
Goods and Services Tax for India

R. Kavita Rao

Working Paper 2008-57

November 2008

National Institute of Public Finance and Policy
New Delhi

<http://www.nipfp.org.in>

Goods and Services Tax for India

R. Kavita Rao*

Introduction

Indirect taxes on goods and services at the state level constitute 85 percent of own tax revenue of the state governments of which sales tax alone accounts for 61 percent. A change in regime in recent times from cascading types sales taxes to taxes based on input-tax credit within taxation of goods, as well as the adoption of a uniform rates of tax, has resulted in buoyant revenues. However, the reform agenda is far from complete. The proposed GST regime constitutes the next step towards comprehensive reforms of indirect taxes in India. It would be the final step or a step in the right direction, depending on how the country chooses to define the constituents of this new regime. Decisions on the design of the proposed tax are not yet in the public domain. In this context, the objective of this paper is twofold: First, to identify the likely form of the proposed tax and the contentious issues that need a resolution before the tax can be implemented effectively. Second, given the importance of indirect taxes in the portfolio of the states, since any change would not affect all states uniformly, an attempt would be made to project the likely impact of one particular design of GST on states. While these estimates can at best be tentative, they will highlight the fact that the impact is differential across states and these differences would have to be taken into account in designing the proposed assignment of tax powers between the centre and the states.

The paper is organised as follows. *Section 2* sets out the contours of a feasible design of VAT in India. It also takes on board the various alternatives proposed. *Section 3* looks at the issues that need resolution and the options available for resolving the same. *Section 4* provides estimates of the rates of tax that would ensure that the regime is revenue neutral. It also illustrates the differential impact across states, under one configuration. This section works with the assumption that there is only one rate of tax under the new regime. *Section 5* concludes.

II. Feasible Design of GST for India

Textbook discussions of VAT often present a case for a federal VAT with a broad base and few exemptions. Political compulsions and the need to maintain some degree of progressivity in the tax system induce deviations from the prescribed coverage. There are very few examples worldwide that incorporate a sub-national VAT.¹ Within the

* Senior Fellow, National Institute of Public Finance and Policy, New Delhi, India Email: Kavita@nipfp.org.in

constitutional assignment of tax powers in India and the current political environment, however, purely federal VAT is not considered feasible, even though it may be considered desirable in a number of circles. The options left therefore are a dual VAT, an integrated VAT, or a state level VAT. Each of these regimes has certain advantages and some costs. It would be useful to look at these in some detail.

In contrast to a federal VAT, a state VAT transfers the entire power to tax to the provincial governments. The revenue balance in such a regime can be ensured by a reduction in the transfers to the provinces from the union government. However, there are two major difficulties in implementing such a regime. First, since one of the purposes of central transfers is to induce some redistribution of resources, a reduction in the transfers can reduce the leverage the union government has in effecting such regional redistribution. Second, since the strength of the Indian economy would lie in its forging a single common market, form of treatment and monitoring of inter-state transactions would be critical in determining the success of such a regime. While destination principle is considered appropriate, success of a pure zero-rating mechanism is contingent on a reliable and timely information system to record and monitor inter-state transactions. It is possible to find solutions to the second problem, however, the first would remain a constraint.

A dual VAT proposes two parallel taxes – one by the union government and the other by the state governments. In principle, the taxes can be completely unrelated to each other and can be run by two or more unrelated tax administrations. In the context of India, this would represent some improvement in the tax base for the governments, since both the union government and the state governments in India currently work with comparatively smaller tax bases. Cascading would be minimised provided provincial taxes are not levied on a base inclusive of central taxes.² However, the tax system would remain as complex as it is today, with 30 different tax laws and the corresponding administrations. The changes in coverage and the implied expansion in incidence of tax would induce a considerable resistance to such a change. Further, there remains the need to put in place a reliable system to monitor inter-state transactions, as in the case of the state VAT alternative.

An integrated VAT as opposed to the above, attempts to design an integration of the tax bases for the centre and the states so that together, the taxes cover a comprehensive base for VAT. This model would eliminate the duality of taxes on all segments of the tax base, however, it would retain the complexity of the dual VAT, provided the states are allowed to determine their own rates of tax and maintain separate administrations. Further, there would arise need for tax credit to flow across taxes, which would make tracking transactions essential and difficult. Another potential difficulty with any such design is, with differential growth rates for different segments of the economy, any assignment of tax powers would be perceived as unfair by one or the other level of government. For instance, if services are allocated to the union government, since this sector of the economy is known to grow faster than the other sectors, states would perceive this as an unfair assignment of tax powers.

Clearly, any model that is adopted needs to be modified to suit the needs of the hour. A dual VAT with corrections for the problems mentioned would provide a model closest to satisfying the needs of both levels of government. This is the model that has found support in academic circles and is now being endorsed by the Empowered

Committee of State Finance Ministers. The rest of the discussion therefore, focuses on this broad structure and attempts to identify the details of any model that can be adopted.

As the discussion above suggests, a dual VAT empowers both levels of government to tax the entire available tax base. In defining the tax base, there will arise some exemptions. A conservative picture of the likely exemptions in the proposed regime would be as follows: Unprocessed agricultural goods could remain exempt from taxes – for reasons of convenience and to present a picture of progressivity in the tax. In the present regimes, the central tax does not extend to the agricultural sector and the state regimes exempt a number of agricultural commodities – only crops considered to be of commercial nature are usually brought under tax.³ Government services are likely to be exempt and so would personal and social services like education and health care. Given the rising demand for the latter category of services in India, where it is often perceived that the responsibility for the same rests with the government, introducing a tax on the same may not be acceptable, at least in the short run. Furthermore, given the well-documented difficulties in taxing financial services, to being with, it is fair to assume that this sector too would remain largely untaxed.⁴ In order to ensure a level playing field, it is important that exports are zero-rated and imports are subject to GST, i.e., to both central and state VAT. The rest of the activities, it is expected, would come within the ambit of GST, at both levels of tax.

In implementing such a regime, it is important to clearly specify a regime for taxation of inter-state transactions. This is even more important in the context of services which span more than one state. The other important issue that needs to be discussed is the nature of administration of such a tax – if the tax base is synchronised/ homogenised across the taxes, there is great merit in exploring the options for a unified administration. These issues remain as yet unresolved. The options in the same are discussed in the following section.

The other major issue that remains to be discussed is the rate of tax that would make this regime revenue neutral. There are three distinct issues in any discussion on the rates of tax. First, should there be a single rate of tax or multiple rates. While it is generally accepted that a regime with a single rate of tax is easier to administer and comply with, multiple rates are introduced to address issues of progressivity. Apart from issues such as classification disputes and accounting difficulties in a multi-rate regime, such regimes introduce perverse incentives. In the present regime of state VAT for instance, inputs have been taxed at 4 percent while 12.5 percent is the regular rate on goods of final consumption. Such a big divergence between taxes on inputs and final products undermines the incentive mechanism of VAT – the manufacturer would not be induced to report all his sales since a substantial part of the tax is to be paid at this stage. A GST regime with an acceptable tax rate might provide the scope for moving away from a multi-rate regime to a single rate regime.

Second, since high rates would induce non-compliance, are there mechanisms available to ensure that the rates of GST rates remain modest and yet generate the required resources? It is often argued that any tax less than 20 percent would not raise the resources required. VAT is often complemented by some non-rebatable excises. These excises could be satisfying a number of other objectives like environmental issues, discouraging the consumption of tobacco and alcohol, and/or imposing a “luxury tax” on select goods associated with relatively higher incomes. In India, no specific emphasis has been placed on environmental issues in determining tax structures – however, for

reasons of ease of collection, petrol and diesel have been subject to high rates of tax, especially at the state level.⁵ The state VAT regimes have kept these two products outside the purview of VAT.⁶ It is feasible therefore to construct regimes which integrate these commodities into the general VAT/GST structure and introduce a separate non-rebatable excise over and above this rate. In the case of tobacco products, especially, cigarettes and *bidis*, the state governments have now introduced a state VAT at 12.5 percent and the central government imposes specific taxes on these products. The central taxes alone contribute anywhere between 17 to 59 percent of the retail prices of these products. There is therefore, room to reorganise these regimes into a generalised GST and some non-rebatable excises. This would not disturb the government's overall concern to discourage the consumption of tobacco products. For luxury taxes, it is possible to identify a number of commodities which satisfy this description. However, in order to capitalise on the benefits of introducing a simple and comprehensive VAT, it is important to keep this list small. For illustration, we limit this list to include only passenger cars and multi-utility vehicles. With these three categories subject to non-rebatable excises, *Section 4* explores the rates of tax required to ensure revenue neutrality. Depending on the relative distribution of revenues within the new regime, the non-rebatable excises can be assigned to either the union government or the state governments.

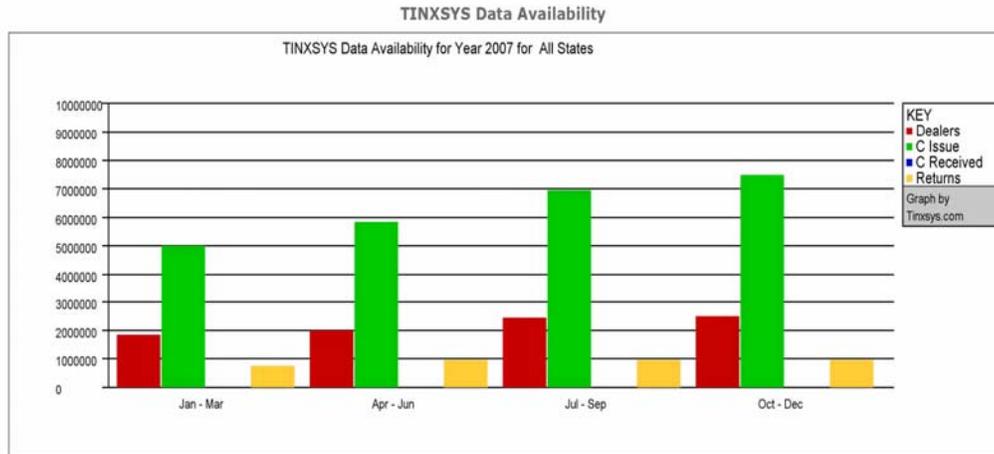
Third, would there be uniform taxes across all states? States, till now, have autonomy in determining tax rates on bases within their jurisdiction. Since 2000, some consensus has been worked out to ensure a degree of harmonisation in the rates. While complete harmonisation has not been achieved, it does not appear to be an impossible task. It may however, be worthwhile to allow for a degree of autonomy in rates within a narrow band so as to address local concerns of individual states. Harmonisation in the base however is essential and highly desirable.

III. Unresolved Issues and Options

1. Treatment of inter-state transactions:

The present regime of taxation of inter-state sales relates only to the taxation of goods and involves tax exportation from the producing states to the consuming states. An agreement has been reached to gradually phase out this levy called the Central Sales Tax.⁷ The budget for the present year has proposed to reduce it from the existing 3 percent to 2 percent. Complete zero-rating – the result when this tax is reduced to zero – would however provide incentives for tax evasion, since there would be considerable difference between the taxes on local sales and those applicable on inter-state sales. It is imperative that a reliable mechanism for identifying inter-state transactions be introduced so as to place a curb on the incentives to evade. The Empowered Committee of State Finance Ministers has worked towards the creation of such a database in the form of TINXSYS. This system is now more than 2 years old. It captures data on C-forms issued by each of the state tax administrations.⁸ However, there is no information on the C-forms received by the exporting states. The registered dealers are expected to report on C-forms every quarter. Unless this loop is completed, the information on inter-state transactions is not complete and hence not reliable.⁹ The chart below provides a summary of the information captured in the database for the calendar year 2007.

This system, by providing information on C-forms issued, does allow the exporting state access to some data. However, the verification of information would remain a manual and individualised task, losing out on the potential gains from implementing a comprehensive system.



Scale on X-axis shows months in quarters
 Scale on Y-axis shows count of records available in
Ten Lakhs

Source: TINXSYS website. www.tinxsys.com

In this context it is desirable to go back to the drawing board. The literature presents a number of models for treatment of inter-state transactions.¹⁰ Both Canada and the European Union use the zero-rating model while the Brazilian system is one central levy, bridging the gap. An adaptation of the zero-rating model has often been discussed in India – zero-rating with pre-payment, also referred to as zero-rating with reverse charge. The system can be broadly summarised as follows:¹¹

Zero-rating is made conditional on payment of tax in importing state. Importing dealer would account for all imports in the monthly return and pay taxes on the same. In practice, zero-rating can be reversed if the transactions are not reported in the importing state within prescribed time limit. It may be mentioned that this places local purchases and inter-state purchases on a level playing field since taxes would be payable on both these transactions.

The information on these transactions would therefore flow on a month by month basis. Information can be captured on individual transactions or on pairs of dealers. It is possible to extend this regime to dematerialise the C-forms and ensure that the details are captured online by the buyer and the seller as well, by self-issuing a C-form and validating the same. In the process, the information can be made more reliable.

While the above deals with transactions involving goods rather efficiently, some more details need to be worked out for dealing with services. In the case of services, the normal regime would dictate that the tax is payable where the service is rendered.

However, when services span more than one jurisdiction, special rules need to be spelt out and agreed upon. In defining these rules, it is important to keep in mind the potential for ensuring tax credit mechanisms work, if required.

The European Union provides some guidelines for dealing with services of such a nature:¹²

- **Passenger transport** services are taxed according to the distances covered.

Example: the price of a bus ticket for a trip from Poland to Austria through Germany will include Polish, German and Austrian VAT, proportionate to the distances travelled in each of these countries.

- The **intra-Community transport of goods** is taxed at the place of departure. If the customer is identified for VAT purposes in another Member State and provides the supplier with this VAT identification number, the service is however taxed in the Member State where the customer is identified.

Example: When goods are transported by a French company from Germany to France, German VAT must be paid on the transport. If this service is rendered to a customer who is identified for VAT in the Netherlands, Dutch VAT will have to be paid, and by the customer himself.

- The **ancillary services to an intra-Community transport of goods**, such as the loading and unloading services, are taxable in the Member State where those services are physically carried out. If rendered to a customer who is identified for VAT purposes in another Member State and he provides the supplier with this VAT identification number of that other Member State, the service is instead taxed in the Member State where the customer is identified.

Example: A Danish company unloads a truck in Rotterdam. If this is done for a Dutch customer, the supplier will need to charge Dutch VAT. If, on the other hand, the customer is a Finnish company, the place of supply of the service rendered by the Danish company is not the Netherlands, where the unloading takes place, but Finland, where the customer is identified for VAT.

Chart A below provides a summary of the treatment of transactions in the case of telecom services.¹³ All these cases illustrate systems for preserving the tax credit mechanism for registered taxpayers and at the same time define rules for sharing of revenues in all other cases. Some such rules need to be agreed upon, before comprehensive taxation of services can be contemplated. Further, clear definitions of what constitutes international export of services too need to be agreed upon since zero-rating at two levels is involved.

2. Administration of the tax

If the tax bases are successfully harmonised, even with some variation in the tax rates across states, it is possible to pool the resources of the tax administrations so as to improve tax administration. There is no significant advantage in implementing two completely disjointed tax administrations for such a tax regime. The important question however is to what extent can and should there be unification of administration. To begin

with, it is important to understand the gains from unification or integration. Dealing with two tax administrations adds to compliance costs for the tax payer — two returns, two sets of officials, and potentially two audits. Some unification therefore would make the transition more acceptable. From the point of view of tax administration, the information flowing from the taxpayer to a unified administration would be more reliable than to two separate administrations. Resources can be conserved by not duplicating routine tasks like registration and returns processing.

Having made a case of some unification in administration, it is useful to discuss what extent of unification is feasible and/or desirable. In principle, it is possible to imagine a single tax administration for this new regime. The regime can be in the form of an independent revenue administration which implements the tax laws of both levels of government. Or it could be a part of either level of government, which takes responsibility to collect revenues on behalf of the other and transfers the same. Such regimes exist in Canada for instance. Such a proposal would face one important question — what happens to the existing tax administrations? Once again it is possible to subsume existing tax administrations within this new arrangement. Even with this problem out of the way, it is difficult to arrive at a consensus on such a proposal since there is some perceived autonomy with respect to tax administration as well.

The minimum desirable level of integration is one covering registration, returns filing, database generation, and management. This level of integration would allow the tax administrations to function efficiently and gain from each other's expertise. A further degree of integration could be one where there is a common audit for both the taxes. This, as argued earlier, would ensure that the compliance cost for the tax payer is minimised. Since the revenue interests of different tax administrations would be different, it is possible that some state governments would perceive a given case as a significant revenue risk which the central tax administration might not. To allow for these differences, the tax departments could have the autonomy to choose cases for audit, subject to the condition that the audit would cover both taxes and would therefore apply for both levels of government. A common procedure for choosing case for audit therefore would need to be developed.

Between these two extremes, any intermediate position should be acceptable to the taxpayer. It is however, important to mention that segregation of units by size or economic activity into groups to be administered by one or the other administration would hinder effectiveness of administration. It would constitute an artificial segregation, and depending on the perceived strength and weakness of the underlying administrations, there would evolve an incentive to align oneself to one or the other. This would give rise to definitional conflicts of turf between two levels of government, without contributing actively to taxes or improved administration or to improved economic environment. It is therefore desirable to develop schemes whereby the division of functions between the different tax administrations is not of immediate concern and relevance to the taxpayer.

Chart A

Liability to VAT on supplies of telecommunications services.

	Status and place of establishment or residence of customer	Supplier in Ireland	Supplier in OMS	Supplier outside EU
1	business customer in Ireland	Supplier accounts for Irish VAT	Customer accounts for Irish VAT	Customer accounts for Irish VAT
2	private individual in Ireland	Supplier accounts for Irish VAT	Supplier accounts for OMS VAT	Supplier must register and account for Irish VAT
3	business customer in OMS	Customer accounts for OMS VAT	Supplier/customer accounts for OMS VAT ¹	Customer accounts for OMS VAT
4	private individual in OMS	Supplier accounts for Irish VAT	Supplier accounts for OMS VAT ²	Supplier must register and account for OMS VAT
5	outside EU, whether business customer or private individual	Outside the scope of Irish VAT - No VAT payable (but see column 6)	Outside the scope of Irish VAT	Outside the scope of EU VAT
6	private individual resident outside EU but avails of service while in Ireland	Supplier accounts for Irish VAT	Outside the scope of Irish VAT	Outside the scope of Irish VAT when mobile services, cards etc. are involved

OMS = other Member State of the EU

¹ If supplier and customer in the same Member State, supplier pays VAT.
If supplier and customer in different Member States, customer pays VAT in his/her Member State.

² Supplier pays VAT in his/her Member State, even if customer in a different State.

IV. Revenue Neutral Rates of Tax for GST

This exercise is based on the All-India Input-Output Matrices, 2003-04.¹⁴ It is assumed that the structure of the economy captured by these matrices remains valid for the present day as well. Since complete and comprehensive information is available for 2005-06, the exercise reports results for this year, and follows it up with rough and ready estimates for subsequent years.

There are two alternative approaches used to estimate the revenue. Both the approaches use common assumptions regarding exemptions, which are listed below. The first approach works with overall GDP numbers.¹⁵ The GDP from taxable sectors as well as the value of exempt inputs used in these sectors constitute the base for the tax. Since even for the taxable activities, imports exceed exports, this provides an acceptable estimate of the domestic base provided one assumes that tax credit for capital goods is not provided upfront. The second approach is based on estimates for private final consumption expenditure. For these estimates, the consumption of taxable goods and services and the taxable inputs used by all the exempt goods and services are taken together to determine the tax base. It may be recalled that the exempt transactions include the exempt goods/services as well as government final consumption expenditure.

Once the base is determined, the rate of tax is sought to be calibrated to ensure the same revenue as jointly obtained from the central excise and service tax of the union government and the state government's state VAT and associated taxes, electricity duty, passenger and goods tax, and entertainment tax. This exercise also assumes that there exist some non-rebatable excises on a few commodities – petroleum products, passenger cars and multi-utility vehicles, and tobacco products. This is in consonance with the conventional view of keeping VAT simple and addressing issues of externalities and inequality through the use of excises.¹⁶

Based on the discussions in the above sections, this exercise works on the following assumptions:

- all agricultural output are exempt – since some of these goods would actually be taxable, when used in final consumption, the present estimate provides a conservative estimate of the revenues. It may be mentioned that agricultural goods used as inputs by other sectors are already accounted in the estimates of the base.
- all banking and insurance services are assumed to be exempt – however, it is not very clear whether there are other heads of activities where some financial services may have been accounted for (FISIM as per the GDP estimates). The present regime of service tax does levy some taxes on financial services. To the extent some of these levies continue in the new regime, the present estimates would also continue to be conservative.
- “other services and personal and social services” are considered exempt – these include health and education services. While the present sentiment does not suggest taxation of these services, it is possible to imagine some segments of this broad category being brought under tax.
- all sales by government are exempt – holds for central and state governments. However, purchases by government are assumed to be taxed.

- exports are to be zero-rated and imports are to be taxed on par with domestic production.

GDP Based Estimates:

In this approach, the GDP, i.e., value added in sectors classified as taxable, as well as the value of exempt inputs used by these sectors, is considered the base for the tax. Value added in exempt sectors is by definition, not a part of the tax base, unless it returns to the taxable chain in a subsequent transaction. While the taxable inputs used by exempt sectors are subject to a tax, and since these would constitute output of the taxable sectors, there is no need to account for this component separately. Using this base and with a 7 percent non-rebatable excise on passenger cars and multi-utility vehicles, petroleum products and tobacco products, the revenue neutral rate for GST can be worked out. *Table 1* below provides the figures for three years. As can be noted, GST at 10 percent is adequate to raise the revenues required to replace CenVAT and Service tax at the central level and sales tax, passenger and goods tax, electricity duty and entertainment tax, at the state level. In 2007-08 for instance, the revenue raised from these taxes is Rs 3891 billion. Value added in taxable goods and services adds up to Rs 27755 billion and value of exempt inputs used by these sectors is Rs 5113 billion.¹⁷ 10.5 percent tax on this base yields Rs 3426 billion. A 7 percent non-rebatable excise on passenger cars and multi-utility vehicles, petroleum products and tobacco products would generate Rs 526 billion¹⁸, together generating Rs 3953 billion. Any assumption to extend the base to cover some of the personal services and privately provided health and education services or financial services can provide some further revenue.

Based on Private Final Consumption Expenditure:

Using the input-output transactions matrix, the share of taxable consumption expenditure in total private final consumption expenditure is computed to be 56 percent. Using this ratio on the actual figures for private final consumption expenditure for any given year, the taxable component of expenditure can be determined. For the exempt sectors and exempt transactions, taxable inputs used for all exempt output needs to be identified. For the exempt sectors, using the input-output coefficients matrix, the ratio of taxable inputs to gross value added can be obtained. Applying these ratios to GDP from each of the exempt sectors, the taxable base is estimated. Similarly, since gross domestic capital formation is considered final use in the input output transaction matrix, whenever the capital formation takes place in exempt sectors, there is a tax incurred. The extent of investment on which such a tax would accrue is estimated by applying the share of exempt sectors in total capital formation to the gross fixed capital formation levels for the respective years.¹⁹ Further, since we assume that all government expenditure is exempt from taxes, the inputs used to fulfil government final consumption expenditure too would suffer a tax. The sectoral profile of government final consumption expenditure is approximated by the figures obtained from the input-output transactions matrix, and in using the input-output coefficients matrix, the corresponding demand for taxed inputs can be derived.²⁰

Table 1: Revenue from GST: GDP based Estimates

(Figures in Rs billion)

	2005-06	2006-07(R.E.)	2007-08(BE)
1. CenVAT	1112	1176	1279
2. Service tax	231	371	506
3. Sales tax	1356	1659	1921
4. Electricity duty	77	86	91
5. Passenger and goods tax	64	77	85
6. Entertainment tax	7	8	9
Total Revenue (1-6)	2847	3377	3891
total revenue (1-3)	2699	3206	3706
Estimates of Revenue			
Rate of GST	10.5 percent	10.5 percent	10.5 percent
Revenue from GST	2553	2980	3426
Rate of non-rebatable excise	7 per cent	7 percent	7 percent
Revenue from excises	420	470	526
Total Revenue	2973	3450	3953

Notes: Revenue figures for the state taxes are revised estimates for 2006-07 and budget estimates for 2007-08. The GDP numbers are quick estimates for 2007-08.

Given the target of revenue, as discussed in *Table 1*, the rates of tax required can be worked out to about 14 percent GST and 10 percent non-rebatable excises on passenger cars and multi-utility vehicles, petroleum products, and tobacco products.

Table 2: Revenue from GST: Estimates based on consumption expenditure

(Figures in Rs billion)

	2005-06	2006-07	2007-08
Rate of GST (percent)	13.23	13.44	13.78
PFCE	20622	23241	26044
Taxable part	11512	12973	14538
Taxes from taxable activities	1522	1744	2003
Taxes from exempt activities	725	907	1075
Total	2247	2651	3078
Rate of excise	10 percent	10 percent	10 percent
non-rebatable excises	600	726	813
Total Revenue Estimated	2847	3377	3891
Target Revenue	2847	3377	3891
GST Rates with Informal Sector Corrections			
30 percent informal sector	18.9 percent	19.2 percent	19.7 percent
25 percent informal sector	17.6 percent	17.9 percent	18.4 percent

Since it is often argued that a significant component of the Indian economy is in the informal sector, which by definition is invisible to the tax system, it is essential to make corrections for this aspect as well. Informal sector can potentially assume two forms — first, forms similar to unregistered manufacturing, where it is accounted for in the

GDP estimates and second, forms where the GDP estimation procedure fails to capture the same. Since the latter does not affect our estimates, we attempt to correct for the former alone. For the former, since unregistered manufacturing accounts for close to 30 percent of total value added in the manufacturing sector, this proportion is assumed to be representative for the entire economy. Correcting on this basis, it can be shown that the rate of GST required to raise the same revenue as above would be 20 percent. It may be mentioned here that the share of unregistered manufacturing is seen to be declining in recent times – it has declined from over 34 percent in 1999-00 to 30.6 percent in 2006-07. If improved tax regimes, including improved tax administration induce further reductions in this ratio, a lower rate of GST would be able to ensure the same revenues. For instance, if the informal component of the economy is 25 percent of the total, a rate of 18 percent would be adequate.

An important question that emerges is whether the liability on the passenger cars, petroleum products and tobacco products would be raised beyond the present levels. *Table 3* below presents some comparison of the present and proposed liabilities. The proposed liability could be somewhat higher than the present liability in the case of passenger cars and multi-utility vehicles. For the other two categories, the differences do not appear significant, in general. Specific products however, may face some increases.

Table 3: Present and Proposed Tax Liabilities in Case of Excisable Goods

	Proposed Liability	CenVAT	Sales Tax
Passenger cars and multi-utility vehicles	30 percent	16 percent	12.5 percent
Tobacco products	30 percent	17-50 percent	12.5 percent
Petroleum products	30 percent	16 percent + specific duties	10-33 percent

Notes: CenVAT is normally applicable as an *ad valorem* levy on ex-factory prices. It is however, a specific tax for cigarettes and *bidis*. The liability as a percentage of the retail price works out to be 17 percent for *bidis* and 26-59 percent for cigarettes.

The revenue neutral rate for GST appears rather modest and comfortable. Lower rates can be achieved by expanding the list of non-rebatable excises and/or hiking the rates of tax on these items. The former is not a desirable route since it would defeat the basic purpose of introduction of a comprehensive value added tax. An alternative route would be to compress the list of exempt activities.

It would in principle be useful to derive such numbers for individual states, based on state specific numbers. However, since expenditure based decomposition of GSDP is not available, nor have input output matrices at the state level been compiled, one cannot generate very reliable numbers for individual states. In what follows, an attempt is made to use some proxies to allocate the total revenue for states to individual states. Since the base for the new tax is different when compared to the taxes it seeks to replace, the revenue in the new regime would not be exactly equal to that in the old regime for each individual state.

The approach adopted to derive the share of each state in total revenue is as follows: Since there are two components to the tax regime, as a first step, some rule for assignment of the non-rebatable excises needs to be worked out. Since the levies are

introduced partially to address revenue considerations, it is important that the rate of tax as well as the coverage of the tax in these cases be defined and frozen in time. Any change in either the base or the rate should require a consensus between all the concerned governments. If such rules can be established, the revenues from the above can be assigned to any of the two tiers of governments, without apprehensions of uneven access to tax bases. Table 4 below provides a comparison of the rates of tax under GST for centre and states under two alternative scenarios. For the sake of simplicity, for the purposes of this exercise, it is assumed that all the revenues from these levies are assigned to the union government. Since most indirect taxes are sought to be zero-rated for any exported commodity, such an assignment would allow for easy corrections in case the commodity is exported out of the country.

The base for the tax under GST, as discussed above, has two components — private final consumption expenditure on taxable activities and taxable inputs used in exempt sectors and transactions. For the former, the share of states in total taxable consumption as per NSS reports is taken as the proxy. Per capita consumption expenditure by item for each state is segregated into taxable items of expenditure and exempt items of expenditure for rural and urban consumers separately.²¹ Population estimates for 2005-06 were used to arrive at the state-wise figure for total private final-consumption expenditure, subject to taxation.²² The share of each state in the sum of total consumption expenditure across states is taken as the proxy for share of the state in total revenue from taxing consumption. The rate of GST is assumed to be 14 percent.

Table 4: Rates of Tax for Centre and State: Alternative Scenarios
(percent)

	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08
Informal sector share	30 percent			25 percent		
Case 1: Non-rebatable excises assigned to the centre						
Centre	6.2	5.9	6.0	5.8	5.5	5.6
States	12.6	13.4	13.7	11.8	12.5	12.8
Case 2: Non-rebatable excises assigned to the states						
Centre	11.3	11.3	11.7	10.5	10.6	11.0
States	7.6	7.9	7.9	7.1	7.3	7.4

For the second component of the base, exempt activities are assumed to be closely related to overall GSDP in the state. Therefore, share of the state in sum of GSDP across all states is taken as the proxy. It is well recognised that GSDP estimates are not comparable across states and hence cannot in principle be added to generate an overall estimate. However, under a reasonable assumption that scale of economic activity is proportionate to the estimate of GSDP, in the absence of better alternatives, the above is used for purposes of illustration. *Table 5* summaries the results of this exercise. Interestingly, inspite of using rates of tax somewhat higher than the revenue neutral rate, the revenue accruing to some of the states falls short of the actual revenue collections. Most of the states with actual revenue higher than projected revenue are states with relatively higher per capita income. To the extent that NSS data underestimates consumption of the higher income categories, the estimates derived here would contain a *bias* in favour of the relatively lower income states. It should however, be pointed out that apart from this factor, tax bases focused more closely on consumption would tend to induce some redistribution when compared to the present systems, to the

extent there is tax exportation on account of CST related provisions within the existing regimes. These two effects need to be segregated, so that a suitably designed assignment of tax powers can be implemented so as to protect the revenues of the states as well as the union government. However, reliable information on CST collections are not readily available, due to poor reporting standards. Some states which are known to derive revenue from CST actually report zero revenue in their budgets. This segregation therefore has not been attempted here.

Table 5: Comparison of Actual and Projected Revenue

(Rs crore)

	Actual Revenue		Projected Revenue		Projected -actual	
	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07
Andhra Pradesh	12800	17175	12903	15227	103	-1949
Arunachal Pradesh	48	53	185	214	137	161
Assam	2646	2907	3082	3628	436	721
Bihar	2379	2998	7446	8692	5067	5694
Chhattisgarh	2850	3904	2755	3199	-95	-704
Goa	879	918	465	551	-414	-367
Gujarat	12662	15274	10751	12529	-1911	-2746
Haryana	6437	7682	5058	6115	-1379	-1567
Himachal Pradesh	859	883	1369	1602	510	719
Jammu and Kashmir	1409	1568	1844	2128	436	561
Jharkhand	2300	2648	3262	3817	962	1170
Karnataka	11276	13821	8731	10105	-2546	-3716
Kerala	7071	8920	7140	8331	70	-588
Madhya Pradesh	5938	6558	7746	8975	1807	2417
Maharashtra	22087	26479	21098	24438	-989	-2041
Manipur	72	86	265	313	193	227
Meghalaya	177	190	331	385	153	195
Mizoram	43	52	171	199	129	147
Nagaland	79	93	290	345	212	252
Orissa	3828	4228	3921	4679	93	451
Punjab	5302	5685	6561	7676	1259	1991
Rajasthan	6313	7404	9576	11160	3263	3756
Sikkim	57	51	80	95	23	45
Tamil Nadu	16647	20025	11412	13332	-5235	-6693
Tripura	203	247	389	456	186	209
Uttarakhand	1031	1436	5922	7358	4891	5922
Uttar Pradesh	11655	15810	16365	18528	4710	2719
West Bengal	6537	8090	11899	13778	5363	5688
Delhi	6535	7442	5046	5881	-1489	-1561
Puducherry	304	357	292	341	-13	-16

Note: Difference in the last two columns is projected-actual revenue.

Source: Data for actual revenue collections are taken from the RBI, State Finances, 2007-08.

V. Conclusion

The implementation of GST in India in the form of a comprehensive value added tax is contingent on several key decisions. While there is clarity that the tax would be in the form of a dual VAT, that is the only detail about the tax that is available in the public domain. Presuming that the country is going to witness considerable tax reform, it is only fair on the taxpayers that the details be worked out well in advance so that preparations for a smooth transition can be made.

This paper attempts to identify some of the potential contours of the tax. One of the key issues that needs to be resolved is the treatment of inter-state transactions in goods and services. The existing consensus of zero-rating by itself would not be adequate to address the potential concerns of evasion in such transactions. Zero-rating with pre-payment appears to be a superior alternative. The related issue concerns taxation of services which span more than one tax jurisdiction. International experience points towards self-assessment in the case of registered taxpayers and taxation in the jurisdiction of the supplier in other cases, with some revenue sharing among the member states. Some of the details need to be worked out before the tax on services can be implemented at the state level. A second concern relates to the need to integrate tax administration at the two levels in order to maximise on the efficiency of administration. While there are options available, a final choice needs to be made, once again

Apart from these design issues, one important concern relates to the rate of tax. It is believed and correctly so, that if the rate of tax is “too high”, it induces non-compliance. In discussions on VAT in India, a rate of 20 percent has often been proposed as a feasible rate. *Section 4* demonstrates that with the informal sector accounting for 30 percent of economic activity in taxed transactions, a rate of 20 percent with non-rebatable excises of 10 percent on a few selected commodities would be required to generate the target revenue. If the non-rebatable excises are assigned to the union government, this translates into about 14 percent rate for the states and 6 percent for the centre. It may be mentioned that in deriving this rate, all agricultural commodities were considered to be exempt. This should mitigate the regressivity normally associated with VAT regimes. The above is however a conservative estimate — since a number of activities currently taxed have been assumed to be exempt for the purposes of arriving at these estimates. Any expansion in the tax base to include some of the activities would allow for a lower rate of tax to be implemented. Further, as observed earlier, the share of informal activities in total — as proxied by the share of unregistered manufacturing in total GDP from manufacturing — is registering some decline in recent times. If this trend persists, there is scope for considering lower rates of tax.

Finally, the impact of the tax on different states would be different. Careful assignment of tax powers is crucial for the new regime to be acceptable. In the absence of the same, transition to the new regime would require some other revenue transfers. With the new regime, instruments for the same would be limited, and can generate perverse incentives and/or unstable finances for some of the governments involved.

Footnote

¹ Canada and Brazil are two such cases. While the European Union is not a single country, the commitment to adhere to the 6th Directive simulates the case of a sub-national levy with no accompanying federal component.

² The rates of tax can be adjusted to yield the same level of revenues.

³ There are however, exceptions to this general rule. In Punjab for instance, a *mandi* tax is imposed on food grains and the revenue from the same is assigned to local bodies.

⁴ It may be mentioned that in the present regime of service taxation, the union government does levy a tax on a number of financial services – especially where there is an explicit fee charged for the same. This regime may persist within GST as well. However, it is not clear how a tax credit mechanism can be designed effectively in such cases.

⁵ The Union government has dual interventions in this sector – on one hand there is a tax on petroleum products and on the other there is an attempt to control the prices of these products, especially in the context of rising crude prices in the international market. In order to moderate the impact of rising crude prices, the rates of tax on petrol and diesel too have been reduced. Petrol for instance, now faces a tax of 6 percent with some specific excises as against 16 percent plus specific excises till 2005-06.

⁶ This approach would enhance cascading in the economy and defeat the purpose of VAT. Andhra Pradesh is an exception in that it allow for tax credit at the refinery stage.

⁷ Central Sales Tax was introduced in 1956 with a rate of one percent to provide a mechanism for documenting inter-state transactions and to ensure that the domain of taxation of any state government remained limited to the dealers located within their geographical jurisdiction.

⁸ C-forms are issued by the importing state to an importing dealer. These are passed on to the exporting dealer who in turn submits them to the tax department of the exporting state as evidence of sales outside the state and hence would be liable to the preferential/concessional treatment.

⁹ It has been mentioned that since different states maintain their data in different formats, and differing degree of detail, comparable information is not uploaded to the system, making the system rather dysfunctional.

¹⁰ For an overview of some the key issues and the options discussed in the literature in the context of United States, see McClure (2005), "Coordinating Sales Taxes with a Federal VAT: Opportunities, Risks and Challenges", Paper presented at Symposium on **Federal Tax Reform and the States**, National Press Club, Washington May 18.

¹¹ The European model is technically one of zero-rating with reverse charge.

¹² http://ec.europa.eu/taxation_customs/taxation/vat/how_vat_works/vat_on_services/index_en.htm

¹³ Government of Ireland, Value Added Tax, Information Leaflet No.7, www.revenue.ie/leaflets/inforno7.pdf

¹⁴ Central Statistical Organisation, Input-Output Transactions Table, 2003-04, http://mospi.nic.in/rept%20_%20pubn/ftest.asp?rept_id=nad04_2003_2004&type=NSSO

¹⁵ Central Statistical Organisation, National Accounts Statistics, 2007, 2008.

http://mospi.nic.in/rept%20_%20pubn/ftest.asp?rept_id=nad01_2007&type=NSSO

¹⁶ S. Crossen (2004) "VAT in South Africa: What Kind of Rate Structure", *International VAT Monitor*, 19-24. For a discussion of the rationale for excise taxes, see McCarten, W.J. and J. Stotsky (1995), "Excise Taxes", in Shome P. (ed.) *Tax Policy Handbook*, International Monetary Fund, Washington DC.

¹⁷ These numbers are derived using the input-output coefficients matrix and the sector-wise GDP figures.

¹⁸ The turnover figures for the non-rebatable excise are available till 2006-07. For 2007-08, 12 percent growth has been assumed, over a base of 2006-07.

¹⁹ Since the decomposition of Gross Fixed Capital Formation is available with a considerable lag, the above approach is used to obtain an approximation. In order to obtain a conservative estimate, the lowest share observed during 2000-05 is taken as the benchmark - 23 percent, in 2003-04.

²⁰ Since there would be some overlap in the base as discussed above, some corrections are made — government final consumption expenditure on otherwise taxable sectors only is taken into account for this exercise.

²¹ NSSO (2008): *Household Consumption Expenditure in India, 2005-06*, Report Number 523.

²² Office of the Registrar General and Census Commissioner (2006): *Population Projections for India and the States, 2006-2026*, Report of the Technical Group on Population Projections, constituted by the National Commission on Population.