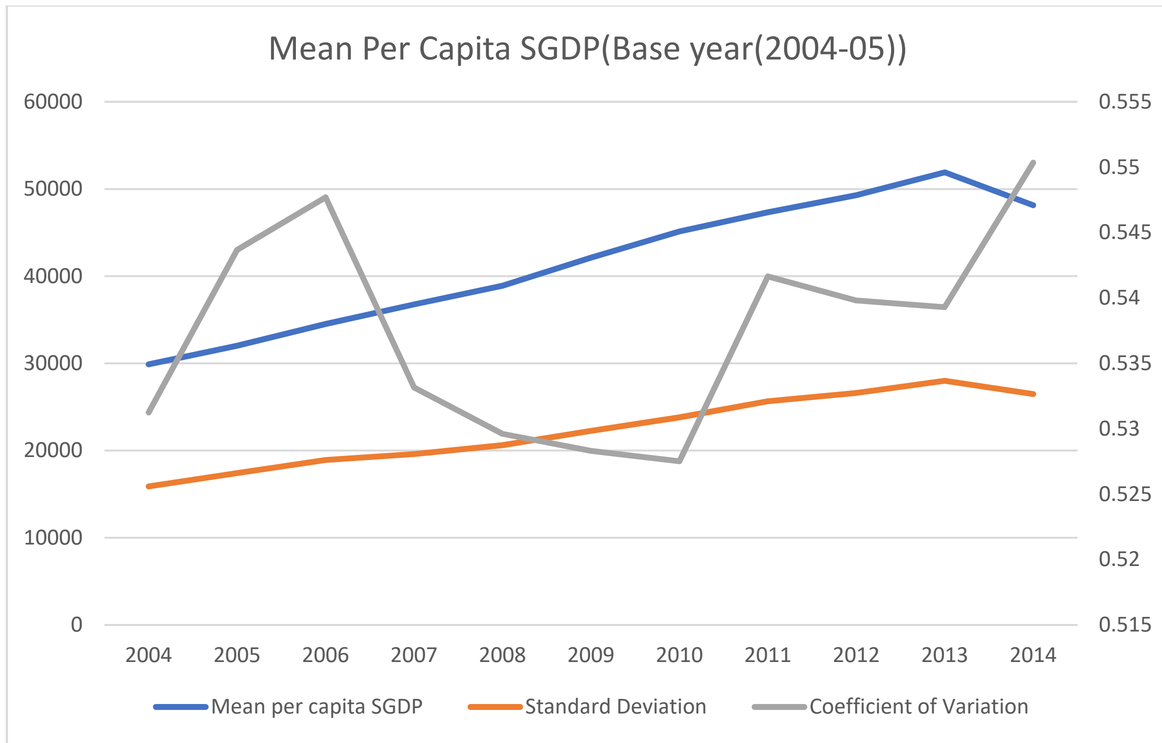


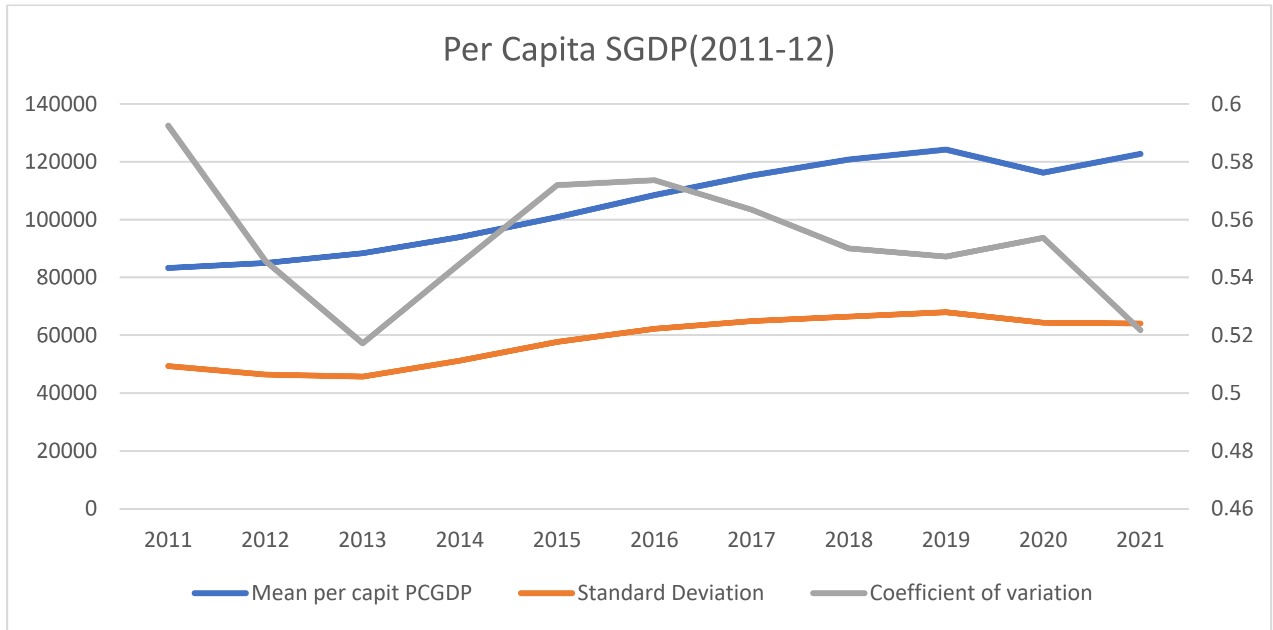
Figure 2a - Characteristics of real per capita SGDP at constant prices



Source "Computed from data from Handbook of Statistics on the Indian Economy

RBI" . All the values are in INR. Base year for the above data is 2004-05, Mean per capita SGDP is measured along the left vertical axis and other magnitudes on the right vertical axis.

Figure 2b - Characteristics of real per capita SGDP at constant prices



Source "Computed from data from Handbook of Statistics on the Indian Economy. RBI" Mean per capita SGDP is measured along the left vertical axis and other magnitudes on the right vertical axis.

. All the values are in INR. Base year for the above data is 2011-12.

Figure 3: Percentage Gap between Mean Real GSDP per capita between richest and poorest states.