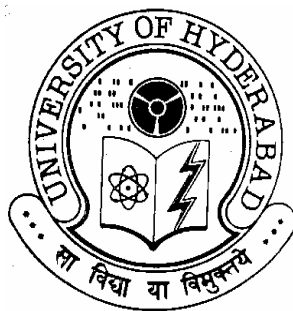


**OPTIONS FOR A GOODS AND SERVICE TAX
IN A FEDERAL STRUCTURE WITH REFERENCE TO
INDIA**

A THESIS SUBMITTED FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

IN
ECONOMICS

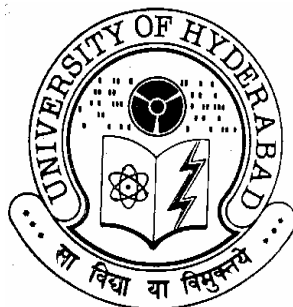
BY
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March 2013

CERTIFICATE

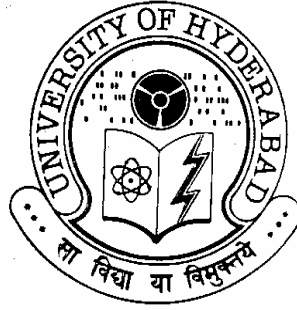


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DECLARATION



I hereby declare that the work embodied in this thesis entitled “**OPTIONS FOR A GOODS AND SERVICE TAX IN A FEDERAL STRUCTURE WITH REFERENCE TO INDIA**” has been carried out by me under the supervision of **Professor J.V.M. SARMA**, School of Economics, University of Hyderabad, and has not been submitted in part or in full to any other University or Institution.

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MARCH 2013**

V BHASKAR

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March 2013

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OPTIONS FOR A GOODS AND SERVICE TAX IN A FEDERAL STRUCTURE WITH REFERENCE TO INDIA

EXECUTIVE SUMMARY

This thesis examines the options for a Goods and Service Taxes in federal structure with reference to India. The term VAT for Value Added Tax and GST for Goods and Services Tax have been used synonymously following international practice. The implementation of the Goods and Service Taxes is seen as a paradigm shift in indirect taxation reform after the value Added Tax was introduced in 2005. This thesis explores the options available for India in implementing the Goods and Service Tax with reference to international experience. It is divided into nine chapters.

Chapter – 1: deals with the historical evaluation of Sales Tax and the introduction of VAT. It also explores the problems in the existing system in the country and points to the need for a GST.

Chapter – 2: is a review of the existing international and national literature relating to indirect tax in general and GST in particular. It also draws lessons which can be applied to the GST in India.

Chapter – 3: explores various successful GST models under implementation in six countries.

Chapter – 4: examines the case for including immovable property in the tax base of the GST.

Chapter – 5: examines the case for inclusion of financial services in the tax base of the GST.

Chapter – 6: explores the political economy issues in the GST implementation including political imperatives, the case for a partial roll out and analyses the reasons for resistance to the implementation of GST by some States. It also examines the case of five countries which initially implemented VAT and subsequently withdrew it. It finally draws out lessons learnt from such experiences.

Chapter – 7: deals with the administrative aspects of the implementation of the GST. It separately examines the policy strategy to be adopted to improve administrative effectiveness, the compliance strategy and the departmental resource strategy. It also looks into international experience relating to VAT frauds and suggests steps to be taken in the GST design to minimise such frauds.

Chapter – 8: examines the legal issues which need to be addressed prior to the implementation of the GST, with reference to the Indian Constitution as well as the State VAT legislation. It makes proposals regarding constitutional amendments as well as GST Law.

Chapter – 9: The concluding chapter proposes a design of the GST based on the lessons of the previous eight chapters. Using Input-Output Tables, it determines the Revenue Neutral Rate for both the Centre and the State. The RNR for the Centre works out 5.29%, the RNR for the State works out to 6.87% and 10.85% under two different scenarios. Thus it appears that implementation of the GST in India is eminently feasible, given the necessary political will.

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ABBREVIATIONS

APGST:	Andhra Pradesh Goods and Service Tax
ASEAN:	Association of Southeast Asian Nations
ATF :	Aviation Turbine Fuel
B2B :	Business to Business
B2C :	Business to Consumer
BBLR :	Broad Based and Low Rates
BI :	Business Intelligence
BJP :	Bharatiya Janata Party
BT :	Business Tax
CENVAT:	Central Value Added Tax
CGE :	Computable General Equilibrium
CGST :	Central Goods and Service Tax
CIS :	Change in Stock
CSO :	Central Statistical Organisation
CST :	Central Sales Tax
CVAT :	Compensating Value Added Tax
CVD :	Countervailing Duty
DTE :	Developing and Transitional Economies
EC :	Empowered Committee

EU	:	European Union
FC	:	Finance Commission
FTA	:	Free Trade Agreement
FTT	:	Financial Transaction Tax
GBRT:		Gross Business Receipt Tax
GDP	:	Gross Domestic Product
GFCE	:	Government Final Consumption Expenditure
GFCF:		Gross Fixed Capital Formation
GOI	:	Government of India
GSDP:		Gross State Domestic Product
GST	:	Goods and Service Tax
GSTN	:	Goods and Service Tax Network
GVA	:	Gross Value Added
HST	:	Harmonised Sales Tax
HTT	:	Hard-to-Tax
IEC	:	Information Education and Communication
IGST	:	Inter Government Sales Tax
IMF	:	International Monetary Fund
IOTT	:	Input-Output Transaction Table
ITD	:	International Tax Dialogue
MIS	:	Management Information System
MODVAT:		Modified Value Added Tax
NAS	:	National Accounts Statistics

NCAER:	National Council of Applied Economic Research
NCCD :	National Calamity Contingent Duty
NDA :	National Democratic Alliance
NIT :	Net Indirect Taxes
OECD:	Organisation for Economic Co-operation and Development
PAN :	Permanent Account Number
PFCE :	Private Final Consumption Expenditure
PIC :	Pacific Islands Countries
QST :	Quebec Sales Tax
RBI :	Reserve Bank of India
RNR :	Revenue Neutral Rate
RST :	Retail Sales Tax
SGST :	State Goods & Service Tax
SOR :	State's Own Revenue
STT :	Securities Transaction Tax
TIN :	Tax Information System
TINXSYS:	Tax Information Exchange System
UPA :	United Progressive Alliance
US SEC:	United States Securities and Exchange Commission
VAT :	Value Added Tax
VIVAT:	Viable Integrated Value Added Tax

CHAPTER 1

THE NEED FOR A GOODS AND SERVICE TAX

1.1. Introduction

This Chapter examines the historical background for indirect service taxation in India while leading on to the need for the implementation of the Goods and Service Tax. Indirect taxes broadly refer to taxes which are not borne by the person who initially pays them, and which is passed on to the ultimate consumers of the goods and services on which they are levied. These indirect taxes are levied on goods as excises (i.e. taxes on production), taxes on sales and taxes on exports and imports into a particular territory (customs duties). They are also levied on services including works contracts, passenger fares and freights and entertainment. In contrast, direct taxes like income tax and corporation tax are borne by the person on whom they are levied and cannot be passed on.

1.2. Evolution of Sales Tax in Ancient India

Though there appears to considerable antiquity in the levy of taxes on the sales and purchases of goods in India, its importance can ultimately be linked to the nature of the economy, to what extent it generated a surplus for the purpose of trade and the nature of goods traded. Thus the Arthashastra in its Chapter on sources of revenue places the greatest importance on monitoring revenue from crown property including agricultural lands, revenue from animal husbandry, irrigation works and forests.

Under the second category comes revenue from state controlled activities like the manufacturing industry including textiles, salt, alcohol and the leisure industry. Under the third category are taxes levied in cash or kind which include:

- i) Customs duty (sulka) which consists of a) import duty (pravesya), (b) export duty (nishkramya) and octroi and other gate tolls (dwarabahirikadeya)
- ii) Transaction tax (Vyaji) including manavyaji (transaction tax for crown goods)
- iii) Share of production including 1/6 share (shadabhaga)
- iv) Tax (kara) in cash
- v) Taxes in kind (pratikara) including labour (vishti)
- vi) Countervailing duties and taxes (vaidharnana)
- vii) Road cess (vartani)
- viii) Royalty (prakriya)
- ix) Taxes paid in kind by villagers(pindakara)
- x) Army maintenance tax (senabhaktam)

The taxation of transactions (Vyaji) listed at item (ii) above was the kautilyan equivalent of a sales tax but only partly. It was at the same time a sales tax, a revenue surcharge and a discount of the payments made by government through the use of

four different standards of weights and measures. The largest weight standard was mandated to be used for payment into the treasury, the second largest for normal trade, the third largest for payments out of the treasury and the smallest for payments into the palace. The transaction tax was also referred to as manavyaji in relation to the sale of crown goods. In addition to the 6.25% for sale by volume and 5% for sales by weight, the tax on sale of goods by counting was $\frac{1}{11}$ of the value i.e. about 9%. Tax was also charged on the sale of liquor as compensation fee (Vyaji) as well as sulka at the rate of 5 per cent. There are also references of the tax on the sale of threads, oil, ghee, sugar and on salt as well as on the sale of animals. There are also elaborate rules regarding differential rates, operations and administration of the tax including rules and punishment of evasion. Thus in ancient India, it was well accepted that those who engaged in trade and commerce were required to pay a tax to the Crown.

Direct taxes like land revenue continued to be predominant during the Moghul period. However, excises, sales tax and customs duties were also be important for revenue. In the cities, specified markets were allotted for the sale of goods including sometimes for specific classes of goods.

1.2.1. History of Sales Tax in India during British Rule

During the early British rule, excises and sales taxes were levied on products like sugar, cloth, leather, and dairy products. Monopolies like manufacturing and sale of salt were instituted. In 1894 the foundation for a modern excise system was laid when duty was imposed on cotton yarn. This base was enlarged to include motor

spirit in 1917 and kerosene in 1922.

The imposition of Sales Tax was first mooted by Tod Hunter Committee (Indian Taxation Enquiry Committee) 1924 which recommended the levy of retail Sales Tax to substitute levy of octroi and terminal tax by municipalities. No action was taken on this recommendation. A decade later, under the Government of India Act 1935, the Provinces in British India were empowered to levy taxes on the sale of goods included in the Provinces List. For the purpose of demarcation and distribution of legislative powers between the central and provincial Governments, three Lists were provided in the Seventh Schedule to the Act. Central government and provincial governments had exclusive power to legislate upon the subjects enumerated under List I and List II respectively. In the case of subjects contained in List III, both the levels of government could legislate with dominance to central legislation over the provincial legislation in case of conflict. Lists I and II contained subjects of taxation whereas List III did not contain any taxation power. This marked a turning point in the evolution of federal fiscal relations in India and provided the basis for the present distribution of powers under the Constitution.

Thus Government of India Act, 1935 also enabled fiscal autonomy in the eleven provinces of British India. Provincial Governments now were required to fund developmental activity. This led to province of Bombay levying for the first time Sales Tax on tobacco in 1938. The Central Provinces (Madhya Pradesh) followed with a retail Sales Tax on motor spirit and lubricants in January 1939. In 1939 the Madras Province was the pioneer to levy a general multiple point Sales Tax. Though the Primary purpose was to make up for the loss of revenue due to the imposition of

prohibition. The Central Government challenged the legality of this Act, questioning the right of the provinces to tax sales by manufacturers. Ruling that the Sales Tax on manufacturers or producers could not be distinguished from a tax on other sales and that the Provincial Government had power to tax sales of every kind, the federal court found in favour of the provinces.

Bengal imposed a single point Sales Tax system in 1941. Punjab followed in the same year with a General Sales Tax on multi point system. This led to all the Provinces and some of the Princely States gradually following suit.

1.2.2. History of Sales Tax in Independent India

Sales Tax is today one of the most dependable and buoyant source of revenue for State Governments. With limited sales points to be tracked, it was relatively easy to levy and collect taxes on sales of goods. This sector was able to contribute significantly to the state revenue. The framework of sales tax was however not uniform across all the States. Some States adopted single point taxation while some other States levied sales tax at every point of sale- the multi point tax. Some states levied a combination of single point and multiple point taxes for different goods. Some states also levied taxes on exports and imports. Such differential taxation caused hindrance to free interstate trade. In 1955 the Supreme Court passed a significant Judgement in the case of Messrs Mohanlal Hargovind Das, Bidi Merchants, Jabalpur (Madhya Pradesh) Vs the State of Madhya Pradesh. The petitioners were carrying on business of making and selling bidis having their head office in Jabalpur in the State of Madhya Pradesh and were registered as "dealers"

for the purposes of the Central Provinces and Berar Sales Tax Act, 1947. In the course of their said business, the petitioners imported tobacco from the State of Bombay in large quantities after it is blended in that State by the vendors with various other types of indigenous tobacco. This finished tobacco, after its import within the State of Madhya Pradesh was rolled into bidis which were then sold to dealers in various other States, largely to the State of Uttar Pradesh for local consumption.

The Sales Tax authorities in the State of Madhya Pradesh demanded that the petitioners to file a statement of the total purchases of tobacco made by them outside Madhya Pradesh and consumed in Madhya Pradesh with a view to assess and levy purchase tax on these transactions. The Supreme Court held that the State of Madhya Pradesh had no authority to impose such a purchase tax and that the action of the State authorities contravened the provisions of Art. 286(2) of the Constitution which prohibits states from restricting inter-State trade.

This judgment finally ended the confusion over the interpretation of Article 286 and the prohibition of States taxation powers under clause (2) became absolute and as such the Sales Tax laws made by States on interstate trade became invalid. Consequent to the judgment taxes on sale or purchase of goods in the course of inter-State trade or commerce were brought exclusively within the legislative jurisdiction of Parliament. The Sixth Constitutional Amendment introduced Entry 92A in List I of the Seventh Schedule authorizing Parliament to levy tax on the sale or purchase of goods (other than newspapers) in the course of inter-State trade. This also led to the passage of the Central Sales Tax Act in 1956, which authorized the Government of

India to levy the tax on sales made in the course of inter-State trade.

The revenue from this tax was assigned to the States by amending Article 269 of the Constitution. This ensured that intra state sales remained within the tax base of the State Government, while taxation of interstate was exclusively assigned to the Central Government. However, the authority to collect and appropriate this tax was assigned to the exporting State from where the movement of goods originated. In addition, section 15 of the Central Sales Tax Act laid down certain restrictions on the powers of the States in regard to the levy of intra-State sales tax on goods declared as of special importance within their respective territories.

Apart from sales tax, certain States also imposed additional levies like the works contract tax – on the material component of works contracts undertaken by agencies: a purchase tax levied on the purchaser when collection from the seller was not feasible like transactions in agricultural products and a turnover tax on small traders below a designated sales threshold who were then exempted from sales tax.

To give a flavor of the development of a taxation system in a state, the history of taxation in Andhra Pradesh is outlined below.

1.2.3. Development of Sales Tax System in Andhra Pradesh

Andhra State which was originally a part of the composite Madras State continued to follow Madras General Sales Tax Act 1939 after it was created in 1953. It was a small multi point tax at a very low rate of ½% with a provision for a turnover tax for small dealers. All sales of tangible goods (excluding sale of immovable property,

actionable claims, stocks, shares and securities) by dealers with turnover not less than Rs.10,000/- in a year were liable for tax. Certain sales were exempt like bullion, spices, cotton yarn, handloom cloth, agricultural and horticultural produce by the producer. Certain commodities like electrical energy, motor spirit etc., were taxed under special enactments. The general rate of tax was ½% on annual turnovers exceeding Rs.20,000/-. Dealers with annual turnover between Rs.10,000/- and Rs.20,000/- were taxed on a slab basis at Rs.5/- per month.

In 1954, the list of exemptions was enlarged. To increase revenue yield, an additional single point tax on the first sales of all varieties of mill made cloth and precious stones was imposed. In 1955, the Government of Andhra State appointed a committee to make recommendations to increase sales tax revenue et al by examining the feasibility of taxing agricultural commodities. The Committee recommended that (a) Agricultural commodities which were largely exported to other states be subjected to single point tax at the point of purchase. (b) List of goods to additional single point be enlarged.(c) No. of taxable luxury articles be enlarged and subjected to uniform rates of tax after negotiations with the neighbouring states and (d) Liability to tax be fixed with reference to gross turnover.

On the basis of the committee's recommendations for levy of single point purchase tax on paddy rice, turmeric, jute, coconuts and copra, the Andhra General Purchase Tax Act, 1956 was enacted bringing the above six commodities to tax at the first purchase point at rates varying from 6 paisa to 1 anna in the rupee.

The Telengana region had a selective sales tax on commodities in place since 1947. In 1950 a general sales tax was introduced by the Hyderabad General Sales Tax Act 1950 to make up for the loss in revenue resulting from the abolition of interstate transit duties. Dealers with turnover of Rs.50,000/- and above in a year were required to register themselves as dealers. Dealers with turnover of Rs.75,000/- and above were made liable to sales tax at 2 paisa in the rupee on all goods generally and at all points of sale. A few commodities like ground nut, beedi leaves, and castor seeds were made liable to purchase tax. There was an additional tax at the point of first sale at 6 paisa in the rupee on motor vehicles, refrigerators, radios, electrical goods, perfumery, cosmetics and other luxury goods. Bullion and spices were liable to tax at $\frac{1}{4}$ % at the point of 1st sale. Articles exempted included food including jaggery, sugar, tamarind, chillies, turmeric, edible oils and ghee, handloom cloth and cheaper varieties of cloth, umbrellas, blankets and rugs, cotton seeds, paper and newsprint, school exercise books and drawing books certain categories of text books, cola, coke, mica, jute, matches, raw iron and steel and cattle fodder. Subsequent to 1950 and before the introduction the APGST ACT 1957 the Hyderabad General Sales Tax Act 1957 underwent the several amendments.

After formation of Andhra Pradesh in 1956, the Madras General Sales Tax which was in operation in Andhra area and Hyderabad General Sales Tax Act which was in operation in Telengana area of the State of Andhra Pradesh were both repealed and replaced by Andhra Pradesh General Sales Tax Act 1957 with effect from 15.06.1957. This Act underwent several amendments subsequently.

1.3. Value Added Tax (VAT)

As will be seen from the above account, the sales tax framework was created in India in a reactive and unplanned fashion more to meet the needs of revenue rather than to put in place an efficient taxation structure. For instance, before a commodity was produced, its inputs were first taxed, and then after the commodity was produced, output was once again taxed again with input tax load. This caused the goods to undergo double taxation with cascading effects leading to distortions in investment and deceleration of growth. Such cascading effects ultimately had a negative effect on the size of tax base thereby dampening the process of revenue generation and resource mobilisation of the government. This also led to misallocation of resources and decelerated growth.

The Value Added Tax (VAT) system, allows this problem to be addressed by allowing dealers to claim a set-off on the input tax paid as well as the tax paid on previous purchases. Consequently, the double taxation of commodities as well as the multiplicity of taxes is eliminated, resulting in the removal of tax cascading. Value Added Tax (VAT) is a multi-point Sales Tax system where the tax is levied as a proportion of value added (i.e. sales minus purchases). VAT is a consumption tax charged at every step of the value chain i.e., at each transaction in the production distribution system. This was a paradigm shift from the Sales Tax framework of taxation at first/ last/ multi point.

1.3.1. International History of VAT

Levy of a value added tax was first proposed by Dr. Wilhelm Von Siemens for Germany in 1919 as an improvement of the turnover tax. In 1921, Professor Thomas S. Adams in the United States of America proposed levy of a "sales-tax with a credit or refund for taxes paid by the producer or dealer (as purchaser) on goods bought for resale or for necessary use in the production of goods for sales", basically a VAT. VAT was also recommended by the Shoup Mission for the reconstruction of the Japanese Economy in 1949.

However, the tax was not introduced by any country till 1954, when it was introduced by France. The initial VAT model was a hybrid since it was not universally applicable to all transactions. It was restricted to large businesses and gradually extended to all business sectors. Later it was supplemented by a separate tax on services.

After a decade, VAT started spreading rapidly. The rollout of VAT internationally can be seen from the following table.

Table 1.1

Implementation of VAT across the world

Sl.no	Name of the Countries	VAT Implementation year
1	France	1954
2	Ivory Coast	1960
3	Senegal	1961
4	Brazil and Denmark	1967

5	Netherlands and Sweden	1969
6	Luxembourg	1970
7	Belgium	1971
8	Ireland	1972
9	Italy , U.K, Austria	1973
10	South Korea	1977
11	China	1984
12	Indonesia	1985
13	Portugal, Spain	1986
14	Taiwan	1986
15	Greece	1987
16	Philippines	1988
17	Japan	1989
18	Pakistan	1990
19	Bangladesh	1991
20	Thailand	1992
21	Finland, Singapore	1994
22	Nepal	1997
23	Mongolia, Srilanka	1998
24	Vietnam	1999
25	India (MODVAT-VAT)	1986-2003

1.3.2. History of VAT in India

In 1986, India introduced a hybrid VAT termed Modified Value Added Tax (MODVAT). Unlike the generally accepted VAT framework, the Indian MODVAT system was designed to cover manufacturing of goods by giving credit of excise duty paid on inputs. The scope of MODVAT has been extended over the years and has since been renamed as Central Value Added Tax (CENVAT), which also covers services.

Table 1.2

Timeline of Important Events in Indirect Taxation in India

Year	Details of the Event
1935	Provinces were empowered to levy and collect taxes on sales of goods through Govt of India Act 1935
1939	Madras State implemented Sales Tax in India for the first time.
1941	Punjab followed Madras and introduced Sales Tax in the state.
1955	Supreme Court judgment in Messrs Mohanlal Hargovind Das Vs the State of Madhya Pradesh.
1956	Enactment of Central Sales Tax Act
1974	VAT recommended by LK Jha Committee
1986	Introduction of MODVAT on selected commodities
1991	VAT also recommended by Chelliah Committee
1994	Tax on Services were introduced in India
1999	Empowered Committee was constituted to work out modalities on VAT
2002	Introduction of Central value Added Tax (CENVAT) on all commodities at central level
2003	Haryana introduces VAT
2005	VAT introduced in 24 States/UTs
2006	Five more States implement VAT

2007	VAT implemented in Tamil Nadu & Puducherry. FM states that GST in India will be introduced from April 01, 2010. Joint Working Group set up for preparation of GST roadmap and structure.
2008	U.P introduces VAT
2009	First Discussion Paper on GST was released by Empowered Committee Task Force on GST of 13 th Finance Commission submit their Report

The Tax Reform Committee (1992) chaired by Raja J. Chaliah suggested a uniform model of VAT for India nationally. This was seen as advantageous as it would also reduce administrative and compliance costs. The first preliminary discussion on levy of VAT in States took place in a meeting of Chief Ministers convened by Dr. Manmohan Singh, the then Union Finance Minister in 1995. In this meeting, the basic and desirable profile of VAT was discussed. Periodic interactions between State Finance Ministers continued. Thereafter, in an important meeting of all Chief Ministers, convened on November 16, 1999 and chaired by Shri Yashwant Sinha, the then Union Finance Minister, three significant decisions were taken which paved the way for future interstate tax coordination nationally.

The first decision was the cessation of the ‘race to the bottom’ between the states. It was agreed that the unhealthy sales tax rate “war” among the States would end and sales tax rates would be harmonized by implementing uniform floor rates of sales tax for different categories of commodities with effect from January 1, 2000. Second, in

the interest of harmonization of incidence of sales tax, the sales-tax-related industrial incentive schemes would be discontinued with effect from January 1, 2000. Third, steps would be taken by the States for introduction of State-level VAT after adequate preparation. For implementing these decisions, an Empowered Committee of State Finance Ministers chaired by the then Finance Minister of West Bengal Dr Ashim Dasgupta was setup.

In 2002, the Kelkar Committee on indirect taxes noted that implementing Value Added Tax (VAT) was important for the following three main reasons. Firstly it eliminates the cascading effect of taxes. Second, it promotes competitiveness of exports. Third, it has a simple and transparent structure thus improving tax compliance. It therefore made a series of recommendations aimed at implementation of VAT. These included improving preparedness for State VAT, putting in place uniformity of definitions and administrative framework across states, payment of compensation for losses on VAT implementation and subsumation of all major indirect taxes into VAT. The Kelkar Committee also suggested that VAT framework should provide for grant of credit of duty by the importing State for the duty paid in the exporting State, in the course of inter-State movement of goods. It also recommended that for ensuring stability and continuity of the VAT regime, a VAT Council or any other permanent agency be setup and vested with adequate powers to take steps to remove discriminatory taxes and practices and eliminate barriers to the free flow of trade and commerce across the country be.

With the impetus provided by the Kelkar report, the Empowered Committee assisted by the Finance Secretaries and the Commissioners of Commercial Taxes of the State

Governments as well as senior officials of the Revenue Department of the Ministry of Finance, Government of India accelerated its efforts to implement VAT. Through repeated follow up and discussions in the Empowered Committee, it was possible within a period of about a year and a half to broadly achieve the first two objectives on harmonization of sales tax structure through implementation of uniform floor rates of sales tax and discontinuation of sales-tax- related incentive schemes. Whenever any deviation was reported from the uniform floor rates of sales tax, or from decision on incentives, the Empowered Committee took up the matter with the concerned State and also the Government of India for necessary rectification through process of 'moral suasion' rather than by imposition of any penalties.

Steps were then initiated by the EC for the introduction of State-level VAT. In order to put in place a ' National VAT ' as envisaged by Dr Chelliah, and avoid competition among the states, attempts were made to harmonize the VAT design while recognizing the need for some flexibility to incorporate the distinctive features of each state. Along with these measures at ensuring convergence, states initiated steps for the required training of staff, computerization and educating trade and industry across the respective states.

The Chief Ministers of all the states in a meeting on State-level VAT convened by the Prime Minister on October 18, 2002, committed to introducing VAT from April 1, 2003. With the introduction of CENVAT (Central VAT), all commodities were brought into the purview of this tax system from the manufacturing side. It was recognized that VAT would address the problems of

the existing system of taxes from the sales side. Since tax credits are provided only if taxes on inputs are paid, VAT essentially ensured a built-in check in tax compliance amongst all dealers. Moreover, since VAT requires a uniform floor rate of tax, differential rates of taxation across states get eliminated which in turn prevents ‘rate war’ among different states. This was thus a significant reform in indirect taxes in India.

Most of the states implemented VAT from April 1, 2005. However implementation in the rest of States across the country could be achieved only in a staggered fashion as seen from the Table 1.2 below.

Table 1.3

Rollout of VAT in India

Sl.no	Name of the States/UTs	VAT implemented from
1	Haryana	April 1, 2003
2	Maharashtra, West Bengal, Karnataka, Kerala, Andhra Pradesh, Goa, Delhi, Punjab, Orissa, Assam, Sikkim, Meghalaya, Tripura, Arunachal Pradesh, Manipur, Jammu & Kashmir, Mizoram, Nagaland, Bihar, Himachal Pradesh, Dadar & Nagar Haveli and Daman & Diu	April 1, 2005
3	Uttaranchal	October 1, 2005

4	Chandigarh	December 15, 2005
5	Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh and Rajasthan	April 1, 2006
6	Tamil Nadu.	January 1, 2007
7	Puducherry	July 1, 2007
8	Uttar Pradesh	January 1, 2008

Overcoming the initial transitional problems, the implementation of VAT had been smooth and encouraging. The rate of growth of tax revenue has nearly doubled from the average annual rate of growth in the pre-VAT five year period. Industry and trade has also responded to VAT regime positively.

1.4. Goods and Services Tax (GST)

Though VAT has been successful to a significant extent, there are still many shortcomings in the existing VAT framework. First, tax cascading has not been eliminated totally. VAT on sale is levied on the excise inclusive cost of a good thus resulting in VAT being levied on the excise component of the tax also. Further CST is not set off, resulting in a further burden of taxation embedded in the cost of a good. This results in distortion of the price of a good and consequent misallocation of resources resulting in lowered economic efficiency and slower growth. Second,

several indirect taxes, such as Entry Tax, luxury tax, entertainment tax, excises on alcohol for human consumption, betting tax, are being levied separately, outside the VAT system. No Input tax credit is available for these taxes resulting once again in these taxes also being embedded in the sales price of a good. Third, Service tax has not been integrated into the VAT structure with the result that set off of service tax is not allowed on VAT levied by the State Government. This further distorts the price structure.

The Goods and Service Tax (GST) is designed to address all these shortcomings. GST can be defined as a true VAT as against the present hybrid VAT in place in India. The tax base includes all goods and services with limited exemptions. The taxable event under the GST system would be the “supply of goods” and the “supply of services”. Since the entire tax bases would be shared by both the Center and the States, and most other taxes would be merged into the GST, cascading would be automatically eliminated. Input tax credit would be against all taxes levied mainly excise, or service tax or VAT. CST being an origin based tax would be eliminated. GST will thus widen the tax base and improve compliance resulting in enhanced tax collections.

The prices of commodities are expected to come down in the long run as dealers pass on the benefits of reduced tax incidence to consumers. Being consumption based tax; GST will result in better revenue collection for states with higher consumption of goods and services. This is demonstrated in the following example which assumes that the CGST rate is 8% and SGST is 10%.

Table 1.4

VAT Vs GST Comparison

(I) Manufacturer to wholesaler	Under VAT (Rs.)	Under GST (Rs)
Cost of Production: (Rs 60000 material cost + Rs 40000 job work/transport)	1,00,000.00	1,00,000.00
Add: Manufacturer's Profit (20%) (60% apportioned to manufacturing and 40% to services)	20,000.00	20,000.00
Manufacturer's basic price	1,20,000.00	1,20,000.00
Plus Central Excise duty @ 12%	8,640.00	NIL
Plus Service Tax @ 12%	5,760.00	NIL
Plus Value Added Tax @ 14.5%	19,488.00	NIL
Plus Central GST @ 8%	NIL	9,600.00
Plus State GST @ 10%	NIL	12,000.00
Total Price	1,53,888.00	1,41,600.00
(II) Whole-Seller to Retailer		
Cost of goods to the Whole-seller after ITC	1,34,400.00	1,20,000.00
Value addition plus Profit (20%)	26,880.00	24,000.00
Total	1,61,280.00	1,44,000.00
Plus Value Added Tax @ 14.5%	23,385.60	NIL
Add: Central GST @ 8%	NIL	11,520.00
Add: State GST @ 10%	NIL	14,400.00
Total	1,84,665.60	1,69,920.00
(III) Retailer to Final Consumer		
Cost of goods to the Retailer after ITC	1,61,280.00	1,44,000.00
Value addition plus Profit (20%)	32,256.00	28,800.00
Total	1,93,536.00	1,72,800.00
Add: Value Added Tax @ 14.5%	28,062.72	NIL
Add: Central GST @ 8%	NIL	13,824.00
Add: State GST @ 10%	NIL	17,280.00
Total Price to the final Consumer	2,21,598.72	2,03,904.00
Tax component in price to Final Consumer	28,062.72	31,104.00
Final Price ex-taxes	1,93,536.00	1,72,800.00

As will be seen from the above example, due to multiplicity of taxes and non-availability of input tax credit across the board, and cascading effect the final price to the consumer is significantly lower in GST than under VAT. The final price to the consumer inclusive of taxes is lower in the GST regime despite the fact that the collection of tax is higher. Essentially this arises because cascading is eliminated, the base of GST is wider, the CGST and SGST aggregate rate is higher than the VAT/ excise /service tax rate and most exemptions are removed.

A NCAER study, commissioned 13th Finance Commission, evaluates the possible impact of GST on India's international trade in a Computable General Equilibrium (CGE) framework. It notes that the differential multiple tax regimes across sectors of production are leading to distortions in the allocation of resources as well as production inefficiencies. Complete offsets of taxes are not being provided to exports, thus affecting their competitiveness. It estimates that implementation of a comprehensive GST across goods and services will enhance the nation's Gross Domestic Product (GDP) by between 0.9 and 1.7 per cent. This works out to between Rs. 52,600 crore and Rs. 99,450 crore on the basis of GDP figures for 2009-10. Such benefits would accrue every year. It would also lead to efficient allocation of the factors of production, with a fall in the overall price level. The report identifies a number of sectors which would directly benefit from the implementation of GST. The study estimates the gain in exports to vary between 3.2 and 6.3 per cent. Imports are expected to gain between 2.4 per cent and 4.7 per cent, thus improving the trade balance.

1.5. Present status of Indirect taxes in India

The indirect taxes levied in India are detailed below. Section 'A' deals with the Indirect taxes levied by the Central Government while Section 'B' deals with Indirect taxes levied by State Governments in general and Andhra Pradesh in particular.

1.5.1. Section A:

1.5.1.1. Customs Duty

Under the custom laws, the various types of duties are leviable.

(1) **Basic Duty:** This duty is levied on imported goods under the Customs Act, 1962.

The rate varies for different items from 2.5% to 100%.

(2) **Additional Duty (Countervailing Duty) (CVD):** This is levied under section 3(1) of the Custom Tariff Act and is equal to excise duty levied on a like product manufactured or produced in India. Such duty is leviable on the value of goods plus basic custom duty payable. e.g. If the customs value of goods is Rs. 5000 and rate of basic customs duty is 10% and excise duty on similar goods produced in India is 20%, CVD will be Rs.1100/-.

(3) **Additional Duty to compensate duty on inputs used by Indian manufacturers:** This is levied under section 3(3) of the Customs Act.

(4) **Anti-dumping Duty:** Whenever sellers abroad export into India goods at prices below the amounts charged by them in their domestic markets in order to capture Indian markets this is termed as dumping. To prevent such dumping of goods, the

Central Government levies additional duty equal to the margin of dumping on such articles whenever dumping is proved.

(5) **Protective Duty:** If the Tariff Commission makes a recommendation to protect the interests of Indian industry, the Central Government may levy protective anti-dumping duties at the rate recommended on specified goods.

(6) **Duty on Bounty Articles:** In case a foreign country subsidises its exporters for exporting goods to India, the Central Government may impose additional import duty equal to the amount of such subsidy or bounty. If the amount of subsidy or bounty cannot be clearly determined immediately, additional duty may be collected on a provisional basis and after final determination; difference may be collected or refunded, as the case may be.

(7) **Export Duty:** Such duty is levied on export of goods. At present very few articles such as skins and leather are subject to export duty. The main purpose of this duty is to restrict exports of certain goods.

(8) **Cess on Export:** Under sub-section (1) of section 3 of the Agricultural & Processed Food Products Export Cess Act, 1985 (3 of 1986), customs is levied and collected as cess on export of all scheduled products at 5% advalorem.

(9) **National Calamity Contingent Duty:** This duty was imposed for the first time in 2001. Its scope was gradually extended to include duty on pan masala. Cigarettes, imported petroleum crude oil, motor cars, imported multi-utility vehicles, two wheelers and mobile phones.

(10) **Education Cess:** Education Cess is leviable @ 2% on the aggregate of duties of Customs.

(11) **Secondary and Higher Education Cess:** Leviable @1% on the aggregate of duties of Customs.

(12) **Road Cess:** Additional Duty of Customs on Motor Spirit and High Speed diesel is levied.

(13) **Surcharge on Motor Spirit:** Special Additional Duty of Customs (Surcharge) on Motor Spirit is also leviable by the Finance Act, 2002.

1.5.1.2. Central Excise Duty

The term "excisable goods" means the goods which are specified in the First Schedule and the Second Schedule to the Central Excise Tariff Act 1985. It is mandatory to pay Central Excise duty payable on the goods manufactured, unless exempted e.g. duty is not payable on the goods exported out of India.

Basis Excise Duty: Excise Duty, imposed under section 3 of the 'Central Excises and Salt Act' of 1944 on all excisable goods other than salt produced or manufactured in India, at the rates set forth in the schedule to the Central Excise tariff Act, 1985, falls under the category of Basic Excise Duty In India. The General excise duty rate (CENVAT rate) is presently at 12%. The merit rate is 6% while concessional duty of 2% is levied on 130 items.

(2) **Special Excise Duty:** According to Section 37 of the Finance Act, 1978, Special Excise Duty is levied on all excisable goods that come under taxation, in line with the Basic Excise Duty under the Central Excises and Salt Act of 1944. Therefore, each year the Finance Act spells out that whether the Special Excise Duty shall or shall not be charged, and eventually collected during the relevant financial year.

(3) **Additional Duty of Excise:** Section 3 of the 'Additional Duties of Excise Act' of 1957 permits the charge and collection of excise duty in respect of the goods as listed in the Schedule of this Act.

(4) **Road Cess:** (a) Additional Duty of Excise on Motor Spirit: This is leviable by the Finance Act (No.2), 1998. (b) Additional Duty of Excise on High Speed Diesel Oil: This is leviable by the Finance Act, 1999.

(5) **Surcharge**

(a) Special Additional Duty of Excise on Motor Spirit: This is leviable by the Finance Act, 2002.

(b) Surcharge on Pan Masala and Tobacco Products: This Additional Duty of Excise has been imposed on cigarettes, pan masala and certain specified tobacco products, at specified rates in the Budget 2005-06.

(6) **National Calamity Contingent Duty (NCCD):** NCCD was levied on pan masala and certain specified tobacco products vide the Finance Act, 2001. The Finance Act, 2003 extended this levy to polyester filament yarn, motor car, two wheeler and multi-utility vehicle and crude petroleum oil.

(7) **Education Cess:** Education Cess is leviable @2% on the aggregate of duties of Excise and Secondary and Higher Education Cess is Leviable @1% on the aggregate of duties of Excise.

1.5.1.3. Service Tax

The levy of service tax can be traced back to recommendations made in early 1990's by the Tax Reforms Committee headed by Professor Dr. Raja J. Chelliah.

Based on these recommendations Dr. Manmohan Singh, the then Union Finance Minister, in his Budget speech for the year 1994-95 introduced service tax on three services namely telephones, non-life insurance and stock brokers services. Successive Finance Ministers widened the service tax net in their budgets. At present, over 119 services are included in the tax base of service tax. With the introduction of the concept of negative list of services in the 2012-13 budgets, all services except those specified have been brought into the service tax net. During this period of eighteen years (1994-2012) not only was number of taxable services increased from 3 to over 119, the rate of service tax, which was 5% in the year 1994, has also increased to 8% in the year 2003, to 10% in the year 2004 and to 12% in 2006. In 2009, the rate of service tax was reduced to 10%. From 1st April 2012 service tax rate was resorted to 12%. Now with 2% of the service tax payable as education Cess and 1% of service tax amount towards Secondary Higher Education Cess, the aggregate rate of Service tax is 12.36%.

It is noteworthy that despite nineteen years having elapsed, the Central Government has not yet introduced a separate legislation for Service Tax. The Central Board of

Excise and Customs issues departmental circulars or instructions from time to time to explain the scope of taxable services and the scheme of service tax administration.

1.5.2. Section B

1.5.2.1. Sales tax/VAT

In Andhra Pradesh, the standard rate for VAT is 14.5%. Apart from exemptions items and zero rate the other two rates applicable to certain Goods are the concessional rate of 5% and the bullion rate of 1%.

1.5.2.2. Entertainment Tax

In India, entertainment tax is levied on every financial transaction that is related to entertainment such as movie tickets, major commercial shows and big private festivals. Entertainment is included in the state List in the Constitution bringing it into the exclusive tax powers of the state government. The states have started to generate higher incomes after the Paid Television Services began in India including Pay TV services, DTH services, and Cable services.

1.5.2.3. Luxury Tax

A luxury tax is a tax on luxury goods, products not considered essential. A luxury tax is often modeled after a sales tax or VAT, charged as an ad valorem tax on all notified items. As per Andhra Pradesh Tax on luxuries Act, 1987, Government levy a tax at a rate of 10% on the charges in respect of any luxury provided in a hotel to every person when the rate of charge per person per day is Rs.60/- or more. Subsequently,

the levy was extended we.f.1.8.1996 even to corporate hospitals. By the same Act the levy was extended to tobacco products specified in the Schedule. Cigarettes and chewing tobacco products were included in the said Schedule. By Ord. No.2 of 1997 the rate of tax on chewing tobacco products was increased from 10% to 50%.

1.5.2.4. Entry tax:

Entry tax is levied on the products which are under transfer and enter into one state from another state. In Andhra Pradesh entry tax is being levied under the AP Entry Tax on Motor Vehicles 1996. Subject to the provisions of this Act, there shall be levied and collected entry tax on the entry of any motor vehicle into any local area for use or sale therein which is liable for registration in the State under the Motor Vehicles Act, 1988. The tax levied shall be at such rate or rates as may be fixed by the Government, by notification, on the purchase value of the motor vehicle but not exceeding the rates specified for motor vehicles in Vth schedule of the AP Value Added Tax. From March 2012 the rate of tax is 14.5% except on Tractors, power tillers.

1.5.3. Cesses

A cess is strictly speaking an earmarked tax. In terms of its economic effects, earmarking can be beneficial, but the conditions for this to be so are often not met in practice. The earmarked tax (which may be a separate tax or a fixed proportion of a broad tax) needs to be kept separate from other revenue, be applied exclusively to the expenditure programme for which it is identified, and fully funded (but not over-funded) to ensure successful implementation of the program it is meant for.

1.6. Problems in the existing Indirect tax system in India

The existing Indirect tax structure and its administrative framework have thus created a variety of problems. These include:

- i. The remnant tax cascading even after introduction of VAT on the cost of products and services is adversely affecting domestic competitiveness.
- ii. Different tax treatment for manufacturing and service sectors as well as geographical and product based exemptions distorts prices and thwarts economically sound investment decisions;
- iii. The complex tax structure demands a high cost of compliance and tax administration which add to the cost of doing business discouraging economies of scale, efficiency in the supply chain and thus fresh resource allocations.
- iv. Uncertainty of tax incidence on investment in manufacturing and services and litigation due to frequent changes in tax laws and procedures discourage new investment.
- v. Instances of double taxation by central and state government on same tax event abound specially in the service sector. These have led to substantial distortions in the tax structure.
- vi. The existing tax structure has fragmented the Indian market in to 29 state markets by tax barriers which discourages efficient production and supply chain models and restricts trade. Stand alone multiple taxes have cascading effect on cost leading to competitive disadvantage to Indian

industry. Central Sales Tax (CST) on interstate movement of goods have not been integrated with Value Added Tax hence CST paid on inter-state procurement is not eligible for input tax credit and continues to be an extra cost of doing business. Similarly, manufacturers are unable to avail credit of state taxes and miscellaneous central taxes, such as entry tax, octroi, etc against excise duty and vice versa and these become added costs along the supply chain adversely affecting exports and encouraging imports

- vii. Differential treatment of the manufacturing and service sectors has created a persistent implementation problem in the existing tax system. With the line between goods and services getting blurred, definitional litigation is on the rise. The problem is further aggravated with the advent of digital technology. There should be uniform tax rate on goods and services and same tax treatment for availing input tax credit at central as well as state level.

1.7. Additional Handicaps in the existing hybrid VAT system

As detailed above, a plethora of taxes, cesses and duties still survive which are not eligible for set off against input tax paid. This results in tax cascading and inefficient resource allocations. In addition, border and internal check-posts on highways form physical barriers to trade. These are primarily associated with monitoring by five different state level revenue earning departments.

- Sales tax Department

- Transport Department
- Mines Department
- Excise Department
- Forest Department

Check-posts are setup by these departments to inspect goods traffic and to ensure regulatory compliance. These include i) ensuring goods transported are tax paid ii) royalties on mineral under transportation are paid iii) prevention of illegal movement of goods minerals and forest produce. iv) To check the fitness of the vehicle used for transportation. v) Prevent overloading of the trucks. Due to multiple regulatory compliance check-posts have become sources of delay for traffic. In addition rent seeking is encouraged by setting up of check-posts.

Of late, the system check-posts have been under severe criticism from all quarters of society, the main allegations are corruption, harassment, obstructing free flow of movement of goods resulting abnormal delays in shipments.

Almost all the states are maintaining these check-posts barring a few states. In this era of VAT/GST there is a dire need to revisit the entire system of check-posts to facilitate free flow of movement of goods across State borders.

1.8. GST for India's competitiveness and growth

In the above context replacement of existing complex multilayer indirect tax system by a rational Goods and Service Tax on all tradable goods and services is imperative for India's growth and competitiveness. In the proposed GST regime, manufacturers

should be entitled to input tax credit of all taxes levied on inputs and capital goods purchased from within the State as well as inter-state, from a registered dealer for setting off the output tax liability on the sale of their finished products. Similarly, distributors should also be able to pass on the duty burden to their customers. This would ensure that there is no cascading effect of taxes and would result in the reduced cost of doing business. In the medium term, this is likely to result in reduction in the prices of commodities as manufacturers and distributors would pass on the benefits of the lower costs of carrying on their businesses to the consumers in a competitive environment.

The case for having uniform tax on goods and services across India becomes even more compelling in view of India implementing number of free trade agreements (FTAs) with its neighbours, ASEAN countries and the Gulf nations. With so many FTAs in operation, there is immense pressure manufactures forcing the Central and State governments to rationalise their local tax regime to ensure a level -playing field for domestic manufacturing. This has made imperative the movement to a uniform goods and services tax regime with seamless input tax credit. GST will help to overcome various indirect tax issues under present taxation system in India. It will facilitate a single national common market leading to economies of scale and an efficient and cost effective supply chain.

There is thus a strong case for the implementation of the Goods and Service Tax in India, as early as feasible.

CHAPTER 2

REVIEW OF EXISTING LITERATURE

2.1 Introduction

The purpose of this chapter is to review the previous work done internationally and nationally on the theoretical and empirical foundations of taxation systems in general and VAT /GST in particular as a prelude to designing a GST relevant for India. Considerable research effort has already gone into analyzing the characteristics of VAT /GST across different countries in the world and a variety of models of VAT/GST have been designed, developed and implemented to suit different economic environments.

The papers reviewed in this chapter are the work of eminent research scholars and tax professionals/experts across the world and international agencies like World Bank IMF and OECD. The Value Added Tax (VAT) and Goods and Service Tax (GST) have been treated synonymously for the purpose of this literature review only. This Literature review has been undertaken below in three sections. The first section captures the international experience of developed nations, their VAT/ GST structures/ designs, implementation process and the problems associated with them. In the second section the experiences relating to developing and transitional countries are reviewed for. Finally in the third section, issues on VAT/ GST reforms and policy formulation and other issues relating to India specifically have been analysed.

Section 2.2 provides the review of literature based on the international experience of developed nations, Section 2.3 focuses on the literature relating to developing and

transitional countries, Section 2.4 is devoted to issues relating to India and Section 2.5 summaries the various arguments developed in the chapter and posits a conclusion.

2.2 International Studies

Richard Bird (2010). This paper, analyses the issue of taxation from the perspective of international institutions concerned with improving tax outcomes. This paper draws two general conclusions. First, one must know the context well, and for doing so one requires a clear analytical model, where the issues in each country are approached in light of a thorough understanding of the path-dependent and context-specific conditions within which policy initiatives are introduced and implemented. Close attention must be paid to relevant local conditions. Secondly, there is “*no-one-size-fits-all*” approach which can be adopted across countries. There is no magic blueprint, no tax system, structure, or particular policy that makes sense for all countries at all times. Realizing that, from the government’s perspective, taxes are only one of a set of “governing instruments,” it is critical in designing and evaluating tax policy to take carefully into account the design, administration, and consequences of such other government activities as those related to nontax revenues, expenditures, and regulations. Designing and implementing a viable and sustainable tax strategy for development in a developing country is a difficult and time-consuming task. When countries really want to do so and take the lead themselves and obtain the technical, institutional, and financial support that may be required, they are successful in designing a sustainable tax system. As India embarks on its initiative to implement GST, this paper offers useful lessons on broad contours of tax design.

N. Gregory Mankiw, Matthew Weinzierl, Danny Yagan (2009). This paper deals with the optimal design of a tax system. This paper explores the interplay between tax theory and tax policy. The paper examines eight general lessons suggested by optimal tax theory as they have developed in recent decades: 1) Optimal marginal tax rate schedules depend on the distribution of ability; 2) The optimal marginal tax schedule could *decline* at high incomes; 3) A flat tax, with a universal lump-sum transfer, could be close to optimal; 4) The optimal extent of redistribution rises with wage inequality; 5) Taxes should depend on personal characteristics as well as income; 6) Only final goods ought to be taxed, and typically they ought to be taxed uniformly; 7) Capital income ought to be untaxed, at least in expectation; and 8) In stochastic, dynamic economies, optimal tax policy requires increased sophistication. Theoretical underpinnings for each lesson are reviewed and its consistency with actual tax policy analysed. The paper thus identifies key lessons policymakers might take from the academic literature on how taxes ought to be designed, and it discusses the extent to which these lessons are reflected in actual tax policy. The authors find that there has been considerable change in the theory and practice of taxation over the past several decades although the two paths have been far from parallel. Overall, tax policy has moved along a few dimensions in the directions suggested by theory, even though the recommendations of theory along these dimensions are not always definitive. In particular, among OECD countries, top marginal rates have declined, marginal income tax schedules have flattened, and commodity taxes are more uniform and are typically assessed on final goods. However, trends in capital taxation are mixed, and rates still are well above the zero level recommended by theory. Moreover, some of theory's

prescriptions, such as taxes that involve personal characteristics, asset-testing, and history dependence, remain rare. Where large gaps between theory and policy remain, the harder question is whether policymakers need to learn more from theorists, or the other way around. Both possibilities have historical precedents.

Richard M. Bird and Pierre-Pascal Gendron (2009).The authors draw lessons from the Canadian experience of the implementation of VAT. The Canadian experience is particularly relevant to India as it demonstrates that a federal VAT can work well in a country in which some sub national units have their own VATs, some have their own retail sales taxes (RSTs), and some have no sales tax at all . In the context of some states in India objecting to GST, a partial implementation model across some states can be considered for which this experience is relevant. The Canadian system simultaneously implements three different models-federal VAT, QST and HST. The authors find that with good tax administration it is perfectly feasible to operate a VAT at the sub national level on a destination basis. In principle, it is immaterial whether there are two separate administrations or one; or, if there is one, which level operates it. While a single central administration and a common base (as with the HST) is likely to be more administratively and economically efficient, this requirement of convergence is less essential if a high degree of intergovernmental cooperation is ensured. This could be through a number of steps including unified audit, a uniform VAT registration system and online information exchange. From the perspective of ensuring fiscal autonomy and improving accountability, each taxing government should be able independently to determine its own VAT rate. Achieving a “coordinated” two-level sales tax structure requires

considerable effort. First, basic political agreement has to be secured between governments with different interests. Second, an appropriate legal framework to implement that agreement has to be worked out. Third, an appropriate administrative structure must be agreed. Fourth, to make the system work over time, appropriate oversight and cooperation systems between governments need to be developed and put into place. The authors consider the case of the United States of America and find that even taking into account the existence of numerous local sales taxes in some US states, these lessons should be broadly applicable to that country. These findings are however extremely relevant to India as we struggle to achieve consensus between the Centre and all the 28 states on the configuration and implementation of the GST.

Background Paper prepared by staff of the IMF, OECD, and World Bank (2005).

This paper provides an overview of the experience of implementation of VAT globally providing the context for the discussion at the International Tax Dialogue (ITD) conference on the VAT which was held at Rome in 2005. This paper asserts that while the net benefits depend to some degree on individual country circumstances, global experience indicates that the VAT has proved to be appropriate for developing countries. VAT has served to stabilize and bolster revenue mobilization in many countries while contributing to enhanced economic efficiency. Moreover, the complexity of the indirect taxes that the VAT has typically replaced belies the concern that the VAT is inherently “too complex” for developing countries. Empirical analysis indicates that the importance of international trade, high literacy, and the length of time the VAT has been in place in enhancing VAT revenues. While the latter two factors

imply that the tax is “more successful” in the more developed countries, there is empirical evidence that it has also been “successful” in many developing countries. On the choice between a single-rate and a multiple-rate VAT, the authors feel that this depends mainly on balancing tax administration considerations. In general, the zero rates should apply only to exports. The case for a relatively high threshold is strong to improve compliance and reduce administrative burden. Critical areas which require attention include inter jurisdictional aspects of the VAT both internationally, within trading blocs, and inside federal countries; the increasing profile of trade in services and electronic commerce; and organizing the overall structure of the tax administration. In regard to tax administration, three focus areas are implementation of appropriate self-assessment procedures, the development of effective audit procedures and an effective refund policy.

Christophe Grandcolas (2005). This paper reviews VAT implementation experience in five countries. After examining three country cases where VAT was withdrawn after implementation, the paper goes on to discuss two successful cases. It then draws lessons on the prerequisites for successful VAT implementation in the Pacific Islands Countries (PICs). Only five countries have ever removed a VAT, and two of these were small islands. The five countries are Grenada (introduced in 1986 and gradually dismantled), Malta (introduced in 1995 and removed in 1997), Belize (introduced in 1996 and removed in 1999), Vietnam (in the 1970s) and Ghana (introduced in March 1995 and removed two months later). Three of these have since reintroduced the

VAT, i.e. Ghana in 1998, and both Malta and Vietnam in 1999. Grenada is considering reintroducing the VAT in 2008.

The paper finds that in all the above five cases, there were some common features that led to the repealing of VAT: political commitment (i.e. politicians had promised to repeal the VAT if elected); poor performance of the VAT due to poor preparation and planning prior to its introduction; and an inadequate definition of registration threshold, which resulted in an excessive number of taxpayers being brought into the tax base. The paper concludes that, in administrative terms, VAT systems can work well in PICs if ten requirements are satisfied.

First a government that is committed to the implementation of VAT (and not to repeal it); second a well-designed VAT implementation timetable; third a well-designed VAT law with few exemptions, no zero rating for domestic consumption and an adequate threshold to limit the number of taxpayers consistent with the capacity of tax administrator, fourth a well-designed and client-oriented administration to administer the VAT and large taxpayers; fifth a close cooperation (and not rivalry) between the revenue administrations (with a single TIN system); sixth a well-trained tax administration; seventh a comprehensive public education campaign; eight an effective refund mechanism; ninth a strong and computerized compliance enforcement mechanism with an adequate penalty system; and finally tenth an effective audit programme.

The paper also recognizes four issues which can critically undermine the successful implementation of a VAT. First, the absence of self-assessment procedures; Second

inadequate structure of the penalty system and failure to immediately take the right actions against non-compliers; third failure to refund exporters and investor on time; and finally failure to perform effective audits.

Fernando Cunha (2004). This paper is a review of the taxation system in Brazil including suggestions for reform with reference to the three parameters of equity, progressivity and distribution of fiscal powers between the federating units. The author reviews tax reforms in the US, Sweden, UK and Latin American countries in the past. He notes that the taxes on property, customs and tariffs, and excises on particular goods and services were levied traditionally. Taxes on personal income, corporate profits, general consumption and social security have been introduced over the last century. Noting that taxes on property, personal income, capital, consumption and social security contributes almost 94% of its revenues, the paper analyses the levy of these taxes in Brazil. The paper then identifies the problems with the current tax structure and emphasizes the role of improvement of tax administration in the process. This paper concludes by making a number of Brazil specific recommendations. These include some specific recommendations on implementing a Goods and services Tax through a national legislation; simplifying the system by unifying internal and interstate tax brackets with fewer rates; and decentralizing fiscal autonomy to the lower levels of the federation. It suggests a concessional VAT rate for essential items including food and an ICMS tax for interstate transactions.

Tuan Minh Le (2003) This paper reviews the role of tax design and implementation of VAT and identifies critical issues to be addressed. A VAT on destination principle is

desirable as it purely taxes domestic consumption and promotes production efficiency. An important requirement in designing an efficient VAT is that the tax should be imposed on pure consumption, broad-based, and comprehensive in coverage over the whole production-distribution chain. The VAT rate structure should be simple in design, preferably with one or at most two positive rates, few exemptions, and zero rating being exclusively granted to exports. Broadening base, in general sense, reduces deadweight loss and provides an opportunity for lowering the rates, and, thereby, increasing compliance. Zero-rating should be discouraged as it provides strong incentives for frauds, creates excessive burden on tax administration, and effectively erodes the base. Two major problems identified by this study, relates to exemptions. First, exemption breaks the VAT chain and induces cascading downwards. Second, excessive exemption tends to break up the integrity of the VAT regime and hurt its sustainability. The VAT design should, therefore minimize to the extent possible the number of exemptions. The rule is also applicable to hard-to-tax sectors.

Despite technical, political, and social arguments for sparing the agricultural sector from VAT, the sector, in principle, should be brought into the tax net. Exempting agriculture tends to ratchet up to exemption of agricultural inputs and dwarf the benefits of the zero-rating granted to exports of agricultural commodities. Rather than exempting agriculture and its inputs, selective outright fiscal subsidies may be provided to agriculture wherever necessary. Also taxing agriculture should be accompanied by setting a reasonable threshold, preferably the same as the one applied in other sectors, in order to maintain a manageable number of taxpayers in the net. Small businesses are numerous. Their inclusion in the tax net would lead to high collection costs, strain the

already thin capacity of tax administrations, but provide low revenue potential. They should, therefore, be excluded from the VAT base, and if necessary, be subject to some type of simplified taxes such as presumptive taxation. Threshold setting set in terms of turnover will also address this issue. To be successful apart from being well designed, carefully prepared (from both administration's and taxpayers' perspectives) the VAT should be introduced in good timing: country-experience studies show clearly that the VAT does not have significant impact on inflation, but its introduction during high inflation period tends to reduce the chance for its success.

Richard M. Bird, Sally Wallace (2003). The main concern in this paper is with the problem of dealing with the “hard-to-tax” (HTT) sector and whether “presumptive taxation” can be an effective tool to address this. The HTT sector is classified into three categories. First firms and individuals, usually small, who do not keep good books and records but are potentially (and legally) taxable. Second, firms and individuals whose activities are clearly large enough to fall within the scope of the tax system but who are tax evaders. Some in this group may be completely off the fiscal radar while others offer a partial view.

In authors' view it is not that hard in either economic or technical terms to tax those who are usually classed as “hard-to-tax” essentially the small business sector, although it may often be politically hard to do so properly. It is, however, indeed hard to tax them in administrative terms as in many countries, neither the tax system nor the tax administration function very well. Summarizing, the authors conclude that the problem of taxing the hard-to-tax (HTT) in any country is more a matter of the nature of its tax administration than of the character of its taxpayers.

Azizul Islam (2001). This paper outlines the principles that have guided recent tax reforms in Asian developing countries. It critically examines the purported rationale underlying these reforms and raises issues connected with these reforms. The following seven key issues have been identified. These are first the determinants of the desirable level of taxation in a particular country; second the existence of a causal relationship between government revenue and Government expenditure and, the direction of causation; third the circumstances under which VAT can be more revenue-productive than the taxes it replaces; fourth the degree of differentiation that should be made in VAT; fifth the balance between multiple rates and complexity in tax administration; sixth the degree of compliance with VAT when compared to income taxes and finally seventh the relative importance to be accorded to the protective role of tariffs be vis-à-vis its revenue role.

Jesus E. S. Oliveira (2001). This paper reviews the relative merits of implementing the VAT under the destination principle compared to the origin principle, with reference to interstate trade and production and consumption efficiency. Production efficiency holds if producers at the margin in different states have their prices equalized across the community, thus having the same marginal cost and consequently receiving the same returns on their activities. Likewise, consumption efficiency holds if, for a given good, consumers at the margin in different states pay the same price, thus attributing the same utility to that good. The author also finds that neither production efficiency nor consumption efficiency are inherently superior.

Richard M. Bird and Pierre -Pascal Dendron (2001) This paper is discusses the state of play with respect to sub-national consumption VATs in the federal countries. The

authors' opine that the debate on how best to design and implement a sub-national VAT is far from settled, and the final answer may turn out that different contexts call for different solutions. In a sense this mirrors Bird's paper quoted earlier in this review what a country should do, depends on many factors. Trade patterns, the location and size of the country and its sub-national jurisdictions, the relative importance of "Business to Business" (B2B) versus "Business to Consumer" (B2C) transactions in the tax base, the quality of administration, the degree of trust and feasible coordination, the desire for local autonomy, the tolerance for asymmetry, the offsetting nature of equalization, the extent and nature of revenue shifts, and, not least, the existing sales tax structure are all the determinants of the final model to be adopted. This paper concludes that though much has been learnt over the last decade on this subject, still much more has to be learned. Successful answers are more likely to lie in systems carefully "customized" for local circumstances rather than in any one uniform system.

Michael Keen (2000). Conventional wisdom has it that the value added tax system is not a suitable instrument for lower level jurisdictions (provinces) in a federal system. The problem that arises when it is so used, have become a serious constraint on the development of VAT and closer economic integration in Brazil, the EU, and elsewhere. This paper reviews two proposals for forms of VAT designed to alleviate these difficulties; the VIVAT and the C VAT. Both enable the VAT chain to be preserved on inter provincial trade without compromising the destination principle which mandates allowing provinces tax consumption at different rates. They also limit game playing. CVAT requires sellers to discriminate between buyers located in different provinces of the federation, whereas VIVAT requires them to differentiate between registered and

non registered buyers. The paper concludes that it is not clear where the balance of convenience lies.

Simon James (2000). This article reviews the experience of the UK with VAT over nearly three decades comparing it to Australia. The author notes the similarities in the factors leading to the introduction of a GST/VAT in both the countries. In both Australia and the UK, a strong driving force was the perceived inadequacy of the existing indirect tax system and a view that an overall reform rather than modification of existing taxes was required. Politically, in both countries it proved impossible to introduce a GST/VAT that was as broadly based as economic theorists would have liked. The process of introducing such a tax aroused opposition and special pleading. The tax that was eventually introduced had a much wider range of excluded items, such as food, than had originally been intended. If the parallels continue in the future, Australia might expect opposition to the tax to diminish rapidly and the tax to become accepted as part of the fiscal furniture. Such opposition as remains is likely to focus on particular issues rather than on resistance to GST in principle. Furthermore, in the longer run, as its disadvantages appear to be less than those associated with some alternative taxes, the pressures to raise more revenue through GST will grow. However, there may be significant opposition to increases in the rate of tax as there was VAT in the UK. In terms of legal issues, the purposive approach is already present in Australia and in some case law, but there has been a judicial reluctance to use it more widely in tax matters. Such changes are more likely to have an impact with a new tax rather than with a more established tax, and it might be that the introduction of GST in Australia allows similar changes in this respect, as in the UK. If the same pattern is followed in

Australia, depending on the enforcement regime, there may be a long term upward trend in appeals as taxpayers become more familiar with the process. In conclusion, the author finds that if GST in Australia follows a similar path of development as VAT in the UK, it will rapidly become acceptable.

Eric Engen& Jonathan Skinner (1996) It is often argued that Tax reforms have strong macroeconomic growth effects. Using three approaches, this paper examines the impact of a ‘five percentage point’ cut in marginal tax rates on long-term growth rates. The first approach examines the historical record of the U.S. economy to evaluate whether tax cuts have been associated with economic growth. The second is to consider the evidence on taxation and growth for a large sample of countries. And finally, the evidence from micro level studies of labor supply, investment demand, and productivity growth are used for the third approach. The findings of this study are as follows.

First, there is enough evidence linking taxation and output growth to make the reasonable inference that beneficial changes in tax policy can have modest effects on output growth. The implied effects from the “bottom-up” micro level studies and the “top-down” cross-country regressions are quite close in magnitude: a major tax reform reducing all marginal rates by five percentage points and average tax rates by 2.5 percentage points is predicted to increase long-term growth rates by between 0.2 and 0.3 percentage points. Whether these effects on output growth are permanent (lasting forever) or transitory (lasting perhaps 10 to 15 years) is difficult to determine. Second, even these modest growth effects can have an important long-term impact on living standards. Third, it appears highly unlikely that past tax reforms have been self-

financing in the aggregate. There is evidence that tax changes focused on high-income taxpayers may be self-financing, perhaps because of changes in financial arrangements as well as shifts in economic activity. Fourth, a major shortcoming with nearly all cross-country and time-series studies is the difficulty of measuring the marginal tax burden appropriately. The average tax rate does not reflect the marginal tax burdens hypothesized to affect economic decisions. Fifth, the composition of the tax system is probably as important for economic growth as is the absolute level of taxation. Countries those are able to mobilize tax resources through broad-based tax structures with efficient administration and enforcement will be likely to enjoy faster growth rates than countries with lower overall tax collections assessed inefficiently. In short, the design of the tax system is likely to exert a modest, but cumulatively important, influence on long-term growth rates.

Anwar Shah and John Whalley (1990). This paper revisits the issue of the incidence of taxes in developing countries. Its central theme is that despite many decades of studies, tax incidence analysis for developing countries continues to be based upon the same shifting assumptions used in developed country studies, despite some obvious pitfalls. Taxes are assumed to be shifted forward to consumers, or backwards onto factor incomes, as has been the case for developed country tax incidence. Developing countries typically have a much different non-tax policy and regulatory environment from developed countries, with higher protection, rationed foreign exchange, price controls, black markets, credit rationing and many other features. The paper argues that all these features can greatly complicate and even obscure the incidence effects relative to conventional thinking and by substantial orders of magnitude.

This paper develops a "new" view of the incidence of major existing taxes by incorporating key developing country features into its analyses. The challenge to existing perceptions which permeate policy in this area is illustrated by considering a stylized Bank/Fund package of tax reforms. Such reforms consist largely of four separate components: (1) a general move towards reduction of trade taxes (and trade liberalization in general); (2) an emphasis on movement away from trade taxes and towards a broad based sales taxes of the value-added type; (3) a reduction in personal tax rates and consolidation of number of brackets; and (4) a reduction in corporate tax rates with special incentives for inward foreign investment. A traditional analysis of the incidence effects of such a package would be along the following lines. Reductions in personal tax rates would tend to be somewhat regressive, and if the corporate tax is borne by capital and capital is more heavily owned by higher income groups, reductions in corporate taxes would also tend to be regressive. Trade taxes and value-added taxes are both indirect taxes of a consumption type, and an increase in them also tends to be regressive. This whole package, therefore, would tend to be seen as a move towards a more regressive tax regime, about which there could be substantial agonizing in policy making.

Under the alternative view of the world posited in this paper, it seems equally defensible to suggest that the value-added tax is a progressive rather than a regressive tax as its trade component falls on rents acquired by import license holders, that portions of the corporate tax in various countries are borne by foreign treasuries rather than by domestic capital, that reductions in personal taxes can have substantial incidence effects in the opposite direction because of the weakening in problems of

evasion and administration ultimately reducing transfers through a system of bribery and corruption to high income groups. Thus the incidence effects of each of these taxes could well be quite opposite to the conventional wisdom asserted repeatedly in developing country incidence literature.

David Nellor (1987). This paper examines the effect on the tax ratio of the introduction of a VAT. There is a widespread perception that the introduction of a VAT will increase the tax ratio although no sound theoretical rationale has been spelt out that supports this view. Nevertheless, several reasons were suggested why this might be correct. These included the cost of tax collection, the reduction of tax distortions, and fiscal illusion. The focus of this paper is on an empirical examination of the experience of 11 European countries which introduced VATs in the period 1967 to 1973. The hypotheses tested were that the introduction of the VAT increased the level and growth rate of the tax ratio. These hypotheses were tested using the method of “event analysis”. In addition, one hypothesis- the tax mix hypothesis—explaining why the introduction of a VAT may increase the tax ratio was examined by a cross section analysis of 23 countries. The empirical examination supported the hypothesis that the introduction of a VAT will be associated with an increase in the tax ratio. There was weaker evidence that the growth rate of the tax ratio increased as a result of the introduction of the VAT. There are three limitations to this analysis. First, the conclusions relate to the experience of the group as a whole and may not apply to particular countries. Second, the effect on the tax ratio may reflect the nature of the tax reform rather than any inherent characteristics of the VAT. Third, the results may indicate, at least in part, that

the tax ratio will increase by diversifying the sources of revenue between a broad-based income tax and any broad-based consumption tax.

2.3 Studies in Developing and Emerging Countries

Richard M. Bird, Roy W. Bahl (2008). This paper reviews the changing nature of tax policy in developing countries over the last 30 years and considers what factors determining the level and structure of tax revenues in such countries may have changed recently and how such changes may affect future developments. The findings are as follows. First, there appears to be no necessary relationship between tax levels and either income levels or growth rates. Both "big governments" and "small governments" may succeed; or they may fail. Secondly, the last 30 years seem to show fairly conclusively that for sustained development it is not only desirable but, over time, essential to keep tax and expenditure levels close together. In this sense most developing countries are now "fiscally conservative". Thirdly, it seems evident that it is more important that countries spend well than that they tax well. Fourthly, turning more specifically to taxes, from a structural perspective, it appears that the best way for developing countries is to have a tax "portfolio" that incorporates broad-based taxes on both consumption and income while keeping effective rates on sensitive economic margins as low as possible. Finally, no tax is better than its administration, so tax administration matters a lot.

Richard M. Bird (2008). Fiscal experts have years proposed a holy trinity of tax reform options for developing countries: broader bases, lower rates, and better administration. The review in this paper of fifty years of experience suggests that what might be called the BBLR approach-- broader bases and lower rates -- to tax structure reform holds up fairly well. Nonetheless, some qualifications to the basic BBLR approach are suggested and the continuing fundamental importance of understanding and improving tax administration is stressed. What countries do to reform their tax systems and how successful they are generally depends less on the economics of taxation than on the politics of taxation. The learning from 50 years of experience and reflection on fiscal issues in developing countries is that broader bases and lower rates -- holds up fairly well. In addition, author has emphasized that the fundamental importance of understanding and improving tax administration. He also notes that no one can work in this field without recognizing the importance of the administrative dimension of tax reform; too often, however, inadequate attention has been paid to this critical aspect of the problem when thinking about tax policy in emerging countries.

Richard M. Bird (2005). This paper reviews lessons and questions on the Value-Added Taxes in Developing and Transitional Countries. It emphasizes that VAT is not the answer to the fiscal problems of Developing and Transitional Economies (DTE). However, some form of VAT almost certainly constitutes a critical ingredient in such an answer. Even the best possible VAT will not solve all the problems of DTE: the VAT they have may not always work well; in some instances it could be designed better to fit the context of the country; in many instances, it could

certainly be administered better, even in the face of adverse political and capacity factors. Nonetheless, so long as a general consumption tax makes sense as a key part of a country's fiscal system, as is surely true in most DTE, VAT remains the best available fiscal instrument.

Roger Gordon, We Li (2005). Tax policies seen in developing countries are puzzling on many dimensions. To begin with, revenue/GDP is surprisingly small compared with that in developed economies. Taxes on labor income play a minor role. Taxes on consumption are important, but effective tax rates vary dramatically by firm, with many firms avoiding taxes entirely by operating through cash in the informal economy and others facing very high liabilities. Taxes on capital are an important source of revenue, as are tariffs and seignorage, all contrary to the theoretical literature. This paper, argues that all of these aspects of policy may be sensible responses if a government is able in practice to collect taxes only from those firms that make use of the financial sector. Through use of the financial sector, firms generate a paper trail, facilitating tax enforcement. The threat of disintermediation then limits how much can be collected in taxes. Taxes can most easily be collected from the firms most dependent on the financial sector, presumably capital intensive firms. Given the resulting differential tax rates by sector, other policies would sensibly be used to offset these tax distortions. Tariff protection for capital intensive firms is one. Inflation, imposing a tax on the cash economy is another. The key hypothesis of this paper is that governments need to rely on the information available from bank records in order to identify taxable entities

and to measure the amount of their taxable activity. Firms then become subject to tax if they choose to make use of the financial sector. But the authors made no attempt to estimate the quantitative size of the effects described in the paper.

M. Shahe Emran, Joseph E. Stieglitz (2005).In this paper, the authors have presented an analysis of selective reform of trade taxes and VATs in developing countries that takes into account the implications of a large informal sector in the economy. The results raise serious doubts about the validity of the consensus that favors a reduction and eventual elimination of trade taxes, and almost exclusively relies on VAT as the instrument of indirect taxation in developing countries. The results on a coordinated reform of import tariff and VAT show that, the incomplete coverage of VAT due to the existence of a large informal sector renders the results derived earlier in the literature as the basis of indirect tax policy reform in developing countries, unhelpful at best and potentially misleading at worst. When the choice of the commodity for VAT increase is restricted by the existence of a large informal sector, the standard policy reform can reduce welfare under plausible (sufficient) conditions. A revenue-neutral selective reform of export tax and VAT requires extremely stringent assumptions to secure a welfare improvement, and may reduce welfare, even in the absence of an informal segment in the economy. These conclusions run counter to the conventional wisdom that VAT is a better instrument for raising revenue in developing countries compared to the trade taxes. It can be argued that since a significant part of the VAT revenue in a typical developing country comes from the VAT collected at the border, it is essentially a trade tax in the

guise of VAT. In this case, the tax reform policies implemented under the IMF and World Bank policy conditionalities are not as damaging. However, it is difficult to reconcile this argument with the view that trade taxes are inefficient as instruments of revenue raising and the tax reform policies are designed to improve efficiency in resource allocation by reducing the trade taxes and shifting the burden of revenue raising to the more efficient VAT. The goal of eliminating trade taxes implies that the part of VAT that is collected at the border should also be eliminated, especially when the corresponding domestic production cannot be equally taxed under VAT due to its informal character.

2.4 Studies on Indian VAT/GST

V Bhaskar, J V M Sarma (2012). This paper examines the current steps being taken to implement the Goods and Services Tax in India. It analyses the provisions of the 115th Constitutional Amendment Bill and the Finance Act 2012 relating to service tax and notes the need for changes if the policy goals of the GST are to be met. It proposes steps to be taken for speedy implementation of GST. These include five changes to the Bill and five steps the Government of India needs to take to bridge the present “GST trust deficit” between it and the states.

The Paper proposes fundamentally two broad policy approaches available for the implementation of the GST – the incremental approach and the transformational approach. The incremental approach is what is presently being considered by the Government of India. The proposed hybrid GST which excludes the specified goods (about half the VAT revenue of some states is derived from these specified goods), as

well as important sectors like the railways and real estate may do little to make our industry more competitive and catalyse the economy. It does not put in place a mechanism to ensure compliance of the states with the GST framework and thus does not deter the competitive “race to the bottom” indulged in by some states. The transformational approach recognises the paradigm shift which will be brought by the GST and seeks to enfold into it all taxes and levies while maintaining revenue neutrality. It seeks to amend the Constitution only on broad terms while leaving the nitty-gritty to the GST council. It will allow for the inclusion of the railways and the real estate sector into the GST making it truly comprehensive and “flawless”. For this five steps are suggested. (i) The 115th Constitutional Amendment Bill must allow for a broader definition of GST in respect of the taxes to be subsumed while leaving the final details of the GST to the determination of the council, (ii) This Bill should enable the GST tax base to be broadened as and when consensus is achieved between stakeholders without recourse to another constitutional amendment. Special emphasis should be placed on possibility of including the real estate sector and the railways in the tax base, (iii) petroleum crude, high speed diesel, motor spirit, ATF, natural gas, alcohol for human consumption and tobacco should be included in the GST tax base. To maintain revenue neutrality, they could also be subject to an additional levy against which input tax credit need not be provided, (iv) the said Bill should adequately empower the GST council so that its recommendations have finality and are enforceable, and (v) the proposed amendments permitting local bodies to levy entry tax and entertainment tax should be reviewed.

R. Kavita Rao, Pinaki Chakraborty (2012). The objective of this study is to arrive at a revenue neutral rate for the states during the proposed GST regime. In other words, this study is an attempt to estimate the tax base for services at the state level. Based on the analysis, this paper concludes that GST rate in a three rate structure would be higher than the general rate of VAT at 12.5 percent and would be around 12.5 percent in case a two rate structure is adopted. If services are assumed to be taxed at 8 percent, the paper notes that the general rate will go up further. If both goods and services are taxed at the same rate, the RNR will come down. The base of service sector estimated in this paper is the most conservative one and it does not have the full coverage of the base of services by the households and of those entities providing services but not registered in the stock market, except a partial correction made for the informal sector. In reality, with these sectors coming into the GST-net and the overall efficiency gain that GST would bring in, the actual taxable base of the service sector would be much higher than what is estimated in this report and accordingly the revenue neutral rate will be lower.

Arindam Das-Gupta (2011). This Paper examines revenue and GSDP data for 29 states for 1993-94 to 2008-09 to study the revenue performance of the state Value-Added Tax (VAT) in India. The direct revenue impact was assessed by testing if VAT introduction increased VAT or state's own revenue (SOR) buoyancies or the VAT or SOR to GSDP ratios. The indirect impact of VAT introduction on the VAT base (proxied by GSDP) and base growth were also examined. The findings of this paper are as follows. No indirect impact of the VAT on its base was found. The direct revenue impact of the VAT was found to be positive in two-thirds of sample jurisdictions. A positive impact on SOR was however found only in Orissa and

Haryana among 11 major states and 50 percent of other jurisdictions. The VAT may have had a negative revenue impact in Gujarat and Goa. However there are few methodological weaknesses present in this study as pointed out by the author, in assessing the VAT impact using dummy variables. At the same time there are no alternative appears to be available so far. Hence the results obtained in this study actually reflect differences between VAT and pre-VAT periods rather than the impact of the VAT.

Ehtisham Ahmad and Satya Poddar (2009).This paper focuses on the GST reforms and intergovernmental considerations in India .Authors have opined that the GST has the potential to be the single most important initiative in the fiscal history of India. It can pave the way for modernization of tax administration makes it simpler and more transparent and significant enhancement in voluntary compliance. However, these benefits are critically dependent on a neutral and rational design of the GST. The discussion of selected issues in this paper suggests that there are many challenges that lie ahead in such a design. The issues are neither trivial nor merely technical. They would require much research and analysis, deft balancing of conflicting interests of various stakeholders, and full political commitment for a fundamental reform of the system. Also opportunities for a fundamental reform present themselves only infrequently, and thus need to be pursued vigorously as and when they do become available. As the choices made today would not be reversible in the near future, one needs a longer-term perspective. Achieving the correct choice is then a political economy balancing act that takes into account the technical options and the differing needs and constraints of the main partners. Fortunately, there is a very substantial

consensus among all stakeholders in the country for a genuine reform. In the circumstances, an incremental or timid response would be neither politically expedient, nor would it serve the needs of India of the 21st century. Experience of countries with modern VATs, such as New Zealand, Singapore, and Japan suggests that a GST with single-rate and comprehensive base can be a win-win proposition for taxpayers and the fisc alike.

R. Kavita Rao (2008). This paper attempts to identify some of the potential contours of the Goods and Services Tax. The paper's objective 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 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 author finds that 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, one of the key issues for adjudication 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. One important concern relates to the rate of tax. It is believed 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. 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. Any expansion in the tax base to include some of the activities would allow for a lower rate of tax to be implemented. 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 compensational revenue transfers.

2.5 Conclusion

Eleven conclusions drawn from the literature review are as under. First, a comprehensive destination based goods and services tax on consumption computed on invoice based credit method has been successfully implemented in countries across the globe and has shown some association with growth in tax revenues.

Second, for this to be successful demands a strong level of political commitment as well as careful administrative preparation, training and conscientization of the tax payers through awareness programs. Third, the tax GDP ratio for a country can be broken down into the product of two quotients - the tax base to GDP and the tax revenue to tax base. Better tax policy can enhance the first quotient while better tax administration can enhance the second quotient. Tax administration is thus the key to tax reform and without an efficient tax administration in place, full advantage of any tax policy reforms cannot be derived. Fourth, there is no one size fits all approach and each country should work out its own tax design based upon its economic and political environment. Fifth, the design of the GST should be as simple as possible with the minimum number of rates as well as few exemptions. Zero rating should be confined to exports. Sixth, in case of political opposition from some states to implement GST, options for a partial rollout should be examined as an option keeping the relevant Canadian experience in mind. Seventh, a self assessment system backed with a computerized risk based audit framework and a predictable refund policy are essential requirements of a sustainable GST. Eighth, it is preferable to put in place a constitutional framework for a broadly permissive GST as per the requirements of economic efficiency while later allowing political expediency to guide the actual design of the GST law. Ninth keeping the informal sector of the Indian economy in mind, the GST should be designed to gradually bring it into the tax net. Tenth, there is a need for the Government of India to bridge its trust deficit with the states and come forward with a compensation assurance which will encourage states in India to take the leap of faith to implement the Goods and Services Tax. Eleventh, the VAT

should be introduced with good timing. Global experience shows clearly that while the VAT does not have significant impact on inflation, its introduction during high inflation period tends to reduce the chance for its success.

The issue now is the relevance and applicability of Goods and services tax to India. India is a Federal Country with twenty eight (28) States, each having widely different levels of geographical endowments, economic development and human capital. The per capital income difference between the poorest State (Bihar) and richest State (Goa) is 1:8. The literacy rate also widely varies between 93.9% in Kerala to 63.8% in Bihar. Therefore, the States' aspirations and objectives of growth vary. In this diverse economic environment, a GST model must be tailor made to be acceptable to all the States. The GST has been implemented in both developed and developing countries, and necessarily, as has been observed in the literature review, there is no "one size fits all" approach. It was also found from the literature review, that there is no comprehensive analysis on how best a GST can be tailor made to fit the ambitions and requirements of all the twenty eight States in India. No specific model for India based on international experience has been proposed.

The importance of implementing GST in India is increasingly been recognised. The momentum for implementation has increased with the introduction of the 115th Constitutional Amendment Bill in April 2011 in Indian parliament. With this backdrop, it was decided to take up a study on "**Option for a Goods and Service Tax in a federal structure with reference to India**" in view of its immediate and topical relevance to India.

CHAPTER 3

INTERNATIONAL EXPERIENCE IN GST MODELS

3.1. TERMINOLOGY

The terms Goods and Service Tax (GST) and Value Added Tax (VAT) have been mostly used synonymously in this thesis. In the international context, both VAT and GST are synonymous. In the Indian context, VAT refers to the tax levied only by State Governments on an exclusive base of sales of goods. On the other hand, GST refers to the tax levied on a common base comprising both goods and services by both the Central and State governments.

3.2. SPREAD OF THE VAT/GST

The history of VAT and its implementation across the globe has been covered earlier in Chapter 1. This Chapter will examine the VAT models adopted for implementation in six countries. It must be kept in mind that such an analysis must be made against the background of a number of parameters which have a bearing on the successful implementation of a VAT/GST. Firstly, whether a country is unitary or federal in its constitutional structure has a bearing on the implementation of VAT. It is easier to implement the 'ideal' GST in a unitary country like New Zealand than in a federal country like India. Second, in a federal structure the manner in which whether the tax base of the GST shared between the national and sub-national structures. Third, the type of VAT imposed - whether it is a production VAT or an income VAT or consumption VAT. A consumption VAT, which requires that tax on capital goods be

credited, does not distort prices that producers face in buying and selling from one another and accordingly preserves production efficiency. Fourth- complexity of rate structure. There is considerable diversity in the rate structure in the VATs currently in place internationally. The standard VAT rate is higher in Western Europe and in the transition economies than elsewhere. It is lowest in the Asia and Pacific region. Western Europe, North Africa, and the Middle East have the most complex VATs in terms of the number of rates. Fifth - the stage of economic development of a country. Those countries which have successfully implemented a VAT are both relatively more developed and have a relatively higher ratio of international trade to GDP.

Some successful VAT models across countries are outlined below.

3.3. SUCCESSFUL MODELS OF VAT/GST

3.3.1. THE FRENCH MODEL

France is a unitary semi-presidential republic. France is divided into twenty seven (27) administrative regions, out of which twenty two (22) are in metropolitan France, and five are overseas regions. The regions are further subdivided into 101 departments. In 1954 France was the first country to introduce VAT. Its introduction as a value added tax was deemed necessary to replace high sales taxes and tariffs then in place which encouraged evasion. The GST in France is administered by French Ministry of Finance. In general, all economic activities conducted in France are subject to VAT (sales of goods, supplies of services and intra-community acquisitions). The Standard rate of VAT in France is 19.6%. This rate applies to all operations other than those that are expressly exempt or subject to the reduced rate (5.5%) or to the special rate (2.1%). Thresholds are kept at €81,500 for sales of goods

and €32,600 for supplies of services. The taxpayer is liable for VAT on sales but may offset against this amount any VAT included in the purchase of goods, equipment and services. Exempt supplies of goods and services include Land, Financial transactions, buildings completed for more than five years, Insurance, Education, Health and welfare, Betting and gaming.

3.3.2. THE GERMAN MODEL

Germany is a federal parliamentary republic. It consists of 16 states. The value Added Tax was introduced in the year 1968 and is administered by German Ministry of Finance. VAT in Germany is administered federally on a uniform base and at uniform rates, with the proceeds being divided between the federal and provincial governments and among the provincial governments in accordance with a pre determined distribution formula.

There exists no threshold for registration under VAT. The two rates of VAT in Germany are the standard rate at 19% and the reduced rate at 7%. The standard rate of VAT applies to all supplies of goods or services, unless a specific provision allows a reduced rate or exemption. An option to treat VAT-exempt supplies and services as taxable supplies exists. Examples of exempt supplies of goods and services include Land and buildings, financial transactions, Insurance, Education, and Medical services. Examples of goods and services taxable at reduced rate of 7% are Books and newspapers, Cultural services, Food, Agricultural products, Hotel stays and passenger transport.

3.3.3. THE NEW ZEALAND MODEL

New Zealand is a unitary country. It is organised into 11 regional councils and 67 territorial authorities for administrative purposes. The VAT in New Zealand, referred to as the Goods and Services Tax (GST) is regarded as the most simple and efficient VAT in the world. The GST Act was enacted in 1985, and the tax was introduced on October 01, 1986. The Inland Revenue Department mainly administers the tax, while the Customs Department collects the tax on imported goods and those subject to excise. The VAT is consumption-based and applied on destination principle. The law stipulates that any business with annual net-of-GST turnover exceeding NZ\$60,000 is required to register for the GST. Those making taxable supplies with annual turnover below the NZ\$60,000 threshold may elect to register voluntarily.

The VAT structure is simple with a single standard rate of 15 percent plus zero-rate, and few exemptions. Examples of exempt supplies of goods and services include (1) Financial services (although some qualify for the zero rate), (2) Sales of donated goods by nonprofit organizations, (3) specified real estate transactions, (4) Supply of precious metals. Goods and services taxable at 0% include (1) Sale of a business as a going concern, (2) Exported goods and services, (3) Services performed outside New Zealand, (4) First sales of refined precious metals for investment purposes, (5) Supplies of financial services made to businesses that make taxable supplies in excess of 75% of total supplies, (6) Exported second-hand goods if the recipient gives the supplier an undertaking in writing that the goods will not be re imported into New Zealand.

3.3.4. THE CANADIAN MODEL

Canada is a federal country consisting of ten provinces and three territories. Three different VAT models are presently being implemented in Canada. These provincial variations are superimpositions on the uniform federal GST levied by the Centre nationally and collected by the Canadian Revenue Agency. The GST was originally levied in 1991. These are

- a) In one province, the federal GST is the only sales tax applied.
- b) In five provinces, a regional sales tax (RST) is imposed additionally. In four of these provinces, it is applied on the GST exclusive base while in one province it is applied on the GST inclusive base.
- c) In three provinces, the Harmonised Sales Tax(HST) which is basically a joint VAT comprising the Central and provincial components is administered by the federal government at a uniform rate. This was introduced in 1997.
- d) The Quebec Sales tax (QST) which is applied only in Quebec on the GST inclusive tax base. Quebec administers both the QST for itself as well as the GST on behalf of the Central Government. This was introduced in 1992.

Canada can thus be seen to have four models of GST applied over its ten provinces and three territories. First, only a GST imposed centrally. Second, separate State and Central VATs administered separately. Third, a combined tax comprising both Central and Provincial elements administered centrally. Fourth, independent central and state GST administered provincially.

The QST demonstrates the potential of tax design to ensure mutual trust in fiscal matters between two politically hostile agencies- the federal government and the government of Quebec. Since QST is levied on a GST inclusive tax base, the government of Quebec which collects both the taxes is incentivized to ensure that all Central GST is collected. The federal government while auditing tax on interstate trade ensures that QST has not been evaded. This mutual dependence has ensured that the system succeeds and is a valuable lesson for designing the GST in India.

The HST option is an equally viable model worthy of consideration. The existing provincial and federal tax was replaced by a combined tax on a harmonized base – the HST in 1997. Compensation was paid to the provinces for any revenue losses in excess of five percent of its current revenue collections. Exports are zero-rated and imports are not subject to the provincial portion of the HST. The Threshold limit for Registration under GST exists and is presently at C\$30,000. Tables 3.1 and 3.2 below give details of tax rates for HST and QST.

Table 3.1
GST/HST Rates

Province	After July 1, 2010	Province	After July 1, 2010
Alberta	5%	Nova Scotia	15%*
British Columbia	12%	Nunavut	5%
Manitoba	5%	Ontario	13%
New Brunswick	13%	Prince Edward Island	5%
Newfoundland and Labrador	13%	Saskatchewan	5%
Northwest Territories	5%	Yukon	5%

The HST breakdown:

- The HST rate of 12% includes the 5% federal part and 7% provincial part.
- The HST rate of 13% includes the 5% federal part and 8% provincial part.
- The HST rate of 15%* includes the 5% federal part and 10% provincial part.

Table 3.2**QST Rate**

Québec Province	Up to Dec 31 2012	From Jan 1 2013
QST	9.50%	9.98%

Examples of exempt supplies include supplies of used residential property, financial transactions, most supplies by charities and public sector bodies, healthcare, and education. Also examples of zero-rated supplies include Exports of goods and services, basic foodstuffs, international transportation, prescription drugs, medical devices, and certain inputs used in agriculture and fishing.

3.3.5. THE BRAZILIAN MODEL

Brazil, officially the Federative Republic of Brazil, is a federation characterised as the "indissoluble union" of four distinct political entities: the Union, the States, the Municipalities and the Federal District. Brazil has introduced to varieties of VAT one for the federal government (the IPI) and one for each of the state governments (the ICMS). IPI (*Impostosobre Produtos Industrializados*) is levied by the federal

government on industry, and ICMS (*Impostosobreoperacoesrelativas a Circulacao de Mercadorias e Servicos*) is levied by the states on agriculture, industry, and some services. In addition, another tax, the ISS (*Imposto Sobre Servicos*) is levied on a gross receipts basis by municipalities on a variety of industrial, commercial, and professional services, and there are also a number of other taxes on financial transactions, retail sales of fuel. Types of Taxes, their local names and the year of its introduction are furnished hereunder.

Table 3.3

Existing Taxes in Brazil

Sl.no	Name of the Tax	Local Name	Year Introduced
1	Federal Value-Added Tax (IPI)	IPI	1964
2	State Value-Added Tax (ICMS)	ICMS	1989
3	Municipal Service Tax (ISS)	ISS	1968
4	Federal Gross Receipt Contributions	PIS-PASEP	1970
5	Federal Gross Receipt Contributions	COFINS	1991

The State VAT (ICMS): This is levied independently by states in Brazil with the minimum rate being set by the Central Government. Tax is liable on all domestic transactions, even if they commence abroad. They include circulation of goods, importation of goods, supply of transportation between states and between municipalities, supply of communication services, and supply of electricity. Exemption is provided to exports of manufactured goods and raw materials.

The Federal VAT (IPI): This is levied by the federal government on national and foreign finished goods. This is a mixture of an excise and customs levy being applicable to shipment of finished goods from an industrial establishment (or similar establishment) in Brazil as well as customs clearance of finished goods of foreign origin. Tax incentives are provided if the shipment of goods is related to an export, a sale to a trading company or to plant expansion plans. These incentives may be provided either through exemptions or enabling tax credits.

The Municipal Service Tax (ISS): This is levied by the municipalities in Brazil. It applies to all services excluded from the ICMS tax base. ISS is a single-point tax where previously paid ISS is not allowed set off. Thus ISS at every level gets embedded in the cost. ISS is normally levied by the municipality where the service provider is located except for construction services, where it is levied by the city where the construction takes place.

The Gross Receipt Contributions (PIS-PASEP and COFINS): These are social contributions based on turnover, which are levied on companies' gross revenue, on a monthly basis. Exports are not subject to PIS-PASEP and COFINS. Import operations are also subject to PIS-PASEP and COFINS. PIS-PASEP and COFINS rates may vary depending on the company's activity and on the revenue received.

The existing tax rates for all these taxes are presented in a table below.

Table 3.4**Tax Rates in Brazil**

Sl.no	Tax	Tax Rates as of April 2012.
1	IPI	1.5% to 35% (for supplies in the same state) 7% to 12% (for supplies made to a taxable person in a different state)
2	ICMS	0% to 330% (depending on the IPI tariff table classification for the goods)
3	ISS	2% to 5% (depending on the municipality)
4	PIS- PASEP	0.65% (for taxpayers taxed under the presumed income tax method of calculation, under the cumulative system)
		1.65% (for taxpayers taxed under the annual actual income tax method, under the noncumulative system)
5	COFINS	3% (for taxpayers taxed under the presumed income tax method of calculation, under the cumulative system)
		7.6% (for taxpayers taxed under the annual actual income tax method, under the noncumulative system)

3.3.6. THE AUSTRALIAN MODEL

Australia is a federal country with six states and two territories. The Goods and Services tax (GST) in Australia was introduced in the year 2000, and is administered federally by Australian Taxation Office. The GST structure is simple with a single standard rate of 10%. Other existing rates are GST-free (zero-rated) and input taxed (exempt without credit). The GST registration threshold is at A\$75,000. Examples of supplies of GST-free (zero-rated) goods and services (1) Basic foodstuffs, (2) Water, sewerage and drainage services, (3) Exports of goods and services performed for nonresidents of Australia (4) Health, education, religious and related supplies (5) Supplies of going concerns and (6) International transport and mail. Few examples of

input-taxed supplies of goods and services are (1) Financial supplies (2) Rental of residential premises sales (or long-term leases) of residential premises (except for new residential premises) (3) Supplies of some precious metals and (4) Supplies in the course of fund-raising events conducted by charitable institutions .

3.4. CONCLUSION

Based upon international experience it is seen that there are four possible approaches to implementing VAT in a federal system. First, all the different federal levels implemented completely independent VATs like in Brazil. In that country states have partial rate autonomy, as the minimum rate is fixed by central legislation. Second, each level of government sets its rates independently but on similar bases and there is a high level of administrative cooperation (as in the GST-QST case). This is a dual VAT. Third, there could be a single ‘joint’ VAT—essentially a central VAT with some of the revenue flowing to the states either in accordance with estimated consumption (as in Canada’s HST) or with a distributive formula (as in Australia and Germany). Fourth is the application of the ‘compensating VAT’ or CVAT approach proposed by McLure. In a fiscal environment where states are authorized to levy their own independent VAT; CVAT would be imposed by the central government on sales between states at some appropriate rate. States would zero-rate not only international but interstate sales as well. The latter would be subject to the central CVAT as well as the central VAT. Domestic sales would thus be subject to central VAT and either state VAT or central CVAT. There would be no need for any state to neither deal explicitly with any other state nor there be any need for interstate clearing of tax credits. Registered purchasers in the importing state would be of able to credit CVAT

against central VAT. Given the need to preserve fiscal autonomy to States in India to the extent possible in a GST framework the second and fourth options seem relevant in the Indian context i.e. the dual VAT and the CVAT. The table below highlights the different designs with respect to twelve parameters.

Table 3.5

Characteristics of Different Designs of VAT

Feature	Independent VATs	Dual VATS	Joint VATs	CVAT
Rate autonomy	Yes	Yes	No	Some
Collection incentive	Strong	Strong	Unknown	Unknown
Administrative requirements	High	High	Lower	Moderate
Administrative costs	High	Depends on how it was done	Low	Moderate to high
Need for central administration	No	No, but lower cost	No, but probable	Probably
Need for single administration	No	No	Yes	No
Need for interstate administrative cooperation	High	Limited	No	No
Need for central-state cooperation	No	Yes	Complete	Yes
Revenue distribution	Independent	Independent	Formula	Essentially independent
Need for clearing of some credits	No	No	No	Yes
Potential for interstate evasion	High	Restricted	No	Restricted
Cross-border shopping a problem	Yes	Yes	No	Yes

Source of Table: "VATs in Federal States: International Experience and Emerging Possibilities", Richard M. Bird and Pierre -Pascal Dendron (2001), Table2, page 32.

CHAPTER 4

INCLUDING IMMOVABLE PROPERTY IN THE DESIGN OF GST-LESSONS FROM INTERNATIONAL EXPERIENCE

4.1. Introduction

Over the past three years, during the discussions between the Centre, the Empowered Committee and the States on the design of the GST, all the stakeholders have studiously been ignoring the treatment of immovable property. The issue is whether transactions in immovable property should be enfolded into the GST design or not. The 13 Finance Commission recommended that this be done. However, this recommendation did not find favour with either the Center or the States. Subsequently, all further discussions on GST design at the national and state level have skirted this important issue. Presently, service tax is being levied only on rental of non residential property. Given the unique nature of the Indian federation with the wide variation in States' development, incomes, resources, and infrastructure, India necessarily must carve out its own GST model consistent with its fiscal environment. This chapter examines the need for including immovable property in the design of the GST, the scope for doing so as well as options available with reference to international experience.

4.2. Construction and Real Estate Sector in India

Transactions in immovable property originate from both the construction and real estate sectors which have emerged as two of the key drivers of growth in India today. Through their explicit linkages with a host of industries in the manufacturing sector like steel, cement, wood, hardware, paint as well as in the service sector like construction, design, architecture, furnishing they also support employment growth and provide both direct and indirect tax revenue. In 2010-11, the construction sector contributed about 8.2% to the GDP and 'real estate, ownership of buildings and business services' contributed 10.6%. (Ministry of Finance , 2012) While the aggregate of these two sectors at 18.8% is extremely significant, it is difficult to extract from this the value of immovable property created and then sold during a particular period. This is because in the national accounts, (Central Statistical Organisation, March 2010) the construction sector comprises two components namely (i) accounted construction (pucca construction) and (ii) unaccounted construction (kutchha construction). It is not possible to estimate the proportion of each component which will be built and formally sold/leased/rented during a year. The real estate component of the 'real estate, ownership of buildings and business services' sector includes buying, selling, renting and operating of self-owned or leased real estate such as apartment building and dwellings, non-residential buildings, developing and subdividing real estate into plots, etc. Under ownership of buildings, only occupied residential houses including imputed value of owner occupied dwellings are included. Importantly, services rendered by non-residential buildings are considered to be a subsidiary activity of the industries, which occupy the buildings and therefore, are not

included in this subhead. It is estimated that the housing sector contributes about 5% to the national GDP which is likely to increase to 6%. The housing and construction sector, ranks fourth in the size of its multiplier effect on the GDP with a value of 0.78. (Ministry of Finance , 2012). However, for the reasons outlined above, it is difficult to cull out the value of immovable property created and sold during a particular year to determine the potential tax base.

A private sector firm (India, 2012) estimates the size of the real estate market in India at between 5 and 6 % of GDP. This is in terms of the economic value of real estate development activity. The residential sector comprises 90-95% of the market followed by commercial segment at 4-5% and organized retail with 1% of the market. Over next 5 years, Indian real estate market is expected to grow at a CAGR of 20%, driven by 18-19% growth in residential real estate, 55-60% in retail real estate, and 20-22% in commercial real estate.

An alternative way to determine the size of the real estate market is through an examination of the income received from sale of immovable property of all states in India and the average stamp duty charged across the country. Based upon the analysis in subsequent paragraphs, the total all state revenue from transactions in immovable property during 2009-10 was Rs 39,576 crore. Assuming that only 70% of this income emanates from stamp duty, this works out to Rs 28,000 crore. Applying a conservative 'national' rate of 5% for stamp duty, the volume of transactions for 2009-10 works out to $\text{Rs } 28,000 / 0.05 = \text{Rs } 5,60,000$ crore which was 8.67% of the GDP in 2009-10 at current market prices (of Rs 64,57,352 Crs). The size of the

transfer of property market appears significantly larger than the earlier estimates of 5% and therefore needs to be brought into the consumption tax base.

Table 4.1

All States- Revenue from Transactions in Immovable Property (RTIP)

Sl.no	State	Revenue from Transactions in Immovable Property (RTIP) (in Rs Crs)			Own Tax Revenue (OTR) 2009-10 (Accounts) (in Rs Crs)	Percentage of RTIP in OTR for 2009-10 (Accounts) (%)
		2009-10 (Accounts)	2010-11 (RE)	2011-12 (BE)		
1	Maharashtra	10,773.65	14,140.27	15,677.14	59,110.00	18.23
2	Uttar Pradesh	4,562.23	6,081.73	6,993.99	33,880.00	13.47
3	Tamil Nadu	3,662.16	4,599.47	6,492.54	36,550.00	10.02
4	Andhra Pradesh	2,638.63	3,600.00	4,240.00	35,180.00	7.50
5	Karnataka	2,627.57	3,500.35	4,030.00	30,580.00	8.59
6	Gujarat	2,556.72	3,499.98	5,000.00	26,740.00	9.56
7	Kerala	1,896.41	2,617.05	3,252.17	17,630.00	10.76
8	West Bengal	1,814.22	2,265.14	3,002.92	16,900.00	10.74
9	Madhya Pradesh	1,783.15	2,200.00	2,000.00	17,270.00	10.33
10	Punjab	1,550.94	2,500.00	2,900.00	12,040.00	12.88
11	Rajasthan	1,362.94	1,750.00	1,900.00	16,410.00	8.31
12	Haryana	1,293.57	1,900.00	2,350.00	13,220.00	9.78
13	Bihar	997.90	1,215.00	1,600.00	8,090.00	12.33
14	Chhattisgarh	583.13	650.35	750.00	7,120.00	8.19
15	Uttarakhand	398.70	425.65	483.85	3,560.00	11.20
16	Odisha	359.96	450.00	510.00	8,980.00	4.01
17	Jharkhand	274.94	302.50	450.00	5,560.00	4.94
18	Himachal Pradesh	113.40	124.47	142.76	2,570.00	4.41

19	Goa	111.25	130.39	148.10	1,760.00	6.32
20	Assam	108.45	123.09	145.00	4,990.00	2.17
21	Jammu and Kashmir	64.88	72.73	75.58	3,070.00	2.11
22	Tripura	18.15	19.97	19.97	530.00	3.42
23	Meghalaya	11.02	8.60	12.29	440.00	2.50
24	Sikkim	4.48	3.13	3.26	220.00	2.04
25	Manipur	4.26	4.85	15.52	200.00	2.13
26	Arunachal Pradesh	1.88	2.06	2.27	170.00	1.11
27	Nagaland	1.19	1.17	1.26	180.00	0.66
28	Mizoram	0.39	0.70	2.50	110.00	0.35
	All States	39,576.17	52,188.65	62,201.12	3,63,060.00	10.90

Source: State Finances- A Study of Budgets 2011-12 by the Reserve Bank of India.

As will be seen, the collection in the first ten states listed above aggregates to Rs 33865 crore, which forms 85% of the all states total of Rs 39,576 crore collected during 2009-10. Two points emerge from this analysis:

- a) The aggregate revenue from transactions in immovable property forms 10.9% of the overall own tax revenues of all states.
- b) Ten states account for 85% of the revenue. In Maharashtra, it is as much as 18%. This reflects to some degree the extent of urbanization and the consequent higher land values in these states. Apart from the general concerns of revenue loss, specific apprehensions which these states may have may also need to be addressed for this initiative to move forward on this proposal.

4.3. Black Money

The White Paper on Black Money (Ministry Of Finance , 2012), recognizes the need to control this scourge and foster the growth of the legitimate economy. It identifies

the real estate sector as one of the eight sectors vulnerable to the generation of black money noting that ‘investment in property is a common means of parking unaccounted money and a large number of transactions in real estate are unreported or underreported’. It identifies the high level of property transaction taxes as one of the reasons for this default and recognition that this adds to the already substantial immovable property transaction costs which include registration charges, transfer duty user charges, search fees, legal certification fees, brokers’ commissions, bank charges and advertising fees. It notes the need for substantial reforms in both the fiscal and regulatory sectors for the distortions in the market to be removed and for the market to become more efficient. It also urges the importance of building up local property data bases and their integration into a national data base.

The Report on the Measures to tackle Black money in India and Abroad (Ministry of Finance , 2012) equally recognizes that the real estate sector contributes significantly both to the generation of black money as well as to its deployment and therefore calls for regulating it urgently. The report makes a number of recommendations from the regulatory angle, calling for the application of improved accounting standards and more comprehensive tax provisions to cover all contingencies.

Both the above reports do not appear to have adequately recognized the beneficial impact the GST will have on controlling back money in real estate, if transactions in immovable property were to be included in the tax base of the GST. Due to the increasingly high cost of land in urban areas, there is a tendency for both the buyer and the seller to suppress the sale prices in the sale document. The seller can avoid

wealth tax and capital gains tax and buyer can avoid stamp duty, registration charges and transfer fees.

If input tax credit paid on steel, cement, architectural services and other construction inputs is allowed to be deducted from the final stamp duty payable on sale of an immovable property transaction, all construction contractors and real estate dealers will be incentivized to record all their purchases in their accounts. They will also put pressure on those upstream suppliers who operate in the informal economy to similarly account for their transactions. Downstream a property buyer will be enthused to pay GST on the sale, if the amount paid is allowed as a set off when the property is put up for resale subsequently.

4.4. Present Taxes on Immovable Property

At present, all three levels of government impose taxes on immovable property. These are briefly described below

4.4.1. Union Government level:

- a) **Wealth Tax:** Wealth Tax is levied at 1% on the amount by which an assessee's net wealth exceeds Rs.15 lakh. The net wealth includes all assets in India or outside India. As per the definition given in Section 2 (e) of the Wealth Tax Act, "Any building, which includes commercial buildings, residential buildings, guest houses, farm houses within 25 KMs of the Municipality" is included as part of wealth. This however excludes self occupied property or property if it is let out on rent.

- b) **Capital Gains Tax:** Capital Gains Tax is classified as one of the five sources of income liable for income tax. Short term / long term capital gains taxes are levied on the computed capital gains at the marginal rate and 20% respectively.

4.4.2. State Government Level

At the State level three different taxes are levied on transactions in immovable property. These are:

- (a) The Indian Stamp Act 1899 provides for levy of stamp duty in respect of notified instruments. As per item 63 of the State List, the power to determine rates of stamp duty in respect of immovable property is vested with the State.
- (b) As per the Section 78 of the Registration Act, 1908, the State Government shall determine the registration fees for documents which are registered under the Act for services provided including search, making copies, maintaining records etc
- (c) In addition to these, as per State Panchayat Raj Acts and Municipal Acts, a transfer duty in the form of a surcharge on certain instruments such as sale, gift, exchange, Mortgage with possession, lease is leviable. State Governments levy and collect this charge on behalf of the local bodies at the time the stamp duty and registration charge is collected. It then transfers the proceeds to the concerned local body.

The Rates of stamp duty, transfer duty and registration fee in five select states is provided below

Table 4.2

Rates of Stamp duty and Registration fee in Select States

Sl.no.	State	Stamp Duty (SD)	Transfer Duty (TD)	Registration Fee
1	Maharashtra	5%	1%	1% Max Rs30,000
2	Uttar Pradesh	5%	2%	2% Max Rs10,000
		4% (women)		
3	Tamilnadu	5%	2%	1%
4	Andhra Pradesh	5%	3% / 2%	0.50%
5	Karnataka	5%	3% on SD (Rural)	1%
			2% on SD (Urban)	
6	Kerala	7%(Rural) 8%(Municipalities) 9%(Corporations)	NA	2%
7	Haryana	6% 4% (Women)	2% (in municipalities)	Min Rs 100 Max Rs15,000
8	Gujarat	4.9%	NA	1%

As will be seen, despite the reforms under JNNURM, the aggregate statutory charges exceed 7%. In Uttar Pradesh, it is as much as 9%. This excludes other costs associated with property purchase including authentication fees, broker's commission, and bank charges.

4.4.3. Local Level Tax

At the third level, property tax is levied by urban and rural local bodies. This is a tax on the stock of property. The tax is collected and appropriated by the local bodies. The rate of property tax is theoretically decided by the respective local bodies. The revenues depend upon (a) the enumeration of properties in the municipal tax register,

(b) the assessment and valuation system in place (c) the extent of the exemptions allowed and (d) collection efficiency. In as much as these parameters vary widely across the country, the collections are not susceptible to analysis.

As will be seen, taxes on immovable property at the Central government level are levied both on the stock (wealth tax) and flow (capital gains/income tax). Taxes at the State level are levied on the flow of immovable property only. Taxes at the local government level are levied on the stock only. The only candidates for merger in the GST base are the taxes levied on transactions in immovable property by the State Government – namely stamp duty, registration fee and transfer duty. Stamp duty by itself, or in conjunction with registration fee and transfer duty can be considered for amalgamation into the GST base.

4.5. Need to include immovable property in the GST Tax base

On the basis of the above analysis, it is considered imperative to include immovable property in the GST tax base for the following reasons:

- (a) The construction and real estate sector contributes significantly to GDP. They also have critical spillover effects in other sectors of the economy. It is therefore necessary that tax distortions affecting the growth of these sectors are removed and this sector bears an equitable burden of the GST.
- (b) As GST is essentially a tax on consumption, all components of consumption expenditure should necessarily be included in the tax base. Consumption on housing and the housing services is a very important

component of consumption expenditure. Therefore it should be brought into the tax base.

- (c) The menace of black money can be effectively curbed by inclusion of real estate in the GST tax base. For the first time, all the buyers in the value added chain from the contractor to the real estate agent to the final buyer will be strongly incentivized to insist on invoices for their respective purchases. Presently, while income tax clearances are obtained at the time of registration of immovable property, no verification occurs on payment of sales tax. This leads to significant amounts being not accounted for in sales price and working backwards into consumption of cement, steel, paints, services etc. Since it is proposed to provide input tax credit to the seller of the property, she will be incentivized to insist on invoices and, therefore, gradually all the components of real estate and construction industry will be brought into the direct and indirect tax net.
- (d) Though JNNURM reform initiative has succeeded in bringing down stamp duties largely to a level of 5% the addition of transfer duty and registration duty effectively raise the level to 7.5% which is a deterrent for any purchaser of real without any offsetting input tax credit. This results in cascading of a consumption tax with undesirable consequences. Inclusion of immovable property in the GST tax base will provide substantial relief even if the RNR rate is higher because of the set offs of input tax available.

- (e) This step will also result in more efficient discovery of the property tax base by local bodies given that they will be in a better position to assess the construction cost of a building. This will spur the buoyancy of property taxes and thus bolster their revenues.

4.6. International Experience

Prior to discussing the scope and form in which taxes on transactions of immovable property could be merged into the GST, it will be useful to examine the international experience in this regard. The indirect taxation frameworks of 97 countries where some form of GST/ VAT was in force were studied. The list of countries where immovable property transactions is included in the GST/VAT tax base is listed at Table 5 below. The list of countries where immovable property transactions is not included in the GST/VAT framework is at Table 6 below.

Table 4.3

List of countries where transactions of immovable property is included in the GST/VAT framework

Sl.no	Name of the Country	Sl.no	Name of the Country	Sl.no	Name of the Country
1	Armenia	10	Greece	19	Poland
2	Belarus	11	Guatemala	20	Russian Federation
3	Belgium	12	Ireland	21	Slovak Republic
4	Bulgaria	13	Israel	22	Slovenia
5	Canada	14	Italy	23	Spain
6	Croatia	15	Kazakhstan	24	Ukraine
7	Cyprus	16	Lithuania	25	Vietnam
8	Czech Republic	17	Macedonia		
9	France	18	Philippines		

Table 4.4

**List of countries where transfer of immovable property is not included in
GST/VAT.**

Sl.no	Name of the Country	Sl.no	Name of the Country	Sl.no	Name of the Country
1	Albania	25	Ghana	49	Pakistan
2	Argentina	26	Honduras	50	Panama
3	Aruba	27	Hungary	51	Papua New Guinea
4	Australia	28	India	52	Paraguay
5	Austria	29	Indonesia	53	Peru
6	Azerbaijan	30	Isle of Man	54	Portugal
7	Barbados	31	Japan	55	Romania
8	Bolivia	32	Jordan	56	Rwanda
9	BES-Islands	33	Kenya	57	Singapore
10	Botswana	34	Korea (South)	58	South Africa
11	Brazil	35	Latvia	59	Sweden
12	Chile	36	Lebanon	60	Switzerland
13	China	37	Luxembourg	61	Taiwan
14	Colombia	38	Malaysia	62	Tanzania
15	Costa Rica	39	Malta	63	Thailand
16	Denmark	40	Mauritius	64	Trinidad and Tobago
17	Dominican Republic	41	Mexico	65	Tunisia
18	Ecuador	42	Moldova	66	Turkey
19	Egypt	43	Morocco	67	Uganda
20	El Salvador	44	Netherlands	68	United Kingdom
21	Estonia	45	New Zealand	69	Uruguay
22	Finland	46	Nicaragua	70	Venezuela
23	Georgia	47	Nigeria	71	Zambia
24	Germany	48	Norway	72	Zimbabwe

As will be seen, twenty five (25) out of ninety seven (97) countries studied, have specifically included transfer of immovable property as taxable under the GST/VAT Act. This has been facilitated by making sale transactions relating to both movable and immovable properties subject to the respective GST Acts.

4.6.1. Description of levy in Twenty five countries

- 1) **Armenia:** The definition of goods includes fixed assets and real estate. Standard rate of 20% is applied.
- 2) **Belarus:** Definition includes goods and property rights, including exchanges of goods and gratuitous assignments. There is no stamp duty and transfer tax on property. A dual rate is applied – standard rate of 20% and a reduced rate of 10%.
- 3) **Belgium:** In Belgium, application of VAT on transfer of property is restricted to buildings which are less than 2 years old. Further it is applied only on the buildings component of the purchase price. It is also applied to renovated properties. The rate applied is 21%. All other transactions are exempt from VAT. In addition, a transfer duty of 12.5% is levied on the land portion of purchased price, and registration fees are separately levied.
- 4) **Bulgaria:** Sales of property bought through a company are liable for VAT. However, sales of land are exempt. VAT is levied at 20%. Registration fee is separately levied.
- 5) **Canada:** GST is applicable on newly constructed and substantially renovated homes. Rate of 6% is applied on which partial telescopic

rebates are allowed if it is used as the primary place of residence. Land transfer taxes (property transfer tax) or purchase tax in other provinces are separately levied between 0.5% and 2%.

- 6) **Croatia:** VAT is applicable on all properties built after 31st December 1997. 22% VAT is levied on the construction value of the building. Transfer of property prior to this date is subject to a real estate tax of 5% on the purchase value. Land value is always subject to real estate transfer tax. No stamp duty is levied.
- 7) **Cyprus:** The regular GST rate on purchases is 15%. However, a reduced rate of 5% is applied for first time buyers. In addition, telescopic transfer tax is also made applicable.
- 8) **Czech Republic:** The definition of goods includes real estate and VAT is applied on real estate also. There is a dual rate regime – standard rate of 20% and reduced rate of 14%. In addition, registration fees and real estate transfer tax are applicable.
- 9) **France:** VAT is applicable on first sale of property within 5 years of completion of the building. Applicable rate is 19.6%. Properties exempt from VAT are liable to pay registration fees / transfer fees levied at 3.6%. In addition, there are two additional taxes 1.2% for department equalization fund, 2.5% towards assessment and collection cost and an additional dual levy of 0.2% and 0.1%. The aggregate rate on property exempt from VAT is therefore 7.5%.

- 10) **Greece:** 19% VAT is leviable on a property constructed after 1st Jan. 2006. Transactions in properties constructed earlier are subject to a transfer tax. There is a dual telescopic tax rate for each of two classes of properties- those covered by fire protection and those which are not. In addition, cadastral charges are levied.
- 11) **Guatemala:** A rate of 12% is applied both on the rental or the real estate. In addition, a documentary stamp tax of 3% is levied.
- 12) **Ireland:** VAT rate of 13.5% is levied on sale of immovable property. In addition, a stamp duty of 9% is levied on transfer of residential property.
- 13) **Israel:** VAT at the rate of 16% is applicable to the sale of assets which includes real estate. Exemption is given for leasing apartments for residential purposes. In addition, acquisition tax (transfer fees) is levied at progressive rates depending on the value of the property.
- 14) **Italy:** VAT is levied at progressive rates between 4% and 20% depending on first time home buyers (4%) second time and non-resident buyers (10%) and luxury homes (20%). This is applicable to new properties defined as buildings sold within 5 years of completion of the construction or restoration. Other properties are subject to proportionate registration tax 3% for those buying their first home, and it mustn't be classified as a 'luxury' home. The registration tax for non-residents and those buying second homes is 7%. Registration tax on the purchase of building land is 8%. Land registry tax is 2% and cadastre tax 1% or a fixed fee of €168 for

new properties. Fixed fee of €168 also applies if the property is their main or only residence.

- 15) **Kazakhstan:** Definition of goods includes all forms of property, property rights and VAT is applied to the sale of goods at either the standard rate (12%) or zero rate. In addition, a land tax is payable. User charges are also levied.
- 16) **Lithuania:** VAT is levied for new buildings at the rate of 21%. A new building is defined as an unfinished building or a building sold before 24 months of its construction. In addition, registration fees up to 0.5% are levied.
- 17) **Macedonia:** A standard rate of 18% is applicable for all buildings. Rate is reduced to 5% for first sale of residential buildings. In addition, a transfer tax is leviable between 2 to 4%.
- 18) **Philippines:** VAT of 12% is levied on property tax transactions. Some exemptions are provided. In addition, stamp tax is levied on certain documents. Local transfer tax imposed by municipal or city Governments at 0.5% to 0.75% is also levied.
- 19) **Poland:** Rate of 23% is applied on immovable properties excluding residential leased accommodation. In addition, a transaction tax up to 2% and registration fees between 0.3% and 1.6% is levied.
- 20) **Russia:** VAT rate of 18% is applied on purchase price of buildings. Sale of land is exempt. Leasing of land as well as property is subject to VAT at

18% excluding residential property lease. Registration fee, between 0.01% and 1% is levied.

21) **Slovak Republic:** All real estate transfers made within 5 years of official completion are liable to VAT. Land is excluded on buildings which are more than 5 years old. Apart from this, stamp duty is levied.

22) **Slovenia:** The standard rate applicable for property transfer is 20%. Newly constructed or renovated buildings are charged 8.5%. Apart from this, registration fee of 0.5% and a real estate transfer tax of 2% is levied on properties on which VAT is not levied.

23) **Spain:** VAT at the rate of 7% is applied on new property. A rate of 0.5% to 1% of stamp duty is levied on vacant land. Commercial premises are levied VAT at 16%. Owners of old property are liable at the time of sale to pay property transfer tax at 7%. In addition, a transfer tax 14% is also leviable.

24) **Ukraine:** 20% VAT is applied on sale of property. Sale of land and residential units (except for sale) are exempt.

25) **Vietnam:** A special rate of 5% VAT is applicable on transactions of realty sector. Other applicable taxes include stamp duty, which varies from 0.05% to 16%.

4.6.2. Levy in other Systemically Important countries

The practice prevailing in levy of taxes on immovable property transactions in the remaining G 20 countries, where real estate is not included in the GST/VAT tax base is outlined below.

- 1) **Argentina:** For real estate sales the Stamp duty rate is 2.5%. There is no transfer tax.
- 2) **Australia:** Stamp Duty from 1.25% to 6.75% is levied. The Registration Fee levied is from 0.01% to 0.6%.
- 3) **Brazil:** No Stamp duty is levied but a real estate transfer tax is levied upon the transfer of title to real property (land, buildings). The tax rate is progressive, from 2% to 6%, calculated, roughly, on the sales price.
- 4) **China:** A Stamp Tax is levied on various contracts including property leasing, documents for the transfer of property rights etc. Tax rates range from 0.005% to 0.1%. A fixed amount of Rmb 5 is charged on certificates evidencing rights and licenses. The Business Tax is a non-recoverable turnover tax imposed on the provision of certain services, the assignment of intangible assets and the sale of immovable property within China. Tax Rates are 3% to 5% and withheld at source for most services. Deed Tax is imposed on the transferee or assignee to which land use rights or building ownership rights are transferred (sales, exchange or gifts). The tax rate ranges from 3% to 5% depending on the location of the property.
- 5) **Germany:** The real estate transfer tax (Grunderwerbsteuer) is due about four weeks after the notary deed has been signed by buyer and seller. The buyer must pay registration fee to have his name entered in the local land registry (Grundbuch) as the legal owner. Registration fee is fixed by law depends on the value of the property. Real Estate Transfer Tax is at 3.5% and Registration Fees is between 0.2% to 0.5%.

- 6) **Indonesia:** A land and building transfer duty of 5% is payable when a person or company obtains rights to land or a building with a value greater than IDR 60 million. Certain exceptions/reductions apply, including transfers in connection with a merger. Certain documents are subject to stamp duty at a nominal amount of IDR 3,000 or IDR 6,000.
- 7) **Japan:** A real estate acquisition tax of 3% to 4% of the assessed value is applied at the time land or buildings are acquired and a real estate registration tax is imposed on the appraised value of real property at rates ranging from 0.4% to 2%, depending on the type of transfer. Stamp duty of JPY 200 to JPY 600,000 is imposed on the execution of taxable documents.
- 8) **Mexico:** A tax of 1% to 5% of the assessed value of the property is paid by the buyer on all purchases of property. The federal government works with the states of the Republic so that in co-operating states only the local tax applies with no levy of federal tax. Property Acquisition Tax, which is a tax on acquisition of immovable property (IAI), is imposed by states at the municipality level following the abolition of the Federal IAI (at 2%) effective Jan 1996. In most municipalities, the acquisition tax is 2% of either: (i) the real estate tax commercial appraisal, (ii) the total purchase price, or (iii) the cadastral value of land, whichever is higher.
- 9) **South Korea:** In the business year in which a corporation acquires real estate, property acquisition tax will be assessed. This is a one-time tax assessed at the rate of 2% of the value of the acquired article. However, in

the case of the acquisition of articles for business purposes in certain major cities, the rate is 10%. At the time of officially registering the acquisition, transfer, creation or lapse of certain property rights, a registration tax must be paid. The tax is assessed on the value of the property concerned, which is calculated on the basis of a list of "Standard Values" prepared by the government. Where the actual value is less than the standard Value, tax based on the Standard Value will be imposed.

- 10) **South Africa:** The buyer is liable to pay Transfer duty up to 8% on the fair market value of the purchased property.
- 11) **Turkey:** Stamp duty of 0.75% is charged on the sale of Turkish real estate. Apart from this title deed charge is paid to the Land Registry, at 3% of property value.
- 12) **United Kingdom:** Selling, leasing and letting commercial land and buildings are exempt from VAT. But an option is available for the seller to opt for VAT to enable him to reclaim input tax credit paid earlier. A Stamp Duty Land Tax (SDLT) is payable on the purchase or transfer of property or land in the UK where the amount paid is above a certain threshold. It is levied on a pro rata basis. In addition most UK land and property transactions must be notified to HM Revenue & Customs (HMRC) on a Stamp Duty Land Tax return within a certain time limit - even if no tax is due. Differentiated rates are applied depending on whether the land is residential or non-residential, freehold or leasehold on a non telescopic basis.

13) **USA:** The U.S. does not levy a federal value added tax or sales tax. Individual states levy sales tax at various rates subject to state-set requirements. Most states and some municipalities of the US impose other taxes including real and personal property tax, franchise tax, intangibles tax, transfer tax, and tax on capital. Taxes paid to the states and municipalities are deductible on the federal income tax return in the year paid or accrued. Recording fees are charged by the government for entering an official record of the change of ownership of the property. It can be paid by either party but is usually paid by the buyer. Recording fees are usually fixed amounts and are minimal ranging between 0.2% - 0.5%. Levy of Transfer tax varies depending on the location of the property, ranging from 0.01% in Colorado to 2% in Delaware. Some states do not impose transfer taxes

4.7. Lessons from International experience

Based upon the above analysis of the framework of GST on immovable property transactions in 97 countries, the following four models emerge. They are briefly outlined below:

- 1) A comprehensive model applicable to all immovable property transactions- both sale and lease and enfolding both land and buildings constructed thereon. This model has two variations:
 - a. **A single GST rate** : Armenia 20%;Guatemala 12%; Ireland 13.5%; Israel 16%; Vietnam 25%.

- b. **A dual GST rate** : Belarus 20%/10%; Cyprus 15/5%; Czech Republic 20/14%; Kazakhstan(12/0%) ; Macedonia 5/18%.
- 2) A restricted GST model where the base of the GST is constrained by the following:
- a. **Land exempted:** Belgium; Bulgaria 20%. Croatia 22%; Russia 18%; Ukraine (including residential units exempted) 20%.
 - b. **Buildings constructed prior to a specified date exempted** : Belgium less than 2 years old; 21%; Canada newly constructed 6%; Croatia 22%; France 5 years old 19.6%; Greece after 1st Jan 2006 19%; Italy- first time owners / second time/ non-resident owners/ luxury homes sold within 5 years of completion; Lithuania 21% less than 2 years old ; Spain 7% on new property ; commercial premises 16%; old property liable for GST @7%.Slovenia : Newly constructed buildings 8.5% ; Others 20%.
 - c. **Residential leased accommodation exempt:** Poland 23%; Russia.
- 3) The restricted GST Model also has two variations:
- a. **Single rate:** Philippines (12%), Ukraine (20%)
 - b. **Dual rate:** Greece; Italy (4/10/20%)
- 4) Simultaneously, the following additional charges are levied by the following countries:
- a. **Land Transfer duty:** Belgium 12.5%; Canada 0.5 to 2%; Croatia for other property 5%; Czech Republic; Israel; Kazakhstan; Macedonia 2-4%; Slovenia 2%; Spain 14%.

- b. **Registration fees:** Bulgaria; Czech Republic; Lithuania 0.5%; Russia 0.01% to 1%; Slovenia 0.5%.
- c. **Stamp tax:** Guatemala 3%; Ireland 9% on residential property; Vietnam 0.05 to 16%
- d. **Other charges:** France 7.5% for non GST property; Philippines local transfer tax 0.5- 0.75%.

4.8. A proposed model

Based on the discussion above, a proposed model for inclusion of immovable property transactions in the GST base is suggested below. The parameters of this model are guided by the following factors.

- (a) A number of States continue to levy high stamp duty rates. For them and other states which have higher income even with lower rates; income from taxes on immovable property transactions continues to be significant. Merging these taxes into GST may cause significant revenue losses to them and adequate revenue neutral substitutes would have to be determined, failing which their compensation requirements will be much higher.
- (b) Significant opposition can be expected from a number of other stakeholders for enfolding real estate transactions into the GST base for reasons other than economic.

The proposed model would thus contain the following elements:

4.8.1. Tax Rate

As the RNR rate determined in Chapter 9 is below 12%, the merger of Real Estate into GST will be facilitated. This is because with the present average rate of about 8% on property transfer, there will be little significant impact on purchasers given the input tax benefit provided. If the GST design leads to RNR being above 12%, then there is a case for a dual GST rate regime with the rate for immovable property being applied at the lower rate rather than the standard rate.

4.8.2. Tax Base

- 1) All real estate transactions- sale as well as lease will be brought into the GST base with prospective effect from a notified date. Tax will be levied on transactions relating to both old and new property.
- 2) In respect of new property, set off against input tax credit paid on construction materials and services will be available against the GST payable. In respect of old property, GST will be leviable on the capital gain between the purchase price and the resale price with the purchase price being suitably indexed. It may be desirable to restrict input tax credit relating to renovations and improvement in such cases.
- 3) It may be desirable to regulate the input tax credit availed while GST is levied on lease rentals. If this is not done, GST paid on items used for construction of the property(to be set off against GST for the sale of property) will be used to set off GST on rentals, which will result in practically no GST on rentals being recovered during the initial periods.

4.8.3. Taxes to be subsumed

Both stamp duty and registration fee, applied on a prorate basis would be subsumed into the GST. However, in view of the critical dependence of local bodies on revenues from transfer duty, this duty may have to be maintained unless a suitable compensation package is devised for the local bodies.

4.8.4. Exemptions

To ensure that small house owners do not come under the ambit of the GST with concomitant registration and record keeping requirements, exemptions could be granted up to a threshold limit for both property value and rental. This could be fixed say at Rs 20 lakh for value of property and Rs 2 lakh annual rental. This approach seems preferable to the option of providing an exemption to residential property as a class which may lead to classification disputes. The owners of properties below the threshold level will have a choice to 'opt in' to a GST.

4.8.5. Concomitant Charges

The government's obligation to continue to register documents attesting to the sale of immovable property and maintain a data base of such property continues. To meet the cost of this service, a fixed registration fee may be charged on a per transaction basis. The existing prorate levy will be removed. The transfer duty, proceeds of which are transferred to local bodies may have to remain unless alternate methods of compensating the local bodies are worked out.

4.8.6. Legal implications:

The application of GST on immovable property transactions in India will signify a paradigm shift in immovable property legislation which will require a number of amendments to existing legislation. Given the possible objections to this initiative, the philosophy to be adopted while deciding the amendments, should be simple and unequivocal. The constitutional amendments should be permissive and the GST law may be only as restrictive as required by the demands of political economy. Using this touchstone, the following changes will be required.

4.8.6.1. Amendments to the Constitution

- (a) Entry 63 on the State List dealing with rates of Stamp duty on property would need to be shifted to Concurrent List to be applicable to GST.
- (b) Entry 18 of the State List awards land i.e. Right in or over land as well as transfer and alienation of agriculture land to the State. In addition, Entry 49 provides award of Tax on lands and buildings as State subject. These two Entries also may require to be amended

4.8.6.2. Amendments to Central Legislation

- (a) Amendments to the Indian Stamps Act
- (b) Amendments to the Indian Registration Act
- (c) The proposed National GST act

4.8.6.3. Amendments to State Legislation

- (a) State Schedules to the Stamp Act

- (b) State schedules to the Registration Act
- (c) State GST Act

4.9. Conclusion

Keeping such a large base comprising about 8.67% of the GDP outside the GST base will be a travesty especially as the inclusion will make the revenues more buoyant. Further there is adequate international experience on the levy of GST on immovable property. However, the exact model to be adopted will depend on the deliberations of the newly constituted GST design committee referred to in the opening paragraph of this paper.

However, it must be remembered that in some states there are no perfect land markets in some states in India today. Sale of land is not permitted to non-residents in states like Himachal Pradesh, J&K, Uttarakhand and the North East. Sale to non agriculturalists is prohibited under the ceiling laws in other states. Since the land market is repressed in such cases, the correct price is not used in transactions and therefore tax revenue is lower than potential.

Some states provide incentives for women to own property by levying a lower rate of stamp duty if women are the purchasers. This gender specific approach may only be supportable in a GST framework through the use of an appropriately carved refund mechanism.

CHAPTER 5

INCLUDING FINANCIAL SERVICES IN THE DESIGN OF GST - LESSONS FROM INTERNATIONAL EXPERIENCE

5.1. Introduction

Financial services facilitate financial transactions like deposits, loans, insurance, credit cards, and investments as well as associated activities like brokerage, money management. This sector has seen significant growth over the last two decades in India. It constitutes about 5% of the GDP and has an estimated market capitalization of over US\$ 200 billion. It employs over 3 million people. This sector is projected to grow at an accelerated pace in the future. By 2020, it is expected to contribute US\$ 350 to 400 billion and provide about 10 million jobs. The major contribution will come from core financial services with IT for Financial services and ITeS/BPO also contributing.

5.2. Taxation of Financial services

Given its significant contribution to the GDP, the issue of whether financial services should be included in the GST tax base has been extensively examined internationally. The handicap in this exercise is that within the financial sector, unlike for other services, charges for some services are not explicitly stated as fees or commissions, but are implicit in interest rate spreads and other financial margins. Consequently this is a Hard to Tax sector as the value added must be estimated using indirect methods. Because of such difficulties, most countries which have a VAT in

place have chosen to exempt a broad range of financial services without fully exempting them. This has led to complex VAT rules being put in place which are often not economically neutral.

This Chapter examines the international experience with respect to the taxation of financial services within a VAT and examines whether it would be relevant for a developing country like India to include financial services in the tax base for its proposed GST given that exemption seems to be the dominant choice in developed countries .

There are five broad categories of financial services. These are¹:

- **Deposits, borrowing, and lending which includes:** banking operations; and credit card operations.
- **Purchase, sale, and issuance of financial securities which includes:** bonds, shares, options, guarantees, and foreign currencies; and gold and precious metals.
- **Insurance which includes:** life; and property and casualty.
- **Brokerage and other agent services which include:** buying and selling of financial securities; and underwriting and other transactions where agents act as principals.
- **Advisory, management, and data processing which includes:** asset management and investment advice; administrative and information services,

¹ Satya Poddar, "Consumption Taxes: The Role of the Value-Added Tax," in *Taxation of Financial Intermediation: Theory and Practice for Emerging Economies*, Patrick Honohan, ed. (Washington: World Bank and Oxford University Press, 2003).

incidental or supplementary to financial services; and any others not elsewhere classified.

Alternatively, services can be classified based on how they are paid for. Services like brokerage, advisory and management services are paid for by explicit fees charged. On the other hand, financial intermediation services are paid for through implicit fees in the form of interest rate margins or other margins.

Following the pattern in other services, VAT is leviable on financial services in three forms.

- **Taxable:** Taxable at the normal positive rate. The registered seller is obtains a refund of the VAT incurred on the input purchases undertaken to make taxable supplies.
- **Zero-rated:** Taxable at zero percent. This registered seller is also entitled to a refund of the VAT paid on inputs even though no VAT is charged on the service supplied. Export of financial services is zero rated.
- **Exempt:** Taxable at zero percent, the registered supplier is not entitled to any refund of input tax paid by him for purchases made to enable him to make these exempt supplies. Most countries treat implicit fees like interest margins as exempt. Others allow some explicit financial fees also. While the solution appears simple, the problem arises in computation for eligibility of input tax creditable. Most financial institutions provide taxable, zero rated and exempt services and allocation of input tax credit to these three categories and

blocking the tax credit for the last category demands putting a complex rule structure in place.

5.3. International Experience

This section presents a brief overview of country practices with respect to the VAT treatment of financial services based upon a sample of 46 countries listed below.

Table 5.1

List of Countries selected for the Study

Sl.no	Country	Sl.no	Country	Sl.no	Country
1	Argentina	17	Hungary	33	Poland
2	Australia	18	India	34	Portugal
3	Austria	19	Indonesia	35	Romania
4	Belgium	20	Ireland	36	Russia
5	Brazil	21	Israel	37	Saudi Arabia
6	Bulgaria	22	Italy	38	Slovak Republic
7	Canada	23	Japan	39	Slovenia
8	China	24	Korea (South)	40	South Africa
9	Cyprus	25	Latvia	41	Spain
10	Czech Republic	26	Lithuania	42	Sweden
11	Denmark	27	Luxembourg	43	Taiwan
12	Estonia	28	Malta	44	Turkey
13	Finland	29	Mexico	45	United Kingdom
14	France	30	Morocco	46	United States of America
15	Germany	31	Netherlands		
16	Greece	32	Paraguay		

5.3.1. Countries - Financial Services included in the GST/VAT

Out of these forty six countries, the countries where financial services are explicitly included in the GST/VAT tax base are:

Table 5.2

List of Countries where Financial Services included in GST/ VAT

1	Argentina
2	Israel
3	Morocco
4	Paraguay
5	Taiwan

A brief overview of the levy in these five countries is furnished herewith

1. Argentina:

Under VAT, goods and services taxable at 10.5% include Interest and commissions on loans made by banks. Under Argentina's Turnover Tax "*Impuesto sobre los ingresos brutos*" (IIBB), goods and services are taxable at 6% which include commissions and intermediation services.

Other Taxes on Financial Services: Tax on financial transactions is levied on debits and credits in current accounts at a rate of 0.6% per transaction. Of the amount levied on credits in the accounts, 0.2 percentage points may be taken as an advance payment of income tax or minimum presumed income tax, resulting in an effective rate of 0.4% and, therefore, 1% on a complete

collection/payment cycle. Interest on bank accounts and fixed term deposits are however exempted.

Recovery of VAT: A taxable person may recover input tax (also known as credit VAT), which is VAT charged on goods and services supplied to it for business purposes. Input tax is generally recovered by being deducted from output tax (also known as debit VAT), which is VAT charged on supplies made.

Input tax may not be recovered on purchases of goods and services that are not used for business purposes (for example, goods acquired for private use by entrepreneurs). In addition, input tax may not be recovered for some items of business expenditure. The measures regarding refunds apply only to VAT, not to IIBB.

2. Israel:

The Israeli Value-Added Tax law imposes VAT liability on the transactions pertaining to sale of assets, sale of intangibles or the provision of “services” by a “taxable person” in the course of its business. However the term “assets” do not include securities, shares or similar instruments. The term “service” includes all types of services provided to others for a consideration, including credit transactions and money deposits. It does not include services provided by an employee to his or her employer.

Recovery of VAT: A taxable person may recover input tax, which is the VAT charged on assets (purchased locally or imported) or services supplied to that

taxable person for business purposes, if such items are used or will be used for taxable transactions. This excludes, for example, private expenditures, and expenditures that are used for out of scope transactions or exempt transactions.

3. Morocco:

The standard rate of Morocco VAT is 20%. Under Article 99 of the Moroccan Tax Code, a reduced rate of 10% applies to specific items such as banking and credit services, leasing.

Recovery of VAT: A taxable person may recover input tax in the month following the month in which the VAT was paid. Input tax is VAT charged on goods and services acquired by an entity for business purposes. A taxable person generally recovers input tax by deducting it from output tax (VAT charged on supplies made). Input tax consists of VAT charged on goods and services supplied in Morocco and VAT paid on imports of goods.

Nondeductible input tax: Input tax may not be recovered on purchases of goods and services that are not used for business purposes and that are considered to be nondeductible expenses for corporate tax purposes (for example, goods acquired for private use by an entrepreneur).

Partial exemption: Input tax deduction is granted for taxable supplies and for supplies that are exempt with a right to deduct. If a taxable person makes both taxable supplies and exempt supplies, it may recover only the input tax related to supplies that are taxable or exempt with a right to deduct.

4. Paraguay:

In Paraguay, the standard rate of VAT is 10%. VAT also provides for a reduced tax rate of 5% for certain products and services. This reduced rate of 5% applies to leasing and interest on loans or debts.

Foreign currency, Interest on public securities, Interest on bank deposits, Certificates and shares are exempted under VAT. Share transfer is exempt if the seller communicates with the tax authorities regarding the transaction.

Recovery of VAT: In certain circumstances, a taxable person may recover input tax (credit VAT), which is VAT charged on goods and services supplied to it for business purposes. A taxable person generally recovers input tax by deducting it from output tax (debit VAT), which is VAT charged on supplies made.

Input tax includes VAT charged on goods and services supplied in or from Paraguay and VAT paid on imports of goods. A valid tax invoice or customs document must generally support an input tax credit.

Nondeductible input tax: Input tax may not be recovered on purchases of goods and services that are not used for making taxable supplies or that are used for non business purposes (for example, goods acquired for private use by an entrepreneur). In addition, input tax may not be recovered for some items of business expenditure.

5. Taiwan:

Taiwan imposes Business Tax, which consists of Value Added Tax (VAT) and Gross Business Receipt Tax (GBRT).

Business Tax applies to the following:

- A transaction involving good is a transfer of ownership of goods to others for consideration. This is not limited to goods exchanged for money. The exchange of goods for other goods is also considered.
- A transaction involving services is the rendering of services to others or supplying goods for the use of others for consideration.

Taxable person may be subjected to both VAT and GBRT. For example, a bank may be subject to VAT on its rental sales and GBRT on its interest income.

In Taiwan the standard rate for VAT is 5% and the other rate is 0%. The GBRT rates are

- 1% for reinsurance premiums of insurance enterprises (5% for operations other than authorized core businesses).
- 2% or 5% on the sale of services by local financial institutions, where these services are the core business.
- 3% or 5% on the purchase of services from non-established financial institutions, where these services are not core.

Other Taxes on Financial Services: In Taiwan the securities transaction tax (STT) is imposed upon gross sales price of securities transferred and at a rate of 0.3% for share certificates issued by companies and 0.1% for corporate bonds or any securities offered to the public which have been duly approved by the government.

Taiwan also levies a stock index futures transaction tax imposed on both parties. The current transaction tax is levied per transaction at a rate of not less than 0.01% and not more than 0.06%, based on the value of the futures contract.

5.4. Other systemically important countries

An overview of the state of taxation on Financial Transactions, in the European Union, the G-8 and G-20 countries is presented below:

5.4.1. European Union

The European Union comprises of 27 countries. The Sixth EU VAT Directive (77/388/EC) provides a binding framework for the formulation of VAT law at national level throughout the European Union. The Directive provides that specified financial services are exempt from VAT. This essentially means that no VAT shall be charged on these financial services and that no credits are allowed on the inputs used to produce these VAT exempt services.

No definition of financial services is, however, provided, nor is any explicit reference made to definitions used by regulatory bodies. This apparently deliberate lack of

precision has resulted in considerable differences between Member States with regard to the VAT treatment of financial services.

On the issue of eligibility for input tax credit, for each of the Member States, the framework provides for i) Exemptions without right to deduction and ii) Exemptions with right to deduction. The definition of exemptions without right to deduction and exemptions with right to deduction is the same for all the Member States, unless otherwise provided in each country.

Exemptions without right to deduction mean that the taxable person has no right to recover input tax incurred in connection with certain exempt supplies. These include inter *alia*, insurance and reinsurance transactions and banking and financial transaction. *Exemptions with right of deduction* (or exempt with credit or zero-rated) mean that even if the taxable person is not required to charge VAT on the supply, such person is entitled to recover input tax on purchases and expenses incurred in connection with such supply. Exemption with right to deduction is generally reserved for exports of goods and international services.

As regards the different rates of input VAT recovery for financial institutions, several Member States (for example, Estonia, France, Germany and Lithuania) enable financial institutions to opt for taxation as regards their exempt financial transactions.

The effect of the option for taxation and, consequently, a relatively high rate of input VAT recovery on the financial institution's competitive position depends on the

conditions under which the option can be exercised. In countries like Germany, where the option can be exercised on a case-by-case basis, the financial institution will only exclude from the exemption services B2B transactions where its customers are entitled to deduct input tax. In respect of B2C transactions, the exemption will remain in force, which means that the customer effectively bears the financial institution's non-deductible input tax. In countries like France, where the option for taxation must be exercised in respect of certain categories of services, regardless of the VAT status of the customer, the option similarly has a favourable effect on services rendered to customers entitled to deduct input tax but an unfavourable effect on services rendered to customers not entitled to deduct input tax.

In some cases, variations in the rates of input VAT recovery amongst EU countries can be explained on the ground that the scope of the exemptions under national law deviates from that of the provisions laid down by the Sixth Directive. For example, portfolio management services are exempt in, for example, Italy, whilst they are subject to VAT in the UK, Ireland, Luxembourg (at the reduced rate of 12%) and Sweden.

Simultaneously, the EU has put in position a framework for taxation of the financial sector outside the GST framework. In June 2011, the Commission announced that it would propose to set up a financial transaction tax as the basis for an own resource for the EU budget. The European Parliament in May 2012 adopted an opinion supporting the Commission's proposal on FTT.

Unanimous support within the Council for a common system of FTT was lacking. The Commission received requests of eleven Member States asking it to submit a proposal for a Council Decision to authorise enhanced cooperation. Under EU rules, a minimum of nine countries can co-operate on legislation using a process called enhanced co-operation as long as a majority of the EU's 27 countries give their permission. In January 2013 the EU Council adopted a decision authorising eleven Member States to go ahead with enhanced cooperation on a common system of financial transaction tax (FTT). Thus, eleven countries won the EU's backing for a financial transaction tax (FTT). These are Germany, France, Italy and Spain, Austria, Portugal, Belgium, Estonia, Greece, Slovakia and Slovenia.

5.4.2. Financial Transaction Taxes - Outside the GST/VAT in the EU

A country wise analysis of other financial transaction taxes levied outside the purview of GST/VAT in Member States of European Union is as follows:

- 1. Estonia:** nil
- 2. France:** On 1 August 2012, France introduced a financial transaction tax in French tax regulation pursuant to Article 5 of the French Amended Finance Bill of 14 March 2012. Two other taxes applicable to financial transactions were also introduced, including a tax on high frequency trading; and a tax on naked sovereign credit default swaps. The FTT levies a 0.2 percent tax on all publicly traded companies with a market value over €1 billion. France is the first European country to impose a transaction tax on share purchases.
- 3. Germany:** nil

4. **Lithuania:** nil.
5. **Austria:** Austrian banks and foreign banks with an Austrian branch are subjected to a banking tax amounts to 0.055% to 0.085% of the tax base. In additional surcharge of 0.013% on the derivative transaction volume is levied. A capital tax of 1% is levied on Compulsory shareholder contribution, as well as voluntary direct and hidden capital contributions to Austrian corporations if affected by the direct shareholder.
6. **Belgium:** The Belgium securities tax applies to certain transactions concluded or executed in Belgium through a Belgian professional intermediary, to the extent that they relate to public funds, irrespective of their (Belgian or foreign) origin. The "tax on stock exchange transactions" is not due upon subscription of new securities (primary market transactions). Both buyers and sellers are subject to the tax. The tax rate varies in accordance with the type of transactions. Between 0.07% tax for distributing shares of investment companies, certificates of contractual investment funds etc , to 0.5% tax for accumulating shares of investment companies and 0.17% (subject to a maximum of €500 per transaction) for any other securities (such as shares).
7. **Bulgaria:** Insurance contracts covering risks in Bulgaria are subjected to a 2% tax on the insurance premiums. An Exemption applies for certain premiums, including those under, reinsurance contracts, life insurance contracts and permanent health insurance.
8. **Cyprus:** nil
9. **Czech Republic:** nil

10. Denmark: nil

11. Finland: Finland imposes a tax of 1.6% on the transfer of certain Finnish securities, mainly equities such as bonds, debt securities and derivatives.

12. Greece: Greece applies a transaction duty on the sale of Greek listed shares at a rate of 0.15% (0.2% as of 1.4.2011). This tax applies to traded financial instruments treated as compound products (equity swaps, call options, futures). The transaction duty, which burdens the seller of the listed shares, is directly withheld upon each settlement of the transaction and paid by the Stock Exchange Depository SA to the competent tax authorities.

13. Hungary: nil

14. Ireland: nil

15. Italy: Tax levied on Equity between 0.01%–0.14% of shares traded off exchange, and on loan between 0.25%–2%. A flat fee of Euro 168 on share issuance; 3% on business purchases is also levied in Italy.

16. Latvia: nil

17. Luxembourg: nil

18. Malta: nil

19. Netherlands: A 6% transfer tax is levied on the transfer of shares in a so-called qualifying real estate company (in which 70% or more of the assets of the company consist of real estate and the object of the company is portfolio investment in real estate). The purchaser is liable for this tax.

20. Poland: Transfer tax is imposed at a rate of 1%-2% on Shares. Poland charges a 1% Civil Law Activities Tax (CLAT) on the sale or exchange of property

rights, which includes securities and derivatives. The tax applies to transactions, which are performed in Poland or which grant property rights that are to be exercised in Poland. It also applies to transactions executed outside Poland if the buyer is established in Poland. All transactions on a stock market, Polish treasury bonds and Polish treasury bills, bills issued by the National Bank and some other specified securities are exempted from the tax.

- 21. Portugal:** Stamp Duty is levied on transactions relating to leases, subleases, financial transactions, insurance premiums and on certain bets.
- 22. Romania:** Some financial services like factoring, debt collection, managing and depositing certain equity papers are subject to 24% VAT. However VAT exemption without credit applies to a range of activities including banking, finance and insurance.
- 23. Slovak Republic:** nil
- 24. Slovenia:** Tax on Insurance Services: This tax is levied on insurance premiums and paid by insurance companies. The tax rate is 6.5%.
- 25. Spain:** A 1% transfer tax applies to the value of contributions, in cash or in kind, to the share capital of a company.
- 26. Sweden:** In January 1984, Sweden introduced a 0.5% tax on the purchase or sale of an equity security. Hence a round trip (purchase and sale) transaction resulted in a 1% tax. In July 1986, the rate was doubled, and in January 1989, a considerably lower tax of 0.002% on fixed-income securities was introduced for a security with a maturity of 90 days or less. On a bond with a maturity of

five years or more, the tax was 0.003%. The revenues from taxes were disappointing, in addition, as taxable trading volumes fell, so did revenues from capital gains taxes, entirely offsetting revenues from the equity transactions tax. On 15 April 1990, the tax on fixed-income securities was abolished. In January 1991 the rates on the remaining taxes were cut in half and by the end of the year they were abolished completely. Once the taxes were eliminated, trading volumes returned and grew substantially in the 1990s. The Swedish FTT is widely considered a failure by design since traders could easily avoid the tax by using foreign broker services.

27. United Kingdom: Existing Tax on Equity is in the form of Stamp duty of 0.5% on secondary sales of shares and trust holding shares, on Options: 50 basis points on strike price, if executed and on Futures: 50 basis points on delivery price.

5.4.3. Financial Transaction Taxes levied outside the GST/VAT in Non EU countries

The country wise analysis of other financial transaction taxes levied outside the purview of GST/VAT in the member countries of G-8 and G-20 excluding E.U member countries is as follows:

- 1. Australia:** nil
- 2. Brazil:** The Financial Operations Tax “*Imposto sobre Operacoes Financeiras*” (IOF): is levied at various rates on financial transactions. As a general rule, all foreign exchange transactions made in order to allow payments to non-residents, considering royalties, technical services, technical,

administrative and any other assistance or any other revenue, including the reimbursement of any costs, are subject to IOF. The tax rate on equity issued abroad as depository receipts and on loans is at 1.5%. On foreign exchange transactions the rate is 0.38%, and on short-term transactions (<90 days) it is at 5.28%. The tax rate is at 2% on capital inflows to stock and bond markets.

On Insurance operations:

- Private insurance for health care: 2% tax rate
- Reinsurance, compulsory insurance, insurance linked to home mortgage, exports and international transport, among others: **zero rate**
- Life insurance, personal and labor accident: for contracts made from September 1st, 2006: **zero rate**
- Other insurance operations: **7%**

On the transactions in real estate titles and securities: The maximum rate of IOF levied on those transactions is 1.5% per day.

3. **Canada:** nil
4. **China:** Tax on Equity is levied at 0.1% of principal, and a Business Tax (BT) ranging from 3% to 20% is imposed on various service incomes which include financial and insurance services. Business tax is generally levied on gross turnover and no tax credit is allowed for taxes paid on business inputs.
5. **Indonesia:** Sales of shares listed on the Indonesian stock exchange are subject to a final tax of 0.1% of the transaction value; an additional tax of 0.5% applies to the share value of founder shares at the time of an initial public offering.

- 6. Japan:** Till 1999, Japan imposed a transaction tax on a variety of financial instruments, including debt instruments and equity instruments, but at differential rates. The tax rates were higher on equities than on debentures and bonds. In the late 1980s, the Japanese government was generating significant revenues. The tax was eventually withdrawn as part of “big bang” liberalization of the financial sector in 1999. Only a Registration tax of 0.4% on mergers and trusts is levied.
- 7. Korea (South):** Tax on Equity is levied on the value of shares in corporations or partnerships at the rate of 0.5% and a tax on capital formation is also levied ranging from 0.1% to 0.4%.
- 8. Mexico:** nil
- 9. Russia:** Capital duty: 0.2% of value of new issues, but not on initial public offering of company.
- 10. Saudi Arabia:** nil
- 11. South Africa:** Tax on Equity: 0.25% of value; new share issues excluded. Stamp duty – Securities Transfer Tax is levied on the transfer of securities (including shares) at a rate of 0.25%.
- 12. Turkey:** Taxes on Equity is levied. The initial charge for obtaining stock market quote is at 0.1%, annual maintenance charge is 0.025%, bond issuance charge varies from 0.6% to 0.75%, and the Stock issuance charge is levied at 0.2%.
- 13. United States of America:** U.S Securities Exchange Commission (SEC) imposes a “Section 31 fee” on stock transactions As of April 1, 2012, that tax

was 0.224 basis points (0.00224 percent). Also in New York, a state tax is levied at \$0.05 per share up to \$350 per trade.

5.4.4. Taxing Financial Transactions in India

Some financial Services in India are taxed as services. Others are taxed under different categories of taxes like the Securities Transaction Tax (STT). A brief overview is provided below.

5.4.4.1. Service Tax

The negative list of Service taxes notified June 2012, exempts the listed services. These include services provided by sub-broker or an authorised person to a stock broker; authorised person to a member of a commodity exchange; mutual fund agent to a mutual fund or asset management company etc. In addition, Deposits, loans or advances where consideration is by interest or discount are exempt. Further, any business entity charging interest (for loan, late payment, deposits); Discounting charges and Inter Bank Transactions are exempt. General Insurance schemes are exempt. Effectively, financial services which are being taxed under the Service Tax Act at the rate of 12.36 % (including education cess and S. H. Cess) are as under :

- Bank charges, Letter of Credit Charges
- Cheque collection charges, recovery agents charge, chit funds
- Conversion of money (foreign exchange transactions)
- Credit card charges for late payment
- Entry exit load by mutual funds

In regard to Life insurance service where the entire premium is not towards risk cover, the first year's premium shall be taxed at the rate of three per cent, while subsequent premium shall attract tax at the rate of 1.5 per cent. Availment of full credit is allowed.

5.4.4.2. Securities Transaction Tax

Since 1 October 2004 India levies financial transaction taxes of up to 0.125% payable on the value of taxable securities transaction made through a recognized national stock exchange. The securities transaction tax (STT) is not applicable on off-market transactions. The tax rate is set at 0.125% on a delivery-based buy and sell, 0.025% on non delivery-based transactions, and 0.017% on Futures and Options transactions. As part of the imposition of STT, long term capital gains were abolished and short term capital gains were sharply reduced. Reportedly, the Government is considering the option to abolish STT and revert to the earlier capital gains taxes.

5.5. Conclusion

As has been seen, globally, the dominant practice is to exempt financial services from GST. This despite the fact that it is recognised that these exemptions distort competition by under taxing the business-to-consumer (B2C) supplies since the value added by the supplier escapes tax. Simultaneously exemption overtaxes supplies to VAT-registered businesses (B2B) because of blocked input VAT that is never recovered in the supply chain. Exemption thus biases use of financial services in favour of consumers and against businesses. Further exemption deters outsourcing by financial services companies since input tax recovery is blocked.

To address these issues some countries have adopted modifications to the exemption system which include three major options. First taxing all explicit financial fees, second providing taxpayers with the option to treat otherwise exempt financial services as taxable, and third zero rating B2B supplies of some financial services.

These options require a high degree of complexity in the administrative mechanism. India already levies service tax on some financial transactions and securities transaction tax not eligible for input tax credit. As has been seen, even the EU has adopted as part of enhanced cooperation for a sub group of eleven countries only; an explicit financial transactions tax – though for reasons of financial stability. In such a global environment, given the handicaps in implementing the financial transaction tax, it may be desirable for India at this stage of its development to refrain from including financial transaction tax in the tax base of the proposed GST and continue with the status quo.

CHAPTER 6

POLITICAL ECONOMY ISSUES IN GST IMPLEMENTATION

6.1. Introduction

All reform is driven and incentivized by political economy considerations. The term political economy is used here to examine the interaction of political forces with executive institutions to influence and determine the contours of the taxation policies adopted by the Government. Ultimately politics can be seen as a process of balancing available resources against the needs and demands of different interests represented not only political parties but also by the different identity based groupings presently organized in India along income, profession, region, caste, language, religion and sex and language considerations. Generation of resources through the GST will affect these groups differentially. The GST which will abandon the concept of exclusive tax bases for the Centre and States presently mandated in the Constitution and move fully to a dual tax base regime based upon consumption. This will generate both winner and losers amongst these groupings. For example producing states who are presently exporting their taxes to consuming states are likely to lose in terms of revenue which is expected to be compensated by accelerated growth. Presently Services providers who are outside the tax net will be brought comprehensively into it raising the cost of their services. However, manufactured goods will become more competitive through the removal of cascading taxes. The administrative infrastructure

required to successfully implement GST is IT intensive. Some states which do not have appropriate IT infrastructure in place including networked offices will need to upgrade their administrative framework. All such groupings who are initially expected to lose, or face a greater implementation burden with the implementation of the GST are likely to oppose its implementation, while potential winners not confident of their gains may remain mute.

Further as in all taxation matters, the ruling political structures often use the tax framework to

1. Directly further their political interests
2. Manage the demands of the various groupings which constitute their own political constituencies
3. In an era of coalitions, manage the demands of the members of their coalitions.

The various political economy parameters which will play a role in the implementation of the GST are outlined below.

6.2. Coalition Politics

GST is a reform initiative which involves both the Center and the States. Today twelve state governments are politically opposed to the majority party in the ruling coalition at the Center. The ruling coalition at the Centre – the United Progressive Alliance (UPA) presently has eight members. All these constituent members can theoretically take a stand different from their party stand if the interests of their state so demand. Thus, the three different drivers for shaping the tax framework identified

above are very relevant in India today in shaping the final form of the GST to and be adopted.

The Election Commission of India has recognised six (6) parties as national parties and twenty seven (27) parties as state parties. In addition, it has registered eight hundred and eighty nine (889) parties which are ‘unrecognized’. This potpourri of political parties with widely varying demands and constituencies makes management of fiscal reform a formidable challenge.

6.3. Partial Rollout

At present, two states led by one opposition party are vocal in their opposition to the implementation of GST- Madhya Pradesh and Gujarat. Other states ruled by opposition parties including Karnataka and Tamil Nadu are more nuanced in their objections. Rolling in the GST is seen as a indicator of the government’s effectiveness and with the forthcoming general elections in 2014, opposition parties may be delaying the implementation of GST till a new government is in place, apparently hoping that they would be part of it. Such a pattern follows the VAT implementation in 2005 after the General Elections in 2004. Prior to 2004, the NDA government led by the BJP vigorously espoused the cause of VAT, but this turned to opposition in 2004 when the UPA government came into power. While twenty one (21) states introduced VAT on 1st April 2005, five states ruled by the BJP Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh and Rajasthan implemented it only one year later – on 1st April 2006. Tamil Nadu joined VAT only on 1st January 2007 while Uttar Pradesh joined only on 1st January 2008. Thus, historical precedent

indicates that some states may not join the GST for purely political reasons and not for economic reason. Such an eventuality must be addressed in the design of the GST. This contingency is addressed by incorporating possibility of partial rollout in the GST design which also allows for the other states to join at their convenience.

The critical issue in dealing with partial rollout is the treatment of sales between GST and non GST states. It should be ensured that the GST design is neutral to the choice of the state and no unfair advantage is conferred to either group by their choice of staying in or out of the GST regime. Simultaneously, the GST design should enable an optimum GST to be put in place to leverage its benefits. These issues will be covered in Chapter 10 which examines the design of the GST.

6.4. Abridgement of fiscal Autonomy

A number of state governments have voiced the concern that by joining the GST they will have to be subservient to the rulings of the GST Council on tax base and rates and will therefore have to surrender their fiscal autonomy. Such a prospect is not encouraging to these states that see fiscal power not only as a means to independently raise resources but also as power per se the exercise of which is an essential part of the political process.

The conventional response to this argument is based on four branches. First the Center is equally giving up its fiscal autonomy in the implementation of the GST and will therefore be equally subservient to the decisions of the GST Council. Second, if a floor rate approach is adopted instead of a fixed rate, then states, which will then have the freedom to levy taxes above the floor may be less vocal in their opposition.

Third, the GST will bring with it the merger of all cesses and surcharges levied by the Center. This will expand the size of the divisible pool increasing tax devolution to the states. Fourth, the tax base of the states will significantly increase with the inclusion of manufacture and services. The Center's tax base on the other hand may not increase as significantly with the inclusion of only sales in its tax base.

While the above arguments have some validity, it is necessary to analyse the impact on the Centre on what taxes presently imposed by it will be subsumed into the GST and the impact on the States on which taxes imposed by them will be subsumed into the GST. The following analysis assumes that the GST model proposed in Chapter 10 will be adopted. In such a scenario, the respective contributions of the Centre and the States are outlined in the Table below.

Table 6.1**Contribution of the Center and the States to the GST Pool**

Sl.no	Type of Tax	(Rs In Crores)		Percentage of Total
		2010-11 (Accounts)	After deducting 32% devolution for items 1 and 2	
1	Union Excise (excluding Cesses and Surcharges)	1,17,942.96	80,201.21	13.14
	Total Cesses and Surcharges	20,356.08	20,356.08	3.34
2	Service Tax	68,947.45	46,884.27	7.68
	Education Cess & Secondary & Higher Education Cess	2,068.42	2,068.42	0.34
3	Sales Tax/VAT	2,78,838.42	2,78,838.42	45.69
4	Other State/Local Taxes	1,81,870.48	1,81,870.48	29.80
	Total	6,70,023.81	6,10,218.88	100.00

The above table shows that the Centre will contribute about 24.5% to the GST pool of about Rs 6 lakh crores while the States will contribute 75.5%. This analysis ignores the fact that petroleum products will be subject to a supplementary excise in addition to VAT and to that extent the contribution of the States to the pool will stand reduced. Be that as it may, the fact remains that the States' contribution to the GST pool will be at least thrice as much as the Centers contribution and to that extent the GST is an unequal partnership. This finding is further reinforced by the analysis in Table 2 below which provided details of revenue sources which will continue to be available to the Center and the States outside the GST framework .

Table 6.2
Revenue Sources outside the proposed GST

(Rs in Crs)				
Sl.no	Revenue	TAX category	Govt. of India	States
			2010-11 (Actuals)	2010-11 (Actuals)
1	Tax revenue (outside GST)	Corporation Tax	2,98,687.89	nil
		Income tax	1,46,586.54	
		Wealth Tax	687.45	
		Customs	1,35,812.51	
2	Non- tax Revenue	Interest payments, GIA contributions, Dividends and Profits etc.	2,17,505.28	2,55,148.93
3	Share in Central Taxes	Income tax , Service tax, corporation tax, Estate duty etc.	na	2,19,489.37
Total			799,279.67	474,638.30

Here again, the States have only about 60% of the Revenue sources of the Center outside the GST pool. In addition, the Center has recourse to Article 271 which allows it to levy a surcharge on certain duties and taxes for the purposes of the Union. This facility is not available to the States which will only have the proposed supplementary excise on petroleum products which it can raise to garner extra revenue.

Thus as far as the States as are concerned, they face a double whammy- when compared to the Center, they sacrifice more at the altar of the GST while remaining with less revenue outside the GST pool. Their apprehension of constriction of fiscal autonomy is therefore legitimate and adequate safeguards will have to be built into the GST framework to address them. One possible approach is to provide flexibility to the States to levy a temporary surcharge on GST whenever circumstances so demand.

It must however be noted that States will benefit from the abolition of the cesses and surcharges presently being levied by the Centre, and the size of the divisible pool will rise correspondingly. Presently this amounts to about 15 per cent of the divisible pool.

6.5. CST compensation and the Trust deficit

It is because of the proactive stance of the Center that States successively took the leap of faith and implemented VAT between 2005 and 2008. The firm assurance provided by GoI about compensating possible revenue losses during implementation was the bedrock of this faith. States expect a similar approach to compensation while implementing the GST. Unfortunately, such an assurance has not been forthcoming

so far. Further the payment of compensation on account of reduction of CST is not being settled to the full satisfaction of the states and this has led to the emergence of a trust deficit between the Center and the States.

CST – an origin based tax is incompatible with GST a destination based tax, hence it was agreed by the Empowered Committee as well as Government of India that this tax would be phased out with effect from 1 April 2007 over a period of three years. Compensation package guidelines were issued in October 2007. This package envisaged the transfer of identified services for levy, collection and appropriation of tax by the State Governments. It also recommended raising the lower VAT rate from 4 to 5 % and levying tax on sugar and textiles. The first step- reduction from 4 to 3 % was effected on 1 April 2007. Subsequently, since all the components of the compensation package could not be implemented, a revised package which included a watered down compensation formula based on proportionate loss rather than the expected growth of CST was accepted by the states. CST was then reduced from 3 % to 2% with effect from 1st June 2008. Subsequently, the payment of compensation by the Center to the State Governments has become controversial. Claims from the States aggregating Rs 12,666 crore for the year 2010-11 are pending. The Center insists that the revenue from the increase in the VAT rate from 4 to 5 %, and deduction on account of abolition of D form be set off from the compensation payable. States contest this claim on the ground that these elements were not included in the revised compensation package. GoI made a budget provision of Rs 12000 crore in 11-12 for payment of CST related compensation, but paid only Rs 4172 crore. For the financial year 2012-13, only Rs 300 crore was provided in the

GOI budget. These allocations and disbursements reflected the view that GOI does not appear sanguine about either the validity of the compensation claims of the states or the prospect of implementation of GST in the near future. As mentioned above, even if the Bill is enacted, substantial further work needs to be done before the GST framework can be firmed up. Therefore, it is often inferred that the GoI feels that States are responsible for the delay in the implementation of the GST and has therefore determined not to pay compensation. These instances reflect to some extent the growing trust deficit between the Center and the States on the issue of CST and GST. This is decelerating the movement towards the GST. The provision of 9000 crores towards CST compensation in 2013-14 budget speech is therefore a good augury of the Centre's willingness to meet the States halfway.

The EC meeting at Bhubaneswar in January 2013 recommended that CST compensation be paid by the Center to the States consistent with the August 2008 guidelines (which exclude consideration of raising the base rate as well as D form) as under

- i. 100% for the year 2010-11
- ii. 75% for the year 2011-12
- iii. 50% for the year 2012-13
- iv. Restoration of the CST to 4% if the Government of India is unable to grant compensation for 13-14.

In addition the Center should take the following three steps to bridge its trust deficit with the States and underline its commitment to implementing a GST as quickly as possible. These are:

- i. The Center should provide a firm assurance upfront to States that they will provide compensation to States for possible losses in implementation of GST for a period of at least five years as suggested by the 13 FC.
- ii. The Center should suo moto put in place a Central GST within the present framework by merging the excise and service tax levies and replacing it with a single GST with a single threshold and common exemptions.
- iii. The Center should delegate collection of Central GST up to an agreed turnover limit to the States. This will bring into place a single tax window for relatively low turnover accounts - a much expressed desire of trade and industry which will also reduce compliance cost and improve collection

6.6. Visibility of Taxation

Presently, the excise duty paid by a customer is not ‘visible’ on the invoice. Only the State VAT payable is displayed on the customer invoice. In the GST regime, apart from the State GST which will substitute for the State VAT, the Central GST will also be displayed on the invoice. Despite the fact that in most cases, the price will be the same, the inclusion of an additional tax in the invoice may lead to consumer opposition, which will have to be carefully managed. This issue was experienced in Canada when that country switched to VAT

6.7. Empowered Committee of State Finance Ministers

The Empowered Committee of State Finance Ministers was set up in July 2000 to provide a forum for states to forge a consensus on indirect tax related issues. The

Committee was registered as a society in 2004 under the Societies Registration Act. However, it still does not have any formal status nor do its recommendations carry any force of authority. Its recommendations, derived by consensus have so far had to be converted to legislation by the respective State Governments as well as by the Centre. This was the procedure followed when VAT was implemented. Based upon the recommendations of the Empowered Committee, each state enacted VAT acts in their respective assemblies. Some States did not completely comply with the recommendations of the EC, either at the time of enacting their VAT acts or subsequently. This laissez faire approach which has been unwittingly tolerated by the Empowered Committee has resulted in dilution of the VAT framework in the country in the recent past.

The Chairman of the Empowered Committee has since 2000 been the Finance Minister of a state government ruled by a party in opposition to the ruling party at the Centre. Till 2011, the Finance Minister of West Bengal was the Chairman. Presently, the Finance Minister of Bihar is the Chair. Given that the Empowered Committee works by generating a consensus, it is difficult to enforce its decision when states violate common understanding.

If GST is to be a success, there should be uniformity of approach across all states as well as strong disincentives for non compliance with the agreed framework. This stance was supported by the 13 Finance Commission , which recommended that that constitutional status be provided to the Empowered Committee through creation of a GST council so that its recommendations would have the force of authority.

The proposed Article 279(A) of the 115 Constitutional Amendment Bill provides for the creation of the Council. It will be chaired by the Union Finance Minister with all State Finance Ministers of Finance / Taxation as members. The State Finance Ministers are required to elect from amongst themselves a Vice Chairman.

The Council is required to make recommendations (sic) to the Union and the States on:

- i. The taxes, cesses, surcharges levied by Centre, State and local bodies which may be subsumed in the GST
- ii. The good and services which may be exempted from the GST
- iii. The threshold limit of turnover below which GST will be exempted
- iv. The rates of goods and service tax.

Though the above four are important issues, all important issues relating to GST have not been included in the Terms of Reference. For e g the modalities of levy, collection and appropriation of IGST do not find specific mention above. However, the umbrella provision that the Council can consider ‘any other matter relating to GST as the Council may decide’ may be seen as suitable empowering the Council. To what extent the Council’s views will prevail if Parliament, which will be empowered to enact on IGST by the proposed Article 269A, sees otherwise, is not clear.

Since the proposed Council would have Ministerial representation from both the Centre and the states (unlike the present Empowered Committee), the intention of the 13th Finance Commission clearly was to provide statutory backing to its recommendations on all critically important parameters of the GST. Unfortunately, the Bill while providing a statutory status to the structure of the Council per se

provides no legal backing to its deliberations. The Bill envisages that it can make only recommendations to the Union and the States. The deliberations of the Council can culminate only in recommendations which presumably may or may not be accepted and implemented by either the GoI or the state governments. This detracts from the credibility of the Council.

Further the Bill empowers the Council to recommend the ‘taxes, cesses, surcharges levied by Centre, State and local bodies which may be subsumed in the GST.’ This proposal appears to be at variance with the proposed amendment to Article 366 which already specifies which goods are proposed to be kept out of the purview of the GST. It appears that anticipating the wisdom of the GST Council, the primary decision to exclude the specified goods from GST has already been taken in the Bill.

The provision for setting up a Dispute Settlement Authority may have to be deleted in deference to the sensitivities of some states. However, the GST Council must be suitably empowered with the authority to impose sanctions if it is to effectively resolve disputes. This is all the more necessary keeping in mind the experience in the Empowered Committee where states have violated decisions with impunity. Without the power of sanction and review given to the Council, a uniform GST across the country will be difficult to enforce.

6.8. Lessons from International Experience

6.8.1. Poor Implementation - the case of Ukraine

VAT was introduced in 1997. Revenues from VAT declined from 7.3% of GDP in 1998 to the 5.1% in 2001. This was less than half of the 1994 revenues generated

from a turnover tax which yielded 10.8% of GDP. The main reasons for this were as under:

- i. Though Ukraine had implemented a single rate VAT of 20%, it provided a very large number of exemptions estimated at about 21% of the potential VAT revenue. These included exemptions to agriculture enterprises after they are allowed to collect the tax, exemptions of ‘critical imports’ including cars and parts, exemptions to employees based upon their disabled employee profile. These exemptions added to distortions while diluting collection efficiency and adding to the pressure to provide further exemptions.
- ii. Tax incentives were being used as a tool for addressing political issues resulting in an increasingly unproductive and distortionary VAT.

6.8.2. Five Cases of Recidivism

Five countries initially implemented a VAT and then subsequently removed it. These countries are Grenada (introduced in 1986 and gradually dismantled), Malta (introduced in 1995 and removed in 1997), Belize (introduced in 1996 and removed in 1999), Vietnam (in the 1970s) and Ghana (introduced in March 1995 and removed two months later). Though four of these countries have since reintroduced the VAT, i.e. Ghana in 1998, both Malta and Vietnam in 1999 and Grenada in 2010, it is instructive to examine the reasons for their initial withdrawal.

6.8.2.1. GHANA

VAT was introduced in March 1995. The taxation framework originally in place was a manufacturing based excise with an import duty. Though a retail sales tax was in place, it was riddled with exemptions. There was a very narrow band of services which were taxed. After two years of preparation, the government implemented VAT in January 1995, with the first return to be filed in April 1995. The Government repealed the VAT in June 1995 reviving the previous system. The immediate cause of action was people's unrest and concerns about inflation.

The following reasons have been attributed for this withdrawal.

- i. A poorly designed Information Education and Communication (IEC) where the tax payers and consumers were not adequately informed about their responsibilities and obligations under the VAT system. Further, the VAT design as not finalized prior to the IEC campaign. The rate was not communicated during the IEC campaign. The VAT rate was announced only in the beginning of 1995 just prior to implementation. This resulted in generating unclear expectations amongst the stakeholders which turned to opposition when the final design was revealed. The standard rate of sales tax was increased from 15 to 17.5 % apparently because the government could not put in place as broad based a VAT as it had earlier anticipated. Thus effectively, a dealer in Ghana was faced with a VAT of 17.5 % against a prior sales tax of 15%. Several businesses simply increased their prices by the amount of tax on sales, not taking into account credit for tax paid on inputs and the removal of the previous sales

and services taxes. This was exacerbated by inflationary pressures present in the economy at the time of the introduction of the VAT generating significant opposition to the VAT system.

- ii. The threshold for the tax was set at a very low level. This resulted in the number of taxpayers being registered for the VAT being beyond the capacity of the tax administration to service.
- iii. A new administrative department - the VAT service was created to implement the law. Poor administrative integration with the other two older services - the Inland Revenue Services, and Customs and Excise Services - resulted in ineffective implementation. Reportedly, the resentment in the two older services against the VAT service hamstrung the successful implementation of the VAT given the dependence of the VAT service on the Customs service for providing import and export data.

The VAT was reintroduced in 1998. The legislation was enacted 10 months prior to the adoption of VAT providing enough time for an effective IEC campaign. The rate applied was also substantially lower at 10%. In addition, many basic goods such as unprocessed food, agricultural inputs and machinery, drugs and health services, utilities, books, and educational materials were exempted. The threshold was raised sharply to reduce the number of registered dealers. This led to a successful implementation of VAT with an initial revenue growth rate of 20%.

6.8.2.2. MALTA

Malta introduced a VAT in January 1995. Imports exceed consumption in this island country resulting in the VAT effectively replacing the customs duty. The VAT had the following characteristics

- i. A Zero threshold
- ii. Zero rating for domestic transactions

Though the initial performance was encouraging a new government came into power in December 1996, which repealed VAT as part of its campaign commitment.

In support of this decision, it was argued that:

- i. Given Malta's geographical and economic situation, it would be preferable to return to the explicit customs duty regime since imports anyway exceeded domestic consumption.
- ii. The zero threshold had brought a large number of dealers in the tax net placing an unacceptable burden on tax administration as well as increasing compliance costs to the previously uncovered dealers.
- iii. Zero rating of domestic consumption resulted in a complex system difficult to administer. Further this negated the basis of a consumption based tax since consumers were not bearing their full burden of taxation.

After subsequent change in government, VAT was reintroduced into Malta from 1st January 1999, as required by the EU accession process. The threshold was raised from zero. Currently, VAT is imposed at a standard rate of 18% and a reduced rate of 5% for specified items.

6.8.2.3. GRENADA

Grenada initially introduced VAT in 1986. The implementation was unsuccessful with frequent amendments. In 1995, it was replaced by a general consumption tax.

The broad features of the VAT as introduced were:

- i. A broad based tax of 10% on the entire value added chain from manufacturing to retail.
- ii. Zero rating of many domestic goods and services to compensate for removal of previously existing exemptions. This resulted in a significantly narrowed tax base
- iii. Low thresholds, which imposed an unnecessary compliance burden on small dealers generating discontent.
- iv. Poor administrative preparedness. Just a few weeks before implementation, the administrative responsibility was switched to the Customs Department from the Inland Revenue Department.
- v. No IEC program to communicate the benefits of the system to new stakeholders.

The VAT was reimposed by the Government of Grenada on 1 February 2010, as part of an overall programme of fiscal and tax reform.

6.8.2.4. VIETNAM

The Republic of Vietnam adopted, VAT briefly in 1973 and was abolished soon after the country was unified in 1975 with the merger of North and South Vietnam. In 1995

the National Assembly ratified the decision to introduce VAT, and it was reintroduced in 1999.

One of the main aims in 1999 was to eliminate the weaknesses of the existing turnover tax. It was believed the new tax would also improve the country's competitiveness in international markets and bring imports under some control as Vietnam prepared to adhere to Asean Free Trade Area provisions. The new tax was also intended to encourage domestic production and distribution of goods and services. The general goods and services rate in Vietnam is 10% with a reduced rate of 5% for select goods.

6.8.2.5. BELIZE

VAT was introduced in 1996 and continued till 1998. While some revenue growth was recorded, weak administration and an expanding list of zero-rated items to include food and construction items, led to declining VAT collections over this period.

In August of 1998 the new government in Belize, abolished VAT and put in place a general sales tax. It appears that this was done more to meet the government's campaign rather than on grounds of revenue improvement. However, it is noteworthy that the standard rate of General Sales Tax in Belize is 10%. General sales tax is, effectively, a value added tax with tax becoming payable at each stage in the supply chain and with tax incurred on inputs being recoverable by offset against tax charged by a business to its customers on taxable supplies.

6.8.3. Malaysia- A case of Extreme Preparation for a GST

The case for careful and prior preparation before implementing GST is exemplified to an extreme by the case of Malaysia. A GST was initially announced in 2004, but it was deferred thereafter. In 2009, the government introduced the Goods and Services Tax (GST) Bill in Parliament. It is still under Parliamentary consideration. The government is currently engaging in a widespread IEC program with all stakeholders. The GST is expected to replace the existing sales and services tax (SST) system which is considered to be more costly for businesses and consumers. The Government recognizes that the key challenge is balancing the conflicting demands of welfare and tax efficiency while putting in place a simple tax framework with a low compliance burden.

6.8.4. Implementation Consequences

It is often argued that the implementation of VAT results in increased inflation and in some cases a change of government during the next elections. Table below lists fourteen countries where VAT was implemented along with information on whether the ruling party continued to remain in power during the next elections as well as the rate of inflation in the country during the year following the year of VAT implementation. Disregarding the issue of efficiency of VAT design and implementation, it is seen that the evidence is at best mixed and no firm conclusions can be drawn.

Table 6.3

Implementation consequences of VAT

Sl.no	Country	Name of the tax	Year Implemented	Party in Power when VAT was Implemented	Party came to Power in the Immediate next Election	Inflation (%)	
						during the Year	Following Year
1	New Zealand	GST	1986	Labour	Labour	18.20	9.60
2	Australia	GST	2000	Liberal/National coalition	Liberal/National coalition	3.10	6.10
3	Brazil	ICMS	1989	Brazilian Democratic Movement Party	Brazilian Democratic Movement Party	1969.88	1621.18
4	Canada	GST	1991	Progressive Conservative	Liberal Party of Canada	5.64	2.17
		HST	1997	Liberal Party of Canada	Liberal Party of Canada	0.78	1.00
5	Singapore	GST	1994	People's Action Party,	People's Action Party,	3.10	1.70
6	United Kingdom	VAT	1973	Conservative	Labour	9.20	16.00
7	South Africa	VAT	1991	National Party	Government of National Unity (African National Congress+ National Party+ Inkatha Freedom Party)	16.70	11.50
8	Spain	VAT	1986	Spanish Socialist Workers' Party (PSOE)	Spanish Socialist Workers' Party (PSOE)	8.25	4.60
9	Sweden	VAT	1969	Swedish Social Democratic Party	Swedish Social Democratic Party	3.86	8.12
10	Denmark	VAT	1967	Social Democratic	Social Democratic	5.81	2.56

				Party	Party		
11	Ghana	VAT	1995	National Democratic Congress	National Democratic Congress	59.46	44.36
12	Malta	VAT	1995	Nationalist Party	Malta Labour Party	3.97	1.96
13	Grenada	VAT	1986	New National Party	National Democratic Congress	3.76	4.47
14	Belize	VAT	1996	United Democratic Party-National Alliance for Belizean Rights	People's United Party	6.43	1.03

6.9. Lessons Learnt

The lessons learnt from international experience as applicable to the implementation of GST in India are as under;

- i. There must be strong commitment to the GST across the political spectrum irrespective of which party implements the tax. This commitment includes the need for parties to refrain from using the GST as a tool for addressing their political constituencies. Further political parties should not make repeal of the GST a campaign issue which will constrain their actions if and when they assume power.
- ii. Adequate and prior planning and redesigning of administrative structures as well as training staff is essential to empower it to adequately meet the challenges of implementing GST.
- iii. A well-designed GST law is required which will incorporate few exemptions, no zero rating for domestic consumption and an adequate

threshold to limit the number of taxpayers to reflect the tax administration's capacity

- iv. A well designed IEC campaign which should be put in place after the enactment of the GST legislation but prior to the implementation of GST. Adequate scope should be provided for this exercise through a carefully designed time table.
- v. A client oriented GST administration structure integrating with other tax administrations to ensure that dual control over small trader and manufacturers is eliminated.
- vi. Providing for a partial rollout amongst states in the GST design subject to a critical mass of states joining the GST.
- vii. Allow for the implementation of a perfect GST in the Constitutional amendment through permissive legislation. The GST law to be legislated by the Centre and the states could be adequately restrictive consistent with political compromises deemed necessary at that time. This ordering follows the recommended strategy for tax reform that appropriate policy goals must be set first and then these could be modified by taking into account the associated political and administrative problems.
- viii. Timing the implementation carefully. Though GST introduction internationally did not have significant impact on inflation, chances of success appear to increase if it is introduced during a period of low inflation.

CHAPTER 7

ADMINISTRATIVE ISSUES

IN THE IMPLEMENTATION OF THE G.S.T

7.1. INTRODUCTION

The purpose of good tax administration is to ensure maximum efficiency of collection of revenue at maximum convenience and minimum compliance cost to the tax payer.

Tax revenue can be written as:

$$\text{Tax revenue} = \text{Tax base} * \text{Tax revenue / Tax base}$$

The first item on the right hand side of the equation - the size of the tax base is affected by tax policy. If the tax policy is designed to tap all consumption then the base is enlarged. If the policy provides too many exemptions, the base is reduced. Thus policy is critical for enhancing the tax revenue.

The second item on the right hand side of the equation is equally important. It represents the percentage of the tax base which is tapped as tax revenue. This quotient depends entirely on the efficiency and effectiveness of the tax administration as for a given tax policy, tax revenue depends entirely on it.

Thus the aphorism that tax administration is tax policy. This is equally applicable to issues relating to simplification of the tax structure to ensure a low compliance cost. In this Chapter, we examine issues in tax administration both from the collecting department's side as well as the consumer's side which must be successfully

addressed for an optimum implementation of the GST. This Chapter is divided into three sections. The first section looks at the policy strategy that must be adopted to ensure that the tax is administered efficiently and effectively. The second section examines tax compliance strategy – how best can tax payer compliance be improved both voluntarily and involuntarily. The third section looks at the requirement to upgrade both human and physical resources in the department to ensure enhanced operational effectiveness. This section also examines issues relating to GST fraud as experienced in other countries and suggests steps which can be put in place to minimize them.

7.2. Policy strategy

The objective of policy strategy is to design the GST law and rules in such a manner that there is a low compliance burden on the tax payer and simultaneously a low supervision burden on the tax administrator. There are a number of strategies which can be adopted aimed at this objective. Eight of them are outlined below.

7.2.1. Single rate

Ideally, all goods and services should be taxed at the same rate. This will obviate all classification disputes and drastically reduce the litigation burden of the department. As seen from international experience a number of countries like New Zealand, Australia, Israel, Japan, Singapore, South Korea put in place a single rate. However, in developing countries including India this may not be possible for two reasons. First, essential goods like food and clothing, which consume a large proportion of a poor man's budget should be either exempted or taxed at a lower concessional rate. Second, high value items like bullion, jewelery cannot be taxed at the standard rate as

this would be too high. In India bullion is generally levied a sales tax of 1%. Thus in the proposed GST in India, there have to be a minimum of three rates- a rate for bullion, a concessional rate and a standard rate.

7.2.2. Minimise exemptions

Exemptions break the GST chain and do not permit input tax credit to be availed by the seller. This results in the input tax credit paid remaining embedded in the cost of the good. If the downstream purchaser is the final consumer, he pays a lower price than he should since there is no tax on his sale. If the downstream consumer is a business, he pays a higher price than he should since there is input tax embedded in the price. Exemptions thus distort prices affecting efficiency of the tax. Only the minimum number of exemptions should be provided in the GST.

7.2.3. Simple return

In an effort to monitor all aspects of a dealers business, tax authorities often prescribe the filing of detailed returns asking for production of records relating to all sales transactions undertaken. Such unacceptably high information demand deters compliance by the dealers. It is essential that the tax return stipulates is simple and not very long. Additional details can be drawn from the tax payer at the time of the audit.

7.2.4. Self-Assessment Procedures

Given the large number of dealers as well as the number of interstate transactions that will have to be monitored, a self assessment procedure needs to be put in place based on the philosophy that tax payers are voluntarily expected to meet their basic tax

obligations. The Department provides assistance and advice whenever required and tax payers are expected to fill up their tax forms, assess themselves and pay the tax. This frees up the tax department to concentrate on tax payers whose payments are seen as at risk.

Since the existing VAT system in most states in India is already based on self assessment as well as risk based audit, the transition to a GST base is likely to be smooth.

7.2.5. Low Thresholds

As demonstrated in Chapter 3 while reviewing international experience of GST implementation, putting in place low thresholds for determining GST liability has often resulted in an unacceptably high burden on the tax administration. The threshold should be fixed depending upon the capacity of the administrative department implementing a self assessment procedure and on the basis of a existing revenue collection. If necessary a dealer survey needs to be carried out to determine an appropriate threshold.

7.2.6. Scientific Audit

Audit is the most significant interface between the tax payer and the tax department in a self assessment based GST regime. An effective audit program is key to successful implementation. The objective is to improve compliance by dealers by verifying whether the correct amount of tax has been collected.

Audit must cover three areas. These are a) General audit which will cover all VAT dealers within a number of specified cycle with additional audit visits for at risk

dealers b) specific audit which will cover refund audits and audits commissioned on the basis of specific information c) Special audits which will be undertaken by specialized staff for investigating fraud.

Refund audits form only a small part of the audit portfolio but are often resorted to excessively in the absence of a scientific audit program. Further intensive input tax verification programs, which are often wrongly seen as a substitute for audit, dilutes its quality. It is therefore essential that audit programs are drawn up scientifically and the audit personnel are specially trained for this delicate task. If an effective audit program is not in place, dealer compliance weakens and the effectiveness as well as credibility of the tax administration is affected.

Selection of dealers for audit must follow a precise methodology which incorporates various issues. These will include level of VAT throughput(Input tax plus output tax) , complexity of the dealers business in terms of geographical coverage of sales, use of exempt goods, importers and exporters ; Whether the dealer is an exporter or an importer or both and his previous history of tax compliance etc. Based upon a numerical grading system, a risk based list can be generated which can be used as a basis for audit subject to all the dealers being covered by audit in a predetermined cycle (say 2-3 years) .

Putting in place an audit department will require various steps including a) staff training b) preparation of audit manuals c) preparation of audit plan d) implementation and follow up. Since this procedure is relatively complex, significant resources have to be allocated to it.

7.2.7. Objective Refund Policy

This is one of the most significant parameters which will determine whether the GST has been implemented successfully. The volume of refunds in a well functioning GST system may often be substantial reaching up to 60 % of gross GST collections in some countries. Given the revenue target orientation of many tax departments, perverse incentives may arise to (a) delay payment of refund claims in an effort to maintain level of net revenue for a particular period to achieve revenue targets (b) generate large spurious claims against some tax payers. Of these claims, pending final adjudication, the tax payer is often required to pay a part; which will subsequently be refunded after the claim is proved spurious but presently bolsters revenue. The first action can be forestalled if revenue collection targets are fixed on gross basis (excluding refunds paid) rather than net basis (after taking into account refunds paid). However, such treatment is likely to strengthen the second action. It is therefore necessary to put in place a refund analysis cell which will carefully scrutinize the circumstances under which refunds are given and whether refunds have been generated due to spurious claims made by the tax department earlier.

In some cases taxpayers themselves are responsible for spurious claims of input tax credit which need to be determined during audit. In other cases tax officials leverage refund opportunities for indulging in corrupt activities.

A clear pre refund and post refund audit strategy must also be designed to ensure that only high risk high value groups are included in the first group and most refunds are only subject to post refund audit

7.2.8. Minimising GST withholding

In particularly risk prone sectors where tax evasion is considered rampant, GSST rules mandate that business and government entities deduct tax from payments due to their suppliers which will then be directly credited. Under VAT some states have implemented withholding for works contracts where government departments are the payer. Ideally, this practice is undesirable. The withholding rate must be fixed carefully to ensure that this does not generate excessive refund claims.

7.3. Compliance strategy

A compliance strategy is aimed at generating voluntary compliance from the tax payer. This is ensured through a two pronged strategy (a) putting in place a taxpayer education program which will be addressed at all tax payers generally comprise elements like publishing leaflets and manuals and holding seminars, (b) putting in place a tax payer assistance program aimed at specific tax payers who need clarification on their tax liabilities. These comprise; instituting advance ruling authorities, setting up help desks & help lines and advisory visits by tax auditors immediately after a business has been set up.

This vital part of tax administration is often neglected in most tax departments in India. Tax collection is seen as a process of coercion by tax payers which often are accompanied by high compliance costs. Suitable avenues for tax payer education, adjudication, and information should be provided on a real time basis for the benefit of tax payers. The Canadian tax system has a taxpayer's Bill of Rights in place with small taxpayers getting special consideration. The Canadian tax agency reports to the Parliament outlining measures taken to improve taxpayer services. The USA has

instituted a National Taxpayer Advocate for examining the needs of assesseees. An annual report is placed before Congress highlighting topics of relevance for assesseees including taxpayer services. For GST to be successful, it is necessary that both the Central Government and the state governments in India create exclusive tax payer directorates dedicated to amongst other things (a) acting as a tax ombudsman (b) simplifying tax procedures (c) providing advance ruling services and (d) operating help centres/help lines.

7.3.1. GST Frauds

GST fraud enables tax payers to either avoid paying GST or claim refunds for GST which was never paid by them. Estimates for losses on account of GST fraud are difficult to quantify. In Austria it is estimated at 4.4% of VAT revenue. In Germany it is estimated at 2% of VAT revenue. In UK this estimate is as much as 14.5% of the VAT revenue. The International VAT Association estimated this loss figure in 2007 at the significant amount of €100 billion. The European Commission however estimates this figure for the same period at €250 billion annually; assuming that tax-fraud amount to between 2% and 2.5% of GDP. It is thus clear that while designing a tax administration framework adequate attention should be paid to preventing GST frauds.

The modus operandi of VAT/GST frauds includes (a) suppression of output (b) undervaluation of output. This is done through either undervaluation of quantity sold or undervaluation of price at which this has been sold (c) inflation of input tax paid by overvaluing input tax paid (d) declare goods for export without actually exporting goods (e) using the Tax identification number of other dealers for tax not paid

transactions (f) misdirection of GST liability when supplies are recorded as liable to tax lower than the rate actually liable for (g) domestic sales disguised as exports (h) Carousel fraud involving a dealer who goes missing after collecting tax from a domestic dealer on sale of an imported good which is subsequently re-exported to the country of origin using a similar gambit. This fraud abuses the zero-rated mechanism provided for exports. This problem may arise in India if the inter-state sales tax (IGST) is kept at zero under the proposed GST. This is the reason why it is necessary to levy compensatory VAT for interstate sales under the GST.

7.3.2. Preventing GST Frauds

The GST information system should be comprehensive and accessible to all stakeholders including dealers themselves. The dealers will then have access to the list of dealers who have claimed input tax credit based on his sales so that the “cloning” fraud can be detected both by the dealer himself as well as the tax administration. Further, there should be an effective mechanism to monitor new registrations including a compulsory visit to the dealer’s premises within three months of registration. New registration for business in the risk-prone sectors and must be flagged appropriately and monitored regularly to ensure that business takes place in only those commodities for which registration has been obtained.

The GST information system should be comprehensive and updated on a real-time basis with reported sales returns of the dealers. Ideally, even sales returns should be filed by dealers electronically. The system should on an exception basis throw up an alert when the commodity reported in the monthly returns is different from the commodities declared at the time of registration. The system should also have the

capacity to link input tax credit claimed by the purchasing dealer with output tax paid by the selling dealer. The system should also incorporate a mechanism to track stop filers as well as new registrants declaring abnormally high sales in the initial months of registration. The system should also empower dealers to verify their tax credit status and the proper recording of their returns in the data base. The software design should incorporate a trend analysis of tax credit and output tax declared commodity wise so that an abnormal rise or fall in the tax credit availed/ output tax payments in any specific commodity are flagged.

Other specific types of fraud highlighted above can be checked by (a) inspection of the documents filed in proof of exports, (b) filing of a stock declaration at the end of the year (c) Providing for practical rules of apportionment of input tax credit between taxable and exempt sales (d) careful verification of classification of goods during audit and (e) personal verification of business premises and periodical surveys to prevent ghost businesses from seeking registration.

Some of these steps have already been initiated in India as a precursor to the implementation of GST as described below.

7.4. Departmental Resource reorganization

7.4.1. Coordination between Tax Departments

Unlike VAT, interstate sales are an essential element of the GST tax base. This necessarily requires close coordination between tax authorities of the Centre and the states. In addition, to ensure that GST on imports is provided as set off only in the state of final consumption, the customs department has to share relevant import data

with the concerned state governments. This is mammoth task which can only be undertaken with a shared and real time data base which incorporates both registration of GST dealers and transactions undertaken by them. Depending upon the IGST model adopted, the exact data sharing requirements will vary, but the essentiality for data sharing cannot be denied. Two steps which have been recently taken in this direction are the implementation of TINXYSIS and the Goods and Service Tax network.

7.4.2. TINXSYS

The Tax Information Exchange System (TINXSYS) was originally set up after VAT was implemented in 2005. It is managed by the Empowered Committee of State Finance Ministers with Government of India sharing the cost. TINXSYS is a centralized data base of all registered dealers across states undertaking interstate trade which also records issue of C forms by exporting states. Dealers are identified by their Tax Information system (TIN) number and their interstate transactions recorded through the issue of C forms can be verified by the tax authorities in the importing state. This is supposed check tax arbitrage undertaken to exploit the present difference in tax rates between intra state trade (14.5%) and interstate trade (2%) and thus check fraudulent transactions.

TINXSYS can also be of assistance to dealers in importing states who can verify the credentials of the dealer in the exporting state (through his TIN number only). If all interstate transactions are reported on TINXSYS, it would develop into a comprehensive data base on interstate trade which can provide valuable inputs to tax policy. It will also provide MIS and Business Intelligence Reports to the Commercial

Tax Departments to monitor interstate trade movements and will enable EC to monitor the trends in interstate trade.

Unfortunately, the System is not operating as efficiently as expected for the following reasons. The system will be efficient only if all states participate in entering data relating to issue of C forms and dealer registration in TINXSYS data base with equal enthusiasm. An exporting state which issues a C form to a dealer will normally have no incentive to enter the relevant data on the web site since the benefit of this information will be derived only by the importing state and not by it. The exporting state will require data to be fed by some other state in respect of goods for which it is an importing state. Thus TINXSYS will succeed only if all states conscientiously participate in data sharing. The present incentive mechanism is not aligned in this direction.

For implementation of the GST, the TINXYS network will be restructured and enhanced to form the Goods and service Tax network.

7.4.3. Goods and Services Tax Network (GSTN)

This tax network will inter connect the data bases of states and the centre and will be used to implement PAN (Permanent account Number) - based registration, filing of tax returns and payment processing system. The last will be the additional but crucial facility over TINXSYS – interstate and state- center account adjustments by recording and matching all interstate transactions. Though the exact model will depend upon the IGST model adopted for the GST, this network is critical for implementation of GST. This network will be put in place even prior to

implementation of GST as using this States will be able to access various Central Government excise and income tax department records which will be useful for matching with sales returns to check evasion.

The GSTN network will be set up as a 'not – for – profit' company registered under Section 25 of the Companies Act with an equity capital of Rs.10 crores. In March 2013, Government of India appointed the chairman the Special Purpose Vehicle (SPV) that will manage this network.

7.4.4. Reorganization of Taxation Departments

Presently in Government of India, collections of excise and service tax are entrusted to different departments. In the proposed GST, both these taxes will combine into the single GST. In state governments often different wings of the revenue department administer the taxes which will also be subsumed into GST like VAT, entry tax, entertainment tax, luxury tax etc. These administrative wings need to be merged. This process will require comprehensive reorganization of the GST related tax departments both at the center and the states. This process will involve a number of steps including (a) physical reorganization to remove duplication of offices (b) corresponding staff reorganization (c) preparation of tax manuals for GST (d) staff training (e) undertaking dealer education and publicity campaigns (f) setting up tax payer directorates. A suitable time table will have to be drawn up to implement this comprehensively.

7.4.5. Performance measurement

Performance measurement purely based upon achievement of revenue targets provides perverse incentives to tax administrators and is a breeding ground for litigation. Presently, most tax collectors are hyper active during the last quarter of the year levying claims which the tax payer often perceives as unreasonable and unjustifiable. This need for tax departments to meet the revenue targets assigned to them creates a disruptive relationship between the tax payer and the department. This situation can be obviated if performance measurement of officers in the tax department is done more scientifically coupled with regular in house training programs for skill upgradation.

CHAPTER 8

LEGAL ISSUES TO BE ADDRESSED FOR THE IMPLEMENTATION OF THE GST

8.1. Present Constitutional Status

The allocation of legislative spheres to the Center and the States is governed by Article 246 of the Constitution read with the three lists in the Seventh Schedule.

8.1.1. Subject-matter of laws made by Parliament and by the Legislatures of States

Article 246 of the Constitution reads as under:

- (1) Notwithstanding anything in clauses (2) and (3), Parliament has exclusive power to make laws with respect to any of the matters enumerated in List I in the Seventh Schedule (in this Constitution referred to as the “Union List”).
- (2) Notwithstanding anything in clause (3), Parliament, and, subject to clause (1), the Legislature of any State also, have power to make laws with respect to any of the matters enumerated in List III in the Seventh Schedule (in this Constitution referred to as the “Concurrent List”).
- (3) Subject to clauses (1) and (2), the Legislature of any State has exclusive power to make laws for such State or any part thereof with respect to any of the matters enumerated in List II in the Seventh Schedule (in this Constitution referred to as the “State List”).

- (4) Parliament has power to make laws with respect to any matter for any part of the territory of India not included in a State notwithstanding that such matter is a matter enumerated in the State List.

Under sub Article 1, the Central Government has exclusive powers to make laws with respect to items included in the Union List in the Seventh Schedule. The power to tax is provided in items 82 to item 92 C of the Union List as under:

- 82. Taxes on income other than agricultural income.
- 83. Duties of customs including export duties.
- 84. Duties of excise on tobacco and other goods manufactured or produced in India except—
 - (a) Alcoholic liquors for human consumption;
 - (b) Opium, Indian hemp and other narcotic drugs and narcotics, but including medicinal and toilet preparations containing alcohol or any substance included in sub-paragraph (b) of this entry.
- 85. Corporation tax.
- 86. Taxes on the capital value of the assets, exclusive of agricultural land, of individuals and companies; taxes on the capital of companies.
- 87. Estate duty in respect of property other than agricultural land.
- 88. Duties in respect of succession to property other than agricultural land.
- 89. Terminal taxes on goods or passengers, carried by railway, sea or air; taxes on railway fares and freights.

90. Taxes other than stamp duties on transactions in stock exchanges and futures markets.
91. Rates of stamp duty in respect of bills of exchange, cheques, promissory notes, bills of lading, letters of credit, policies of insurance, transfer of shares, debentures, proxies and receipts.
92. Taxes on the sale or purchase of newspapers and on advertisements published therein.
 - 92A. Taxes on the sale or purchase of goods other than newspapers, where such sale or purchase takes place in the course of inter-State trade or commerce.
 - 92B. Taxes on the consignments of goods (whether the consignment is to the person making it or to any other person), where such consignment takes place in the course of inter-State trade or commerce.
 - 92C. Taxes on services.

Under Sub Article 3, the States are exclusively authorized to make laws on items relating to the State List. The list of taxation items in the state list runs from items 45 to 63 as under:

45. Land revenue, including the assessment and collection of revenue, the maintenance of land records, survey for revenue purposes and records of rights, and alienation of revenues.
46. Taxes on agricultural income.

47. Duties in respect of succession to agricultural land.
48. Estate duty in respect of agricultural land.
49. Taxes on lands and buildings.
50. Taxes on mineral rights subject to any limitations imposed by Parliament by law relating to mineral development.
51. Duties of excise on the following goods manufactured or produced in the State and countervailing duties at the same or lower rates on similar goods manufactured or produced elsewhere in India:—
 - a) Alcoholic liquors for human consumption;
 - b) Opium, Indian hemp and other narcotic drugs and narcotics; but not including medicinal and toilet preparations containing alcohol or any substance included in sub-paragraph (b) of this entry.
52. Taxes on the entry of goods into a local area for consumption, use or sale therein.
53. Taxes on the consumption or sale of electricity.
54. Taxes on the sale or purchase of goods other than newspapers, subject to the provisions of entry 92A of List I.
55. Taxes on advertisements other than advertisements published in the newspapers and advertisements broadcast by radio or television.
56. Taxes on goods and passengers carried by road or on inland waterways.

57. Taxes on vehicles, whether mechanically propelled or not, suitable for use on roads, including tramcars subject to the provisions of entry 35 of List III.
58. Taxes on animals and boats.
59. Tolls.
60. Taxes on professions, trades, callings and employments.
61. Capitation taxes.
62. Taxes on luxuries, including taxes on entertainments, amusements, betting and gambling.
63. Rates of stamp duty in respect of documents other than those specified in the provisions of List I with regard to rates of stamp duty.

Under Sub Article 2, both the Center and the State are authorized to make laws in any matter relating to the Concurrent list, with the caveat in Article 251 that in case of conflict between the laws made by the Center and the States, the laws made by the Center shall prevail. The Concurrent List includes only one item relating to taxation namely item 44 as under:

44. Stamp duties other than duties or fees collected by means of judicial stamps, but not including rates of stamp duty.

The subject of stamp duty spans thus all the three lists as under:

- a) Item 91 of the Union List
- b) Item 63 of the State List
- c) Item 44 of the Concurrent List

Stamp duties occur in the concurrent list excluding

- a) Rates of stamp duty which are essentially fixed by either the Center or the States in items 91 and 63 of their respective lists.
- b) Revenue from judicial stamps which are covered in Item 77 of the Central List and Item 3 of the State List

Excluding the issue of stamp duty, it is seen that tax base is clearly identified and delineated between the Center and the States. Apart from the residuary powers, the Center is broadly empowered to levy income and corporation tax, estate and succession duty, excise duty, customs duties, and taxes on interstate trade. This is apart from the provisions of Article 271 which empower the Center to levy surcharges. The States are broadly empowered to levy sales tax, excise duty on alcohol for human consumption, agricultural income tax, entry tax, purchase tax and entertainment tax. The tax bases are mutually exclusive with no intersection.

The essence of the GST is that the tax base for both the Center and the States is broadened to include bases which are presently not available to each party in relation to the sale of goods and the supply of services. The Center presently has the power to tax manufacturing and services while the state has the power to tax sales only. It is proposed that both the center and the States be provided the same tax base on which a dual GST is levied one by the Center – the CGST and the other by the States – the SGST. To enable this, the related provisions of the Constitution have to be amended. To this effect, the Government of India introduced the 115th Constitutional Amendment Bill in the Lok Sabha in March 2011. The Bill as introduced is placed as an Annexure to this Chapter.

8.2. The 115th Constitutional Amendment Bill 2011

The Bill seeks to amend the constitution to authorize the levy, collection and appropriation of the Goods and Services Tax (GST) by both the Centre and the States.

The Statement of Objects and Reasons of the Bill, is unimpeachable and reads as under:

- a. The goods and services tax would replace a number of indirect taxes presently being levied by the Central Government and the State Governments and is intended to remove cascading of taxes and provide a common national market for goods and services.
- b. The proposed Central and State goods and services tax would be levied on all transactions involving supply of goods and services except those that are exempt or kept out of the purview of the goods and services tax.

The Bill is presently being considered by the Parliamentary Standing Committee on Finance. A preliminary reading of the bill raises a number of concerns on whether the bill as drafted would fully meet its declared objects and reasons including its primary purpose of providing a common national market for goods and services.

8.2.1. Concerns relating to the Bill

It also does not appear that approval of the Constitutional amendment will pave the way for quick implementation of GST. These concerns are outlined below:

8.2.1.1. Definition of GST

Article 366 is the definitional Article of the Constitution. The Bill seeks to insert Clause 12 A in this Article to define the Goods and Service tax as ‘any’ tax on the

supply of goods or services or both except the taxes on the supply of the following goods (hereinafter called specified goods in this chapter) namely:

- i. Petroleum crude
- ii. High speed diesel
- iii. Motor spirit (petrol)
- iv. Natural Gas
- v. Aviation turbine fuel(ATF)
- vi. Alcoholic liquor for human consumption.

The outcome of accepting such a definition of GST appears to be that this definition of the GST can be changed only through another Constitutional amendment. All items not in this of excluded goods list will be subject to the GST. Such a specific stance adopted on the definition of GST must be consistent with the stance adopted regarding the subsumation of the corresponding taxes into the GST by the Center and the States respectively. For example, as the six goods specified above are exempt from GST, the Bill proposes simultaneous amendments to Entry 84 of the Union List and Entry 54 of the State list to empower the Center and the States to independently tax the manufacture and sale respectively of these six goods only while allowing for the subsumation of the excise/sales taxes of the remaining goods into the GST.

However, such a consistency in approach does not appear to have been adopted universally to allow for integration of all taxes which could possibly be subsumed into GST in the future. An example is the incorporation of the real estate sector into the GST tax base discussed in Chapter 4. The White Paper on Black money recognizes that the real estate sector which comprises 11 percent of the GDP is a

favoured avenue for ‘parking unaccounted money and a larger number of transactions in the real estate sector are not reported or underreported’. Despite such an explicit acknowledgement, the Bill does not provide the headroom for enfolding the real estate sector into the GSDP even at a later date, if not immediately. This could have been achieved by making suitable changes to the proposed definition as well as amending Entry 63 in List II and Entry 44 in List III which empower the State and Central Governments in matters relating to stamp duty.

Similarly, recent events sparked by the Supreme Court’s views on the auction of natural resources will put upward pressure on the price of coal in India. This would have been the right time to recognize the need to enfold electricity duty into the GST by suitably accommodating this requirement in the definition of GST and in entry 53 of List II. This would provide significant relief to power producers who would then be able to set off their input tax, making power costs more competitive.

The proposed amendment to Entry 84 of the Union List, seeks to empower the Centre to continue to levy excise on petroleum crude, high speed diesel, motor spirit, natural gas, ATF and tobacco products. Comparing this to the exclusion list proposed for Article 366, it is seen that tobacco has been included in Entry 84 but not excluded from the purview of GST as defined in the proposed Clause 12 A of Article 366. Thus, the Bill envisages that tobacco will be included in the GST base, but simultaneously subject to an excise by the GoI.

Correspondingly, the proposed amendment to Article 54 of the State List empowers the States to levy sales tax on the same list of goods with the notable exception that tobacco is replaced by alcohol for human consumption. Thus in this part of the Bill, it

is envisaged that alcohol for human consumption will be excluded from the GST base but subject to levy of tax on sales by the State government.

Both tobacco and alcohol, seen as luxury goods need to be treated symmetrically in the proposed GST. The Bill does not do so. Tobacco is kept within the GST but subject to only an additional excise levied by the Center. Alcohol is kept outside GST, similar to the other specified goods, but subject to both excise and sales taxes, to be levied by the States. Such a framework seems to be part of a sharing arrangement worked out between GoI and the states where GoI gets to levy additional excise on tobacco in return for states being allowed to continue levying both excise and sales tax on alcohol for human consumption after the GST is implemented.

This arrangement, where excises continue to be levied outside GST which cannot be set off against tax paid dilutes the very raison d'être of the GST. The 13 FC had recommended that all the specified goods be brought into the ambit of GST and to maintain revenue neutrality, a special levy imposed wherever required. Such an arrangement has been envisaged for tobacco in the Bill. It is necessary that a similar framework be applied to all the other six specified goods. Most states derive more than half their VAT revenue from the specified goods and keeping them out from the GST base ignores the valid and felt needs of industry. Petroleum products being the foundation for a number of industries, this stance will result in continuance of cascading in a wide variety of goods detracting from their competitiveness. Incorporating petroleum products into the GST tax base while permitting a provision for levy of a supplementary excise by states would represent an optimum solution.

Such a holistic approach will ensure a broader based GST and continuity in the GST chain for a larger range of goods resulting in industry coming more competitive.

Thus, for the reasons outlined above, there is a strong case for revisiting the definition of GST in the Bill by including all the six items mentioned above in the Bill.

8.2.1.2. Insertion of Article 269(A)

Article 269 as it stands allows for the levy of taxes on the sale and purchase of goods and on the consignment of goods by the Centre during the course of interstate trade. It is the basis on which the Central Sales Tax (CST) is levied. The Central Sales Tax being an origin based tax will need to be abolished with the implementation of GST.

The Bill proposes to introduce Article 269(A) which will specifically empower Government of India to levy and collect GST in the course of inter-state trade subject to apportionment as may be decided by Parliament. The fact that Article 269 is proposed to be retained without substantive amendment, allows for a framework where the existing CST regime will need to coexist with the GST regime in the future. This may be necessary given developments in the political sphere relating to GST discussed earlier in Chapter 6. CST being an origin based tax and GST being consumption based tax, this bivalent approach will enable a partial rollout of GST in some States. Such a provision will also allow for a zero rated CST to prevail even in the GST regime, to prevent arbitrage between interstate and intra state sales.

Finalization of the modalities for the collection of the IGST is one of the most critical building blocks for the IGST. A number of models are being examined and it is essential that a simple sustainable and scalable model be adopted. For this, a

consensus driven approach is necessary. The Bill proposes that the IGST collected during the course of inter-state trade should be apportioned between union and the states as prescribed by Parliament after it also determines what constitutes interstate trade. However, the procedure for allocation of proceeds and the modalities of collection of the IGST does not find specific mention in the terms of reference of the Goods and Service Taxes Council (the proposed Article 279A discussed in Para 3.5 below) even though such items are of extreme concern to all the states who are members of the proposed Council.

8.2.1.3. State List-Entry 52

The proposed amendment to Entry 52 allows for taxes to be levied and collected by a Panchayat or a Municipality on entry of goods into a local area for consumption use or sale therein. Thus effectively, in a GST regime, local bodies can continue to levy Entry Tax. The spirit of this proposal while being eminently consistent with the 73rd and 74th Amendments may actually result in physically hindering the free movement of goods and hamper trade. The exercise of this power by local bodies may result in every Panchayat / Municipality within which major highways are located, setting up check posts for verification of goods passing through their jurisdiction for collection of entry taxes, wherever appropriate. This would cause significant delays to the movement of goods traffic and would militate against the declared objective of the Bill to provide a common national market for goods and services. The 13 FC had proposed subsumation of all taxes into the GST including the entry tax. Recognizing that this recommendation may result in lowering revenue for local bodies, the 13 FC had significantly raised devolution to these bodies, making

them eligible for up to 2.5% of the divisible pool. Keeping these two factors in mind, all entry tax should be subsumed into GST and this proposal to amend Entry 52 reviewed.

8.2.1.4. State List – Entry 62

The proposed amendment to Entry 62 permits taxes on entertainment and amusements to the extent levied and collected by Panchayat, Municipality, Regional Council or District Council. These taxes will be outside the GST base and it is proposed that input tax paid cannot be set off against them. Entertainment today is big business requiring significant investment in multiplexes, theme parks, golf courses, and the like. Due to the high cost of land, a number of such centers are located outside city areas within the jurisdiction of Panchayats. To compensate for their large investments, entertainment facility owners are entitled to avail input tax on goods purchased by them for setting up their facilities. Keeping entertainment tax levied by local bodies outside GST may not be desirable, even though the motive to strengthen local government revenue is laudable.

8.2.1.5. Creation of Goods and Service Tax Council

The Empowered Committee of State Finance Ministers was set up in July 2000 to provide a forum for states to forge a consensus on indirect tax related issues. The Committee was registered as a society in 2004 under the Societies Registration Act. However, it still does not have any formal status nor do its recommendations carry any force of authority. Its recommendations, derived by consensus have so far had to be converted to legislation by the respective State Governments as well as by the Centre. This was the procedure followed when VAT was implemented. Based upon

the recommendations of the Empowered Committee, each state enacted VAT acts in their respective assemblies. Some States did not completely comply with the recommendations of the EC, either at the time of enacting their VAT acts or subsequently. This laissez faire approach which has been unwittingly tolerated by the Empowered Committee has resulted in dilution of the VAT framework in the country in the recent past.

If GST is to be a success, there should be uniformity of approach across all states as well as strong disincentives for non compliance with the agreed framework. This stance was endorsed by the 13th Finance Commission, which recommended that that constitutional status be provided to the Empowered Committee through creation of a GST council so that its recommendations would have the force of authority. The Bill ostensibly seeks to implement this recommendation.

The proposed Article 279(A) provides for the creation of the Council. It will be chaired by the Union Finance Minister with all State Finance Ministers of Finance / Taxation as members. The State Finance Ministers are required to elect from amongst themselves a Vice Chairman. The Council is required to make recommendations (sic) to the Union and the States on

- i. The taxes, cesses, surcharges levied by Centre, State and local bodies which may be subsumed in the GST
- ii. The good and services which may be exempted from the GST
- iii. The threshold limit of turnover below which GST will be exempted
- iv. The rates of goods and service tax.

Though the above four are important issues, all the important issues relating to GST have not been included in the Terms of Reference. For e g the modalities of levy, collection and appropriation of IGST do not find specific mention above. However, the umbrella provision that the Council can consider ‘any other matter relating to GST as the Council may decide’ may be seen as suitably empowering the Council. To what extent the Council’s views will prevail if Parliament, which will be empowered to enact on IGST by the proposed Article 269A, sees otherwise, is not clear.

Since the proposed Council would have Ministerial representation from both the Centre and the states (unlike the present Empowered Committee), the intention of the 13FC clearly was to provide statutory backing to its recommendations on all critically important parameters of the GST. Unfortunately, the Bill while providing a statutory status to the structure of the Council per se provides no legal backing to its deliberations. The Bill envisages that it can make only recommendations (sic) to the Union and the States. The deliberations of the Council can culminate only in recommendations which presumably may or may not be accepted and implemented by either the GoI or the state governments. This detracts from the credibility of the Council.

Further, the Council is to be empowered to recommend the ‘taxes, cesses, surcharges levied by Centre, State and local bodies which may be subsumed in the GST.’ This proposal appears to be at variance with the proposed amendment to Article 366 which already specifies which goods are proposed to be kept out of the purview of the GST. It appears that anticipating the wisdom of the GST Council, the primary decision to exclude the specified goods from GST has already been taken. While

admittedly this may have been done after consultation with the Empowered Committee, there is a possibility that the GST Council may review this stance in line with the recommendations on the 13 FC that the specified goods be included in the GST tax base- as has been discussed above, while maintaining revenue neutrality through additional taxes levied by both GoI and State Governments. Such additional levies will be outside the purview of the GST and no input credit would be available. This option is a preferable option as it would widen the GST tax base and provide continuity in the VAT chain. However, if and when the GST council agrees to such a stance, this would be impossible to implement without another Constitutional amendment as the framework of the GST appears to have already been defined by the Bill.

The Bill proposes that Article 279 A (8) read as under:

“(8) Every decision of the Goods and Services Tax Council taken at a meeting shall be with the consensus of all the members present at the meeting.”

The word consensus is not defined in the bill and retaining this word is undesirable given that it is susceptible to widely subjective interpretations. The word ‘consensus’ can assume meanings ranging from unanimity to a finding of rough consensus by a single person- the Chairman of the Empowered Committee based upon his informed understanding of the views of members. Further it is necessary to recognize that a consensus can be generated with only some members positively agreeing with a proposal while others may merely consent even though they may not

agree with the proposal. The latter group may be willing to tolerate a proposal without agreeing to it but this stance may be interpreted as joining the consensus.

James Madison recognized this problem of generating a consensus in the 58 Federalist Paper published on 20th February 1778. He wrote

“It has been said that more than a majority ought to have been required for a quorum; and in particular cases, if not in all, more than a majority of a quorum for a decision. That some advantages might have resulted from such a precaution cannot be denied. It might have been an additional shield to some particular interests, and another obstacle generally to hasty and partial measures. But these considerations are outweighed by the inconveniences in the opposite scale. In all cases where justice or the general good might require new laws to be passed, or active measures to be pursued, the fundamental principle of free government would be reversed. *It would be no longer the majority that would rule: the power would be transferred to the minority* (emphasis supplied)”.

Madison thus emphasized the need for all major legislation to be passed by majority rather than by consensus as the latter case would undesirably result in power being transferred to a minority. The need for a consensus may result in the tyranny of the minority.

Thus, there are strong reasons for deleting the proposed 279A (8) of the Bill which requires that the GST Council decide as per consensus. If not done, only suboptimal solutions will be generated. In its place, a provision for a majority decision in the Council should be introduced. Given that the Center will be outnumbered in the

Council (2 representatives against 28 State representatives), and the GST council will take a final view on the Central GST also, it is necessary to give the Centre enhanced voting power say 33%. If this is agreed to, all policy decisions of the Council could be mandated to be taken with a minimum of 75% majority. This will restore the balance of power to the states while keeping the Centre's interests protected.

8.2.1.6. Dispute Settlement Authority

The Goods and Service Tax Council is empowered to make only recommendations to the Union and States for consideration. As mentioned above, this implies that these recommendations will not be binding on either the Center or the States, who will have the option to accept or reject any/all of the recommendations. However, the proposed Article 279(B) provides for the setting up of a Tax Dispute Settlement Authority to adjudicate disputes / complaints arising out of deviations from recommendations of the Council. It is not clear how mere recommendations of the Council will be deemed to acquire finality based upon which the grounds for a dispute between states inter se or between the Center and states can be articulated and prosecuted before the Dispute Settlement Authority. Thus the GST council must be empowered to take decisions, not make recommendations. Unless the grounds for appeal to the Dispute Settlement Authority crystallize, there will be little scope for effectualizing it.

8.2.1.7. Basic Structure

As mentioned earlier, the Constitution presently mandates exclusive tax jurisdictions to both the Centre and the states through the mechanism of Article 246 and the Union

and State Lists in the Seventh Schedule. It does not allow for concurrent jurisdiction for both the Center and the States over any tax base. The GST necessarily requires a concurrent jurisdiction to enable both the Centre and States to simultaneously levy taxes on the supply of goods and services. There are a number of options available to enable States/Centre to levy GST through Constitutional amendments. The Bill seeks to achieve this by inserting a new Article 246(A) which will specifically empower Parliament and State Legislatures to make laws with respect to taxes on goods and services imposed by the Union and States respectively. The Bill proposes that Parliament retain the exclusive power to make laws in respect of taxes on goods and services involved in inter-state trade.

A more direct option is amending the Seventh Schedule to include the items comprising the GST tax base in the concurrent list while removing them from the union and state lists. This option was reportedly considered but opposed by the States on the grounds that if placed in the concurrent list, the provisions of Article 254 would ensure the dominance of the GoI in this tax field. This situation, it was apprehended would result in constraining the fiscal autonomy of the states. Such apprehensions are without basis for two reasons. First, all GST related law will have to be approved by the GST Council. The balance of power in the Council is totally asymmetric in favour of the states. The GoI has only two members. The States have twenty eight (excluding the three Union Territories with legislatures). States can effectively shoot down any proposal of GoI aimed at fiscal hegemony. Second, a number of sensitive subjects are already in the Concurrent List like education,

electricity and labour. It can be nobody's case that the GoI has sought to dominate the States in these fields.

Despite the State's apprehensions being groundless, the option of including GST in the concurrent list was discarded and the option of insertion of Article 246(A) favoured by the drafters of the Bill. It could be argued that Article 246 and the 7th Schedule of the Constitution as they stand, are part of the basic features of the Constitution and introduction of an Article 246 A as a specific provision for levy of goods and service tax, will dilute the import of Article 246 and hence the basic structure of the Constitution. This option needs to be validated with reference to its consistency with the Constitution if the Bill as it stands is to be proceeded upon. It would be extremely desirable if a Presidential reference is made under Article 143 of the Constitution, to the Supreme Court, on this important issue which has the potential to hamstring the proposed Constitutional amendment.

8.2.1.8. Service Tax:

A necessary and complementary approach to the GST is the treatment of service tax of which the GST is an indelible part. After a significant debate the Center has accepted the need to adopt a negative list approach to the taxation of services and proposed suitable amendments in Chapter V of the Finance Bill 2012 (Ministry of Finance, 2012). The concept of negative list is delineated by three sections of the Finance Bill 2012. These are:

- i. 66 (B) which is the charging section;
- ii. 66(D) which lists the services to be placed in the negative list;

- iii. 66(E) which specifically identifies services which have been declared as services.

The first three items on the negative list of services exempt providers (Government of India; RBI and foreign embassies) for all the category of services they render. The other items deal with activities which are exempt like Agriculture, Farm Labour, and Trading of Goods etc. A number of questions have arisen with respect to the negative list. Using the ‘ dominant position of transaction’ test, it has been argued that some of the activities declared as services in the new Section 66E and which are proposed to be taxed by the Center are in fact well within the legislative purview of the states . Three instances are detailed below:

8.2.1.9. Renting of Immovable Property

The Center assuming the right to tax renting of immovable property may be seen as negating the state’s rights to tax land and buildings under Entry 49 of List II. It can be argued that any activity ancillary to ownership of land and buildings and concomitant to it lies within the legislative competence of the states. In the past, courts have supported a limited exercise of this right by the Center ‘as long as it is associated with business or commercial use ‘. But this caveat is absent from Section 66E of the Finance Bill 2012 which deems renting of immovable property to be a declared service, with a specific exception being provided in the negative list for residential buildings. 66(E) assumes a general power to tax renting of immovable property with a specific exemption instead of a specific power being presently recognized by the Courts.

8.2.1.10. Taxes on Luxuries

Under Entry 62 the states are empowered to levy taxes on luxuries, including taxes on entertainment, amusements, betting and gambling. Most states have in place a luxury tax act, some more exhaustive than the others. Despite this, the Union has been levying service taxes on activities like beauty parlours, health and fitness centers, which are patently luxuries within the legislative competence of the states. However and importantly, the negative list in 66 D does not use the word luxuries in clauses (i) and (j). These clauses merely restrict themselves to excluding betting gambling, or lottery and admission to entertainment events or access to amusement facilities.

8.2.1.11. Missing Services

Apart from what is included, another aspect of concern in the negative list is what is excluded. There are negative lists nested within the negative list in respect of three clauses. Under clause (o) , the service of transportation of passengers with or without accompanying belongings by stage carriage and railways excluding those travelling by first class or air conditioned coach are included in the negative list . Effectively, service tax is leviable on the Railways only for first class and AC class passengers. In regards to goods transported by Railways, they are included in the tax base as they are not specifically excluded in the negative list.

After much procrastination, service tax on railway freight as well as Air conditioned and 1st Class passenger fares was levied with effect from 1st October 2012 with an abatement of 70%. It is now necessary to fully enfold the operations of the Railways into the GST tax base.

Thus the Service Tax provisions in the Finance Bill 2012 seem to anticipate the passage of the 115th Constitutional Amendment Bill which may not take place in the immediate future. The validity of some of these provisions could therefore be called into question.

8.3. Conclusion

The 115th Constitution Amendment Bill does not appear to have been formulated based upon a philosophy for the GST. As seen from the issues raised in this Chapter the Bill does not appear to be driven by a broad philosophy on the modalities of implementation of the GST. Measured against Occam's razor, the Bill is neither succinct nor comprehensive. It is over specific in some sections like the definition of GST and not specific enough in other sections like the powers of the GST Council. It neither fully determines the contours of GST nor does it adequately empower the GST Council to do so. Admittedly, this Bill seeks to find the middle ground between different state contentions and GoI's views, but in seeking to do so, it has not identified the policy goals to be achieved for implementing the GST. Ideally, the Bill should enable the policy goal of the GST to be implemented. Only then can the full benefit of this tax reform be leveraged. The Bill should simultaneously empower the GST Council to suitably moderate the path to this goal depending upon political and administrative constraints. Unfortunately the Bill reverses the sequencing of these steps. The dominant political and administrative constraints have first shaped the Bill. The GST Council is subsequently then expected to achieve the policy goals. This appears to be an unreasonable expectation, given that the same political and administrative constraints will continue to apply to the working of the Council also.

There is thus a possibility that the approach adopted in the Bill will lead to a sub optimal GST.

Further, it is noteworthy that the passage of the Bill as it stands is not sufficient for the implementation of the GST. More work will need to be done by the Council which may result in the need for another Constitutional amendment. At best, this Bill can be described as a job half done. Ideally, as mentioned above, the Bill should have only enabled the implementation of GST while delegating the modalities of implementation to the GST Council. The Bill should have enabled the policy goal – the ‘flawless’ GST as defined by the 13 FC being reached and adequately empowered the GST Council to determine the road map to achieve this goal . In view of the lack of consensus on some issues amongst states and the Center, the road map could involve a multi stage journey. Thus even if a hybrid GST has to be adopted in the first instance by the Council, it could later be improved upon without recourse to another Constitutional amendment.

CHAPTER 9

ESTIMATING THE RNR FOR THE PROPOSED GST USING INPUT OUTPUT ANALYSIS

9.1 INTRODUCTION

A reliable estimation of the Revenue Neutral Rate (RNR) is an essential part of the framework for the implementation of Goods and Services Tax (GST). In this chapter an attempt has been made to do so in two steps. First, the indirect tax base of the Government of India is determined using the Input-Output Transaction Tables (IOTT). Subsequently then RNR, which is a quotient of present revenue being subsumed into the GST Tax base and the present Tax base is also determined. For this computation the Input Output Transaction table (IOTT) 2007-08 published by Central Statistical Organisation (CSO) was used.

I-O analysis is an analytical technique for explaining and predicting the behaviour of our economic system based upon a holistic data base encompassing all the facets of the economic environment. The Input-Output model used here depicts the Indian economy as a network of flows or linkages between economic activities specified as distinct sectors. In the I-O model, it is assumed that the economy is in, or tends toward, general equilibrium. This implies that supply equals demand for all goods and services in all the sectors of the Indian economy. When the economy is perturbed by an external "shock" – say, an increase in demand for an industry's products, the equilibrium is disturbed. To satisfy this demand increase,

the industry must increase its production. For this, it must purchase additional goods and services from its suppliers. These suppliers, in turn, must purchase goods and services from their suppliers who in turn must turn to their own suppliers. This process continues and creates a multiplier effect in the economy until the new ramped up supply matches the new demand for the economy, and equilibrium is restored. The economic method illustrated in this chapter follows the Leontief Input-Output model.

9.2 INPUT-OUTPUT TRANSACTION TABLE (IOTT)

The building blocks for I-O analysis are the Input-Output Transaction Table (IOTT). Data on value added at the stage of production for each sector of the economy is first collected empirically for a specified year. This table is then constructed by arranging this data collected into rows and columns. Each sector of the economy is allocated both a row and a column. For a particular row, representing a sector 'i', the amount or value of goods and services measured in rupees (say x) that flowed directly into the sector represented by column 'j', is represented as, X_{ij} for the year in which the IOTT is prepared. Thus the table is so arranged that the entry X_{ij} in the i^{th} row and j^{th} column gives the flow from the i^{th} sector to the j^{th} sector.

9.2.1 Mathematical Treatment of the I O Analysis

$$X_{ij} = a_{ij} X_j \quad \text{-----} \quad (1)$$

Where

X_j : Total input used by j^{th} industry

X_{ij} : Value of the i^{th} commodity used as input in j^{th} industry

$$a_{ij} = \frac{X_{ij}}{X_j},$$

is a constant, representing the proportional value of i^{th} Sector commodity required for production of one unit of j^{th} Sector industry.

If there are 'n' industries under consideration then

$$X_i = \sum_{j=1}^n X_{ij} + C_i$$

Where

X_i is the total output of the i^{th} commodity

C_i is the proportion of the total output of the commodity 'i', that meets the final demand, in other way it is the total consumption value of the i^{th} Commodity.

The above equation holds since total output of an industry must go either as inputs to other industries or to final demand.

$$C_i = X_i - \sum_{j=1}^n X_{ij} \text{-----} (2)$$

Substituting the value for X_{ij} in equation (2) from equation (1) we get

$$C_i = X_i - \sum_{j=1}^n a_{ij} X_j$$

This can be written as a set of 'n' equations for different values of 'i' from 1 to 'n' and 'j' from 1 to 'n'.

$$\begin{aligned} X_1 - a_{11}X_1 - a_{12}X_2 \dots \dots \dots - a_{1n}X_n &= C_1 \\ X_2 - a_{21}X_1 - a_{22}X_2 \dots \dots \dots - a_{2n}X_n &= C_2 \\ \dots \dots \dots & \\ X_n - a_{n1}X_1 - a_{n2}X_2 \dots \dots \dots - a_{nn}X_n &= C_n \end{aligned}$$

Using the Matrix theory, these set of 'n' equations can be written as below

$$\begin{bmatrix} (1-a_{11}) - a_{12} - a_{13} \dots \dots \dots - a_{1n} \\ -a_{21}(1-a_{22}) - a_{23} \dots \dots \dots - a_{2n} \\ \dots \dots \dots \\ -a_{n1} - a_{n2} - a_{n3} \dots \dots \dots (1-a_{nn}) \end{bmatrix} \begin{bmatrix} X_1 \\ X_2 \\ \dots \\ X_n \end{bmatrix} = \begin{bmatrix} C_1 \\ C_2 \\ \dots \\ C_n \end{bmatrix} \text{----- (3)}$$

Assuming, the Matrix of Input-Output Coefficients is given by 'A', then 'A' can be denoted as

$$A = \begin{bmatrix} a_{11} & a_{12} & \dots & a_{1n} \\ a_{21} & a_{22} & \dots & a_{2n} \\ \dots & \dots & \dots & \dots \\ a_{n1} & a_{n2} & \dots & a_{nn} \end{bmatrix}$$

Then the equation in the matrix form in (3) can be written as

$$(\mathbf{I} - \mathbf{A})\mathbf{X} = \mathbf{C}$$

Where, ' \mathbf{I} ' is the identity matrix of order \mathbf{n} .

And hence

$$\mathbf{X} = (\mathbf{I} - \mathbf{A})^{-1}\mathbf{C}$$

Here $(\mathbf{I} - \mathbf{A})^{-1}$ is the Leontief Inverse matrix. The basis for computation of the inverse matrix is the I-O transaction table and is prepared empirically for each industry/sector depending upon its contribution to other industries and sectors as well as final demand. This transaction table depicts the economy as a series of inter-related transactions among sectors in any given year.

The IOTT table for 2007-08 is placed at Appendix – I. The Amounts are in lakhs of rupees. The following figure provides a conceptual view of the transaction table by dividing the economy into four quadrants.

9.2.2 Schematic View of IOTT

Table 9.1

Schematic View of IOTT

Sector Seller/ Commodity	Buyer/Industry				Final Consumption						Total Output
	1	2	...j...	n	PFCE	GFCE	GFCF	CIS	EXP	Less IMP	
1	Quadrant A Inter industry transactions X_{ij}				Quadrant C Consumption						X_1
2											X_2
.....										
i											X_i
.....										
n											X_n
Value Added	Quadrant B Income accruing to Households and businesses etc..				Quadrant D Social transfers						
Import											
Total Input	X_1	X_2	... X_j ...	X_n							

Quadrant ‘A’ Inter industry transactions : It depicts the transactional flows between different sectors in the economy, showing all possible ways that raw materials and intermediate goods combine to produce outputs for sale to other industries and to final consumers. Quadrant A of the IOTT, which depicts the Indian economy comprises of 130 sectors/ industries. It is thus a 130X130 matrix.

Quadrant ‘B’: This quadrant shows the value-added through capital and labour by including incomes accruing to businesses and households, depreciation, taxes paid as well as imports into the economy. Since these incomes are often difficult to identify individually, they are frequently recorded as one value-added row. Quadrant B also includes payments to industries outside the economy for materials and intermediate goods which are imported.

The sum of quadrant A and B represents the total inputs provided to the economy.

Quadrant ‘C’: This quadrant which describes consumption, identifying consumption of industrial goods and services by households and other uses of goods by private investors and governments. Part of quadrant C is exports, which represents sales to other industries and final consumers outside the Indian economy. These sales are regarded as final, since they are deemed not to reenter the economy. As final demand is assumed to be the motivating force in an economy, quadrant C contains activity-generating forces that result in changes in the economy including stimulation of demand. Here

- PFCF: Private Final Consumption Expenditure.
- GFCE: Govt. Final Consumption Expenditure.
- GFCF :Govt. Fixed Capital formation
- CIS :Change in Stock and
- Exp :Exports and
- less Imp : Less Imports

Quadrant ‘D’: This is the social transfers’ quadrant depicting primarily nonmarket transfers between sectors of the economy. It shows gifts, savings and taxes of households, government surplus or deficits, and government payments to households and other governments. The quadrant also includes purchases by final demand sectors from industries outside the state. In the Transaction tables under consideration, following the normal practice this quadrant has been omitted.

An I-O transaction table is validated through its relationship with the Gross Domestic Product (GDP). GDP is the value of final goods and services produced in an economy in a given year. From the I-O transaction tables we remove the component of goods and services which are used to produce other goods and services in the economy, i.e. the intermediate production.

Two options are available to estimate GDP using IOTT, the Product approach and Earnings approach. The summation of private consumption, investment, government spending, and net export gives estimation under the Product approach, which is represented by a usual formula for GDP:

$$\mathbf{GDP = C + I + G + (EX - IM)}$$

Earnings approach is based on counting earnings or costs, such as wages, indirect taxes, depreciation, profits, and other income. This is represented by the row in the IOTT absorption matrix as Gross Value Added (GVA).

9.3 FINDING THE RNR USING IOTT

From equation (2) above we have

$$C_i = X_i - \sum_{j=1}^n X_{ij}$$

Decompose each sector's value of input as the (quantity used as input, Q) × (its price, P)

$$X_j = Q_j \times P_j$$

Now the equation (2) can be written as

$$C_i = Q_i P_i - \sum_{j=1}^n a_{ij} Q_j P_j \quad \text{-----}(3)$$

Suppose a tax like union excise tax with tax rate τ_i and sales tax is with tax rate τ_j are levied without any input tax credit. Then the tax base including the tax collected on it would be.

$$\begin{aligned} \tilde{C}_i &= Q_i P_i (1 + \tau_i) - \sum_{j=1}^n a_{ij} Q_j P_j (1 + \tau_j) (1 + \tau_i) \\ &= Q_i P_i + Q_i P_i \tau_i - \sum_{j=1}^n a_{ij} Q_j P_j (1 + \tau_j) - \sum_{j=1}^n a_{ij} Q_j P_j (1 + \tau_j) \tau_i \\ &= Q_i P_i + Q_i P_i \tau_i - \sum_{j=1}^n a_{ij} Q_j P_j - \sum_{j=1}^n a_{ij} Q_j P_j \tau_j - \sum_{j=1}^n a_{ij} Q_j P_j (1 + \tau_j) \tau_i \end{aligned} \quad \text{-----}(4)$$

As this exercise is to estimate the impact of Union excise tax, a Central Government tax, the term $\sum_{j=1}^n a_{ij} Q_j P_j \tau_j$ in the above equation (4), which deals exclusively with sales tax, which is tax levied by Sub-national/ State governments is ignored, for better results.

Now $\tilde{C}_i - C_i$ would be the total Union Excise tax collected, and that can be found by subtracting equation (3) from equation (4)

$$\tilde{C}_i - C_i = Q_i P_i \tau_i - \sum_{j=1}^n a_{ij} Q_j P_j (1 + \tau_j) \tau_i$$

The Union Excise Tax rate 't' on an average would be

$$t = \frac{\tilde{C}_i - C_i}{C_i} = \tau_i \left[\frac{Q_i P_i - \sum_{j=1}^n a_{ij} Q_j P_j (1 + \tau_j)}{Q_i P_i - \sum_{j=1}^n a_{ij} Q_j P_j} \right]$$

It can be seen from the above equation that this tax suffers from cascading effect, because of input taxation.

9.3.1 Impact tax burden in the case of GST

Under GST system of taxation the taxes collected on the inputs will be credited back. In this scenario the tax collected including the tax base would be.

$$\tilde{\tilde{C}}_i = Q_i P_i (1 + \tau_i) - \sum_{J=1}^n a_{ij} Q_j P_j$$

And the total GST tax collected on the tax base would be

$$\begin{aligned}\tilde{C}_i - C_i &= Q_i P_i (1 + \tau_i) - \sum_{j=1}^n a_{ij} Q_j P_j - Q_i P_i + \sum_{j=1}^n a_{ij} Q_j P_j \\ &= Q_i P_i \tau_i\end{aligned}$$

Now the average tax rate 't_i' can be found from the following equation

$$t_i = \frac{\tilde{C}_i - C_i}{C_i} = \tau_i \left[\frac{Q_i P_i}{Q_i P_i - \sum_{i=1}^n a_{ij} Q_j P_j} \right]$$

It is obvious that, and if the tax rates are uniform, then the average rate equals the statutory rate itself.

$$t = \sum_{j=1}^n \tau_j = \tau$$

Thus, estimation for RNR can be worked out

$$t = \frac{Q_i P_i \tau_i}{Q_i P_i - \sum_{i=1}^n a_{ij} Q_j P_j}$$

Ideally this is the appropriate method to find the Revenue Neutral Rate for the GST. To follow this method we need to know the Quantity and price of each of

the commodities which is being used in the inter industry transactions and as well as for meeting the final consumption. Without this data the values that appear in the Input Output Transaction Table as a product of quantity and price cannot be decomposed. This is a formidable challenge.

It is pertinent to reiterate here that, all the entries in the IOT are at factor cost, i.e. excluding trade and transport charges and NIT, and also the IOT is prepared at original purchasers' prices, i.e. at the price at which actual transactions take place. In the IOTT 2007-08 background paper, it has been clearly mentioned that these entries have been arrived through various estimates and from different sources.

With regard to Consumption part, the estimate for Private Final Consumption Expenditure (PFCE) is computed mostly through the commodity flow method, in which estimates of PFCE are compiled as residual from the total output of each item by subtracting from it, the estimated inter industry utilization and other final uses.

The item-wise estimates of GFCE are compiled at the time of preparation of five-yearly Input Output Transactions Tables (IOTT) for the Indian economy. While preparing the IOTTs, item-wise expenditure data, which is otherwise not available in the budget documents, is collected from a sample of departments of Central and State Governments.

From the above analysis, it is evident that decomposing the entries, relating to either Inter Industry Transaction part or the Final consumption part of the IOTT, into a product of quantity and price for each commodity X Industry wise is not

practicable. Hence to estimate the tax base and for finding out RNR a different approach has been adopted, which is now elaborated.

9.4 ESTIMATING TAX BASE USING IOTT

The Scheme of sector classification adopted in the present is given in Appendix-II. The first 37 sectors in the sector classification (Appendix II) represent primary production, the next 68 sectors relate to manufacturing industries and the remaining 25 sectors deal with the tertiary activities.

In the primary production, 20 categories belong to agriculture, 4 to animal husbandry and 1 each to forestry and fishing and the remaining 11 to mining. Tertiary activities include services like construction, electricity, water supply, railway transport, land transport including via pipelines, water transport, air transport, supporting and auxiliary transport activities, storage and warehousing, communication, trade, hotels & restaurants, banking, insurance, ownership of dwellings, education, medical and health, business services, computer related services, legal services, real estate service activities, renting of machinery & equipment other community, social & personal services and other services.

Being a non market producing sector, public administration and defence has neither any intermediate flows nor input, but appears as a sector in gross domestic product of the economy, its contribution being in the form of compensation of employees. This sector is included to take complete account of total gross value added (GVA) by all sectors of the economy.

The final uses have been classified into six categories (i) Private Final Consumption Expenditure (PFCE), (ii) Government Final Consumption Expenditure (GFCE), (iii) Gross Fixed Capital Formation (GFCF), (iv) Change in Stocks (CIS), (v) Exports of goods and services (EXP) and (vi) Imports of goods and services (IMP).

This table in lakhs of rupees is at factor cost. Under the proposed GST, a group of sectors/industry will be exempt from taxation. This group of exempt sectors is yet to be finalized by the Empowered Committee and the Government of India. However, for purpose of this computation this group of exempt sectors is assumed to comprise of the sectors detailed below. The other sectors are all deemed taxable. The basis for these assumptions is as under.

To ensure that the proposed GST to be applicable to a tax base as wide as possible, it is necessary to keep the list of exempt sectors to a minimum.

Agriculture contributes 17% to the GDP, but employs nearly 60% of the population. Given the imbalance, the primary sector should not be unduly burdened with indirect tax. Therefore, sale of all primary agriculture goods are sought to be exempted at the first stage. The same applies to milk, animal products, forestry, fishing, etc. In the present state of Indian economy, Government has a critical role to play in growth and development of the social sector.

It is, therefore, essential that the services provided in the medical and health sector whether provided by the Government or by private parties are exempt. A similar

approach needs to be adopted for education, scientific research and as well as printing and publishing, which needs to be encouraged.

As far as other commercial social and personnel services are concerned, the negative list adopted in the Finance Bill 2011-12 has been internalized. In addition, service provided by public administration and Defence are proposed to be exempted.

In addition, some commodities have been shown as partially exempted, for the reasons outlined below:

1. Tobacco has been shown as partially exempted to an extent of 50% as cured tobacco, used for making cigarettes is proposed to be taxed. However, raw tobacco sold by growers will be exempted.
2. Similarly a primary product like Milk is proposed to be exempted. But secondary products like butter, cheese will be levied tax. Therefore an exemption of 80% has been provided.
3. In regard to commercial services, social and personal services most of these personal services are like barbershops, florists, plumber, carpenters who are mostly unregistered and below the threshold, therefore getting them into tax net will be difficult. Hence an 80% exemption has been provided in this category.
4. In regard to certain services which have critical national broad base, like communication, Banking and Insurance if they were to be included in the GST tax base, the states would then theoretically have a

right independently tax these services. This may lead to an uneven taxation across the country. In addition the place of supply rules for these services would need to be carefully drafted as services provided at one State by a bank branch would be reported in another State at the headquarters branch for the benefit of beneficiary in a third State as requested by an account holder in a fourth State. It is therefore proposed that these critical sectors be excluded from the GST tax base. They would however be subject to the service tax by Government of India, which would continue to be taxed.

5. In regard to printing and publishing, given the low literacy rate in the country, it may be desirable to exempt this at 100%.
6. Similarly, Khadi, Cotton Textiles and Handloom, which are receiving benefit of exemption presently under the VAT, should continue to do under the GST, to encourage these sectors.

As mentioned earlier, it is desirable to have as wide tax base as possible. This will not only ensure integration of sectors which are presently taxed in an isolated manner into the general economy, but will also result in curbing the menace of black money. Thus ideally, land revenue, stamps and registration should be integrated into the GST and present stamp and registration taxes should be withdrawn.

Similarly, State Excise on alcohol should be brought into the ambit of GST to ensure that manufacturers of alcohol are allowed benefit of input tax credit for their raw-material, cartons, bottles, caps etc. Taxes on goods and passengers

vehicles tax on duties on electricity and entertainment tax are levied independently by the State Government. Each of these tax bases is presently independent Base Island and there is no provision for set off across bases. Ideally, in a GST all these taxes should be integrated and only single GST should be levied.

Table 9.2

Proposed list of Fully & Partially Exempt Sectors

IOTT Sec. No.	Name	Specification	Base
001	Paddy	Paddy, rice milling	100% exempted (Agricultural Goods)
002	Wheat	Wheat, flour milling	.....DO.....
003	Jowar	Jowar	.....DO.....
004	Bajra	Bajra	.....DO.....
005	Maize	Maize	.....DO.....
006	Gram	Gram	.....DO.....
007	Pulses	Milled and unmilled tur, urad, moong, matar,masur,and gram dal including flour	.....DO.....
008	Sugarcane	Sugarcane, gur (indigenous production)	.....DO.....
009	Groundnut	Groundnut	.....DO.....
010	Coconut	Coconut, copra	.....DO.....
011	Other Oil Seeds	Other Oil Seeds	.....DO.....
012	Jute	Raw jute	.....DO.....
013	Cotton	Raw cotton	.....DO.....
014	Tea	Tea plantation	.....DO.....
015	Coffee	Coffee plantation	.....DO.....
016	Rubber	Rubber plantation	.....DO.....
017	Tobacco	Tobacco plantation	Commercial Products to be Taxed. Estimated at 50% of the base

			(50% Exempted)
018	Fruits	Fruits	100% exempted (Agricultural Goods)
019	Vegetables	Vegetables	.....DO.....
020	Other crops	Other cereals and their milling, mesta, sannhemp, dry chillies, black pepper, dry ginger, turmeric, indigo, opium, cardamom, other fibbers, other sugars, other dyes and tanning materials, other drugs and narcotics, other condiments and spices, fodder, grass, rice bran, rice husk, straw and stalks, badges, cane trash and miscellaneous food and non-food crops.	.....DO.....
021	Milk and milk products	Milk consumed as such, ghee, butter, lassi	Commercial Products to be Taxed. Estimated at 20% of the base (80% Exempted)
022	Animal Services (Agricultural)	Agricultural animal services by rural bullocks and camels	100% Exempted (Animal Husbandry)
023	Poultry & Eggs	Eggs, poultry meat, increment in poultry	.....DO.....
024	Other livestock Products	Production of meat, mutton, pork and glands, other meat products, raw hides and skins, animal hair, bristles, wool, honey, silk worm cocoons, bones, horns, hoofs, dung fuel & manure, increment in livestock	.....DO.....
025	Forestry and logging	Planting, replanting, conservation of forests, production of fuel including	100% Exempted (Forestry and Logging)

		charcoal, felling and cutting of trees, hewing or rough shaping of poles, blocks etc. And transportation of logs up to the permanent lines of transport, industrial wood (timber, match and pulp wood) bamboo, sandal wood, gathering of uncultivated materials such as gums, lacs, resins, forest grown fruits, nuts, herbs, barks and cane, gobar gas	
026	Fishing	Rearing and catching of fish, seaweeds, shells, pearls, sponges etc. Fish curing viz; salting and sun drying of fish	100% Exempted (Fishing)
046	Khadi, cotton textiles in hand looms	Cotton spinning in charkha, Khadi weaving and finishing of cotton textiles in handlooms	100% Exempted (Handlooms)
058	Printing, publishing and allied activities	Printing and publishing of newspapers, periodicals, books, journals, atlases, maps, sheet music, directories, bank notes, currency notes, postage stamps, security passes, engraving, etching, block making, book binding, allied activities like envelope printing, picture post card printing, embossing	100% Exempted (Printing and Publishing)
108	Water supply	Collection, purification and distribution of water	100% Exempted (water Supply)
115	Communication	Postal, telephones, telegraph services rendered by postal & telegraph department and overseas communication services	100% Exempted (Communications)

118	Banking	Commercial banks, banking department of RBI, other financial companies, industrial development and financial corporations, post office saving banks, cumulative time deposit accounts, cooperative credit societies	100% Exempted (Financial Services)
119	Insurance	Life insurance corporation, postal life insurance, employees state insurance and non-life insurance such as fire, marine, accidents etc.	.....DO.....
121	Education and research	Education, scientific and research services	100% Exempted (Education & Research)
122	Medical and Health	Medical and health services	100% Exempted (Medical & Health)
128	Community , Social & Personal Services	Religious and community services, cultural services, personal services such as domestic services, laundry, dry-cleaning and dyeing, photographic studios, barber and beauty ops, funeral related activities, custom tailoring, hair dressing and other beauty treatment, washing and cleaning of textiles.	Not feasible to tax all the services. Taxes below threshold level are all exempted assumed to be 80%, and rest 20% is taxable services.
130	Public Administration and defence	Public administration and defence	100% Exempted (Public administration and defence)

The consumption and final demand based these values obtained from the From the IOTT 2007-08 Absorption matrix is summarized in Table 9.3 below.

Table 9.3

Total Final Consumption & Output Table

No	Category	Value in Rs lakhs (at factor cost)
1	Industrial Intermediate use	49,31,33,258
2	Private Final consumption Expenditure	27,32,01,468
3	Govt. Final Consumption Expenditure	5,01,14,255
4	Govt. Fixed Capital Formation	15,75,68,911
5	Change in Stock	2,55,04,800
6	Exports	9,58,26,337
7	Less Imports	12,42,46,878
8	Total Final Use(2+3+4+5+6-7)	47,79,68,893
9	Total output(1+8)	97,11,02,151

For computing the tax base of the Goods and Services Tax, which is consumption based tax; the relevant data point is the Total Final Consumption Expenditure. This is found by adding Total Private Final Consumption Expenditure (PFCE) and Total Government Final Consumption Expenditure (GFCE) provided in the IOTT. The Total PFCE and Total GFCE are the aggregate consumptions across 130 commodities available at the bottom of the input-output flow, Commodity X Industry matrix also called Absorption Matrix or Use matrix, placed at Appendix II, which are found to be 27,32,01,468 in Rs. Lakhs and 5,01,14,255 in Rs. Lakh

respectively. Then the Total Final Consumption Expenditure is found to be 32,33,15,723 in Rs Lakh.

The Total Taxable Final Consumption Expenditure is then calculated by subtracting the Total Final consumption expenditures on fully and partially exempted goods and services shown in the Table 4.1, on both the private as well as Government side from the Total Final Consumption Expenditure.

To calculate the total value of Private Final Consumption Expenditure on all the exempted commodities, the Private Final Consumption Expenditure on each of these exempted commodities shown in the Table 4.1 is added. Similarly for finding the value of Government Final Consumption Expenditure on all exempted commodities, the respective Government Final Consumption Expenditure is added. These two values are found to be 10,12,17,644 in Rs Lakh and 3,56,92,655 in Rs Lakh respectively.

The Total Taxable Final Consumption Expenditure is then calculated by subtracting the sum of the above two values, (i.e. the total value of Private Final Consumption Expenditure and value of Government Final Consumption Expenditure on all exempted commodities) from the Total Final Consumption Expenditure. The Total Taxable Final Consumption Expenditure thus found is 18,64,05,424 in Rs. Lakh.

After finding the Total Taxable Final Consumption expenditure, the next step is to find two values, (i) The value of exempt supplies going into taxable goods and services and (ii) The value of taxable inputs going into exempt goods and services

These two values are also computed from the same, Commodity X Industry i.e. the Absorption matrix, at Appendix I. To find the first value i.e. the value of exempt supplies going into taxable goods and services, all the values of exempt goods in the rows of Absorption matrix, with columns belonging to Taxable goods and services are selected and are all summed up. The sum total thus obtained is the value of exempt supplies going into taxable goods and services.

Similarly, to find the second value i.e. the value of taxable inputs going into exempt goods and services, all the values of taxable inputs in the rows of Absorption matrix, against Columns belonging to exempt goods and services are selected and are all added up. The sum total thus obtained is the value of taxable inputs going into exempt goods and services.

Accordingly the value of exempt supplies going into taxable goods and services and the value of taxable inputs going into exempt goods and services are calculated and found to be 6,20,53,147 Lakh Rs and 3,27,68,244 Lakh Rs respectively.

Finally, the Taxable base for Goods and Services Tax (GST) is the sum of Total Taxable Final Consumption and two values calculated above, the value of exempt supplies going into taxable goods and services and the value of taxable inputs going into exempt goods and services.

The Taxable base for Goods and Services Tax (GST) thus obtained is 28,12,26,815 Lakh Rs. Under the assumption that the increased threshold limits in GST will reduce the tax base, the above arrived figure for the Taxable base is

adjusted by reducing it by 10%. After this adjustment the Tax base for the year 2007-08 is found to be 25,31,04,133 Lakh Rs. The above calculations are summarized as under.

Table 9.4
Summary Table

Sl.no	Item	in Rs. Lakhs
1	Private Final Consumption Expenditure	27,32,01,468
2	Govt. Final Consumption Expenditure	5,01,14,255
3	Total Consumption Expenditure (1+2)	32,33,15,723
4	Pvt. Expenditure On Exempt Goods & Services	10,12,17,644
5	Govt. Expenditure On Exempt Goods & Services	3,56,92,655
6	Total Expenditure On Exempt Goods & Services(4+5)	13,69,10,299
7	Total Taxable Final Consumption Expenditure (i)(3-6)	18,64,05,424
8	Value Of Taxable G&S Into Exempt Goods & Services (ii)	6,20,53,147
9	Value Of Exempt G&S Into Taxable Goods & Services (iii)	3,27,68,244
10	Taxable Base(7+8+9)	28,12,26,815
11	Tax Base After reducing by 10% to adjust threshold Exemption & Compounding	25,31,04,133

As this Taxable base is computed using input-output tables 2007-08, to estimate the tax base for 2010-11, an assumption is made that the increase in taxable base will be in line with the growth rate of Gross Domestic Product (G.D.P) at factor cost and at Current Prices of the country, India.

Accordingly the growth rate for the G.D.P at factor cost and at Current Prices for the country is considered from the year 2007-08 to 2010-11 and the following table presents the growth rate data.

Table 9.5

Nominal GDP Growth Rate

Year	Nominal Growth Rate
2007-08	15.91%
2008-09	15.75%
2009-10(QE)	14.86%
20010-11(AE)	17.50%

Source: Central Statistical Office (CSO)

Under this assumption, the Tax base for the years from 2004-05 to 2010-11 are calculated using the above growth rates and corresponding results are presented in the table below.

Table 9.6

Estimation of Tax base

Year	Tax base (in Lakh Rs)
2007-08	25,31,04,133
2008-09	29,29,68,034
2009-10	33,65,03,084
20010-11	39,53,91,124

9.5 CALCULATION OF REVENUE NEUTRAL RATE (RNR)

Revenue Neutral Rate (RNR) is the rate of GST required to generate the same revenue as was realized in the base year from taxes that are being subsumed. Information required for calculating RNR is (i) The Revenue collections from the subsumed taxes in the base year and (ii) The Potential tax base for GST in the base year.

9.5.1 TAXES PROPOSED TO BE SUBSUMED UNDER GST

For Union Government: From the Union Government 2010-11 Accounts, the total amount of taxes that are proposed to be subsumed under G.S.T is presented here under.

Table 9.7

**Taxes that are proposed to be subsumed under G.S.T
For Union Govt. for the year 2010-11(Actual)**

(Rs In Lakh)	
Tax Revenue	2010-2011
Total Union Excise Duties	1,38,29,904
Total Service Tax	71,01,587
Grand Total	2,09,31,491

Source: <http://indiabudget.nic.in/rec.asp>

Thus, the Government of India taxes to be subsumed works out to 2,09,31,491 Rs in lakh.

As far as computation of States RNR is concerned, two independent scenarios are envisaged below:

Scenario – I: Only the present VAT – CST tax bases are subsumed into GST. All other taxes remained the same and continue to be levied by the State Government independently. The total tax collection of all States and Union Territories proposed to be subsumed in this case for the financial year 2009-10 is presented below.

Table 9.8**Taxes that are proposed to be subsumed under G.S.T****for All States & UTs - for the year 2009-10****(Scenario-I)**

SCENARIO I		
Revenue Receipts of All States and Union Territories with Legislature (Rs. Lakh)		
Item	2009-10 (Accounts)	
Sales Tax (a to f)		2,31,22,316
a) State Sales Tax/VAT	2,27,18,907	
b) Central Sales Tax	1,80,193	
c) Sales Tax on Motor Spirit and Lubricants	1,00,178	
d) Surcharge on Sales Tax	1,546	
e) Receipts of Turnover Tax	7,108	
f) Other Receipts	1,14,384	
Total Collections of Taxes proposed to be subsumed under GST		2,31,22,316

Source: State Finances a Study of Budgets of RBI for the year 2012.

Scenario – II: All taxes levied by the State Governments subsumed into GST and no other tax is levied by the State Government in these sectors. Scenario – II envisages a broader, more encompassing GST is put in place, but with a

concomitant higher revenue neutral rate. The total tax collection of all States and Union Territories proposed to be subsumed in this scenario for the financial year 2009-10 is presented below

Table 9.9
Taxes that are proposed to be subsumed under G.S.T
for All States & UTs- for the year 2009-10
(Scenario-II)

(Rs. in Lakh)			
Item	2009-10 (Accounts)		
Taxes on Property and Capital Transactions			40,55,629
Stamps and Registration Fees		40,55,629	
Taxes on Commodities and Services (i to vi)			3,24,40,321
i) Sales Tax (a to f)		2,31,22,316	
a) State Sales Tax/VAT	2,27,18,907		
b) Central Sales Tax	1,80,193		
c) Sales Tax on Motor Spirit and Lubricants	1,00,178		
d) Surcharge on Sales Tax	1,546		
e) Receipts of Turnover Tax	7,108		
f) Other Receipts	1,14,384		
ii) State Excise		50,34,720	
iii) Taxes on Vehicles		19,63,784	
iv) Taxes on Goods and Passengers		9,85,697	
v) Taxes and Duties on Electricity		12,22,599	
vi) Entertainment Tax		1,11,205	
Total Collections of Taxes proposed to be subsumed under GST			3,64,95,950

Source: State Finances a Study of Budgets of RBI for the year 2012.

9.6 CONCLUSION

The National tax base has been estimated based on consumption, using I-O tables. This National Consumption based tax base is applied to both the Centre and the aggregate of the States and U.Ts. The States and U.Ts are not treated individually but as one unit.

The total amount of taxes proposed to be subsumed under G.S.T was computed in paras 4.35 (GOI), 4.36 (all States and UTs aggregate, for Scenarios I and II). The RNR is then derived as below.

$$RNR = \frac{\text{Total Tax collections from the subsumed taxes in the base year}}{\text{The Potential tax base for GST in the base year}} \times 100$$

The Revenue Neutral Rate (RNR) for the union government and for All States including U.Ts are calculated and are presented in the following table

Table 9.10
RNR for Union Govt and for All States & UTs

Revenue Neutral Rate (in %)		
RNR For Union Govt. (based on 2010-11 Budget(Actual) figures)		5.29
RNR For All states & UTs (based on 2009-10 Budget (Actual) Figures & UTS)	(Scenario -I)	6.87
	(Scenario -II)	10.85

Thus assuming that all States and Union Territories can be treated as one unit, the RNR to all States and Union Territories is 6.87% and 10.85% for scenario-I and II respectively. For the union the RNR is 5.29%.

APPENDIX TO CHAPTER 8

Bill No. 22 of 2011

THE CONSTITUTION (ONE HUNDRED AND FIFTEENTH AMENDMENT) BILL, 2011

A
BILL

further to amend the Constitution of India.

BE it enacted by Parliament in the Sixty-second Year of the Republic of India as follows:—

1. (1) This Act may be called the Constitution (One Hundred and Fifteenth Amendment) Act, 2011. Short title and commencement.

(2) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint, and different dates may be appointed for different provisions of this Act and any reference in any such provision to the commencement of this Act shall be construed as a reference to the commencement of that provision.

2. After article 246 of the Constitution, the following article shall be inserted, Insertion of new article 246A.
namely:—

10 '246A. Notwithstanding anything contained in articles 246 and 254, Parliament and the Legislature of every State, have power to make laws with respect to goods and services tax imposed by the Union or by that State respectively: Special provision with respect to goods and services tax.

Provided that Parliament has exclusive power to make laws with respect to goods and services tax where the supply of goods, or of services, or both takes place in the course of inter-State trade or commerce.

Explanation.— For the purpose of this article, “State” includes a Union territory with Legislature.’

Amendment of article 248.	3. In article 248 of the Constitution, in clause (1), for the word “Parliament”, the words, figures and letter “Subject to article 246A, Parliament” shall be substituted.	5
Amendment of article 249.	4. In article 249 of the Constitution, in clause (1), after the words “with respect to”, the words “goods and services tax or” shall be inserted.	
Amendment of article 250.	5. In article 250 of the Constitution, in clause (1), after the words “with respect to”, the words “goods and services tax or” shall be inserted.	10
Amendment of article 268.	6. In article 268 of the Constitution, in clause (1), the words “and such duties of excise on medicinal and toilet preparations” shall be omitted.	
Omission of article 268A.	7. Article 268A of the Constitution [as inserted by section 2 of the Constitution (Eighty-eighth Amendment) Act, 2003] shall be omitted.	15
Amendment of article 269.	8. In article 269 of the Constitution, in clause (1), after the words “consignment of goods”, the words, figures and letter “except as provided in article 269A” shall be inserted.	
Insertion of new article 269A.	9. After article 269 of the Constitution, the following article shall be inserted, namely:—	
Levy and collection of goods and services tax in course of inter-State trade or commerce.	‘269A. (1) Goods and services tax on supplies in the course of inter-State trade or commerce shall be levied and collected by the Government of India and such tax shall be apportioned between the Union and the States in the manner as may be prescribed by Parliament by law.	20
	<i>Explanation I.</i> — For the purposes of this clause, supply of goods or of services or both in the course of import into the territory of India shall be deemed to be supply of goods, or of services, or both in the course of inter-State trade or commerce.	25
	<i>Explanation II.</i> — For the purpose of this article, “State” includes a Union territory with Legislature.	
	(2) Parliament may, by law, formulate the principles for determining when a supply of goods, or of services, or both takes place in the course of inter-State trade or commerce.’	30
Amendment of article 270.	10. In article 270 of the Constitution,—	
	(i) in clause (1), for the words, figures and letter “articles 268, 268A and 269”, the words, figures and letter “articles 268, 269 and 269A” shall be substituted;	
	(ii) after clause (1), the following clause shall be inserted, namely:—	
	“(1A) Goods and services tax levied and collected by the Government of India shall also be distributed between the Union and the States in the manner provided in clause (2).”	35
Amendment of article 271.	11. In article 271 of the Constitution, after the words “in those articles”, the words “except the goods and services tax” shall be inserted.	
Insertion of new articles 279A and 279B.	12. After article 279 of the Constitution, the following articles shall be inserted, namely:—	40
Goods and Services Tax Council.	‘279A. (1) The President shall, within sixty days from the date of commencement of the Constitution (One Hundred and Fifteenth Amendment) Act, 2011, by order, constitute a Council to be called the Goods and Services Tax Council.	
	(2) The Goods and Services Tax Council shall consist of the following members, namely:—	45
	(a) the Union Finance Minister Chairperson;	
	(b) the Union Minister of State in charge of Revenue ... Member;	
	(c) the Minister in charge of Finance or Taxation or any other Minister nominated by each State Government Members.	50

(3) The Members of the Goods and Services Tax Council referred to in sub-clause (c) of clause (2) shall, as soon as may be, choose one amongst themselves to be the Vice-Chairperson of the Council for such period as they may decide.

(4) The Goods and Services Tax Council shall make recommendations to the Union and the States on—

(a) the taxes, cesses and surcharges levied by the Centre, the States and the local bodies which may be subsumed in the goods and services tax;

(b) the goods and services that may be subjected to or exempted from the goods and services tax;

(c) the threshold limit of turnover below which goods and services tax may be exempted;

(d) the rates of goods and services tax; and

(e) any other matter relating to the goods and services tax, as the Council may decide.

(5) While discharging the functions conferred by this article, the Goods and Services Tax Council shall be guided by the need for a harmonised structure of goods and services tax and for the development of a harmonised national market for goods and services.

(6) One-third of the total number of members of the Goods and Services Tax Council shall constitute the quorum at its meetings.

(7) The Goods and Services Tax Council shall determine the procedure in the performance of its functions.

(8) Every decision of the Goods and Services Tax Council taken at a meeting shall be with the consensus of all the members present at the meeting.

(9) No act or proceedings of the Goods and Services Tax Council shall be invalid merely by reason of—

(a) any vacancy in, or any defect in, the constitution of the Council; or

(b) any defect in the appointment of a person as a Member of the Council; or

(c) any irregularity in the procedure of the Council not affecting the merits of the case.

Explanation.—For the purposes of this article, “State” includes a Union territory with Legislature.

279B. (1) Parliament may, by law, provide for the establishment of a Goods and Services Tax Dispute Settlement Authority to adjudicate any dispute or complaint referred to it by a State Government or the Government of India arising out of a deviation from any of the recommendations of the Goods and Services Tax Council constituted under article 279A that results in a loss of revenue to a State Government or the Government of India or affects the harmonised structure of the goods and services tax.

Goods and
Services Tax
Dispute
Settlement
Authority.

(2) The Goods and Services Tax Dispute Settlement Authority shall consist of a Chairperson and two other members.

(3) The Chairperson of the Goods and Services Tax Dispute Settlement Authority shall be a person who has been a Judge of the Supreme Court or Chief Justice of a High Court to be appointed by the President on the recommendation of the Chief Justice of India.

(4) The two other members of the Goods and Services Tax Dispute Settlement Authority shall be persons of proven capacity and expertise in the field of law, economics or public affairs to be appointed by the President on the recommendation of the Goods and Services Tax Council.

(5) The Goods and Services Tax Dispute Settlement Authority shall pass suitable orders including interim orders.

(6) A law made under clause (1) may specify the powers which may be exercised by the Goods and Services Tax Dispute Settlement Authority and provide for the procedure to be followed by it. 5

(7) Notwithstanding anything in this Constitution, Parliament may by law provide that no Court other than the Supreme Court shall exercise jurisdiction in respect of any such adjudication or dispute or complaint as is referred to in clause (1).

Explanation.— For the purpose of this article, “State” includes a Union territory with Legislature. 10

Amendment of article 286.

13. In article 286 of the Constitution,—

(i) in clause (1),—

(A) for the words “the sale or purchase of goods where such sale or purchase takes place”, the words “the supply of goods or of services or both, where such supply takes place” shall be substituted; 15

(B) in sub-clause (b), for the word “goods”, at both the places where it occurs, the words “goods or services or both” shall be substituted;

(ii) in clause (2), for the words “sale or purchase of goods takes place”, the words “supply of goods or of services or both” shall be substituted;

(iii) for clause (3), the following clauses shall be substituted, namely:— 20

“(3) Any law of a State shall, in so far as it imposes, or authorises the imposition of a tax on the sale or purchase of goods declared by Parliament by law to be of special importance in inter-State trade or commerce be subject to such restrictions and conditions in regard to the system of levy, rates and other incidents of tax as Parliament may by law specify. 25

(4) Nothing in clause (3) shall apply to a law of a State insofar as it imposes or authorises the imposition of goods and services tax.”

Amendment of article 366.

14. In article 366 of the Constitution,—

(i) after clause (12), the following clause shall be inserted, namely:—

“(12A) “goods and services tax” means any tax on supply of goods or services or both except taxes on the supply of the following goods, namely:— 30

(i) petroleum crude;

(ii) high speed diesel;

(iii) motor spirit (commonly known as petrol);

(iv) natural gas; 35

(v) aviation turbine fuel; and

(vi) alcoholic liquor for human consumption.’;

(ii) clause (29A) shall be omitted.

Amendment of article 368.

15. In article 368 of the Constitution, in clause (2), in the proviso, in clause (a), for the words and figures “article 162 or article 241”, the words, figures and letters “article 162, article 241, article 279A or article 279B” shall be substituted. 40

Amendment of Sixth Schedule.

16. In the Sixth Schedule to the Constitution, in paragraph 8, in sub-paragraph (3),—

(i) in clause (c), the word “and” occurring at the end shall be omitted;

(ii) in clause (d), the word “and” shall be inserted at the end;

(iii) after clause (d), the following clause shall be inserted, namely:— 45

“(e) taxes on entertainment and amusements.”

17. In the Seventh Schedule to the Constitution,—

(a) in List I — Union List,—

(i) for entry 84, the following entry shall be substituted, namely:—

“84. Duties of excise on the following goods manufactured or produced in India, namely:—

(a) petroleum crude;

(b) high speed diesel;

(c) motor spirit (commonly known as petrol);

(d) natural gas;

(e) aviation turbine fuel; and

(f) tobacco and tobacco products.”;

(ii) entries 92 and 92C shall be omitted;

(b) in List II — State List,—

(i) for entry 52, the following entry shall be substituted, namely:—

“52. Taxes on the entry of goods into a local area for consumption, use or sale therein to the extent levied and collected by a Panchayat or a Municipality.”;

(ii) for entry 54, the following entry shall be substituted, namely:—

“54. Taxes on the sale, other than sale in the course of inter-State trade or commerce or sale in the course of international trade and commerce of, petroleum crude, high speed diesel, natural gas, motor spirit (commonly known as petrol), aviation turbine fuel and alcoholic liquor for human consumption.”;

(iii) entry 55 shall be omitted;

(iv) for entry 62, the following entry shall be substituted, namely:—

“62. Taxes on entertainments and amusements to the extent levied and collected by a Panchayat or a Municipality or a Regional Council or a District Council.”.

18. Notwithstanding anything in this Act, any provision of any law relating to tax on goods or services or on both in force in any State immediately before the commencement of this Act, which is inconsistent with the provisions of the Constitution as amended by this Act shall continue to be in force until amended or repealed by a competent Legislature or other competent authority or until expiration of one year from such commencement, whichever is earlier.

Transitional
provision.

19. (1) If any difficulty arises in giving effect to the provisions of the Constitution as amended by this Act (including any difficulty in relation to the transition from the provisions of the Constitution as they stood immediately before the date of assent of the President to this Act to the provisions of the Constitution as amended by this Act), the President may, by order, make such provisions, including any adaptation or modification of any provision of the Constitution or law, as appear to the President to be necessary or expedient for the purpose of removing the difficulty:

Power of the
President to
remove
difficulties.

Provided that no such order shall be made after the expiry of three years from the date of such assent.

(2) Every order made under sub-section (1) shall, as soon as may be after it is made, be laid before each House of Parliament.

APPENDIX I to CHAPTER 9

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) -2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	1	2	3	4	5	6	7	8	9	10	11	12
1	Paddy		6831648	35423				57890	77916		2140		87	
2	Wheat		215816	2347632					107122				24	
3	Jowar				35162									
4	Bajra					11097								
5	Maize						32018							
6	Gram			139204				126311	2753					
7	Pulses		49421	37830				2307	1596329					
8	Sugarcane			7801						252566				
9	Groundnut										234892			
10	Coconut											5681		
11	Other oilseeds												328846	
12	Jute													
13	Cotton													
14	Tea													
15	Coffee													
16	Rubber													
17	Tobacco													
18	Fruits													
19	Vegetables													
20	Other crops		16357	49892	4250		25	254	95728		1085		31415	
21	Milk and milk products													
22	Animal services(agricultural)		831514	159593	281880	68860	146504	77077	300987	71225	134247		282804	22410
23	Poultry & Eggs													
24	Other liv.st. produ.		244632	31715	67680	30617	112999	1307	32267	41903	62473	94712	107955	15876
25	Forestry and logging													
26	Fishing													
27	Coal and lignite													
28	Natural gas													
29	Crude petroleum													
30	Iron ore													
31	Manganese ore													
32	Bauxite													
33	Copper ore													
34	Other metallic minerals													

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

													Rs. Lakhs	
Code/ Sector	Commodity	Industry	1	2	3	4	5	6	7	8	9	10	11	12
35	Lime stone													
36	Mica													
37	Other non metallic minerals													
38	Sugar													
39	Khandsari, boora													
40	Hydrogenated oil(vanaspati)													
41	Edible oils other than vanaspati													
42	Tea and coffee processing													
43	Miscellaneous food products		42762											
44	Beverages													
45	Tobacco products													
46	Khadi, cotton textiles(handlooms)													
47	Cotton textiles													
48	Woolen textiles													
49	Silk textiles													
50	Art silk, synthetic fiber textiles													
51	Jute, hemp, mesta textiles		94482	50666					9507					
52	Carpet weaving													
53	Readymade garments		948	883	87	73	127	95	47	215	74		300	
54	Miscellaneous textile products													
55	Furniture and fixtures-wooden		1014	943	92	79	136	101	50	230	79		321	
56	Wood and wood products													
57	Paper, paper prods. & newsprint		986	917	91	77	131	99	49	224	77		312	
58	Printing and publishing		1727	1607	158	135	232	175	86	391	135		546	
59	Leather footwear													
60	Leather and leather products													
61	Rubber products		52	48	5	5	7	5	2	12	4		17	
62	Plastic products													
63	Petroleum products		310273	138424	25723	31418	31294	34869	59075	22472	25113	5950	39748	2607
64	Coal tar products													
65	Inorganic heavy chemicals													
66	Organic heavy chemicals													
67	Fertilizers		978740	748413	82667	50786	135296	49796	108138	244334	80552	24613	256608	13077
68	Pesticides		118408	119363	41	22	134	581	1504	456	592	44403	1138	68

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	1	2	3	4	5	6	7	8	9	10	11	12
69	Paints, varnishes and lacquers													
70	Drugs and medicines													
71	Soaps, cosmetics & glycerin													
72	Synthetic fibers, resin													
73	Other chemicals													
74	Structural clay products													
75	Cement													
76	Other non-metallic mineral prods.													
77	Iron, steel and ferro alloys													
78	Iron and steel casting & forging													
79	Iron and steel foundries													
80	Non-ferrous basic metals													
81	Hand tools, hardware													
82	Miscellaneous metal products													
83	Tractors and agri. implements		36332	43640	910	688	763	532	576	1024	460		1676	74
84	Industrial machinery(F & T)		19018	8763										
85	Industrial machinery(others)													
86	Machine tools													
87	Other non-electrical machinery		11	11			2	1	1	3	1		3	
88	Electrical industrial Machinery													
89	Electrical wires & cables													
90	Batteries		11	9		2	1	1	1	2	1		3	
91	Electrical appliances		342	318	31	27	45	34	17	78	26		109	
92	Communication equipments													
93	Other electrical Machinery													
94	Electronic equipments(incl.TV)		1125	1047	104	87	151	114	56	255	88		356	
95	Ships and boats													
96	Rail equipments													
97	Motor vehicles		1710	1590	157	134	230	172	84	389	134		539	
98	Motor cycles and scooters													
99	Bicycles, cycle-rickshaw													
100	Other transport equipments		444	308	198	141	109	70	133	101	69		220	23
101	Watches and clocks													
102	Medical, precision&optical instru.s													

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	1	2	3	4	5	6	7	8	9	10	11	12
103	Jems & jewelry													
104	Aircraft & spacecraft													
105	Miscellaneous manufacturing		262	244	25	21	35	26	13	60	21		83	
106	Construction		180612	134037	9514	7807	11677	8604	5512	18713	6865		27053	300
107	Electricity		500450	336926	7833	14891	32931	18906	10139	61589	11708		12973	
108	Water supply		2084	1938	191	162	279	209	104	472	162		659	
109	Railway transport services		86322	20713	1700	1045	2497	1623	6682	4284	1504	432	4657	227
110	Land tpt including via pipeline		311325	150353	21460	11328	31439	10820	58086	33509	20843	16053	46274	3644
111	Water transport		34294	13542	481	443	680	696	2249	756	477	299	3526	65
112	Air transport		1163	2110	184	150	256	192	298	431	151		668	
113	Supporting and aux. tpt activities		37097	17846	1847	967	2647	1115	6128	3296	1811	1186	4253	294
114	Storage and warehousing													
115	Communication		2413	2244	220	189	323	243	120	548	189		763	
116	Trade		1072375	492722	31815	11871	29525	29125	409600	124325	39731	25788	122358	2763
117	Hotels and restaurants		2253	2097	204	175	303	227	112	511	176		713	
118	Banking		220139	185695	32429	27708	31347	42112	36165	55054	33694	31517	51710	3179
119	Insurance		6006	3826					1452			6714	7749	
120	Ownership of dwellings													
121	Education and research		432	402	41	33	58	43	22	99	33		137	
122	Medical and health													
123	Business services		2986	3016	293	254	432	327	160	736	254		1024	
124	Computer & related activities		5	4						2			2	
125	Legal services													
126	Real estate activities			108	13	10	17	11	6	27	10		34	
127	Renting of machinery & equipment		23	24	3	2	4	3	1	6	2		8	
128	O.com, social&personal services		5	4						2			2	
129	Other services		1550	1442	140	121	208	157	77	352	121		491	
130	Public administration													
	Total Input		12259569	5295335	607630	271426	604863	466230	2929355	940653	659993	257348	1338162	64606
	NIT		-1112489	-859763	-20829	-7642	-37689	-20682	-69907	-119987	-43908	-3608	-73203	-3245
	Total Input+NIT		11147080	4435572	586801	263784	567174	445548	2859448	820666	616086	253740	1264958	61361
	GVA		10025195	8541659	513094	669078	969371	1025591	2986724	3138471	1652252	461798	2932364	149013
	Total Output		21172275	12977231	1099896	932862	1536545	1471139	5846172	3959137	2268338	715538	4197322	210374

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs													
Code/ Sector	Commodity	Industry	13	14	15	16	17	18	19	20	21	22	23	24	25
1	Paddy									226773			242155	254	
2	Wheat									70225	15934	26604		36056	
3	Jowar												109813		
4	Bajra										6255	339	123861	3399	
5	Maize									451	1361		134941	4153	
6	Gram									47904	59928	38833		73544	
7	Pulses								320	23311	102917	39067		18780	
8	Sugarcane										55799				
9	Groundnut														
10	Coconut														
11	Other oilseeds														
12	Jute														
13	Cotton		28144												
14	Tea														
15	Coffee														
16	Rubber														
17	Tobacco						591								
18	Fruits							126140							
19	Vegetables								110695					6062	
20	Other crops								14095	139290	1580792	1684558	20671	1400270	2332
21	Milk and milk products										9586		203	497	
22	Animal services(agricultural)		302363					2987	67654	96535	268276				
23	Poultry & Eggs											5805	123	301	
24	Other liv.st. produ.		179785	48676	61734	35079	832	23749	26549	42230	4698		99	243	
25	Forestry and logging											6905			91889
26	Fishing														
27	Coal and lignite														
28	Natural gas														
29	Crude petroleum														
30	Iron ore														
31	Manganese ore														
32	Bauxite														
33	Copper ore														
34	Other metallic minerals														

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	13	14	15	16	17	18	19	20	21	22	23	24	25
35	Lime stone														
36	Mica														
37	Other non metallic minerals														
38	Sugar														
39	Khandsari, boora														
40	Hydrogenated oil(vanaspati)														
41	Edible oils other than vanaspati										175513	209824		127701	
42	Tea and coffee processing														
43	Miscellaneous food products										33387	12099	111014	30449	
44	Beverages														
45	Tobacco products														
46	Khadi, cotton textiles(handlooms)														121
47	Cotton textiles										158906	1202		6280	12
48	Woolen textiles														27
49	Silk textiles														
50	Art silk, synthetic fiber textiles														
51	Jute, hemp, mesta textiles									28981					461
52	Carpet weaving														
53	Readymade garments	239					26	133	140	154					
54	Miscellaneous textile products														54766
55	Furniture and fixtures-wooden	256					28	142	149	164					2851
56	Wood and wood products														395
57	Paper, paper prods. & newsprint	248					32	137	145	160					36777
58	Printing and publishing	436					52	242	253	280					7534
59	Leather footwear														
60	Leather and leather products														
61	Rubber products	13						7	8	8					31402
62	Plastic products														4491
63	Petroleum products	34319	1908	1110	1779	2016	40540	57882	142840						139593
64	Coal tar products														
65	Inorganic heavy chemicals														
66	Organic heavy chemicals														
67	Fertilizers	230842	10147		31441	29377	75347	107513	298786						2930
68	Pesticides	3800	1440	7364	24226	110	382	545	40647						2643

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs													
Code/ Sector	Commodity / Industry	13	14	15	16	17	18	19	20	21	22	23	24	25	
69	Paints, varnishes and lacquers													4	
70	Drugs and medicines									21180	8422		16490		
71	Soaps, cosmetics & glycerin														
72	Synthetic fibers, resin														
73	Other chemicals														
74	Structural clay products													24	
75	Cement													15	
76	Other non-metallic mineral prods.													4	
77	Iron, steel and ferro alloys													42	
78	Iron and steel casting & forging														
79	Iron and steel foundries														
80	Non-ferrous basic metals													513	
81	Hand tools, hardware														
82	Miscellaneous metal products													6246	
83	Tractors and agri. implements	1422			3235	261	16110	18435	32368	1478		1831	4482	26706	
84	Industrial machinery(F & T)													46	
85	Industrial machinery(others)									1514		1877	4591		
86	Machine tools													272	
87	Other non-electrical machinery	2					2	1	1					7996	
88	Electrical industrial Machinery													2	
89	Electrical wires & cables														
90	Batteries	3					1	2	2					6594	
91	Electrical appliances	87				10	48	50	56					269	
92	Communication equipments													66	
93	Other electrical Machinery														
94	Electronic equipments(incl.TV)	284				32	157	166	182					1441	
95	Ships and boats													11109	
96	Rail equipments														
97	Motor vehicles	430				52	240	252	277					44337	
98	Motor cycles and scooters													3792	
99	Bicycles, cycle-rickshaw													4790	
100	Other transport equipments	202			1019	52	4935	5660	10032						
101	Watches and clocks														
102	Medical, precision&optical instru.s														

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	13	14	15	16	17	18	19	20	21	22	23	24	25
103	Jems & jewelry														
104	Aircraft & spacecraft														
105	Miscellaneous manufacturing		66				8	37	39	42					41969
106	Construction		21927		10595	9590	2982	73973	130198	140944	2125	845	1986	3405	74275
107	Electricity		59029				7358	22699	26235	60112					9349
108	Water supply		527				65	293	307	337					618
109	Railway transport services		4064	175	5	522	505	1500	2166	8936	6843	7182	3661	5845	13531
110	Land tpt including via pipeline		60652	7918	8725	8312	3145	19231	22434	78643	203310	201320	25164	170000	374685
111	Water transport		972	83	80	168	81	585	826	3391	1208	733	3334	1090	2270
112	Air transport		480			20	58	360	416	793	3640	3594	161	3068	310
113	Supporting and aux. tpt activities		5348	564	579	703	328	1319	1945	8164	22593	22308	3386	18890	3401
114	Storage and warehousing														
115	Communication		607				74	338	354	391					17638
116	Trade		36714	7002	9841	12601	1478	61194	73167	195310	1153310	1122630	138701	938866	77401
117	Hotels and restaurants		568				70	316	331	366					164492
118	Banking		43096	3137	3619	3666	1790	17850	41605	94269	25065		6915	20108	5261
119	Insurance			989	6612	4226		2313	3338	479					
120	Ownership of dwellings														
121	Education and research		109				12	61	64	70					
122	Medical and health														
123	Business services		818				95	455	476	525					17548
124	Computer & related activities								1	1					26821
125	Legal services														22028
126	Real estate activities		31					16	17	19					
127	Renting of machinery & equipment		7					3	4	4					3828
128	O.com, social&personal services								2	1					6386
129	Other services		391				46	218	229	251					50844
130	Public administration														
	Total Input		1018283	82040	110265	136586	54553	558730	743548	1966447	3660052	3379558	929895	2894823	1405148
	NIT		-73812	-2066	1945	-8499	-9822	-9891	-16867	-120465	-255364	-264642	-46589	-227276	97757
	Total Input+NIT		944470	79974	112209	128087	44731	548839	726682	1845983	3404687	3114916	883306	2667547	1502905
	GVA		2084385	295875	162195	579986	211539	6119798	7839604	4948206	13120796		1827194	2960050	8131095
	Total Output		3028855	375849	274404	708073	256270	6668637	8566286	6794189	16525483	3114916	2710500	5627597	9634000

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs														
Code/ Sector	Commodity \ Industry	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
1	Paddy															
2	Wheat															
3	Jowar															
4	Bajra															
5	Maize															
6	Gram															
7	Pulses															
8	Sugarcane													2087979	540317	
9	Groundnut															
10	Coconut															
11	Other oilseeds															
12	Jute															
13	Cotton															
14	Tea															
15	Coffee															
16	Rubber															
17	Tobacco															
18	Fruits													1264	2804	
19	Vegetables													185	19	
20	Other crops													567	228	
21	Milk and milk products													3		
22	Animal services(agricultural)															
23	Poultry & Eggs															
24	Other liv.st. produ.															
25	Forestry and logging															
26	Fishing	120216														
27	Coal and lignite		105121			1799								548	238	
28	Natural gas			1242										15		
29	Crude petroleum															
30	Iron ore															
31	Manganese ore															
32	Bauxite									1						
33	Copper ore															
34	Other metallic minerals															

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Code/ Sector	Commodity	Industry	Rs. Lakhs													
			26	27	28	29	30	31	32	33	34	35	36	37	38	39
35	Lime stone										1					
36	Mica															
37	Other non metallic minerals										6				4	
38	Sugar														9305	1194
39	Khandsari, boora														10745	
40	Hydrogenated oil(vanaspati)														2	372
41	Edible oils other than vanaspati															
42	Tea and coffee processing															
43	Miscellaneous food products	23291													76	
44	Beverages														224	86
45	Tobacco products															
46	Khadi, cotton textiles(handlooms)															
47	Cotton textiles															
48	Woolen textiles															
49	Silk textiles															
50	Art silk, synthetic fiber textiles															
51	Jute, hemp, mesta textiles	46281													413	109
52	Carpet weaving															
53	Readymade garments		3599	1679	8199	3065	359	33	112	27	82		51			
54	Miscellaneous textile products	121671													876	245
55	Furniture and fixtures-wooden		2910	1357	6630	2478	290	27	91	22			87			
56	Wood and wood products	2604	17970	1625			578			280		5	986	3013	1448	
57	Paper, paper prods. & newsprint		3768	338	1650	535	61	6	18	9	70	1	230	8447	1366	
58	Printing and publishing		1695	241	1177	418	49	4	30	5	103		111			
59	Leather footwear															
60	Leather and leather products															
61	Rubber products		15554	3559	17386	10801	169	32	455	1661	1909	2	2982			
62	Plastic products												84	3803	1761	
63	Petroleum products	62362	117653	14622	101256	54964	876	297	831	4527	6656	61	24796	69698	2473	
64	Coal tar products															
65	Inorganic heavy chemicals								572				1	2891	1179	
66	Organic heavy chemicals													211	66	
67	Fertilizers															
68	Pesticides															

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	26	27	28	29	30	31	32	33	34	35	36	37	38	39
69	Paints, varnishes and lacquers															
70	Drugs and medicines															
71	Soaps, cosmetics & glycerin															
72	Synthetic fibers, resin															
73	Other chemicals		4892	138923	28521	87541	35688		175	461	6415	10081	26	64737	724	
74	Structural clay products													4		
75	Cement															
76	Other non-metallic mineral prods.				2231	24470									152	43
77	Iron, steel and ferro alloys		1458											10		
78	Iron and steel casting & forging															
79	Iron and steel foundries		766											6		
80	Non-ferrous basic metals		101													
81	Hand tools, hardware		115	5066	4203	37750					2856	10				
82	Miscellaneous metal products		2367	35388	5739	25676	35045	182	364	259	306		5	1464		
83	Tractors and agri. implements															
84	Industrial machinery(F & T)														7760	1531
85	Industrial machinery(others)			55113	14754	72468	11895	279	475	92	3385	192		2777	7548	
86	Machine tools			28226	2612											
87	Other non-electrical machinery			85477	41417	197462	35596	1044	583	196	3940	10083	14	23483	163	142
88	Electrical industrial Machinery														939	
89	Electrical wires & cables														772	
90	Batteries											2		7		
91	Electrical appliances			66	31	150	56	7	1	2		6		4	566	
92	Communication equipments														669	
93	Other electrical Machinery														670	
94	Electronic equipments(incl.TV)			1171	485	2368	854	99	9	30	9	1			497	
95	Ships and boats		152522													
96	Rail equipments															
97	Motor vehicles			57995	5893	4624	606	62	6	26	795	317	1	1148	2287	
98	Motor cycles and scooters											1		1		
99	Bicycles, cycle-rickshaw											8		5		
100	Other transport equipments															
101	Watches and clocks															
102	Medical, precision&optical instru.s															

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	26	27	28	29	30	31	32	33	34	35	36	37	38	39
103	Jems & jewelry															
104	Aircraft & spacecraft															
105	Miscellaneous manufacturing			677	718	9453	437	15	1	2	159	17		23	2134	
106	Construction			15768	23699	242122	3516	71	205	159	4539	6971		16285	18543	1894
107	Electricity			159335	26289	55742	26723	2589	1445	928	10170	6994	59	18988	36801	6951
108	Water supply			1215	997	4869	123	39	1	12	61	34		1		
109	Railway transport services		955	46405	10082	48701	4071	169	106	68	333	775	1	13613	1591	369
110	Land tpt including via pipeline		46007	160318	19615	73017	20291	952	485	652	2603	4421	37	26182	31021	8237
111	Water transport		1131	3691	566	3067	573	15	3	11	56	66	1	247	707	28
112	Air transport		22	2871	1246	6068	1597	60	4	1	66	41	3	162	339	844
113	Supporting and aux. tpt activities		4373	16037	6314	9032	1960	231	87	109	520	175	1	885	2731	627
114	Storage and warehousing			889	1214	5931	332	1	2	18	232		1			
115	Communication			7609	1410	3213	3808	218	83	338	470	436	1	2329	10486	6169
116	Trade		71982	94927	10985	58425	18467	659	137	399	3112	2651	16	10050	925489	237237
117	Hotels and restaurants			6364	2859	13964	4252	866	25	69	110	399	23	15540		
118	Banking		2817	82533	12955	54302	12157	953	625	674	3125	3123	69	29196	97636	27703
119	Insurance		2712	2366	1173	5717	1611	184	89	137	276	465	18	1394	16169	4855
120	Ownership of dwellings															
121	Education and research			98362	3185	16625	7338	1254		206	87		67			
122	Medical and health															
123	Business services			20174	5156	27626	7136	354	183	342	6867	12	1	75	2417	681
124	Computer & related activities			378	111	376	2456	5	83	280	22	23		121	5079	1311
125	Legal services			1392	22	66	17782	206	1	1295	6451	671		9632	23	140
126	Real estate activities															
127	Renting of machinery & equipment			1947	378	358	2564	1081	1222	1376	2441	2487		18725	216	84
128	O.com, social&personal services			5	2	11	4	1				18		113		
129	Other services			19387	10944	53869	20588	965	1169	996	3031	2897		11654	16040	927
130	Public administration															
	Total Input		668646	1418345	270469	1281360	351588	14940	7969	11250	68974	62194	413	298192	3390441	853679
	NIT		14554	84462	21391	116062	41666	938	822	1043	4789	5683	23	24561	-307774	-85959
	Total Input+NIT		683200	1502807	291859	1397422	393253	15879	8791	12293	73763	67877	436	322753	3082668	767720
	GVA		3893000	3635282	1272657	3107398	1944651	104725	48048	37803	319497	173008	1170	1837045	512527	126079
	Total Output		4576200	5138089	1564516	4504820	2337904	120604	56839	50096	393260	240885	1606	2159798	3595194	893799

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	40	41	42	43	44	45	46	47	48	49	50	51	52
1	Paddy		289	439		438782	2522								
2	Wheat		463	668		730682	272								153
3	Jowar					45217	14380								
4	Bajra					49140	19982								
5	Maize		488	1437		105133	2346								
6	Gram		890			38889	69								
7	Pulses		2018	885		297577	479								
8	Sugarcane		14767			428196	58392	46909							
9	Groundnut		175777	940449		14070									
10	Coconut		11510	191852		3177	2	8						4112	
11	Other oilseeds		704094	2073111		135258	64								
12	Jute								186	1419				186032	189
13	Cotton		4834	12503		4			105492	3041566		5618	5805		533
14	Tea				336943	11491									
15	Coffee				210713	9058									
16	Rubber					5561									
17	Tobacco		6					129427							
18	Fruits		457			3039206	300787								
19	Vegetables		534	1733		56345	3089								
20	Other crops		50291	84444		130140	15491	4127						1111	5
21	Milk and milk products		21	79		1263141	6821								
22	Animal services(agricultural)														
23	Poultry & Eggs			17		21950									
24	Other liv.st. produ.		4			303287		2		1243	64812	6590	1		
25	Forestry and logging		1			3499	1132	76060		372	18	216	262		
26	Fishing		48			740417		40							
27	Coal and lignite		2202	4402	1440	9275	2745	1949	1705	15009	1017	692	30574	6140	606
28	Natural gas							3					70		
29	Crude petroleum														
30	Iron ore														
31	Manganese ore														
32	Bauxite														
33	Copper ore														
34	Other metallic minerals														

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	40	41	42	43	44	45	46	47	48	49	50	51	52
35	Lime stone													3	
36	Mica														
37	Other non metallic minerals				1605								3900	842	
38	Sugar		493	582	1915	296677	144036	485							
39	Khandsari, boora					178436	256312								
40	Hydrogenated oil(vanaspati)		138286	50360		64444	762								
41	Edible oils other than vanaspati		446485	421569		343239	969								
42	Tea and coffee processing				18480	5096	854	300							
43	Miscellaneous food products		106269	18623	24402	1238331	598829	74155	1922	51202					
44	Beverages		19		1	4660	124371						59		
45	Tobacco products							261293							
46	Khadi, cotton textiles(handlooms)								105586	79340	453	3084	6813	313	1634
47	Cotton textiles		394	180		1			149144	651537	1946	18096	45263	1980	7548
48	Woolen textiles								149	4309	152338	70	32234	25646	48710
49	Silk textiles									11605	1000	95891	9916	3624	2123
50	Art silk, synthetic fiber textiles							1029	84613	735784	27094	62377	940341	19667	51422
51	Jute, hemp, mesta textiles		523	1542	606	10417	6267	1971	733	23761	8348	572	8246	28032	18477
52	Carpet weaving									2444	2045	67	18		
53	Readymade garments				36	2347				466722	22409	87	6542		13638
54	Miscellaneous textile products		1124	3066	1622	26155	17025	4258	1252	262831	3091	11227	125098	1859	33705
55	Furniture and fixtures-wooden					948	762						34229		
56	Wood and wood products		41852	10716	4851	70329	1872	26119	4868	22983	465	886	13977	802	1137
57	Paper, paper prods. & newsprint		29436	24252	8578	254588	59591	55544	6886	42563	1315	1611	90001	10280	2369
58	Printing and publishing						228	479							
59	Leather footwear														
60	Leather and leather products									14758	3588		715		2602
61	Rubber products								56	233					2584
62	Plastic products		9571	13197	5879	87074	63330	3054	12335	16698	1560	4979	121235	1166	2156
63	Petroleum products		7863	22809	12859	131050	26853	8960	18164	140232	7280	10098	127699	4628	3477
64	Coal tar products													76	
65	Inorganic heavy chemicals		5644	4155	42	44272	15435	2274	4385	58471	1044	4792	216127	4353	2684
66	Organic heavy chemicals		1670	2280	1367	17968	41376	10728	1732	14137		75502	263295	1742	774
67	Fertilizers		25												
68	Pesticides				5			5650					595		

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	40	41	42	43	44	45	46	47	48	49	50	51	52
69	Paints, varnishes and lacquers		16	21		554	157		30312	65073	1146	1037	41485	5224	837
70	Drugs and medicines		12		350	16337	2066			51			234		
71	Soaps, cosmetics & glycerin		1115	41	98	681	3117	15615	10094	663	129	11	5534	44	350
72	Synthetic fibers, resin				5				1266	23812		2225	650700		1497
73	Other chemicals		23425	69265	403	43252	41349	6918	1235	17764	3079	893	64584	13038	537
74	Structural clay products														
75	Cement														
76	Other non-metallic mineral prods.					34752	1929	265		50			1893	1086	73
77	Iron, steel and ferro alloys														
78	Iron and steel casting & forging												442		
79	Iron and steel foundries														
80	Non-ferrous basic metals			2						343			581		
81	Hand tools, hardware										477	472			
82	Miscellaneous metal products		311	144		13043	1059	3563		125		5073	9	4171	196
83	Tractors and agri. implements														
84	Industrial machinery(F & T)		2351	6089	4137	41040	11540	5499	5011	51828	20622	660	23676	7111	11556
85	Industrial machinery(others)					32	16		587		87	95	210		1
86	Machine tools					253	28			967			366	16	14628
87	Other non-electrical machinery					1984	674	727	295	14315			639		95
88	Electrical industrial Machinery					17				9					
89	Electrical wires & cables														
90	Batteries									57					
91	Electrical appliances									4			73		
92	Communication equipments														
93	Other electrical Machinery														
94	Electronic equipments(incl.TV)									90					
95	Ships and boats														
96	Rail equipments					3									
97	Motor vehicles														
98	Motor cycles and scooters														
99	Bicycles, cycle-rickshaw														
100	Other transport equipments														
101	Watches and clocks														
102	Medical, precision&optical instru.s						45								

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	40	41	42	43	44	45	46	47	48	49	50	51	52
103	Jems & jewelry											628	86		
104	Aircraft & spacecraft														
105	Miscellaneous manufacturing			241	2860	32	376		5453		1712	7501			14984
106	Construction		2099	3661	4796	154585	7866	4368	4926	103087	3849	5319	33415	6239	1785
107	Electricity		26332	56259	64604	335041	80697	9430	53547	478816	19836	10393	151629	55525	4782
108	Water supply				1704	1703		627	2656						
109	Railway transport services		3619	8382	625	50538	6024	16812	2906	11451	735	718	7847	2323	648
110	Land tpt including via pipeline		87146	86162	306078	669361	112443	78255	86810	1397167	54606	41151	215523	39991	37529
111	Water transport		7961	16899	675	34530	13195	2378	248	2801	144	121	1726	344	81
112	Air transport		1214	7139	232	6671	2867	6148	4437	9552	1568	1288	751	874	656
113	Supporting and aux. tpt activities		10193	7983	38769	46558	12545	4552	8329	148257	6296	4345	27540	2792	3738
114	Storage and warehousing														
115	Communication		6468	3739	918	79724	6216	7991	2297	35479	3734	2006	4656	2375	2035
116	Trade		349428	737291	65114	2732235	320818	216866	187781	1006287	87001	71582	750839	160750	61247
117	Hotels and restaurants								3871						
118	Banking		70009	158721	68814	429365	101078	42411	21719	166911	18838	27689	89839	21703	19174
119	Insurance		3825	8888	8366	85610	17103	13893	15574	125700	1935	17396	55597	3417	5935
120	Ownership of dwellings														
121	Education and research														
122	Medical and health														
123	Business services		1087	3666	479	127948	9072	7423	3422	52798	2130	2143	126098	6696	1222
124	Computer & related activities		5367	12231	2966	22440	6343	18613	9380	11732	4527	6746	9518	8281	200
125	Legal services		388	3238	31	1202	178	9172	2082	2324	1455	2296	4720	2618	393
126	Real estate activities														
127	Renting of machinery & equipment		644	536	19	613	98	359	107	364	574	873	989	236	1
128	O.com, social&personal services		5	108	3	32193	34	1780	455	585184	61	33	433	57	191
129	Other services		7211	1577	21012	3790	1086	23805	16361	17967	3978	6961	13147	27924	17006
130	Public administration														
	Total Input		2368575	5077389	1218474	15626048	2548826	1212040	969013	10002227	536629	516395	4375224	675244	397907
	NIT		26016	-57503	3858	-161340	64624	147717	-15770	-501112	11996	19674	190349	20204	20484
	Total Input+NIT		2394590	5019886	1222332	15464708	2613450	1359757	953243	9501114	548625	536069	4565573	695448	418391
	GVA		285582	604762	178878	1840662	780686	1194917	986431	2556686	297159	112504	812052	397189	342193
	Total Output		2680173	5624648	1401210	17305370	3394136	2554674	1939675	12057801	845784	648573	5377625	1092637	760585

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs													
Code/ Sector	Commodity	Industry	53	54	55	56	57	58	59	60	61	62	63	64	65
1	Paddy						446								
2	Wheat		7	1			6	307							
3	Jowar														
4	Bajra														
5	Maize											102			
6	Gram														
7	Pulses											52			
8	Sugarcane														
9	Groundnut													13	6
10	Coconut		1099											97	114
11	Other oilseeds											57			55
12	Jute			5958	60		214								
13	Cotton		5056	317						8					
14	Tea														
15	Coffee														
16	Rubber			58					2297	62553	417550	203221	31		38
17	Tobacco														
18	Fruits														
19	Vegetables		413												
20	Other crops			17094		4380	25798			32	25		75	314	808
21	Milk and milk products														
22	Animal services(agricultural)														
23	Poultry & Eggs														
24	Other liv.st. produ.			8174	15213	1114	175	10	564345	290099		10	853		
25	Forestry and logging		162	6446	346427	1583191	630379	650			2149	2182		743	9
26	Fishing														
27	Coal and lignite		945	1629	2467	22221	103847				4736	969	26	204042	60717
28	Natural gas			76479							46		1143743	27304	1646
29	Crude petroleum												29546544	32568	
30	Iron ore					29								1219	
31	Manganese ore														108
32	Bauxite														104
33	Copper ore														
34	Other metallic minerals												53		585

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	53	54	55	56	57	58	59	60	61	62	63	64	65
35	Lime stone										15				4408
36	Mica														
37	Other non metallic minerals			96	4580	493	2991	205			3919	544	4	674	13268
38	Sugar												13	90	10778
39	Khandsari, boora														
40	Hydrogenated oil(vanaspati)														69
41	Edible oils other than vanaspati											2157		14	19604
42	Tea and coffee processing														5
43	Miscellaneous food products	1989				2423	39756	6909	8006	4021	3186	41928	8951	1497	91191
44	Beverages			2			346	2		3		2406	2919		20056
45	Tobacco products														
46	Khadi, cotton textiles(handlooms)	185520	104009	880	132	560	463				2309	357			
47	Cotton textiles	1049016	373219	4492	331	2510	677	227	756	4992	1452				21
48	Woolen textiles	33346	32811	616		9	65		24	20					
49	Silk textiles	86494	12428	6		2356		3	11						
50	Art silk, synthetic fiber textiles	510171	417232	2594	2252	3375	647	7904	6883					129	2
51	Jute, hemp, mesta textiles	27998	30274	13470	8739	5136	9521	3459	1346	6608	8520	677	296	8660	
52	Carpet weaving		175	339		1147	167	966	794						
53	Readymade garments	187441	46952	1961		11280	4706	6854	1578		56598				
54	Miscellaneous textile products	402532	257829	56512	857	25250	20490	7118	5839	105370	30118	3062	712	9312	
55	Furniture and fixtures-wooden	2042	186	113523	24110		936				937				
56	Wood and wood products	26471	8395	110460	54531	70807	50814	2219	1322	3289	8681	4057	664	4058	
57	Paper, paper prods. & newsprint	48877	17285	10177	61690	1052293	1015610	3360	2669	5420	31252	6898	1164	12457	
58	Printing and publishing	914	1374	93	28	82207	312356	60	1	1	36				
59	Leather footwear		4		3			2391	225						16392
60	Leather and leather products	42835	139025	7142	4151		2723	531707	607138	8048	13010				
61	Rubber products	7784	13156	42409	1768	2879	1332	5903	1951	101613	53143	813	3	17480	
62	Plastic products	51569	22562	68373	35205	31665	48947	6149	7348	20760	1962679	12741	947	20279	
63	Petroleum products	47055	30361	20360	19168	106267	27674	12806	9665	38461	45247	2192463	40538	109643	
64	Coal tar products		265							199	48	6369	38959	6871	
65	Inorganic heavy chemicals	2901	7257	20655	4373	164274	78122	1992	1331	148121	93019	84650	68007	429121	
66	Organic heavy chemicals	5021	10569	106467	37684	48713	6531	738	1563	9235	508624	35840	960	288246	
67	Fertilizers				11424							511523			
68	Pesticides			950	19535	7233	2			194	1603	2515		155062	

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	53	54	55	56	57	58	59	60	61	62	63	64	65
69	Paints, varnishes and lacquers		14208	9333	23773	3587	27173	78633	25246	3449	5293	45693	2238	10	9929
70	Drugs and medicines					1135					167	3847			
71	Soaps, cosmetics & glycerin		18582	15545		8442	8503	2747			2094	946	491		3555
72	Synthetic fibers, resin		93934	186494	2907	15084	6725	5192	261	172	756052	1430201	116	268	2755
73	Other chemicals		89378	33728	3594	14724	100946	94865	31456	21378	47924	413647	85481	85055	48905
74	Structural clay products				3	11									1
75	Cement														
76	Other non-metallic mineral prods.		2340	165	4331	1787	6667	5141	233	209	804	1896	670	187	2359
77	Iron, steel and ferro alloys		1462		14368	2292	4169	1607	234	214	6871	6400		23	84
78	Iron and steel casting & forging		91		86486	604	3052	191	45	2	606	1081	1110	6	1332
79	Iron and steel foundries		1349		52192	5979	4730	1759	216	182	5961	5577			93
80	Non-ferrous basic metals		1435		34775	2903	1224	2638	362	227	2276	10667	545	6840	18530
81	Hand tools, hardware		780	1261	22597	5334	423	1220	679	401	404	4127			71
82	Miscellaneous metal products		11902	25167	30496	12465	11638	21096	5254	1893	18653	16270	696		1760
83	Tractors and agri. implements			313							276	602			
84	Industrial machinery(F & T)		85604	81314						4865					
85	Industrial machinery(others)			7828	8468	12205	12330	11212	7005		10051	12342	7179	4533	8667
86	Machine tools		33943	98050	12558	442	7899	342	59	35	2306	1912	317	63	24
87	Other non-electrical machinery		387	483	5905		2908	55	1808	1526	776	2166	12515	144	788
88	Electrical industrial Machinery				168	1	6	19							119
89	Electrical wires & cables				17		4					4			3
90	Batteries			1145				19							9
91	Electrical appliances			3	367	3496	5				54	197			
92	Communication equipments							249				148			
93	Other electrical Machinery		629	12152	6518		1618	181	66	1006	221	4287		6	370
94	Electronic equipments(incl.TV)			16781				43645		58	580	2968			
95	Ships and boats														
96	Rail equipments														
97	Motor vehicles				1731			1			1385	361			
98	Motor cycles and scooters										98				
99	Bicycles, cycle-rickshaw														
100	Other transport equipments														
101	Watches and clocks														
102	Medical, precision&optical instru.s											730			12

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs															
Code/ Sector	Commodity	Industry	53	54	55	56	57	58	59	60	61	62	63	64	65
103	Jems & jewelry			516					101						
104	Aircraft & spacecraft														
105	Miscellaneous manufacturing		37388	25454	99	407	3135	31020	14948	912	50	9913	4070	59	97
106	Construction		158453	242649	18021	12341	22351	129973	6748	3958	18476	20186	23660	2260	27512
107	Electricity		36919	39345	16135	24464	144421	49220	18502	16014	70790	154162	287003	17021	138109
108	Water supply			164			29		8	7	5		95	4	7349
109	Railway transport services		22914	5651	5618	18002	22536	8054	8372	707	3747	10015	258529	36296	13456
110	Land tpt including via pipeline		316345	186456	120163	207855	297904	249891	125858	78121	127422	261292	276783	35235	74818
111	Water transport		673	493	3300	14042	8574	548	802	436	656	1501	22988	3049	4437
112	Air transport		5164	4549	24459	16083	3456	9698	3989	4528	7148	16968	126061	3019	6341
113	Supporting and aux. tpt activities		30538	20222	9898	20071	28356	22208	8887	6799	12953	26513	25700	3985	7090
114	Storage and warehousing														
115	Communication		71644	32450	14498	11485	20291	5772	3774	4849	12281	8079	52669	3146	9105
116	Trade		888019	575120	293901	450905	394910	188187	283249	276037	246112	460334	523571	131201	237520
117	Hotels and restaurants														
118	Banking		155851	61821	176270	86579	83654	82556	36057	21583	48545	86275	491319	13591	49161
119	Insurance		105428	46383	11690	9270	21922	17882	18759	4369	8936	19080	47764	1423	32821
120	Ownership of dwellings														
121	Education and research														
122	Medical and health														
123	Business services		86069	47799	9698	5401	593	5798	3400	512	271	12261	6458	27	2366
124	Computer & related activities		34898	25153	7910	4399	12885	38005	13494	1029	1150	16630	45288	197	4285
125	Legal services		14293	5302	6272	5925	1610	1720	1761	738	1324	991	2796	71	5633
126	Real estate activities														
127	Renting of machinery & equipment		171	554	2282	735	932	289	146		493	1	11		310
128	O.com, social&personal services		177061	334915	652	154	256	35815	191	129	120	192562	2257	28	255
129	Other services		20147	7331	4100	4790	3041	2620	5104	4942	11111	1608	7226	10437	6979
130	Public administration														
	Total Input		5245661	3793705	1986449	2883231	3692793	2739935	1795578	1468446	2320706	6333395	35880425	779138	2028183
	NIT		111395	91036	116399	47260	182413	168546	34875	24552	106320	428419	1770418	51259	116459
	Total Input+NIT		5357057	3884741	2102848	2930491	3875205	2908481	1830452	1492997	2427026	6761814	37650843	830397	2144642
	GVA		2450847	863967	1229316	1800220	1126150	998860	442324	659540	1495136	1063341	6087728	607133	394071
	Total Output		7807904	4748708	3332165	4730711	5001355	3907341	2272776	2152537	3922161	7825155	43738571	1437531	2538713

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	66	67	68	69	70	71	72	73	74	75	76	77	78
1	Paddy			3			10								
2	Wheat			8	23		81	1583		4					
3	Jowar									117					
4	Bajra			2564			29								
5	Maize						4560			46					
6	Gram			6765				884		583					
7	Pulses			105			610	6		3237					
8	Sugarcane			796			66100	1380							
9	Groundnut		6				21	549							
10	Coconut		230	38			21	4808	30		6767		232		114
11	Other oilseeds		80	8332		708	22744	1617		2438					
12	Jute									232			255		
13	Cotton			25			1740								
14	Tea						558			2					
15	Coffee														
16	Rubber		33			429	126		2222	145			578		
17	Tobacco														
18	Fruits					321	1289	689		355					
19	Vegetables						240	1625		2820	118		16		
20	Other crops		781	2394	353	7269	24667	6283	861	95439	4568		8175		
21	Milk and milk products						14587	2696							
22	Animal services(agricultural)														
23	Poultry & Eggs			31			1370								
24	Other liv.st. produ.		2042	71678	414	16	2057	1502	23503	58871			2642	102	4
25	Forestry and logging		26	150	73	10276	8608	3665	777	3793	822		1283		69
26	Fishing		18504	13			32								
27	Coal and lignite		18397	33822	318	622	4237	2771	225	5093	31252	507166	52006	2661486	283270
28	Natural gas		2133	331423	31	15011	18237		66191	146886	7449	208498	15108	756582	5075
29	Crude petroleum														
30	Iron ore					7				349	2738	11715	34645	1018608	1982
31	Manganese ore		62	1544						37	145		17000	163158	1563
32	Bauxite			26	8	89		222		45	8362	848	2402	24	16
33	Copper ore														
34	Other metallic minerals			476	110	1109	55	557		5738	2659		1883	33750	855

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs													
Code/ Sector	Commodity	Industry	66	67	68	69	70	71	72	73	74	75	76	77	78
35	Lime stone		4468	393	3	13		452		25	2914	238846	3623	19241	120
36	Mica												19983		
37	Other non metallic minerals		15618	84279	1277	1876	545	11541	1004	11456	74449	113697	155439	4942	2209
38	Sugar		10211	60	30		35298	1576		15651	996			12044	1303
39	Khandsari, boora						17093	828							
40	Hydrogenated oil(vanaspati)		82				339	11536							
41	Edible oils other than vanaspati		21324	474	69	8089	17530		1719	2969			288		
42	Tea and coffee processing		10			9	19					46			
43	Miscellaneous food products		87623	12892	10763	13057	155189	75234	22756	118803	94322	2879	26833	37397	7106
44	Beverages		21004	635	1513	758	5227	3334	9055	1371	244		866	1506	15
45	Tobacco products			57			234						144		
46	Khadi, cotton textiles(handlooms)					17	524	34	105	177			247	25	
47	Cotton textiles				60	107	2977	119	628	896			1372	143	
48	Woolen textiles									9		115	409		
49	Silk textiles										14		2		
50	Art silk, synthetic fiber textiles		4	636	997	62	345	4	128	3013			5491	3	
51	Jute, hemp, mesta textiles		884	1333	970	2043	8697	12785	667	16631	1545	3393	10556	806	309
52	Carpet weaving												7		
53	Readymade garments					281	1870	19	74	33		8255	7488		
54	Miscellaneous textile products		1916	3329	1887	5103	21304	27602	2273	6100	2490	8309	11142	1307	1630
55	Furniture and fixtures-wooden						1	340		17086			2914	2532	
56	Wood and wood products		5112	7425	5695	11390	37341	73781	6336	20819	6427	17007	13667	7948	1031
57	Paper, paper prods. & newsprint		39469	26	80	26	6742	873	470	135602	9582	32447	24083	4714	2188
58	Printing and publishing						11535	4663		3693			139		
59	Leather footwear														
60	Leather and leather products			61			69			5994	1295				1
61	Rubber products		70	26	616	519	107	410	14823	2756	73	138	3622	312	1916
62	Plastic products		17260	12064	315	25938	69990	156765	40166	33949	8996	546040	24816	8066	3421
63	Petroleum products		187629	582242	14075	33928	57878	56078	201718	91017	289463	417382	494137	638384	202529
64	Coal tar products		7512			861		1374		4106	1076	4904	42478	400255	590
65	Inorganic heavy chemicals		351688	871642	97273	231543	112478	335202	543758	263236	41058	1492	378931	69687	11607
66	Organic heavy chemicals		394831	228747	96141	80421	1093425	278855	1211412	180656	1695	811	22050	3817	37
67	Fertilizers			2036551	14699										
68	Pesticides		183233	13207	338326								137	3352	

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs															
Code/ Sector	Commodity	Industry	66	67	68	69	70	71	72	73	74	75	76	77	78
69	Paints, varnishes and lacquers		8866	115	696	80175	910	21419	8066	7768	17531	430	8713	14516	637
70	Drugs and medicines		16834	357	3247	3011	1720203	23721	2691	2722	157		5077	1710	86
71	Soaps, cosmetics & glycerin		894	45	2180	16924	15161	370186	3273	40789			2178		
72	Synthetic fibers, resin		2165	54	2293	56809	344	3771	504546	12030	4136	1	21266		1487
73	Other chemicals		59411	18649	10022	173811	58068	682281	329900	143508	6177	2757	10787	9928	14982
74	Structural clay products		4			16					166818	164894	260	1085	49
75	Cement										100133	109327	121460		
76	Other non-metallic mineral prods.		2807	655	789	2562	1139	7423	133	4597	125576	71774	322635	31772	1120
77	Iron, steel and ferro alloys		169	31		770	57	30	39	602	81	137	28326	1585072	1027789
78	Iron and steel casting & forging		1343	8	5	546	576	4		915	477	190	11908	1775738	627780
79	Iron and steel foundries		39	29		888	38	28	17	405	634	69	49962	723020	134494
80	Non-ferrous basic metals		19403	394	1445	6192	1245	844	294	33491	864	62	34571	2819694	396827
81	Hand tools, hardware		71			8					172		5943	15464	1743
82	Miscellaneous metal products		1296	99	627	292	448	2136	223	3895	3010	47	40434	372334	65280
83	Tractors and agri. implements												97		35
84	Industrial machinery(F & T)												6375		3454
85	Industrial machinery(others)		10811	12983	7634	8560	22869	37671	20729	13102	11571		557	1378	14177
86	Machine tools		38	105	89		46	43	57	443	183	2972	16390	2456	12182
87	Other non-electrical machinery		922	40972	20090	442	1546	2102	189	1089	193	989	12032	2697	2358
88	Electrical industrial Machinery		120	8										1092	226
89	Electrical wires & cables												107		14
90	Batteries		8												
91	Electrical appliances			2		127						119	398	22	
92	Communication equipments												1825	5	104
93	Other electrical Machinery		500	4952			17	36970	11988	349	348		3127	1129	1539
94	Electronic equipments(incl.TV)			418				533		153	410				
95	Ships and boats														279
96	Rail equipments														
97	Motor vehicles												86		
98	Motor cycles and scooters														
99	Bicycles, cycle-rickshaw														
100	Other transport equipments														
101	Watches and clocks														
102	Medical, precision&optical instru.s		14				5257			1		785	12830		

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs													
Code/ Sector	Commodity / Industry	66	67	68	69	70	71	72	73	74	75	76	77	78	
103	Jems & jewelry														
104	Aircraft & spacecraft														
105	Miscellaneous manufacturing	5394	8032	1344	4314	23578	4207		24947	2930		6312	280	56	
106	Construction	21210	11295	3934	4514	73871	13797	4558	79310	6879	17340	631654	10891	5559	
107	Electricity	154479	77838	22534	34292	127855	63453	35655	271631	102788	265426	171067	790606	151051	
108	Water supply	184	977			10	130		73	252		574			
109	Railway transport services	7743	47079	1217	5078	29356	18482	34232	8343	25609	133745	44549	553553	60840	
110	Land tpt including via pipeline	80524	374110	15371	61631	320367	199007	261658	144438	237252	282781	323354	747496	162709	
111	Water transport	4717	11180	1249	810	4451	2459	2670	3829	7459	17975	8594	40825	5449	
112	Air transport	7051	15011	1307	5921	26942	21927	34210	11230	13006	25425	27022	147822	13176	
113	Supporting and aux. tpt activities	7262	34732	1662	4929	23659	16703	15281	12422	12614	23584	21611	71173	11108	
114	Storage and warehousing														
115	Communication	7852	9851	4849	5156	21173	30459	6498	18528	11294	27296	10838	59833	10605	
116	Trade	245634	362778	128450	118777	412400	234897	367816	232600	233226	581030	429023	3627501	545868	
117	Hotels and restaurants														
118	Banking	46214	111005	22137	37060	59750	223546	102182	94044	37750	111013	49048	553472	26848	
119	Insurance	12257	22983	5438	5560	23882	18585	30931	17716	8362	21586	19617	30274	4584	
120	Ownership of dwellings														
121	Education and research														
122	Medical and health														
123	Business services	6326	16302	20	66	12138	36056	16	5094	67	111	27800	15116	655	
124	Computer & related activities	10638	17643	328	7883	19279	4373	1507	16333	503	869	18419	4837	410	
125	Legal services	1598	88	961	238	915	253	94	410	220	303	1538	10446	2075	
126	Real estate activities														
127	Renting of machinery & equipment	92				1	214					1	267	1	
128	O.com, social&personal services	613	438	13	103	172594	32264	42	6334	44194	112	604	76186	781	
129	Other services	6396	4980	5232	3535	1895	12697	7037	7868	1603	1880	6392	1963	2719	
130	Public administration														
	Total Input	2144142	5522476	851285	1102900	5010776	3206917	3937435	2483286	1785996	3989017	3902450	19951841	3840099	
	NIT	143311	-379590	26274	79256	282362	247453	305896	92797	138280	224411	303733	1558390	398231	
	Total Input+NIT	2287453	5142886	877559	1182156	5293138	3454370	4243331	2576084	1924276	4213429	4206183	21510231	4238330	
	GVA	495325	790350	287164	811002	1628735	918321	1184527	1425590	1417151	1827032	1373856	6547327	818070	
	Total Output	2782777	5933236	1164723	1993158	6921873	4372691	5427858	4001674	3341427	6040461	5580038	28057558	5056400	

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

														Rs. Lakhs	
Code/ Sector	Commodity	Industry	79	80	81	82	83	84	85	86	87	88	89	90	91
1	Paddy														
2	Wheat													1	
3	Jowar														
4	Bajra														
5	Maize														
6	Gram														
7	Pulses														
8	Sugarcane														
9	Groundnut														
10	Coconut			179											
11	Other oilseeds														
12	Jute														
13	Cotton											981			
14	Tea														
15	Coffee														
16	Rubber			68		991	2	130		1382	374		894	10	
17	Tobacco														
18	Fruits														
19	Vegetables														
20	Other crops			47		8					11	39		16	
21	Milk and milk products														
22	Animal services(agricultural)														
23	Poultry & Eggs														
24	Other liv.st. produ.			864		245			685	101	16704	4	949	3	2339
25	Forestry and logging			253	1039	614		479		467	1250	87	45		
26	Fishing														
27	Coal and lignite		3725	1394719	10696	38881	5283	785	97	199	11693	3470	12	13	22
28	Natural gas		73958	39402		7459	647	12201	11386		27366			89	
29	Crude petroleum														
30	Iron ore		85644	1932		46									
31	Manganese ore		13960	4609										604	
32	Bauxite			26565		8					3	8			
33	Copper ore			667534											
34	Other metallic minerals		187	174452	12	1838	5	43	11	185	34	109	18	897	27

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs															
Code/ Sector	Commodity	Industry	79	80	81	82	83	84	85	86	87	88	89	90	91
35	Lime stone		4160	25	1		2							1	
36	Mica														
37	Other non metallic minerals		551	31528	392	27325	16	330	124	124	184	63	1597	448	1006
38	Sugar			3292		3					11				
39	Khandsari, boora			62											
40	Hydrogenated oil(vanaspati)														
41	Edible oils other than vanaspati			28						3					
42	Tea and coffee processing					1									
43	Miscellaneous food products		14	6688	20952	12135		4057	42		111	76		126	26
44	Beverages		30	818	99	58		71							
45	Tobacco products														
46	Khadi, cotton textiles(handlooms)			11	3	10		26				2	26		
47	Cotton textiles			103	22	114		140				12	132		
48	Woolen textiles										5	573			
49	Silk textiles														
50	Art silk, synthetic fiber textiles			171	2493	1588	59	2175		1931	2169	2138	23639	273	1544
51	Jute, hemp, mesta textiles		83	330	3260	1907	90	324	53	331	1362	701	1229	144	949
52	Carpet weaving					215									
53	Readymade garments					2773				250	4527	103	3974	83	
54	Miscellaneous textile products		1559	5339	1625	18240	493	7093	341	3565	20095	2371	13050	747	2235
55	Furniture and fixtures-wooden		303		2412	6976	3133	338		1083	1373	886			278
56	Wood and wood products		2434	1708	3671	10992	2007	6046	3547	8218	25341	4239	4559	817	5163
57	Paper, paper prods. & newsprint		1550	5739	7749	19310	962	3794	627	2806	20499	15179	10617	3331	10173
58	Printing and publishing			757		48				36	868	13			
59	Leather footwear														
60	Leather and leather products				150	735	1435	2646	6	4099	1212	5023	1653	138	769
61	Rubber products		346	1389	1996	6885	29334	6241	4599	28369	17976	9770	18806	1772	862
62	Plastic products		9963	22058	13351	161293	4015	6631	2766	49507	47215	39901	65896	7870	31463
63	Petroleum products		87455	186057	57753	29631	3743	11010	4404	9542	54116	37979	12369	3172	28986
64	Coal tar products		18435	91650	713	271		468	17	42	13	96		619	4
65	Inorganic heavy chemicals		41400	301199	3215	30926	549	2094	22	2903	25626	4783	19324	19566	20356
66	Organic heavy chemicals		2845	6873	785	20197	62	2125	315	2190	19788	2138	19136	5087	1277
67	Fertilizers											5704	379		
68	Pesticides											321		1587	

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs															
Code/ Sector	Commodity	Industry	79	80	81	82	83	84	85	86	87	88	89	90	91
69	Paints, varnishes and lacquers		3585	31334	4316	17632	263	3968	313	3647	11448	14480	1416	1788	3240
70	Drugs and medicines				88	172	64			280		409	2		
71	Soaps, cosmetics & glycerin			704		18			32	21	20		4	4	1421
72	Synthetic fibers, resin		2459	6114	1497	6540	30	262	4	7385	20476	8037	158609	12996	3044
73	Other chemicals		8021	51760	18971	23274	1497	5084	385	6805	13166	21260	25901	482	3527
74	Structural clay products		437		37	74	5	2		14	355	2080			
75	Cement									56					157
76	Other non-metallic mineral prods.		10204	4651	2518	5510	63	2661	6937	1276	11196	10163	4724	2318	38399
77	Iron, steel and ferro alloys		797446	216866	366149	2041780	175282	387375	257736	399557	1946250	492427	64607	3510	45994
78	Iron and steel casting & forging		311646	97912	91566	150611	59733	96212	21231	90704	296227	61489	5720	497	29785
79	Iron and steel foundries		106391	359510	59667	222395	34585	36559	22628	49262	173178	95161	48142	2621	17516
80	Non-ferrous basic metals		1636647	2332131	290736	1068604	91014	145161	68373	181957	885282	219804	671878	74210	50538
81	Hand tools, hardware		8904	9188	141589	83756	5220	46855	60213	28861	158100	14399	715	37	2950
82	Miscellaneous metal products		122104	316309	157754	450332	117789	83912	40987	141884	604307	168433	133940	20563	66690
83	Tractors and agri. implements		952		452	678	159761	496	553	13397	50857	16250			6732
84	Industrial machinery(F & T)				38	6503	35685	249433	36923	13646	241230	12633			107
85	Industrial machinery(others)		28308	21095	2414	2823	45850	11858	40998	79433	564	182		726	
86	Machine tools		26291	1544	48884	84077	150489	143066	128487	162463	691282	73046	24737	3449	3933
87	Other non-electrical machinery		2391	2425	12236	474578	360773	235888	261811	261590	2604593	92120	2636		21642
88	Electrical industrial Machinery		13270	62	1048	41525	853	45525	3835	16837	124013	472357	17188	12471	28871
89	Electrical wires & cables		1	2952	1032	578	156	578	27	394	2335	116001	33609	6251	3915
90	Batteries			4636	2386	5661	3107	4	6		4314	14019	6	45233	106
91	Electrical appliances		335	25	189	4870	12	1838	121	2543	62189	2094	2021	104	49633
92	Communication equipments		172	3922		13875	10537	3217	1292	5276	23231	28738	5963	5013	22227
93	Other electrical Machinery		11517	20642	32724	210249	2569	149641	10823	110404	240241	457568	26104	18153	35587
94	Electronic equipments(incl.TV)		35	566	4561	47001		17225	4696	23075	38125	52701	1271	2169	8072
95	Ships and boats														11
96	Rail equipments														
97	Motor vehicles					150	13827		31	242	7139	811			
98	Motor cycles and scooters													6	
99	Bicycles, cycle-rickshaw						983								
100	Other transport equipments														
101	Watches and clocks					3777		2			14038				
102	Medical, precision&optical instru.s		30310	5		498			12	2341	4725	1447			156

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs															
Code/ Sector	Commodity	Industry	79	80	81	82	83	84	85	86	87	88	89	90	91
103	Jems & jewelry					356			2639	1846	27	2421	53	200	
104	Aircraft & spacecraft														
105	Miscellaneous manufacturing		142	5962	11706	14551	2659	7792	5361	22670	11149	22598	14421	474	22331
106	Construction		18631	20794	56483	41386	96164	12850	46062	187998	76704	128876	2774	1306	3410
107	Electricity		27782	258018	37825	60198	34415	22548	8285	23458	155622	91926	35943	22965	32200
108	Water supply			5		7									
109	Railway transport services		38411	237255	12726	39645	4949	9900	15685	11101	50546	12771	5417	333	2786
110	Land tpt including via pipeline		110068	419845	110887	165339	47178	70115	75248	87198	359534	99148	77608	9792	42079
111	Water transport		2020	19010	1213	1252	198	276	94	276	1106	592	192	59	364
112	Air transport		6465	54979	17754	39738	7326	10864	3651	14863	51715	17174	9196	1650	5704
113	Supporting and aux. tpt activities		12902	35831	6633	19000	5224	5886	3740	6144	29613	7842	5377	863	2723
114	Storage and warehousing														
115	Communication		17131	73681	11175		7974	12406	2442	12318	47197	126061	10760	23304	4165
116	Trade		366901	968035	150631	334374	110912	152857	68992	138521	539257	186524	81000	20475	60772
117	Hotels and restaurants														
118	Banking		44223	197063	73454	198883	25423	43269	13755	79131	366429	114284	49887	12367	133485
119	Insurance		7960	20971	12768	77688	18235	5503	8831	23690	179842	74471	5683	1796	10360
120	Ownership of dwellings														
121	Education and research														
122	Medical and health														
123	Business services		7375	110180	896	85929	157533	443	619	159457	199607	56819	496	2739	32378
124	Computer & related activities		19419	948	86107	47117	10619	22117	18928	90099	39706	27464	29513	950	1659
125	Legal services		1192	1157	2819	3943	887	1384	1876	18131	48348	6271	764	1117	6406
126	Real estate activities														
127	Renting of machinery & equipment		816	350	2	203		1		39	170	125		184	44
128	O.com, social&personal services		21581	72518	1091	239714	50898	535	1044	15375	28203	49851	305	8313	145113
129	Other services		2743	7812	4637	5639	6390	1151	3380	3427	7344	5027	995	11979	2762
130	Public administration														
	Total Input		4175790	8965215	1972048	6744221	1908970	2115966	1278130	2616421	10720925	3615122	1757889	380886	1060464
	NIT		383219	537821	143821	425800	150265	183418	92369	190941	846940	227692	124370	36462	68737
	Total Input+NIT		4559009	9503036	2115869	7170021	2059235	2299384	1370499	2807362	11567865	3842814	1882259	417348	1129200
	GVA		646082	1627447	728604	2441507	709527	351358	381051	1093376	2635951	558120	353231	101733	289906
	Total Output		5205091	11130483	2844473	9611528	2768762	2650742	1751550	3900738	14203816	4400934	2235489	519082	1419106

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs													
Code/ Sector	Commodity	Industry	92	93	94	95	96	97	98	99	100	101	102	103	104
1	Paddy														
2	Wheat														
3	Jowar														
4	Bajra														
5	Maize														
6	Gram														
7	Pulses														
8	Sugarcane														
9	Groundnut														
10	Coconut														
11	Other oilseeds														
12	Jute														
13	Cotton												262		
14	Tea														
15	Coffee														
16	Rubber		656			1056	2470	163			30		171		
17	Tobacco														
18	Fruits												328		
19	Vegetables														
20	Other crops		351					21					1		
21	Milk and milk products														
22	Animal services(agricultural)														
23	Poultry & Eggs														
24	Other liv.st. produ.					6		252					5		
25	Forestry and logging				998	52		2937					11		
26	Fishing				24	3									
27	Coal and lignite		5	51			4756	8063	26	31	26	3	158		
28	Natural gas														
29	Crude petroleum														
30	Iron ore		30												
31	Manganese ore			522											
32	Bauxite														
33	Copper ore														
34	Other metallic minerals		10	52	4280								11	950	

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs													
Code/ Sector	Commodity	Industry	92	93	94	95	96	97	98	99	100	101	102	103	104
35	Lime stone			33											
36	Mica			621											
37	Other non metallic minerals		23	12806	4351	5	703	4337	442	6	197	33	127	862808	
38	Sugar														
39	Khandsari, boora														
40	Hydrogenated oil(vanaspati)														
41	Edible oils other than vanaspati														
42	Tea and coffee processing												2		
43	Miscellaneous food products		478		453			104					65		
44	Beverages			457				4							
45	Tobacco products														
46	Khadi, cotton textiles(handlooms)			2				403					141		
47	Cotton textiles			12	1			2359	1	1			773		
48	Woolen textiles														20
49	Silk textiles				29								649		
50	Art silk, synthetic fiber textiles		13	1887	345	37	841	11395	430		73	10	9122	136	
51	Jute, hemp, mesta textiles		914	2225	1		1148	1431	1062	540	88	75	751	51	1
52	Carpet weaving							136			292				
53	Readymade garments			541	1354	1		495	64				6390		30
54	Miscellaneous textile products		8049	4884	4	1	306	2742	1025	361	400	160	3503	117	1
55	Furniture and fixtures-wooden		15895		4	107	212	4654	483	1532			1142		10
56	Wood and wood products		5342	9772	217	84	9417	8354	1412	941	251	623	5080	7369	2
57	Paper, paper prods. & newsprint		11266	22918	1034	2	2229	7952	2396	2391	2147	882	8433	2214	4
58	Printing and publishing		1444									8	45		
59	Leather footwear				2										
60	Leather and leather products		520	20340	47		589	93540	1792	3894		10761	5997		13
61	Rubber products		846	4328	1692	33	5356	284069	27945	10517	11048	132	10917	43	62
62	Plastic products		38531	11016	10237	86	5907	91231	13562	2962	2302	2072	22713	6620	6
63	Petroleum products		15659	33608	5044	748	7328	50783	11575	5283	2476	686	9363	10570	618
64	Coal tar products			2255			29	32							
65	Inorganic heavy chemicals		7104	12402	6523	12		14072	1199	248	793	52	7876	2530	
66	Organic heavy chemicals		10465	3106	510	6		18258	1098	200	1143		4269		
67	Fertilizers					80									
68	Pesticides														

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs													
Code/ Sector	Commodity / Industry	92	93	94	95	96	97	98	99	100	101	102	103	104	
69	Paints, varnishes and lacquers	1464	14589	1156	272	23746	44019	5404	1398	94	87	477	43	10	
70	Drugs and medicines	73		33			80					1137			
71	Soaps, cosmetics & glycerin						9				11	144	2		
72	Synthetic fibers, resin	27291	15131	542	37	11194	36165	90888	16	196	18	1712			
73	Other chemicals	9513	10808	2099	60	2645	30752	10033	4516	1196	64	11375	4247		
74	Structural clay products								2						
75	Cement				3										
76	Other non-metallic mineral prods.	57594		396	20	3361	15048	840	80	76	676	8037	296	30	
77	Iron, steel and ferro alloys	194150	202828	7883	17471	280296	1670476	69448	83178	14243	211	4101	408	56	
78	Iron and steel casting & forging	36	1706	2997	408	12450	203510	79066	1152	1062		1166		37	
79	Iron and steel foundries	9242	92882	17860	1769	22992	353179	32838	42133	6595	97	3731		35	
80	Non-ferrous basic metals	10389	165846	6094	79	15766	134816	50975	4075	12002	3212	3920	106616	19	
81	Hand tools, hardware	1080	20677	1817	294	3521	909165	165090	47350	6728	6657	268	37	1	
82	Miscellaneous metal products	30832	138409	67629	608	42264	353426	71035	9177	2512	23	18307	3545	373	
83	Tractors and agri. implements	370	1320	128	81	8716	1111	6172				330			
84	Industrial machinery(F & T)		967	3037		93	21499	391	41			57			
85	Industrial machinery(others)		11503				2490			4		457			
86	Machine tools	10107	76611	3557	1706	54461	520801	78316	9890	9207	218	7145		205	
87	Other non-electrical machinery	72593	27399	31206	6808	50585	2003660	226836	9285	5684	326	1681		154	
88	Electrical industrial Machinery	66753	23805	18063	1142	3783	120725	6143	157	303	67	20709		142	
89	Electrical wires & cables	32474	56934	21718	1	2555	27006	268				10226			
90	Batteries	7307	41269	11576		137	11195	3640			1427	29		1	
91	Electrical appliances	30329	5988	6672	5	299	145621	9893		914	644	3757		1	
92	Communication equipments	939042	64146	179607	4917	23803	13069	1512			3177	45677		135	
93	Other electrical Machinery	196680	84190	669389	3168	90453	756001	60361	9287	40579	5093	11394	65837	23	
94	Electronic equipments(incl.TV)	109284	92158	507652	6997	40490	50450	683	2984		1415	49823	13	67	
95	Ships and boats				617700		4190					2089			
96	Rail equipments					546941		580	168	750		29			
97	Motor vehicles	167					2011560	156066	45	2861			433		
98	Motor cycles and scooters						149889	1232176	3065	1793					
99	Bicycles, cycle-rickshaw						4300	9332	218951			257			
100	Other transport equipments						23675			5559		25			
101	Watches and clocks										96422	31699	28		
102	Medical, precision&optical instru.s	372	2347	961	14	9	26	3313				292397			

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs													
Code/ Sector	Commodity / Industry	92	93	94	95	96	97	98	99	100	101	102	103	104	
103	Jems & jewelry	11	9681				3				31		4133308		
104	Aircraft & spacecraft													111194	
105	Miscellaneous manufacturing	6055	6293	3620	1814	2421	11423	37710	3768	77	3713	24367	1013374	729	
106	Construction	87044	18439	2145	217	12232	95635	7091	6477	498	12957	4402	101373	1152	
107	Electricity	102060	75468	48976	1437	24687	304922	116118	9061	2650	5832	88132	23993	845	
108	Water supply						14935								
109	Railway transport services	5517	7595	3263	861	6294	52399	10312	1993	687	332	94906	585066	11	
110	Land tpt including via pipeline	55399	211444	61410	3273	27741	511666	102054	46950	8384	36218	215419	1101807	2878	
111	Water transport	214	527	141	13	161	951	321	82	32	15	8278	27971	8	
112	Air transport	13253	8543	8317	493	7341	54500	10224	2639	1412	106	10008	60988	3	
113	Supporting and aux. tpt activities	3891	5995	2881	132	2319	38774	7889	4689	500	3519	41896	24901	11	
114	Storage and warehousing														
115	Communication	769268	9722	45250	538	3838	60130	49309	1820	11386			131983		
116	Trade	98352	105129	98174	2853	83974	929336	356881	112883	13339	21987	39963	320232	272	
117	Hotels and restaurants														
118	Banking	9530	15376	48091	3531	44934	787322	142244	9918	7478	7476	141236	319307	287	
119	Insurance	96721	6667	14591	5428	17948	190677	57986	811	642	4828	45327	7976	769	
120	Ownership of dwellings														
121	Education and research														
122	Medical and health														
123	Business services	75686	6758	32536	202	202	128947	2504	4388	8933	9057	9105	258266	112	
124	Computer & related activities	5283	6610	6484	2830	10558	31392	3316	12087	463	5355	9420	42740	1503	
125	Legal services	8013	11005	666	313	559	24760	14935	5815	1888	40	294	48343	670	
126	Real estate activities														
127	Renting of machinery & equipment	304	72	780			5171	317	1333	2496	136	414	3063	8	
128	O.com, social&personal services	84831	694	149	40	244	16404	247	49	42	39	8185	158322	1416	
129	Other services	1890	1455	938	827	764	7869	1183	2699	9994	1009	65502	7389	1250	
130	Public administration														
	Total Input	3347408	1802855	1978255	689625	1526653	13495221	3356612	703315	204525	247991	1437314	9445313	125175	
	NIT	250982	117870	175438	-50846	87748	897130	235595	27524	17686	11093	101812	208765	1537	
	Total Input+NIT	3598390	1920725	2153693	638778	1614401	14392351	3592207	730840	222211	259083	1539126	9654078	126712	
	GVA	551903	679709	496331	147973	566063	2126105	705432	132963	126593	293427	554629	2834838	18777	
	Total Output	4150293	2600434	2650024	786751	2180464	16518456	4297639	863803	348804	552511	2093755	12488915	145489	

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs													
Code/ Sector	Commodity	Industry	105	106	107	108	109	110	111	112	113	114	115	116	
1	Paddy							5	16						
2	Wheat							349	28		5				
3	Jowar														
4	Bajra							176							
5	Maize														
6	Gram							16855							
7	Pulses							6488							
8	Sugarcane				593										
9	Groundnut														
10	Coconut														
11	Other oilseeds														
12	Jute														
13	Cotton														
14	Tea														
15	Coffee														
16	Rubber		6493												
17	Tobacco									6					
18	Fruits														
19	Vegetables														
20	Other crops		4859	266010		113		1161463	2627	1					
21	Milk and milk products														
22	Animal services(agricultural)														
23	Poultry & Eggs														
24	Other liv.st. produ.		14049	34729	1	3									
25	Forestry and logging		2275	2540623	235		25								
26	Fishing				1										
27	Coal and lignite		397		1431998	34	7133		6						
28	Natural gas				374355	378									
29	Crude petroleum														
30	Iron ore														
31	Manganese ore														
32	Bauxite														
33	Copper ore														
34	Other metallic minerals		41												

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	105	106	107	108	109	110	111	112	113	114	115	116
35	Lime stone													
36	Mica													
37	Other non metallic minerals		1912	1542993	487									
38	Sugar													
39	Khandsari, boora		227											
40	Hydrogenated oil(vanaspati)								30					
41	Edible oils other than vanaspati		3192					5527	390					
42	Tea and coffee processing								11					
43	Miscellaneous food products		551		2731			2804	616			216		
44	Beverages		1206			121			129					
45	Tobacco products													
46	Khadi, cotton textiles(handlooms)		1771		1									
47	Cotton textiles		10954		5		436	3565						1425
48	Woolen textiles		1137					23236						
49	Silk textiles													
50	Art silk, synthetic fiber textiles		38292											
51	Jute, hemp, mesta textiles		7265	266347	17	10	22				738	4772		55571
52	Carpet weaving		2											
53	Readymade garments		885	56923	31411	1403	47	11230	7455	15286	131	1566	6193	3899
54	Miscellaneous textile products		23715	15841	6	49	78	893396	1119			7705		
55	Furniture and fixtures-wooden		10292	34209	32485	2396	134	4320	10663	20826	222	297	13884	6707
56	Wood and wood products		54383	1281752	563	33	26	625			575	4317		59564
57	Paper, paper prods. & newsprint		76104	145443	19275	2748	2268	217848	2062	3988	72372	6709	35379	246113
58	Printing and publishing		323	64083	21538	1916	4186	155260	1742	2147	87900	314	24179	530874
59	Leather footwear		399					7372						
60	Leather and leather products		30518		266			127						
61	Rubber products		27459	8599	2928	271	37	1515441	4020	7584	6492	28	4792	5006
62	Plastic products		313074	20362	18	238	32	331496	6629	141915	33991	2903	9442	38032
63	Petroleum products		44709	1155060	1269103	3828	117422	12693943	33539	193067	53577	3908	105646	971323
64	Coal tar products		230	1505047	43746		88							
65	Inorganic heavy chemicals		9985		931	3343		795				1502		1281
66	Organic heavy chemicals		15522		35	2179				3				
67	Fertilizers		1022	40894		18915								
68	Pesticides		159	9300	1830		3	784				6023		66

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	105	106	107	108	109	110	111	112	113	114	115	116
69	Paints, varnishes and lacquers		29649	1009126	22			83642	85277	64714	12413	9		
70	Drugs and medicines		4		39		8	392	7					
71	Soaps, cosmetics & glycerin		12164			132			74	11179				
72	Synthetic fibers, resin		363293					1152						
73	Other chemicals		10651		78832	2755	155	750	5	17427		197		3
74	Structural clay products		3	3040334								109		
75	Cement			5019089								101		
76	Other non-metallic mineral prods.		6678	2965295	38	23	387	45790						19
77	Iron, steel and ferro alloys		42534	7409432	55	1623	148	366			46	295		5031
78	Iron and steel casting & forging		66535											
79	Iron and steel foundries		38758	3591151	43	1003	131	302			30	255		3108
80	Non-ferrous basic metals		8527		154			202						
81	Hand tools, hardware		5430		330	98	206	293401	3416	24				701868
82	Miscellaneous metal products		185905	3101924	4408	1659	314	12887	114	146	26	574	4935	781
83	Tractors and agri. implements		12526											
84	Industrial machinery(F & T)		4334											
85	Industrial machinery(others)		448	79115										
86	Machine tools		34432	3	162		1685							34698
87	Other non-electrical machinery		230236	155021	194158	8262	5163	869254	5219		102	11346	18463	4720
88	Electrical industrial Machinery		91673		428948	410	5917							
89	Electrical wires & cables		4451	897080	304		144	108853	6500	2411			9997	
90	Batteries		866	1789	1041	60	20	283238	369	371	1441	6	782	1111
91	Electrical appliances		1770	4473	1716	104	2477	184	242	6366	10	14	1370	288
92	Communication equipments		144578			1067	9808	1142	3253				1124585	
93	Other electrical Machinery		154973		225565	522	3860	45	180				34107	4
94	Electronic equipments(incl.TV)		178074	12467	11061	1810	362	1251	3584	6932	32951	138	5508	2103
95	Ships and boats			787	5017	289	71		197049		36	3890	616	
96	Rail equipments		5004	6			1138957							
97	Motor vehicles		6578	68653	77224	1152		1146541	1846	3332	29369	181	19288	11398
98	Motor cycles and scooters			88	2102	14	2	24	2		1	2	116	40
99	Bicycles, cycle-rickshaw		3	2923	483	133	8	220	11		12	17	355	370
100	Other transport equipments		8711		1			1383		402				1
101	Watches and clocks		205064				4486							
102	Medical, precision&optical instru.s		223010											

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs											
Code/ Sector	Commodity / Industry	105	106	107	108	109	110	111	112	113	114	115	116
103	Jems & jewelry	148946		23									
104	Aircraft & spacecraft								42731				
105	Miscellaneous manufacturing	12915	515163	101195	2163	126483	212463	1876	137418	1	2246	14502	232935
106	Construction	48290	13150788	279845	124079	364784	395716	13561	71121	65306	15055	81577	362816
107	Electricity	131772	1031247	2709522	31505	572549	263882	9895	25067	95795	61863	146430	522238
108	Water supply		188631	15722	136079	231	10077	10977	2298	3	210	678	92
109	Railway transport services	80370	434930	204094	2683	7713	89317	735	2840	20001	1903	13140	18309
110	Land tpt including via pipeline	526397	4181517	281559	206328	60074	1262985	63974	173936	447613	11091	90227	3425909
111	Water transport	6791	110028	29538	82	1483	126786	361	2179	535	67	1081	10240
112	Air transport	8448	35572	6536	337	609	17765	475	592	1828	86	5762	12394
113	Supporting and aux. tpt activities	48302	420727	27743	450	1155	95455	845	2495	8256	486	2182	27783
114	Storage and warehousing							160		8974			432813
115	Communication	605	95429	122260	5330	7947	650240	20059	64030	172074		67714	246276
116	Trade	286105	8314218	903142	3801	89179	3829251	58079	96700	34907	7369	68493	501056
117	Hotels and restaurants		40064	93123	17548	10168	4923038	19347	30530	394292	6065	23048	1122777
118	Banking	534247	2056311	717744	35499	107459	313770	5481	11047	74421	5009	19483	2700538
119	Insurance	104855	542889	83127	794	474	417614	17529	22625	71810	7551	4568	461671
120	Ownership of dwellings												
121	Education and research		8			8995		3853	42609			79324	
122	Medical and health					96595						11066	
123	Business services	34107	1300898	3964	47281	2466	1400226	11585	13304	60716	3351	13610	596114
124	Computer & related activities	18750	8429	2313	228	6837	27995	2624	30969	8838	5048	6386	73219
125	Legal services	872	31028	876	970	998	7118	914	1268	26433	1839	3344	42995
126	Real estate activities		142380					2211				1808	
127	Renting of machinery & equipment	1363	10664	1	288	68141	44274	2386	6349	518		4650	197
128	O.com, social&personal services	41745	5503	38609	943	55	77475	69	624	45419	79	15331	8699
129	Other services	1591	39611	2004	900	1098	24042	733	1081	987	1000	2796	504
130	Public administration												
	Total Input	4816731	69003006	9889200	676384	2841739	34093612	625955	1279941	1871169	187711	2096838	13484977
	NIT	298004	3909894	255001	4616	59161	4652401	14147	111057	67118	-511	144062	600114
	Total Input+NIT	5114735	72912900	10144200	681000	2900900	38746013	640103	1390998	1938287	187200	2240900	14085091
	GVA	1488758	38891400	6731700	923900	4360800	21302748	918771	1068322	2134459	271600	6606900	70455300
	Total Output	6603494	111804300	16875900	1604900	7261700	60048761	1558874	2459320	4072745	458800	8847800	84540391

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs												
Code/ Sector	Commodity	Industry	117	118	119	120	121	122	123	124	125	126	127	128
1	Paddy		480768				3115	8154	16		2	1		14
2	Wheat		306946				3414	3811	24		3	1		21
3	Jowar													
4	Bajra		391											
5	Maize		4											
6	Gram		3295											
7	Pulses		702158				1755	11181	76		11	3		66
8	Sugarcane		121459											
9	Groundnut													
10	Coconut		272											
11	Other oilseeds													
12	Jute													
13	Cotton													
14	Tea													
15	Coffee													
16	Rubber													
17	Tobacco													
18	Fruits		109649											
19	Vegetables		676378											
20	Other crops		591045				15745	54931	4366		636	166		3967
21	Milk and milk products		1781687				4130	17564	119		17	5		104
22	Animal services(agricultural)													
23	Poultry & Eggs		542289											
24	Other liv.st. produ.		599765				400	1719	5666		825	215		5148
25	Forestry and logging													
26	Fishing		67318											
27	Coal and lignite		5003						437		51	13		325
28	Natural gas													
29	Crude petroleum													
30	Iron ore													
31	Manganese ore													
32	Bauxite													
33	Copper ore													
34	Other metallic minerals													

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs											
Code/ Sector	Commodity \ Industry	117	118	119	120	121	122	123	124	125	126	127	128
35	Lime stone												
36	Mica												
37	Other non metallic minerals												
38	Sugar	225617											
39	Khandsari, boora	198261											
40	Hydrogenated oil(vanaspati)	341091											
41	Edible oils other than vanaspati	354304											
42	Tea and coffee processing	202822											
43	Miscellaneous food products	1925748		7066									
44	Beverages	341915		4698									
45	Tobacco products	102											
46	Khadi, cotton textiles(handlooms)												
47	Cotton textiles							1859		276	39		1450
48	Woolen textiles												
49	Silk textiles												
50	Art silk, synthetic fiber textiles			3389									
51	Jute, hemp, mesta textiles												
52	Carpet weaving	764							10150				
53	Readymade garments	248783	14864	7689		12335	59099		6881				90
54	Miscellaneous textile products	13				6767	36747	13816	3508	2013	525		12558
55	Furniture and fixtures-wooden	155089	30887	21779		34955	134233	118634		2133	4508		28748
56	Wood and wood products		385										
57	Paper, paper prods. & newsprint	123400	65727	52023		6152	15060	28181		4100	1071		10615
58	Printing and publishing	20436	72927	71121		43966	33609	6470	24693	9067	246		6024
59	Leather footwear												
60	Leather and leather products												
61	Rubber products	157	6572	5698		671	1014						7
62	Plastic products												
63	Petroleum products	153474	73215	53565		25045	48119	2191		319	83		3278
64	Coal tar products												
65	Inorganic heavy chemicals					1826	4523						
66	Organic heavy chemicals					18602	43710						
67	Fertilizers												
68	Pesticides	160	1	1			1						

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs											
Code/ Sector	Commodity / Industry	117	118	119	120	121	122	123	124	125	126	127	128
69	Paints, varnishes and lacquers												
70	Drugs and medicines					45524	1887501	7366		1073	280		5054
71	Soaps, cosmetics & glycerin	25422											
72	Synthetic fibers, resin												
73	Other chemicals	5						10576		98	402		5086
74	Structural clay products												
75	Cement												
76	Other non-metallic mineral prods.	9072	3	3		1	2	1617		190	24		993
77	Iron, steel and ferro alloys												3
78	Iron and steel casting & forging												
79	Iron and steel foundries												
80	Non-ferrous basic metals												
81	Hand tools, hardware	11						1128		164	43		1025
82	Miscellaneous metal products	344	17009	22457		429	6256	16105		2347	612		3585
83	Tractors and agri. implements												
84	Industrial machinery(F & T)												
85	Industrial machinery(others)												
86	Machine tools												
87	Other non-electrical machinery	146168	16182	7247		3200	8733	255		37	10		288
88	Electrical industrial Machinery		1286										
89	Electrical wires & cables												
90	Batteries	204	1695	1227		182	233					837	2
91	Electrical appliances	14477	1965	2233		757	1333	5101		654	146		3790
92	Communication equipments	20063	29					85324	36137	11258	2936	3709	205460
93	Other electrical Machinery	23306						321		47	12		292
94	Electronic equipments(incl.TV)	67517	131043	25314		1319	123606	239431	177898	41	11	2755	257
95	Ships and boats	138	2279	16559		843	4514	106225		15477	4036		96552
96	Rail equipments												
97	Motor vehicles	2793	13928	51797		7677	13236	52986	33697			808	77
98	Motor cycles and scooters	15	39541	16033		55	109		9828			2188	1
99	Bicycles, cycle-rickshaw	5	1754	683		193	1012		56254				9
100	Other transport equipments		1	1			2	6075	31105	6021			
101	Watches and clocks					2	345						
102	Medical, precision&optical instru.s			5448									

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

		Rs. Lakhs											
Code/ Sector	Commodity / Industry	117	118	119	120	121	122	123	124	125	126	127	128
103	Jems & jewelry												
104	Aircraft & spacecraft												
105	Miscellaneous manufacturing	52871	25480	3131		19708	23529	52435	71127	28	558		520907
106	Construction	451940	303153	11557	969194	203872	117240	200997	450313	166	641	13954	63809
107	Electricity	251339	265271	93171		13343	24957	105151	432308	63181	770	15978	19118
108	Water supply	11839	8864	856		602	776		57780				3
109	Railway transport services	24116	90066	43690		1145	11148	11689	29440	15	13	4	5440
110	Land tpt including via pipeline	688479	311260	170463		553653	212881	63935	87269	18255	993	2934	140715
111	Water transport	47309	787	850		333	626	159	138	5	3		1024
112	Air transport	13989	61443	9870		8049	7406	27446	13731	20340	46	37	993
113	Supporting and aux. tpt activities	76432	3400	3588		2147	19248	3062	2123	354	91	13	2345
114	Storage and warehousing	2276											
115	Communication	62028	570973	230387		54701	104263	168432	119050	898	12935	825	83988
116	Trade	2062408	48360	31623		31245	161570	48901	54227	3653	877	854	58451
117	Hotels and restaurants	947421	465964	220530		240346	888736	580425	267242	24806	71203	5250	80046
118	Banking	372718	873729	81198	182248	344921	119824	175122	374058	44534	4588	16216	327910
119	Insurance	85304	216959	62050		32307		56	53824	5	1		34
120	Ownership of dwellings												
121	Education and research					109114	44909		623268				
122	Medical and health			51146					360036				
123	Business services	22240	83239	8218	1	37251	925	1112880	626651	8671	163	6376	309199
124	Computer & related activities	22684	28440	1415	112	2966	5851	16544	504615	209	96	105	4270
125	Legal services	8069	10204	3820		2346	13547	136712	47912	52935	126372	1912	19560
126	Real estate activities							242324			152985		
127	Renting of machinery & equipment	287				536	65	653	1587	1		6836	11276
128	O.com, social&personal services	48224	59851	902		201	22208	47064	48112	13299	26058	2521	359361
129	Other services	11400	1834	2101	2	6523	4279	2339	2778	2580	1696		7065
130	Public administration												
	Total Input	15853477	3920570	1406596	1151557	1904368	4304344	3710690	4617739	310798	415478	84113	2410397
	NIT	55931	154052	64282	25199	48176	224201	198913	100604	-2917	19440	887	85130
	Total Input+NIT	15909408	4074622	1470878	1176756	1952545	4528546	3909603	4718343	307882	434918	85000	2495527
	GVA	7818537	20461000	4658500	23862459	16646356	7164881	4004560	13273897	1377421	1156313	352248	8388215
	Total Output	23727944	24535622	6129378	25039215	18598901	11693426	7914163	17992240	1685303	1591231	437248	10883742

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	129	130	IIUSE	PFCE	GFCE	GFCF	CIS	EXP	less IMP	TFUSE	Total
1	Paddy		4		8408871	9807455	174924		-246478	1133106	42	10868965	19277836
2	Wheat		6		3868280	7297113	187487		-164698	5554	266016	7059439	10927720
3	Jowar				204688	559536	3459		-19137	2134		545993	750681
4	Bajra				217231	551915			-16562	5944		541297	758528
5	Maize				287039	853229			-31040	206593	838	1027944	1314983
6	Gram				556707	839061	2657		-4596			837122	1393829
7	Pulses		18		2897009	3244674	59244		-22701	43090	311231	3013077	5910086
8	Sugarcane				3683054	45541			21239			66780	3749834
9	Groundnut				1365783	798560			-35846			762714	2128497
10	Coconut				230344	506414			-20863			485551	715895
11	Other oilseeds				3277404	1149016			36630	45503	19215	1211933	4489337
12	Jute				194546				-329			-330	194216
13	Cotton				3212889				-256721			-256721	2956167
14	Tea				348995				26854			26854	375849
15	Coffee				219772	50424			4209			54632	274404
16	Rubber				709733				43159	34070	78889	-1660	708073
17	Tobacco				130031	47285			2537	78568	2152	126239	256270
18	Fruits				3583288	3215840			1221	222775	354488	3085349	6668637
19	Vegetables				860272	7897363			670	134345	271207	7761171	8621443
20	Other crops		1042		7634196	2955512	355992		-13221	242242	95448	3445078	11079274
21	Milk and milk products		28		3101289	13296226	84419		41078	2528	51	13424201	16525490
22	Animal services(agricultural)				3114916								3114916
23	Poultry & Eggs				571886	2016617	94717		262	28448	1430	2138614	2710500
24	Other liv.st. produ.		1352		3372604	1683073	41369	186885	287987	103616	47938	2254993	5627597
25	Forestry and logging				5333623	4581753	40		104041	130713	516161	4300385	9634008
26	Fishing				946616	3252221			12420	383695	18752	3629584	4576200
27	Coal and lignite		178		7116012	49258	13860		24253	17960	2083253	-1977923	5138089
28	Natural gas				3370412	1356	44103		6743	28889	1886926	-1805835	1564577
29	Crude petroleum				29579113				-4398	426262	25496157	-25074293	4504820
30	Iron ore				1158942				14340	1182506	17884	1178962	2337904
31	Manganese ore				203312				-23816	4208	63092	-82700	120612
32	Bauxite				38733				-38009	78682	8734	31939	70671
33	Copper ore				667534				110	152	617700	-617438	50096
34	Other metallic minerals				230991				126823	201396	163222	164996	395987

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	129	130	IIUSE	PFCE	GFCE	GFCF	CIS	EXP	less IMP	TFUSE	Total
35	Lime stone				278746				2590	3314	39293	-33388	245358
36	Mica				20603				-23081	4253	169	-18997	1606
37	Other non metallic minerals	1			3006382				-401799	3517212	3961839	-846426	2159956
38	Sugar				771661	1354841	306212		373637	341759	760	2375688	3147349
39	Khandsari, boora				661964	550894			18594			569488	1231452
40	Hydrogenated oil(vanaspati)				607373	427432	97695		120153			645280	1252654
41	Edible oils other than vanaspati				2162983	4032070	924979		86725	780240	1042599	4781415	6944398
42	Tea and coffee processing				227655	509609	120097		219978	234507	30749	1053441	1281097
43	Miscellaneous food products	89			5226671	10698081	337997		652750	986438	143481	12531786	17758458
44	Beverages	1			550287	2562334	27190		144979	19657	39830	2714330	3264617
45	Tobacco products				261830	2073001			103398	45565	4256	2217707	2479538
46	Khadi, cotton textiles(handlooms)	1			495100	172243			328937	186985	90515	597650	1092750
47	Cotton textiles	970			2511133	5887493			612947	1250039	128579	7621900	10133034
48	Woolen textiles				355877	604059			38685	96060	139228	599576	955453
49	Silk textiles				226151	205848			71914	100977	158149	220590	446741
50	Art silk, synthetic fiber textiles				2988350	2475895			265136	576267	281027	3036270	6024620
51	Jute, hemp, mesta textiles	5			879509	60018	1		36272	59162	47036	108417	987926
52	Carpet weaving				19729	217820		359422	-279021	380850	21786	657286	677015
53	Readymade garments	482			1375155	3487499	325417		295260	4112191	52385	8167982	9543137
54	Miscellaneous textile products	3302			2808724	2287971	219576		224625	391407	345450	2778129	5586853
55	Furniture and fixtures-wooden	29090			958383	1389860	241497	826419	621612	100484	30557	3149315	4107698
56	Wood and wood products	26			2319359	553825	55	41147	158817	37531	97798	693578	3012938
57	Paper, paper prods. & newsprint	7518			4479788	562236	353920		260552	151386	863908	464185	4943973
58	Printing and publishing	3393			1625266	1309172	627692		135709	65190	279878	1857884	3483150
59	Leather footwear				26788	823706	195027		72815	68858	24361	1136044	1162832
60	Leather and leather products				1571132	545478			99356	640736	171237	1114332	2685464
61	Rubber products	310			2447019	330358	11291	1601214	464296	664547	312106	2759601	5206620
62	Plastic products	206			5156898	1694354	22074	959899	474646	444438	482651	3112759	8269658
63	Petroleum products	3952			25786491	9826000	773135		3104986	6985819	4434680	16255261	42041752
64	Coal tar products				2179698		96		49944	32888	541000	-458073	1721624
65	Inorganic heavy chemicals	611			5331311		888		359698	326262	1140493	-453645	4877666
66	Organic heavy chemicals	116			5287978		12240		168900	2342043	3286379	-763196	4524782
67	Fertilizers				6200617				551828	12216	1843576	-1279532	4921085
68	Pesticides	64			1119765		7123		58568	199300	89230	175762	1295527

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	129	130	IIUSE	PFCE	GFCE	GFCF	CIS	EXP	less IMP	TFUSE	Total
69	Paints, varnishes and lacquers		77		2039391	159931			394054	317536	298071	573451	2612842
70	Drugs and medicines		36385		3836079		517734		1010266	1452725	281865	2698861	6534939
71	Soaps, cosmetics & glycerin		994		602384	3320768	6412		188579	189352	88536	3616575	4218959
72	Synthetic fibers, resin				4563654				115379	620879	1480106	-743848	3819806
73	Other chemicals		4016		3653686	349867	42878		179540	428997	1019351	-18070	3635616
74	Structural clay products		16		3376635				119376	14190	68130	65436	3442071
75	Cement		15		5350357				275634	45145	21816	298963	5649320
76	Other non-metallic mineral prods.		537		3884465	651596	196	363972	431484	410385	380424	1477208	5361674
77	Iron, steel and ferro alloys		28		19881625			1044282	2697750	2286176	3530451	2497757	22379382
78	Iron and steel casting & forging				4197997			964770	365795	195661	187834	1338391	5536388
79	Iron and steel foundries				6434185			1319525	470147	1063729	1031417	1821984	8256169
80	Non-ferrous basic metals				11638316			2919976	472741	1599178	9189649	-4197754	7440562
81	Hand tools, hardware		300		2842561			295208	91762	202953	327191	262732	3105293
82	Miscellaneous metal products		3935		7338044	862584	52606	2391173	249730	556595	372774	3739914	11077958
83	Tractors and agri. implements				475212			2158018	67327	131679	33184	2323840	2799052
84	Industrial machinery(F & T)				1036465			1419944	731575	190626	1519531	822614	1859079
85	Industrial machinery(others)				770115			1429288	334133	123415	893780	993057	1763172
86	Machine tools				2625274		58	2359816	352304	203810	1322286	1593701	4218975
87	Other non-electrical machinery		507		8994920	838073	67618	8433452	1601838	1674597	5543678	7071900	16066820
88	Electrical industrial Machinery				1570609			5230832	-771764	624269	917359	4165977	5736586
89	Electrical wires & cables				1349673			1001835	-283563	146055	369346	494982	1844655
90	Batteries		74		459489	70612	19030	78024	23655	27526	181222	37624	497114
91	Electrical appliances		2007		388873	1075271	122451	360570	65006	33686	112300	1544685	1933557
92	Communication equipments		28100		3079065	183794	260145	3598969	586603	398271	4719678	308104	3387169
93	Other electrical Machinery		4211		3854853			672126	501862	598411	1212782	559617	4414470
94	Electronic equipments(incl.TV)		39999		2203658	915141	405413	1494203	343802	171575	2356530	973604	3177262
95	Ships and boats		25315		1267593			238034	236454	778589	1734325	-481248	786346
96	Rail equipments				1692438			403715	102439	28981	61756	473378	2165816
97	Motor vehicles		1429		3865369	1992531	591142	9686774	-1845235	1265760	1435988	10254985	14120354
98	Motor cycles and scooters		5		1460986	1593708	207025		250194	153297	85782	2118443	3579429
99	Bicycles, cycle-rickshaw		46		303118	112922	4994	341046	53337	16801	5452	523647	826766
100	Other transport equipments		6750		113426			257613	-87231	17471	23450	164403	277829
101	Watches and clocks				355864	130384		60499	16454	12037	49232	170142	526006
102	Medical, precision&optical instru.s				587065			1497779	359855	99285	513156	1443764	2030829

INPUT OUTPUT TRANSACTION TABLE (COMMODITY X INDUSTRY) - 2007-08 AT FACTOR COST

Rs. Lakhs

Code/ Sector	Commodity	Industry	129	130	IIUSE	PFCE	GFCE	GFCF	CIS	EXP	less IMP	TFUSE	Total
103	Jems & jewelry				4300874	1481148		5695	6731656	1764595	1792357	8190737	12491612
104	Aircraft & spacecraft				153925			5041541	9542	270105	5357006	-35817	118108
105	Miscellaneous manufacturing		28890		3713890	1219260	71012	1948456	-268245	1130731	2417368	1683845	5397736
106	Construction		37073		21964653	329701	1195071	88166042		562824	284400	89969237	111933890
107	Electricity		51567		14727098	1643094	831535			23		2474652	17201750
108	Water supply		35		493009	265886	846005					1111891	1604900
109	Railway transport services		1570		4115343	1880675	284614	447497		533572		3146357	7261700
110	Land tpt including via pipeline		16943		28131648	24175312	1509958	2332803		3899040		31917113	60048761
111	Water transport		106		742639	645630	40640	47675		1997090	1914800	816235	1558874
112	Air transport		515		1329912	1501989	307086	76997		1382935	2139600	1129408	2459320
113	Supporting and aux. tpt activities		1162		2041970	1016235	91985	375807		1120149	573400	2030776	4072745
114	Storage and warehousing				452843		5978					5978	458822
115	Communication		124895		5112335	2168696	856182			1056787	346200	3735465	8847800
116	Trade		15683		48943831	27527251	1234464	4135911		7708605		40606231	89550062
117	Hotels and restaurants		1671		10694898	12613406	419640					13033046	23727944
118	Banking		111202		17946268	5763165	826189					6589354	24535622
119	Insurance		309		4096134	1654903	191503			606038	419200	2033244	6129378
120	Ownership of dwellings					25039215						25039215	25039215
121	Education and research				1040819	13628725	5059756				1130400	17558082	18598901
122	Medical and health				518843	9942072	1240717				8206	11174583	11693426
123	Business services		11134		7810767	461197	712100	504828		7654971	9229700	103396	7914163
124	Computer & related activities		5898		1781295	825845	309653	489230		15935617	1349400	16210945	17992240
125	Legal services		15297		926318	600923	91843			251213	184994	758985	1685303
126	Real estate activities				542025	1049206						1049206	1591231
127	Renting of machinery & equipment		9818		234630	192563	51568					244131	478761
128	O.com, social&personal services		29386		3502706	5433552	1947484					7381036	10883742
129	Other services		299079		1098646	543094	525900			3970838	3285601	1754231	2852876
130	Public administration						23499200					23499200	23499200
	Total Input		969743		493133258	273201468	50114255	157568911	25504800	95826337	124246878	477968893	971102151
	NIT		190440		19826657	5088131	1187845	7119096		7278763		20673836	40500493
	Total Input+NIT		1160182		512959915							498642729	1011602644
	GVA		1680348	23499200	458142235								458142235
	Total Output		2840530	23499200	971102150	278289600	51302100	164688007	25504800	103105100	124246878	498642729	1469744879

APPENDIX II to CHAPTER 9

SECTOR SPECIFICATION FOR THE INPUT-OUTPUT TRANSACTIONS, 2007-08

IOTT Sec. No.	Name	Specification
001	Paddy	Paddy, rice milling
002	Wheat	Wheat, flour milling
003	Jowar	Jowar
004	Bajra	Bajra
005	Maize	Maize
006	Gram	Gram
007	Pulses	Milled and unmilled tur, urad, moong, matar, masur and gram dal including flour
008	Sugarcane	Sugarcane, gur (indigenous production)
009	Groundnut	Groundnut
010	Coconut	Coconut, copra
011	Other Oil Seeds	Other Oil Seeds
012	Jute	Raw jute
013	Cotton	Raw cotton
014	Tea	Tea plantation
015	Coffee	Coffee plantation
016	Rubber	Rubber plantation
017	Tobacco	Tobacco plantation
018	Fruits	Fruits
019	Vegetables	Vegetables
020	Other crops	Other cereals and their milling, mesta, sannhemp, dry chillies, black pepper, dry ginger, turmeric, indigo, opium, cardamom, other fibbers, other sugars, other dyes and tanning materials, other drugs and narcotics, other condiments and spices, fodder, grass, rice bran, rice husk, straw and stalks, badges, cane trash and miscellaneous food and non-food crops.
021	Milk and milk products	Milk consumed as such, ghee, butter, lassi
022	Animal Services (agri-cultural)	Agricultural animal services by rural bullocks and camels

IOTT Sec. No.	Name	Specification
023	Poultry & Eggs	Eggs, poultry meat, increment in poultry
024	Other livestock products	Production of meat, mutton, pork and glands, other meat products, raw hides and skins, animal hair, bristles, wool, honey, silk worm cocoons, bones, horns, hoofs, dung fuel & manure, increment in livestock
025	Forestry and logging	Planting, replanting, conservation of forests, production of fuel including charcoal, felling and cutting of trees, hewing or rough shaping of poles, blocks etc. And transportation of logs upto the permanent lines of transport, industrial wood (timber, match and pulp wood) bamboo, sandal wood, gathering of uncultivated materials such as gums, lacs, resins, forest grown fruits, nuts, herbs, barks and cane, gobar gas
026	Fishing	Rearing and catching of fish, seaweeds, shells, pearls, sponges etc. Fish curing viz; salting and sundrying of fish
027	Coal and lignite	Coal and lignite mining
028	Natural gas	Natural gas
029	Crude petroleum,	Crude petroleum
030	Iron ore	Iron ore mining
031	Manganese ore	Manganese ore mining
032	Bauxite	Bauxite mining
033	Copper ore	Copper ore mining
034	Other metallic minerals	Chromite, lead and zinc ore, silver ores, gold ores, ilmenite and rutile
035	Lime stone	Lime stone mining
036	Mica	Mica mining
037	Other non metallic minerals	Dolomite, apatite, asbestos, barytes, chinaclay, gypsum, kyanite, magnesite, diamond, calcite, ochre, garnet, graphite, feldspar, fireclay, flourite, quartz and silica, sillimanite, steatite, minor minerals, salt mining and quarrying, sand and stone quarrying, mining of clay, sandpits, chemical and fertilizer, mineral mining, precious and semi precious stone mining
038	Sugar	Manufacture and refining of sugar
039	Khandsari, boora	Boora, candy and khandsari
040	Hydrogenated oil (vanaspati)	Hydrogenated oils, vanaspati ghee
041	Edible oils other than vanaspati	Edible oils such as linseed oil, mustard oil, sesamum oil, coconut oil, groundnut oil, cotton seed oil, til oil, mahua oil etc.
042	Tea and coffee processing	Blended and unblended black tea leaf grade, dust and waste, coffee curing, roasting and grinding

IOTT Sec. No.	Name	Specification
043	Miscellaneous food products	P reservation, processing and canning of meat, milk foods and manufacture of dairy products, manufacture of fruit juice, jams, jellies, pickles and canning and bottling of fruits and vegetables, canning, preserving and processing of fish, crustacea and similar foods, manufacture of bakery products, production of common salt, manufacture of cocoa, chocolate, sugar confectionery and sweetmeats, cashewnut drying, shelling, roasting, salting etc., Manufacture of ice, prepared cattle, poultry and other animal feeds, starch processed from maize, tapioca, tamarind, potato etc., Manufacture of malted foods, grinding and processing of spices, papads, appalam, egg powder, semi-processed foods and instant foods, sago and sago products, vitaminised high protein flour (multi purpose foods), frying of dals, nuts and foods n.e.c., Residuary snacks n.e.c., Other food processing activities
044	Beverages	D istilling, rectifying and blending of spirits, wines, beer, malt, liquors, other malt country liquor, toddy, manufacture of aerated drinks, aerated natural flavoured syrups, synthetic flavoured syrups, fruit juices and beverages n.e.c.
045	Tobacco products	T obacco stemming, redrying, grading etc. And manufacture of bidi, cigars, cigarette, cheroots, cigarette tobacco, chewing tobacco, zarda and snuff
046	Khadi, cotton textiles in hand- looms	C otton spinning in charkha, khadi weaving and finishing of cotton textiles in handlooms
047	Cotton textiles	C otton ginning, cleaning and baling, spinning, weaving and finishing of cotton textiles in mills and power looms, printing, dyeing and bleaching of cotton textiles, cotton textiles n.e.c.
048	Woolen textiles	W ool cleaning, baling and pressing, wool spinning, weaving etc. (handloom, powerlooms and mills), dyeing, bleaching and manufacture of woollen blankets, shawls, felts and others
049	Silk textiles	S pinning, weaving, finishing, printing, dyeing and bleaching of silk textiles
050	Art silk, synthetic fibre textiles	S pinning, weaving and finishing of synthetic fibres, rayons, nylons etc., Printing, dyeing and bleaching of synthetic textiles, other silk and synthetic fibre textiles
051	Jute, hemp, mesta textiles	P ressing, baling, spinning and weaving, finishing of jute, mesta, hemp and other coarse fibre, dyeing, printing and bleaching of jute textiles, manufacture of jute bags and other jute textiles

IOTT Sec. No.	Name	Specification
052	Carpet weaving	Weaving carpets, rugs, durries and others
053	Ready made garments and made up textile goods	Readymade garments, clothing and tailoring, made up textile goods, curtains, bed covers, furnishings, mosquito nets
054	Miscellaneous textile products	Cotton, woollen and synthetic fibres knitting in mills or otherwise, thread and thread ball making, jute, cotton, hemp, sisal, nylon rope, cordage and twines, nets, webbing, narrow fabrics, embroidery work, laces, fringes, zari and zari products, manufacture of rain coats, hats, umbrellas etc., Oil cloth, rubberised cloth, tarpaulin, artificial leather, made-up canvas goods, coir fibre, yarn and coir products, linoleum and similar products, gas mantles and other textiles viz. Bandage, gauze, dressing cloth
055	Furniture and fixtures-wooden	Wooden, bamboo, cane furniture and fixtures and repair of such furniture
056	Wood and wood products except furniture	Manufacture of veneer, plywood and their products, sawing and planing of wood, container made of wood, cane, bamboo, reed etc., structural wooden goods such as beams, posts etc., Wooden industrial goods, cork and cork products and miscellaneous wood, bamboo and cane products
057	Paper, paper products and newsprint	Manufacture of machine made and made pulp, paper and paper board including newsprint, containers and boxes of paper and paper board, miscellaneous pulp products, paper and paper board articles
058	Printing, publishing and allied activities	Printing and publishing of newspapers, periodicals, books, journals, atlases, maps, sheet music, directories, bank notes, currency notes, postage stamps, security passes, engraving, etching, block making, book binding, allied activities like envelope printing, picture post card printing, embossing
059	Leather footwear	Manufacture and repair of leather footwear, leather-cum-rubber/plastic cloth footwear
060	Leather and leather products except footwear	Tanning, curing, finishing, embossing and japanning of leather, manufacture of wearing apparel and consumer goods of leather and substitutes of leather, scrapping curving and tanning, bleaching, dyeing of fur and other pelts, manufacture of wearing apparel, rugs and other articles of fur and pelts
061	Rubber products	Rubber tyres and tubes for motor vehicles, tractors, aircraft, scooters, motor cycles and cycles and other rubber and plastic footwear, rubber surgical and medical equipment, rubber contraceptives, rubber pipes, balloons, rubber industrial and domestic goods and misc. Rubber products

IOTT Sec. No.	Name	Specification
062	Plastic products	Plastic moulded goods and such as containers, sheets, nets, cords, polythene bags, spectacles frames, industrial accessories, domestic goods and miscellaneous plastic products
063	Petroleum products including L.P.G	Products of petroleum refineries, Manufacture of L.P.G in gasworks and distribution through mains to household, industrial and commercial and other users.
064	Coal tar products	Coke and other coal tar products
065	Inorganic heavy chemicals	Basic heavy inorganic chemicals
066	Organic heavy chemicals	Basic heavy organic chemicals
067	Fertilizers	Inorganic, organic, mixed and other fertilizers
068	Pesticides	Insecticides, fungicides, weedicides and pesticides formulations
069	Paints, varnishes and lacquers	Paints, varnishes, lacquers and dyestuffs, waxes and polishes
070	Drugs and medicines	Drugs and medicines - allopathic, ayurvedic, unani, homoeopathic and others
071	Soaps, cosmetics, glycerine	Soaps, perfumes, cosmetics, toothpastes, soap in any form and other toilet aids, glycerine and detergents
072	Synthetic fibres, resin	Turpentine, resin, synthetic resin plastic materials and synthetic fibres like celluloid nylon, terylene and miscellaneous products of fermentation industries other than alcohol
073	Other chemicals	Inedible vegetable oils including solvent extracted oils, animal oils and fats, matches, explosives, ammunition, safety fuses, fire-works, photochemical materials, sensitised films and paper, fine chemicals, drug and dye intermediaries, glue and galatine, shellac, synthetic sweeteners, textile chemical auxiliaries and other chemical products
074	Structural clay products	Structural clay products such as fire bricks, refractories, tiles and others
075	Cement	Cement
076	Other non-metallic mineral products	Manufacture of glass and glass products, earthenware and pottery, chinaware, sanitaryware, porcelainware, insulators, lime and plaster, mica products, structural stone goods, stoneware, stone dressing and crushing, earthen and laster statues and products, asbestos cement and its products, slate

IOTT Sec. No.	Name	Specification
		products, cement and concrete products, abrasives, graphite products, mineral wool, silica products and other non-metallic mineral products
077	Iron and steel ferro alloys	Iron and steel, special steel and ferro-alloys
078	Iron and steel casting and forging	Iron and steel castings and forgings
079	Iron and steel foundries	Iron and steel structurals, pipes, plates, wire drawings, tools and others
080	Non-ferrous basic metals (including alloys)	Melting, refining, rolling into basic forms, wire drawings etc. Of non-ferrous basic metals and alloys
081	Hand tools, hardware	Hand tools, bolts, nuts, locks, metal chains, agricultural hand tools and implements, general hardware
082	Miscellaneous metal products	Metal containers, steel trunks, safes, vaults, sanitary and plumbing fixtures and fittings of metal, stoves, hurricane lanterns, welded products, enamelling, galvanising, plating and polishing of metal products, metal utensils, cutlery and kitchenware, metal furniture and fixtures, blades, springs, art metal ware, other metal products
083	Tractors and other agricultural implements	Tractors and other agricultural machinery, equipment and implements
084	Industrial machinery for food and textile industries	Rice, dal, flour and oil mill machinery, sugar machinery, tea machinery, textile machinery and jute machinery
085	Industrial machinery (except food and textile)	Pharmaceutical machinery, chemical machinery, paper machinery, mining machinery, cement machinery
086	Machine tools	Automatic, capstans, turrets and lathes, boring, broaching, drilling and threading machines, milling, planing, shaping, gear cutting and slotting machines, grinding, lapping, honing and polishing machines, sawing, filling and cut-off machines, metal forming machinery and other metal work machine tools

IOTT Sec. No.	Name	Specification
087	Other non-electrical machinery	Drills, coal cutting machines, earth moving, lifting and hoisting machinery, cranes, conveyors and road rollers and other heavy machinery and equipment used by construction and mining industries, prime movers, boilers and steam generating plants such as diesel engines, refrigerating, air conditioning plants for industrial use, domestic air conditioners and refrigerators, fire fighting equipment and appliances including fire engines, conveying equipment such as bucket elevators, derrick and size reduction equipment like crushers, ball mills etc., Centrifugal machines, pumps, air and gas compressors and vacuum pumps, ball roller and tapered bearings, speed reduction units, sewing and knitting machines, washing machines, filtration and distillation equipment, arms and armaments and miscellaneous non-electrical machinery and their repair services
088	Electrical industrial machinery	Generators, transformers, switch gears, electric motors
089	Electrical cables, wires	Insulated cables and wires
090	Batteries	Storage batteries, dry cells
091	Electrical appliances	Electrical fans, lamps, flourescent tubes miniature lamps, household appliances like iron, heaters etc. And their repair services
092	Communication equipment	Manufacture of wireless communication apparatus, manufacture of radios, teleprinters, telephones, telegraph equipment, phonographs and record changers, manufacture of parts and accessories and other including public address equipment
093	Other electrical machinery	Manufacture and repair of radiographic X-ray apparatus and tubes and parts, manufacture of light fittings, emergency lighting equipment, flash lights, stage lighting equipment, electric furnaces and oven telescopic aerials and parts and accessories
094	Electronic equipment including TV	Manufacture of television sets, electronic computers, electronic control instruments, other parts and accessories
095	Ships and boats	Making of ships and other vessels drawn by power, boat building, and their repairing
096	Rail equipment	Manufacture of diesel locomotives, steam locomotives, electric locomotives, railway coaches, wagons, parts and accessories

IOTT Sec. No.	Name	Specification
097	Motor vehicles	Manufacture of motor cars, buses, trucks, jeeps, station wagons and parts and repair of motor vehicles
098	Motor cycles and scooters	Manufacture of motor cycles, scooters and scooterettes parts and accessories and their repair
099	Bicycles, cycle-rickshaw	Manufacture of cycles, cycle rickshaws and repair of bicycles and cycle-rickshaw
100	Other transport equipment	Manufacture of other rail-road equipment, tramway works, bullock carts, push-carts, hand-carts and transport equipment not elsewhere classified
101	Watches and clocks	Manufacture of clocks, table time pieces, watches and their parts and repair of watches and clocks
102	Medical Precision, Optical Instruments	Manufacture of surgical, medical, laboratory scientific and mathematical instruments, Photographic and optical goods (excluding photochemical, sensitised paper and film),
103	Gems & Jewelry	Gems, jewelry and related articles, imitation jewelry & novelties
104	Aircrafts & Spacecrafts	Manufacture of aircraft , Spacecrafts, and parts and repair
105	Miscellaneous manufacturing	Water meters, steam meters and electricity meters, recording and regulating devices for pressure, temperature, weight, level etc., minting coins, sports and athletic goods and play equipment, musical instruments, stationery articles like fountain pens, pencils, pens, pin cushions, tags, hair brushes, dusters, feather articles, signs and advertising displays, mechanical toys, other toys, bones, ivory, horns and similar products, wigs, costume, lampshades, presentation articles, badges and others, and repair of enterprises not elsewhere classified
106	Construction	Construction and maintenance of buildings, aerodromes, roads, railways, bridges, tunnels, pipelines, ports, harbours, runways communication systems, waterways, water reservoirs, hydro electric projects and industrial plants and activities allied to construction
107	Electricity	Generation and transmission of electric energy and its distribution to households, industrial and commercial and other users
108	Water supply	Collection, purification and distribution of water
109	Railway transport services	Government railways and Private railways
110	Land Transport including via Pipelines	Buses, tramways and pipelines, trucks, taxies, auto-rickshaws, animal services, urban bullock, urban buffalo, horses and other animals drawn carts, cycles, hand pulled rickshaw and pack animals,
111	Water Transport	Shipping transport by boats, steamer, ferry etc. by canal or rivers and unorganized water transport by sea

IOTT Sec. No.	Name	Specification
112	Air Transport	Air Transport
113	Supportive and Auxiliary transport activities	Supportive and Auxiliary transport activities and Services incidental to transport activities.
114	Storage and warehousing	Warehousing, cold storage and storage and warehousing not elsewhere classified
115	Communication	Postal, telephones, telegraph services rendered by postal and telegraph department and overseas communication services
116	Trade	Wholesale and retail trade
117	Hotels and restaurants	Services rendered by hotels, boarding houses, eating houses, cafes, restaurants, canteen etc.
118	Banking	Commercial banks, banking department of RBI, other financial companies, industrial development and financial corporations, post office saving banks, cumulative time deposit accounts, cooperative credit societies
119	Insurance	Life insurance corporation, postal life insurance, employees state insurance and non-life insurance such as fire, marine, accidents etc.
120	Ownership of dwellings	Residential houses
121	Education and research	Education, scientific and research services
122	Medical and health	Medical and health services
123	Business Services	Accounting Services, Research and Development and other Business Services,
124	Computer Related Services	Computer Related Services
125	Legal Services	Legal Services
126	Real estate Activities	Real estate Activities
127	Renting of Machinery & Equipment	Renting of Machinery & Equipment
128	Community Social & Personal Services	Religious and community services, cultural services, personal services such as domestic services, laundry, dry-cleaning and dyeing, photographic studios, barber and beauty shops, funeral related activities, custom tailoring, hair dressing and other beauty treatment, washing and cleaning of textiles.

IOTT Sec. No.	Name	Specification
129	Other Services	Sanitary services, recreation & entertainment, radio & TV broadcasting services, international and other territorial bodies and services not elsewhere classified.
130	Public administration and defence	Public administration and defence

Notes:

1. Sectors 001 to 020 also include agricultural and horticultural services such as harvesting, baling and threshing, husking and shelling, preparation for marketing, pest destroying and spraying, pruning, picking and operating irrigation systems.
2. Sectors 021 to 024 include breeding and rearing of animals and poultry including private veterinary services.
3. Sectors 027 to 037 include extraction, breaking, milling, washing, cleaning, grading and processing.

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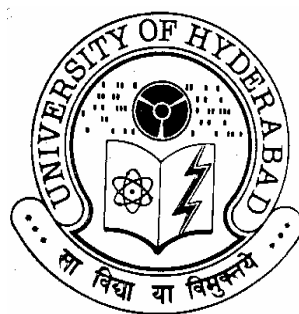
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Synopsis

**OPTIONS FOR A GOODS AND SERVICE TAX IN
A FEDERAL STRUCTURE WITH REFERENCE
TO INDIA**

By

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V BHASKAR

Introduction

Reform of indirect taxes has been an important consideration for all governments considering their dependence on its revenues .VAT was initially introduced by France in 1954. The Central Government in India introduced the Modified Value Added tax in 1986 followed by CENVAT in 2002. State governments in India introduced VAT progressively from 1st April 2005.

Despite these reforms, the existing indirect tax structure still causes distortions and allocative inefficiencies for the following reasons.

- i. All taxes levied presently are not being allowed the benefit of input tax credit. Central Sales Tax (CST) on interstate movement of goods has not been integrated with Value Added Tax hence CST paid on inter-state procurement is not eligible as a credit.CST paid continues to be embedded in the product cost. Similarly, manufacturers are required to pay VAT on the excise duty inclusive prices of goods resulting in cascading to the extent of VAT on excise duty. Further manufacturers are unable to avail

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credit of other state taxes such as entry tax, luxury tax, entertainment tax and octroi, against excise duty or VAT paid. This results in these taxes being embedded in the price adversely affecting domestic competitiveness.

- ii. Service tax has not been integrated with State VAT resulting in non availability of set off and increase in cost of the final goods.
- iii. Differential treatment of the manufacturing and service sectors has created a persistent implementation problem in the existing tax system. With the line between goods and services getting blurred, definitional litigation is on the rise. This has also led to incidence of double taxation on the same goods/service by both the Centre and the States. Ideally there should be uniform tax rate on goods and services and same tax treatment for availing input tax credit at central as well as state level.
- iv. The existing tax structure has fragmented the Indian market into twenty eight (28) state markets through the imposition of physical tax barriers-check posts which discourage efficient production and restrict trade.
- v. Exemptions continue to be provided on geographical and product based considerations; which distort prices and thwart economically sound investment decisions.

In the above context, replacement of existing complex multilayer indirect tax system by a rational Goods and Service Tax on all tradable goods and services is imperative for India's growth and competitiveness. In the proposed GST regime, manufacturers will be entitled to input tax credit of all taxes levied on inputs and capital goods purchased from within the State as well as inter-state, from a registered dealer for

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setting off the output tax liability on the sale of their finished products. Similarly, distributors should also be able to pass on the duty burden to their customers. This would ensure that there is no cascading effect of taxes and would result in the reduced cost of doing business. In the medium term, this is likely to result in reduction in the prices of commodities as manufacturers and distributors would pass on the benefits of the lower costs of carrying on their businesses to the consumers in a competitive environment.

The case for a goods and services across India becomes stronger in view of the free trade agreements India has signed with a number of countries during the last decade. Unless India implements the GST, it will be unable to provide a level -playing field for domestic manufacturing. GST is thus imperative to spur the growth of the manufacturing sector. There is thus a strong case for the implementation of the Goods and Service Tax in India as early as possible.

Once this proposition to implement the GST in India is accepted, the next issue is the manner of implementation given the wide diversity of economic development, geographical endowments and human capital amongst all the twenty eight states of India. The per capital income difference between the poorest State (Bihar) and richest State (Goa) is 1:8. The literacy rate also widely varies between 93.9% in Kerala to 63.8% in Bihar. Therefore, the States' aspirations and objectives of growth vary. In this diverse economic environment, a GST model must be tailor made to be acceptable to all the States. The GST has been implemented in both developed and developing countries, and necessarily, as has been observed in the literature review, there is no "one size fits all" approach.

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The importance of implementing GST in India has increasingly been recognized. The momentum for implementation has picked up with the introduction of the 115th Constitutional Amendment Bill in April 2011 in the Parliament. With this backdrop, it was decided to take up a study on “Option for a Goods and Service Tax in a federal structure with reference to India” in view of its immediate and topical relevance.

Objectives of the Study

This Study examines the options for a Goods and Service Taxes in federal structure with reference to India. In particular, it explores the options available for India in implementing the Goods and Service Tax with reference to international experience.

Terminology

The terms Goods and Service Tax (GST) and Value Added Tax (VAT) have been mostly used synonymously in this thesis. In the international context, both VAT and GST are synonymous. In the Indian context, VAT refers to the tax levied only by State Governments on an exclusive base of sales of goods. On the other hand, GST refers to the tax levied on a common base comprising both goods and services by both the Central and State governments.

Nature and the Sources of Data

The data collected for the study is secondary data. Data on different VAT/GST structures and tax rates, existing across the world has been collated for analysis. The data has been obtained from the official websites of the Revenue and Finance Departments of different countries across the world, as well as from the official

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websites of the concerned tax departments of the Central and State Governments. In addition, the VAT/GST guides published by prominent tax consultant firms like Earnest and Young, Deloitte were also referred to.

Data pertaining to tax revenue, total revenues, and Gross Domestic Product growth rates across the time periods, has been obtained from the official websites of Government of India and Reserve Bank of India

For the Input-output Analysis which was employed for estimating the tax base and for computing Revenue Neutral Rate (RNR); the Input Output Transaction Tables (IOTT) for the year 2007-08, released in 2013 by National Accounts Statistics (NAS), Central Statistics Office Ministry of Statistics and Programme Implementation, Government of India was used.

Organisation of the Study

This thesis has been organized in nine chapters as follows.

Chapter 1 deals with the historical review of the levy of Sales Tax and the introduction of VAT. It also explores the problems in the existing indirect tax system in India and throws up the reasons why a Goods and Service tax is needed.

Chapter 2 is a review of the international and national literature relating to indirect tax in general and GST in particular. It also draws lessons which can be applied to the GST in India.

Nine lessons are listed below. First, a comprehensive destination based goods and services tax on consumption computed on invoice based credit method has been

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successfully implemented in countries across the globe and has shown some association with growth in tax revenues. Second, for this to be successful, demands a strong level of political commitment as well as careful administrative preparation, training and conscientization of the tax payers through awareness programs. Third, the tax GDP ratio for a country can be broken down into the product of two quotients - the tax base to GDP and the tax revenue to tax base. Better tax policy can enhance the first quotient while better tax administration can enhance the second quotient. Tax administration is thus the key to tax reform and without an efficient tax administration in place, full advantage of any tax policy reforms cannot be derived. Fourth, there is no one size fits all approach and each country should work out its own tax design based upon its economic and political environment. Fifth, the design of the GST should be as simple as possible with the minimum number of rates as well as few exemptions. Zero rating should be confined to exports. Sixth, in case of political opposition from some states to implement GST, options for a partial rollout should be examined as an option keeping the relevant Canadian experience in mind. Seventh, a self assessment system backed with a computerized risk based audit framework and a predictable refund policy are essential requirements of a sustainable GST. Eighth, the GST should be designed to gradually bring the informal sector of the Indian economy into the tax net. Ninth, the introduction of GST should be carefully timed. Global experience indicates that though the introduction of GST does not have a significant impact on inflation, its introduction during high inflation periods tends to dilute the chances for its success.

Chapter 3 explores successful GST models under implementation in six countries viz. France, Germany, New Zealand, Canada, Brazil and Australia. Based upon international experience it is seen that there are four possible approaches to implementing VAT in a federal system. The first approach involves different levels of a federation implementing completely independent VATs. Brazil comes near to this, though states are subject to a minimum rate fixed by Central legislation. The second approach called ‘dual VAT’ involves each level of government setting its rates independently but on similar bases with a high degree of administrative cooperation. Quebec is an example. The third approach- termed ‘joint VAT’ is essentially a central VAT with the Centre sharing its revenue with the states as per some predetermined basis. The fourth approach involves the application of the “compensating VAT” or CVAT approach. In a fiscal environment where states are authorized to levy their own independent VAT; CVAT would be imposed by the central government on sales between states at some appropriate rate. States would zero-rate not only international but interstate sales as well. The latter would be subject to the central CVAT as well as the central VAT. Domestic sales would thus be subject to central VAT and either state VAT or central CVAT. There would be no need for any state to deal explicitly with any other state nor, generally, would there be any need for interstate clearing of tax credits. Registered purchasers in the importing state would be able to credit CVAT against central VAT. A combination of the second and fourth options are relevant in the Indian context i.e. the dual VAT and the CVAT.

Chapter 4 examines the case for including immovable property in the tax base of the GST. This chapter finds that keeping such a large base of immovable property comprising about 8.67% of the GDP outside the GST base will be a travesty especially as the inclusion will bring the informal sector into the tax net while making revenues more buoyant. This chapter reviews the international experience in this regard and demonstrates that there is adequate support for the levy of GST on immovable property in India.

However, it must be remembered that there are no perfect land markets in some states in India today. Sale of land is not permitted to non-residents in states like Himachal Pradesh, J & K, Uttarakhand and the North East. Sale to non agriculturalists is prohibited under the ceiling laws in other states. Since the land market is repressed in such cases, the correct price is not used in transactions and therefore tax revenue may be lower than potential.

Chapter 5 examines the case for inclusion of financial services in the tax base of the GST. Globally, the dominant practice is to exempt financial services from GST. This is despite the fact that exemption distorts competition by under taxing the business-to-consumer (B2C) supplies since the value added by the supplier escapes tax. Simultaneously exemption overtaxes supplies to VAT-registered businesses (B2B) because of blocked input VAT that is never recovered in the supply chain. Exemption thus biases use of financial services in favour of consumers and against businesses. Further exemption deters outsourcing by financial services companies since input tax recovery is blocked. This chapter reviews the international experience on the inclusion of financial services in the tax base of the GST.

Some countries have adopted modifications to the exemption system which include three major options. First taxing all explicit financial fees, second providing taxpayers with the option to treat otherwise exempt financial services as taxable, and third zero rating B2B supplies of some financial services. These options require a high degree of complexity in the administrative mechanism. India already levies service tax on some financial transactions and securities transaction tax not eligible for input tax credit.

Even the EU has not fully adopted a financial transactions tax. This Chapter finds that, in such a global environment, given the handicaps in implementing the financial transaction tax, it may be desirable for India at this stage of its development to refrain from including financial transaction tax in the tax base of the proposed GST and continue with the status quo.

Chapter 6 explores the political economy issues in the GST implementation. It examines the political imperatives for some states to resist the implementation of the GST and explores possibilities for a partial roll out of GST covering some states only. The Chapter also examines the case of five countries which initially implemented VAT and subsequently withdrew it. It finally draws out lessons learnt from these experiences as under;

- i. There must be strong commitment to the GST across the political spectrum irrespective of which party implements the tax. This commitment includes the need for parties to refrain from using the GST as a tool for addressing their political constituencies. Further political parties should not make repeal of the GST a campaign issue, as this will constrain their actions if and when they assume power.

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- ii. Adequate and prior planning and redesigning of administrative structures as well as training staff are essential to adequately meet the challenges of implementing GST.
- iii. A well-designed GST law should incorporate few exemptions, no zero rating for domestic consumption and an adequate threshold to limit the number of taxpayers to reflect the tax administration's capacity.
- iv. A well designed IEC campaign should be put in place after the enactment of the GST legislation but prior to the implementation of GST. Adequate scope should be provided for this exercise through a carefully designed time table.
- v. A client oriented GST administration structure should be designed to closely cooperate with other tax administrations to ensure that dual control over small trader and manufacturers is eliminated.
- vi. The GST design should allow for a partial rollout amongst states, subject to a critical mass of states joining the GST.
- vii. The Constitutional Amendment should allow for the implementation of a perfect GST though broad and permissive legislation. The GST law to be legislated subsequently by the Centre and the states could then be adequately restrictive consistent with political compulsions deemed necessary at that time. This ordering follows the recommended strategy for tax reform that appropriate policy goals must be set first and then these could be modified by taking into account the associated political and administrative problems.

Chapter 7 deals with the administrative aspects of the implementation of the GST. It separately examines the policy strategy to be adopted to improve administrative effectiveness, the compliance strategy and the departmental resource strategy. It also looks into international experience relating to VAT frauds and suggests steps to be taken in the GST design to minimise such frauds.

Chapter 8 examines the legal issues which need to be addressed prior to the implementation of the GST, with reference to the Indian Constitution as well as the State VAT legislation. It makes proposals regarding constitutional amendments as well as GST Law.

This chapter notes that the 115th Constitution Amendment Bill as framed does not appear to be driven by a broad philosophy on the modalities of implementation of the GST. The Bill is neither succinct nor comprehensive. It is over specific in some sections like the definition of GST and not specific enough in other sections like the powers of the GST Council. It neither fully determines the contours of GST nor does it adequately empower the GST Council to do so. Admittedly, this Bill seeks to find the middle ground between different state contentions and GoI's views, but in seeking to do so, it has not identified the policy goals to be achieved for implementing the GST. Ideally, the Bill should enable the policy goal of the GST to be implemented. Only then can the full benefit of this tax reform be leveraged. The Bill should simultaneously empower the GST Council to suitably moderate the path to this goal depending upon political and administrative constraints. Unfortunately the Bill reverses the sequencing of these steps.

The dominant political and administrative constraints have first shaped the Bill. The GST Council is subsequently then expected to achieve the policy goals. This appears to be an unreasonable expectation, given that the same political and administrative constraints will continue to apply to the working of the Council also. There is thus a possibility that the approach adopted in the Bill will lead to a sub optimal GST.

Further, it is noteworthy that the passage of the Bill as it stands is not sufficient for the implementation of the GST. More work will need to be done by the Council which may result in the need for another Constitutional amendment. At best, this Bill can be described as a job half done. Ideally, the Bill should have only enabled the implementation of GST while delegating the modalities of implementation to the GST Council. The Bill should have enabled the policy goal –the model GST as defined by the 13 FC being reached and also enabled the adequate empowerment of the GST Council to determine the road map to achieve this goal . In view of the lack of consensus on some issues amongst states and the Center, the road map could involve a multi stage journey. Thus even if a hybrid GST has to be adopted in the first instance by the Council, it could later be improved upon without recourse to another Constitutional amendment.

Chapter 9 is the concluding chapter which proposes a design of the GST relevant for India based on the lessons of the previous 8 chapters. Using Input-Output tables, it determines the Revenue Neutral Rate for both the Centre and the State.

The Revenue Neutral Rate (RNR) is the rate of GST required to generate the same revenue as was realized in the base year from taxes that are being subsumed into the tax base. Information required for calculating RNR is (i) The Revenue collections

from the subsumed taxes in the base year and (ii) The Potential tax base for GST in the base year. The RNR is then derived as below:

$$RNR = \frac{\text{Total Tax collections from the subsumed taxes in the base year}}{\text{The Potential tax base for GST in the base year}} \times 100$$

We have from the Input Output analysis

$$C_i = X_i - \sum_{j=1}^n a_{ij} X_j \quad \text{----- (1)}$$

Where

- C_i is the proportion of the total output of the commodity ‘i’, that meets the final demand. Equivalently, it is the total consumption value of the i^{th} Commodity.

- X_i is the total output of the i^{th} commodity

- $a_{ij} = \frac{X_{ij}}{X_j}$,

is a constant, representing the proportional value of i^{th} Sector commodity required for production of one unit of j^{th} Sector industry.

- X_{ij} is the i^{th} row and j^{th} column of the Input output transaction table which denotes the input flow from the i^{th} commodity to the j^{th} industry.

- X_j : Total input used by j^{th} industry

Decomposing each sector's value of input as the (quantity used as input, Q) \times (its price, P) we can write

$$\mathbf{X}_j = \mathbf{Q}_j \times \mathbf{P}_j$$

Now the equation (1) can be written as

$$C_i = Q_i P_i - \sum_{j=1}^n a_{ij} Q_j P_j \quad \text{-----}(2)$$

Suppose a tax like union excise tax with tax rate τ_i and sales tax is with tax rate τ_j are levied without any input tax credit. Then the tax base including the tax collected on it would be.

$$\begin{aligned} \tilde{C}_i &= Q_i P_i (1 + \tau_i) - \sum_{j=1}^n a_{ij} Q_j P_j (1 + \tau_j) (1 + \tau_i) \\ &= Q_i P_i + Q_i P_i \tau_i - \sum_{j=1}^n a_{ij} Q_j P_j - \sum_{j=1}^n a_{ij} Q_j P_j \tau_j - \sum_{j=1}^n a_{ij} Q_j P_j (1 + \tau_j) \tau_i \end{aligned} \quad \text{-----}(3)$$

Now $\tilde{C}_i - C_i$ would be the total Union Excise tax collected, and that can be found by subtracting equation (2) from equation (3)

$$\tilde{C}_i - C_i = Q_i P_i \tau_i - \sum_{i=1}^n a_{ij} Q_j P_j (1 + \tau_j) \tau_i$$

The Union Excise Tax rate ' τ ' on an average would be

$$t = \frac{\tilde{C}_i - C_i}{C_i} = \tau_i \left[\frac{Q_i P_i - \sum_{j=1}^n a_{ij} Q_j P_j (1 + \tau_j)}{Q_i P_i - \sum_{j=1}^n a_{ij} Q_j P_j} \right]$$

It can be seen from the above equation that this tax suffers from cascading effect, because of input taxation.

Impact tax burden in the case of GST: Under GST system of taxation the taxes collected on the inputs will be credited back. In this scenario the tax collected including the tax base would be.

$$\tilde{\tilde{C}}_i = Q_i P_i (1 + \tau_i) - \sum_{j=1}^n a_{ij} Q_j P_j$$

The total GST tax collected on the tax base would be

$$\begin{aligned} \tilde{\tilde{C}}_i - C_i &= Q_i P_i (1 + \tau_i) - \sum_{j=1}^n a_{ij} Q_j P_j - Q_i P_i + \sum_{j=1}^n a_{ij} Q_j P_j \\ &= Q_i P_i \tau_i \end{aligned}$$

The average tax rate ' t_i ' can be found from the following equation

$$t_i = \frac{\tilde{\tilde{C}}_i - C_i}{C_i} = \tau_i \left[\frac{Q_i P_i}{Q_i P_i - \sum_{i=1}^n a_{ij} Q_j P_j} \right]$$

If the tax rates are uniform, then the average rate equals the statutory rate itself.

$$t = \sum_{j=1}^n \tau_j = \tau$$

Thus, estimation for RNR can be worked out

$$t = \frac{Q_i P_i \tau_i}{Q_i P_i - \sum_{i=1}^n a_{ij} Q_j P_j}$$

Ideally this is the appropriate method to find the Revenue Neutral Rate for the GST.

To follow this method we need to determine the Quantity and price of each of the commodities which is being used in the inter industry transactions and as well as for meeting the final consumption. Without this data, the individual values that appear in the Input Output Transaction Table as a product of quantity and price cannot be decomposed. This is a formidable challenge.

It is pertinent to reiterate here that, all the entries in the IOTT are at factor cost, i.e. excluding trade and transport charges and NIT, and also the IOTT is prepared at original purchasers' prices, i.e. at the price at which actual transactions take place. In the IOTT 2007-08 background paper, it has been clearly mentioned that these entries have been arrived through various estimates and from different sources.

With regard to Consumption part, the estimate for Private Final Consumption Expenditure (PFCE) is computed mostly through the commodity flow method, in

which estimates of PFCE are compiled as residual from the total output of each item by subtracting from it, the estimated inter industry utilization and other final uses.

The item-wise estimates of GFCE are compiled at the time of preparation of five-yearly Input Output Transactions Tables (IOTT) for the Indian economy. While preparing the IOTTs, item-wise expenditure data, which is otherwise not available in the budget documents, is collected from a sample of departments of Central and State Governments.

From the above analysis, it is evident that decomposing the entries, relating to either Inter Industry Transaction part or the Final consumption part of the IOTT, into a product of quantity and price for each commodity X Industry wise is not feasible. Hence to estimate the tax base and for finding out RNR a different approach has been adopted.

Estimating Tax base Using IOTT:

To ensure that the proposed GST be applied to a tax base as wide as possible, it is necessary to keep the list of exempt sectors to a minimum. Agriculture contributes 17% to the GDP, but employs nearly 60% of the population. Given the imbalance, the primary sector should not be unduly burdened with indirect tax. Sale of all primary agriculture goods are exempted at the first stage. The same applies to milk, animal products, forestry, fishing, etc. In the present state of Indian economy, Government has a critical role to play in growth and development of the social sector. It is, therefore, essential that the services provided in the medical and health sector whether provided by the Government or by private parties are exempt. A similar

approach needs to be adopted for education, scientific research and as well as printing and publishing.

As far as other commercial social and personnel services are concerned, the negative list adopted in the Finance Bill 2011-12 has been internalized. In addition, service provided by public administration and Defence are proposed to be exempted. In addition, some commodities have been shown as partially exempted, for the reasons outlined below:

1. Tobacco has been shown as partially exempted to an extent of 50% as cured tobacco, used for making cigarettes is proposed to be taxed. However, raw tobacco sold by growers will be exempted.
2. Similarly a primary product like Milk is proposed to be exempted. But secondary products like butter, cheese will be levied tax. Therefore an exemption of 80% has been provided.
3. In regard to commercial services, social and personal services most of these personal services are like barbershops, florists, plumber, carpenters who are mostly unregistered and below the threshold, therefore getting them into tax net will be difficult. Hence an 80% exemption has been provided in this category.
4. As per the findings of Chapter 4, real estate should be included in the GST tax base. However, given the strong political opposition to this, two options have been used for determining RNR – one where real estate is included in the tax base and one where it is not.

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5. In regard to financial services which have critical national broad base, like Banking and Insurance, as determined in Chapter 5, they should be excluded from the tax base. Also, if they were to be included in the GST tax base, the states would then theoretically have a right independently tax these services. This may lead to an uneven taxation across the country in this critical sector. In addition the place of supply rules for these services would need to be carefully drafted as services provided at one State by a bank branch would be reported in another State at the headquarters branch for the benefit of beneficiary in a third State as requested by an account holder in a fourth State. It is therefore proposed that these critical sectors be excluded from the GST tax base. They would however subject to the service tax by Government of India, which would continue to be taxed.
6. In regard to printing and publishing, given the low literacy rate in the country, this has been exempted. A similar approach has been adopted for Khadi, Cotton Textiles and Handlooms, which are presently exempted under VAT.

The National tax base has been estimated based on consumption, using I-O tables. This National Consumption based tax base is applied to both the Centre and the aggregate of the States and U.Ts. The States and U.Ts are not treated individually but as one unit. Under these assumptions the Taxable base determined for the proposed model of Goods and Services Tax (GST) is 28,12,26,815 Lakh Rs. Also it is assumed that the increased threshold limits in GST would reduce the tax base by 10%. Under

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this assumption the Tax base for the year 2007-08 is arrived at 25,31,04,133 Lakh Rs.

The calculations done using IOTT 2007-08 are summarized as under.

Sl.no	Item	in Rs. Lakhs
1	Private Final Consumption Expenditure	27,32,01,468
2	Govt. Final Consumption Expenditure	5,01,14,255
3	Total Consumption Expenditure (1+2)	32,33,15,723
4	Pvt. Expenditure On Exempt Goods & Services	10,12,17,644
5	Govt. Expenditure On Exempt Goods & Services	3,56,92,655
6	Total Expenditure On Exempt Goods & Services(4+5)	13,69,10,299
7	Total Taxable Final Consumption Expenditure (i)(3-6)	18,64,05,424
8	Value Of Taxable G&S Into Exempt Goods & Services (ii)	6,20,53,147
9	Value Of Exempt G&S Into Taxable Goods & Services (iii)	3,27,68,244
10	Taxable Base(7+8+9)	28,12,26,815
11	Tax Base After reducing by 10% to adjust threshold Exemption & Compounding	25,31,04,133

As this Taxable base is computed using input-output tables 2007-08, to estimate the tax base for 2010-11, an assumption is made that the increase in taxable base will be in line with the growth rate of Gross Domestic Product (G.D.P) at factor cost and at Current Prices of the country.

Under this assumption, the Tax base for the years from 2004-05 to 2010-11 are calculated using the GDP growth rates. Thus the tax base for the year 2009-10 and 2010-11 are estimated at 33,65,03,084 lakh Rs and 39,53,91,124 lakh Rs respectively.

The Revenue collections from the subsumed taxes in the base year: For Union Government: From the Union Government 2010-11 Accounts, the total amount of

taxes that are proposed to be subsumed under G.S.T works out to 2,09,31,491 Rs in lakh.

As far as computation of States RNR is concerned, two independent scenarios are envisaged below:

Scenario – I: Only the present VAT – CST tax bases are subsumed into GST. All other taxes remained the same and continue to be levied by the State Government independently.

Scenario – II: All taxes levied by the State Governments subsumed into GST and no other tax is levied by the State Government in these sectors. Real estate has been included in the tax base. Scenario – II envisages a broader, more encompassing GST being put in place, but with a concomitant higher revenue neutral rate.

Total Collection of Taxes proposed to be subsumed under GST under Scenario – I is 2,31,22,316 lakh rupees and under Scenario – II is 3,64,95,950 lakh rupees.

The Revenue Neutral Rate (RNR) for the union government and for All States including U.Ts are calculated and are presented in the following table

RNR for Union Government and for All States & UTs

Revenue Neutral Rate (in %)		
RNR For Union Government. (based on 2010-11 Budget(Actual) figures)		5.29
RNR For All States & UTs (based on 2009-10 Budget (Actual) Figures & UTS)	(Scenario -1)	6.87
	(Scenario -2)	10.85

Thus assuming that all States and Union Territories can be treated as one unit, the RNR to all States and Union Territories is 6.87% and 10.85% for scenario-I and II respectively. For the union the RNR is 5.29%.

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