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**“AN ANALYTICAL STUDY ON THE TRENDS IN THE VAT
REVENUE AMONG INDIAN STATES”**



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Abstract

Value Added Tax provides the immense scope for increasing the revenue of the state governments. However, in the sphere of taxation, in the context of developing countries like India, a good tax system is one which does not affect the interest of the tax payers in paying tax apart from helping the government to raise the required resources. It minimizes the disincentive effects on economic activities without deviating from taxpaying norms. Also, in the context of indirect tax, it should not discourage the tax payers from payment of tax and above all it should not affect the production and income of the economy. The generic aim of Value Added Tax is to bring simplicity and transparency in tax structure and to avoid fragmentation in domestic markets, which ensures unification of national market to keep the price stable and eliminate unhealthy competition to encourage exports. VAT would ensure smooth interstate trade and commerce. The research paper is attempted to analyze the trends in the relative growth of tax revenue and its component, including the Modified Value Added tax – a tax structure which was suggested by the central government and implemented by the state governments in the consecutive years. Such an analysis would help to understand the relative position of state of Tamilnadu in terms of tax revenue collection.

Key Words: Trends in Tax Revenue, Value Added Tax.

1. Introduction

Taxes are the major fiscal policy instruments and important government policy tools that have an important role in increasing the rate of capital formation and thereby leading to a higher rate of economic growth. Since the developing countries have lack of savings and investment, tax policy is being used by the government as an effective tool to increase the rate of saving, investment, Gross Domestic Product and other macro economic variables like, output, inflation and employment. Since, India is also in the process of its development, tax policy constitute an important source of revenue to India. It has been an instrument of social and economic policy for the government.

In India, the role of indirect tax is seen to be more important as it contributes to a lion's share of revenue to states' exchequer. Among the various types of taxes, Value Added Tax (VAT) as the term suggests, is a tax on the Value Added to the commodity at each stage in the production and distribution chain. The production-distribution chain, popularly known as supply chain in the modern day system, starts from manufacturer producing an item. This

item passes through various agencies like distributor, wholesaler and retailer, before it reaches the final consumer. The value added at each stage in the supply chain is determined on the basis of the difference between the sale prices of that entity and purchase values of bought out items of that entity. Thus, a Value Added Tax is a tax levied on the value added to a commodity or service as it passes through different stages of production and distribution, until it reaches the final consumer. Of the various types of indirect taxes, VAT is probably the best tax system and the most important innovation during the second-half of the twentieth century, which is considered as an effective means to collect revenue as a reformed sales tax of indirect tax system. In present scenario, the traditional role of wholesalers is linked to the product distribution channel. To meet this transitional domain wholesalers resell them to retailers for a profit or for industrial use in VAT regime. It becomes essential to understand the rate of increase in the VAT relative to other types of indirect tax and contribution of this type of tax to total states' revenue. An effective tax collection system should involve a simplified tax procedures which would also help to reduce tax evasion.

2. Objectives of the Study

- 1) To study the trends in the growth in tax revenue and its types
- 2) To study the relative inequality in the growth of tax revenue among the states of India and its types

3. Research Methods

To study the relative growth in the tax revenue of the major 29 states identified, the data pertaining to the total revenue of the states, the tax revenue, the components of tax revenue including the states' own tax revenue, the state revenue or VAT, the commodities and services tax were collected from various publications including publications of Government of India, Reserve Bank of India, Centre for Monitoring Indian Economy, State Budgets of the Tamilnadu Government, Statistical Abstracts of Tamilnadu, Excise and Taxation Departments of Tamilnadu, and NSS Consumer Expenditure Survey 60th Round, 2004.

The collected data were analyzed using the appropriate statistical tools and techniques that include: arithmetic mean, the linear growth rate (LGR), Compound growth rate (CGR) the coefficient of Variation, ANOVA and logic models.

4. Review of Literature

Burgess, Howes and Stern (1995), in their study on value added tax options for India analyzed that the pressure of aggregate revenue, the requirement of a reduced role for customs duties for the liberalization of the economy, and the complexity and strains of the current system together pointed clearly towards the desirability of tax reform in India. Since domestic indirect taxes provide the major source of revenue, they deserve special attention. They argued that India would benefit from moving towards a system of value added taxation (VAT) and would focus on the way in which a VAT (or VATs) could be best introduced into India, given the country's federal structure. Three different options were distinguished: a central VAT, dual VAT, and states' VAT. They argued that the first was politically infeasible, that the second represented the best way forward in the short-term, and that the third deserved consideration as a long run option. Special attention was to be paid to the problems that would arise under either a state's or a dual VAT with regard to taxing inter-state trade.

Agarwal (2003) in their study on "Fundamental Aspects and Scope of Value Added Tax in India" observed that the indirect tax system plays an important role in the development of an economy and also on the rate of production and consumption in an economy. With the growing maturity of our industrial sector and specially the need to become internationally competitive, it is necessary to restructure the tax system to eliminate tax evasion, cascading effects in production, vertical integration of firms, bureaucratic control and allow greater play to entrepreneurial decision making, subject to the normal disciplines of market competition. They concluded their study with the remark that the government should understand that any further delay in introducing VAT will affect the competitiveness of the Indian industries at the domestic level as well as the global level, especially after the removal of quantitative restrictions and reduction of custom duty.

Sthanumoorthy (2005) reported that states in India carried out a path-breaking tax reform by replacing defective sales tax with Value Added Tax (VAT). The author pointed out that sales tax system suffered from many structural weaknesses, including multiplicity of sales tax rates and commodity categories in each state; wide differences in rates within and between states; cascading effect due to its imposition on a large number of inputs; tax competition among states; tax exportation; large number of exemptions; application of surcharge and additional levies; additional sales tax and turnover tax; entry tax and octroi; complicated and wide

variety of tax rules and widespread tax evasion. Even when policy-makers were advocating replacement of sales tax with VAT, the attempts were initiated in early 1990s. The process was delayed due to several implementation problems and finally Central Government persuaded majority of the states to switch over to VAT with effect from 1.4.2005. The author discussed important issues and challenges in implementation of VAT and in this context experience of some of the Indian states and countries operating VAT system was reported.

5. Trends in the Revenue from Sales Tax (Vat) of Major Indian States

As it is seen in Table 1.1, in the case of revenue generation through state sales tax or Value Added Tax, Andhra Pradesh (Rs.701601 lakhs) registered the highest value of tax in the year 2001-02. This is being followed by the other states in the order as: Tamilnadu (Rs.676153 lakhs), Maharashtra (Rs.672263 lakhs), Karnataka (Rs.459008 lakhs), Uttar Pradesh (Rs.455403 lakhs), Kerala (Rs.416457 lakhs), Gujarat (Rs.366174 lakhs), West Bengal (Rs.347393 lakhs), New Delhi (Rs.300706 lakhs), Rajasthan (Rs.286696 lakhs), Haryana (Rs.211396 lakhs), Punjab (Rs.206386 lakhs), Madhya Pradesh (Rs.202820 lakhs), Orissa (Rs.135051 lakhs), Bihar (Rs.133500 lakhs), Jharkhand (Rs. 125507 lakhs), Assam (Rs.107296 lakhs), Chhattisgarh (Rs.49436 lakhs), Goa (Rs.35867 lakhs), Himachal Pradesh (Rs.31192 lakhs), Jammu & Kashmir (Rs.30000 lakhs), Tripura (Rs.10580 lakhs), Meghalaya (Rs.5217 lakhs), Uttaranchal (Rs.3437 lakhs), Nagaland (Rs.3041 lakhs), Manipur (Rs.2952 lakhs), Sikkim (Rs.2523 lakhs) and Arunachal Pradesh (Rs.1678 lakhs). There was no tax collection in the year 2001-02 for Mizoram.

In the year 2012-13 also the order of the states has not been modified much with Andhra Pradesh (Rs.4177905 lakhs) taking the highest amount of tax collection under VAT followed by Tamilnadu (Rs.4090070 lakhs), Maharashtra (Rs.3634800 lakhs), Uttar Pradesh (Rs.3560265 lakhs), Gujarat (Rs. 3181500 lakhs), Karnataka (Rs.2692500 lakhs), Kerala (Rs.2304288 lakhs), West Bengal (Rs.1860664 lakhs), New Delhi (Rs.1530000 lakhs), Rajasthan (Rs.1506837 lakhs), Haryana (Rs.1463560 lakhs), Punjab (Rs.1352247 lakhs), Madhya Pradesh (Rs.1250000 lakhs), Orissa (Rs.901620 lakhs), Bihar (Rs.727700 lakhs), Chhattisgarh (Rs.628143 lakhs), Jharkhand (Rs.553463lakhs), Assam (Rs.547407 lakhs), Jammu & Kashmir (Rs.327000 lakhs), Himachal Pradesh (Rs.254868 lakhs), Uttaranchal (Rs.251000 lakhs), Goa (Rs.196750 lakhs), Tripura (Rs.67000 lakhs), Meghalaya (Rs.30559

lakhs), Manipur (Rs.25080 lakhs), Arunachal Pradesh (Rs.22655 lakhs), Nagaland (Rs.22055 lakhs), Sikkim (Rs.17600 lakhs) and Mizoram (Rs.10500 lakhs).

The average value of VAT collection worked out indicates that for the entire study period, Maharashtra (Rs.2041389.08 lakhs) registered the highest amount of VAT collection followed by Andhra Pradesh (Rs.1892907.83 lakhs), Tamilnadu (Rs. 1874157.50 lakhs), Uttar Pradesh (Rs.1421551.08 lakhs), Karnataka (Rs.1271530.50 lakhs), Gujarat (Rs.1072025.58 lakhs), Kerala (Rs.1045896.50 lakhs), West Bengal (Rs.823584.25 lakhs), Rajasthan (Rs.754746.75 lakhs), New Delhi (Rs.738850.58 lakhs), Haryana (Rs.657453.58 lakhs), Madhya Pradesh (Rs.590042.25 lakhs), Punjab (Rs.563548.17 lakhs), Orissa (Rs.390699.33 lakhs), Bihar (Rs.329316.33 lakhs), Assam (Rs.260795.42 lakhs), Jharkhand (Rs.26 lakhs), Chhattisgarh (Rs.25 lakhs), Jammu & Kashmir (Rs.133635.83 lakhs), Uttaranchal (Rs.117497.58 lakhs), Himachal Pradesh (Rs.105438.75 lakhs), Goa (Rs.92243.58 lakhs), Tripura (Rs.30991.83 lakhs), Meghalaya (Rs. 12564.83 lakhs), Manipur (Rs.12222.58 lakhs), Nagaland (Rs.10597 lakhs), Arunachal Pradesh (Rs.8542.17 lakhs), Sikkim (Rs.5610.83 lakhs) and Mizoram (Rs.5250.58 lakhs).

The coefficient of variation indicates that New Delhi (53.79 per cent) recorded the least volatility followed by Goa (54.39 per cent), Rajasthan (54.76 per cent), Assam (55.93 per cent), Maharashtra (56.63 per cent), Tamilnadu (56.68 per cent), Kerala (57.45 per cent), West Bengal (57.82 per cent), Karnataka (57.93 per cent), Nagaland (58.21 per cent), Jharkhand (58.54 per cent), Tripura (58.85 per cent), Andhra Pradesh (58.97 per cent), Bihar (59.28 per cent), Madhya Pradesh (59.40 per cent), Haryana (62.18 per cent), Orissa (64.95 per cent), Mizoram (66.82 per cent), Punjab (69.77 per cent), Manipur (69.98 per cent), Himachal Pradesh (70.76 per cent), Uttar Pradesh (73.41 per cent), Chhattisgarh (73.63 per cent), Jammu & Kashmir (74.08 per cent), Meghalaya (75.12 per cent), Uttaranchal (84.89 per cent), Arunachal Pradesh (87.10 per cent), Sikkim (89.94 per cent) and Gujarat (94.74 per cent).

Table: 1.1

State	2001-02	2012-13	AVERAGE	CV	LGR	Sig/ Not Sig	CGR	Sig/ Not Sig
Andhra Pradesh	701601	4177905	1892908	58.97	15.75	Sig.	18.08	Sig.
Arunachal Pradesh	1678	22655	8542.17	87.10	22.59	Sig.	30.33	Sig.
Assam	107296	547407	260795	55.93	14.41	Sig.	15.28	Sig.
Bihar	133500	727700	329316	59.28	15.02	Sig.	15.89	Sig.
Chhattisgarh	49436	628143	253044	73.63	19.43	Sig.	24.92	Sig.
Goa	35867	196750	92243.6	54.39	14.42	Sig.	16.12	Sig.
Gujarat	366174	3181500	1072026	94.74	21.91	Sig.	22.63	Sig.
Haryana	211396	1463560	657454	62.18	16.58	Sig.	19.31	Sig.
Himachal Pradesh	31192	254868	105439	70.76	18.66	Sig.	22.27	Sig.
Jammu & Kashmir	30000	327000	133636	74.08	1.46	Sig.	25.05	Sig.
Jharkhand	125507	553463	257331	58.54	15.22	Sig.	16.46	Sig.
Karnataka	459008	2692500	1271531	57.93	15.53	Sig.	18.05	Sig.
Kerala	416457	2304288	1045897	57.45	15.00	Sig.	16.25	Sig.
Madhya Pradesh	202820	1250000	590042	59.40	15.89	Sig.	18.30	Sig.
Maharashtra	672263	3634800	2041389	56.63	14.86	Sig.	18.02	Sig.

Trends in the Revenue from Sales Tax (Vat) Of Major Indian States

State	2001-02	2012-13	AVERAGE	CV	LGR	Sig/ Not Sig	CGR	Sig/ Not Sig
Manipur	2952	25080	12222.6	69.98	18.64	Sig.	23.36	Sig.
Meghalaya	5217	30559	12564.8	75.12	19.03	Sig.	21.70	Sig.
Mizoram	0	10500	5250.58	66.82	18.03	Sig.	2.74	Not Sig
Nagaland	3041	22055	10597	58.21	15.58	Sig.	18.52	Sig.
Orissa	135051	901620	390699	64.95	17.14	Sig.	19.73	Sig.
Punjab	206386	1352247	563548	69.77	15.06	Sig.	13.13	Sig.
Rajasthan	286696	1506837	754747	54.76	14.76	Sig.	16.81	Sig.
Sikkim	2523	17600	5610.83	89.94	17.63	Sig.	14.51	Sig.
Tamilnadu	676153	4090070	1874158	56.68	14.88	Sig.	16.63	Sig.

Tripura	10580	67000	30991.8	58.85	15.56	Sig.	17.70	Sig.
Uttaranchal	3437	251000	117498	84.89	22.27	Sig.	71.11	Sig.
Uttar Pradesh	455403	3560265	1421551	73.41	19.00	Sig.	22.03	Sig.
West Bengal	347393	1860664	823584	57.82	15.01	Sig.	16.20	Sig.
New Delhi	300706	1530000	738851	53.79	14.49	Sig.	16.65	Sig.

Sources: Annual Reports of RBI, Economic Survey and Budget in Brief of Various States, Various Years

In the case of linear growth rate worked out, Arunachal Pradesh (22.59 per cent) registered the highest growth followed by Uttaranchal (22.27 per cent), Gujarat (21.91 per cent), Chhattisgarh (19.43 per cent), Meghalaya (19.03 per cent), Uttar Pradesh (19.00 per cent), Himachal Pradesh (18.66 per cent), Manipur (18.64 per cent), Mizoram (18.03 per cent), Sikkim (17.63 per cent), Orissa (17.14 per cent), Haryana (16.58 per cent), Madhya Pradesh (15.90 per cent), Andhra Pradesh (15.75 per cent), Nagaland (15.58 per cent), Tripura (15.56 per cent), Karnataka (15.53 per cent), Jharkhand (15.22 per cent), Punjab (15.06 per cent), Bihar (15.02 per cent), West Bengal (15.01 per cent), Kerala (15.00 per cent), Tamilnadu (14.88 per cent), Maharashtra (14.86 per cent), Rajasthan (14.76 per cent), New Delhi (14.49 per cent), Goa (14.42 per cent), Assam (14.41 per cent), Jammu & Kashmir (1.46 per cent).

In the case of compound growth rate, while Uttaranchal (71.11 per cent) registered the highest growth, Arunachal Pradesh (30.33 per cent), Jammu & Kashmir (25.045 per cent), Chhattisgarh (24.92 per cent), Manipur (23.36 per cent), Gujarat (22.63 per cent), Himachal Pradesh (22.27 per cent), Uttar Pradesh (22.03 per cent), Meghalaya (21.70 per cent), Orissa (19.73 per cent), Haryana (19.31 per cent), Nagaland (18.52 per cent), Madhya Pradesh (18.30 per cent), Andhra Pradesh (18.08 per cent), Karnataka (18.05 per cent), Maharashtra (18.02 per cent), Tripura (17.70 per cent), Rajasthan (16.81 per cent), New Delhi (16.65 per cent), Tamilnadu (16.63 per cent), Jharkhand (16.46 per cent), Kerala (16.25 per cent), West Bengal (16.20 per cent), Goa (16.12 per cent), Bihar (15.89 per cent), Assam (15.28 per cent), Sikkim (14.51 per cent), Punjab (13.13 per cent), Mizoram (2.74 per cent) followed it.

An attempt is also made to find out whether there is a significant difference among states in terms of VAT revenue generation. For this purpose, a One Way Analysis of Variance has been attempted.

Table: 1.2

One-Way Analysis Of Variance of Revenue from State Sales Tax (Vat) Among States

Sources of Variations	Sum of Squares (SS)	Degrees of Freedom	Mean Square	F ratio
Among Treatment Groups	4648.22	29-1 = 28	166.01	166.01/0.86 = 193.30
Sampling Error	273.96	348-29 = 319	0.86	
Total	4922.18	348-1=347		

Source: Computed from Table 1.1

The Null Hypothesis framed for this purpose is “there is no significant difference among states in terms of VAT revenue generation”. The table value or the critical value for F_{28, 319} degrees of freedom is 1.49, while as given in Table 4.12, the calculated value is obtained as 193.30. A comparison of the calculated value with that of the table value indicates that the calculated value is greater than the table value and hence the Null Hypothesis that “there is no significant difference among states in terms of VAT revenue generation” has been rejected. This implies that there is a significant difference among the states of India in terms of VAT revenue generation.

Thus from the analysis it can be concluded that all the 29 states considered for analyzing the growth in sales tax revenue indicated that Andhra Pradesh recorded the highest amount of tax collection. The least volatility is being registered in the case of Goa, while the highest growth in VAT revenue is being registered in the case of Arunachal Pradesh during the study period. It can also be noted that the growth rates worked out are significant for all the states Except for Mizoram and Jammu and Kashmir. It is also established in this paragraph that there is a significant difference among states in terms of VAT revenue generation.

6. Composite Rank Indexes: An Overall Measure of Tax Performance of States

There is no uniformity found among the states in terms of value of revenue by categories or in terms of growth. This results in an inclusive conclusion on the performance of the states. Hence, to know the order of the states in terms of the tax performance, a composite rank index has been arrived at. For this purpose, each of the performance measure, namely, the value of taxes by states in the years 2001-02 and 2012-13, the linear growth rate and the

compound growth rate are arranged in the descending order and the coefficient of variation is arranged in the ascending order and ranked. These ranks are summed up for each category of the tax revenue. These summed up ranks are again aggregated to arrive at the rank sum total. This rank sum total again arranged to arrive at the Composite Rank Index. The rank sum total and the composite rank index are discussed below:

Table1.3
Composite Rank Indexes: An Overall Measure of Tax Performance of States

States	R A N K I N G O F								Ran k Su m tot al	Compos ite Rank Index
	Total Revenu es	Tax Reven ue	State's Own Tax Reven ue	Taxes On Commodit ies & Services	Sal es Tax	VA T	State Exci se	Taxes On Vehicl es		
Andhra Pradesh	3	3	2	3	2	1	4	2	20	2
Arunachal Pradesh	25	29	28	28	27	26	26	27	216	27
Assam	15	18	17	18	18	18	20	20	144	18
Bihar	10	9	15	15	16	15	14	14	108	15
Chhattisgarh	18	16	16	16	17	16	13	15	127	16
Goa	23	21	22	22	21	20	21	16	166	22
Gujarat	6	6	6	6	5	7	23	1	60	6
Haryana	14	14	10	12	11	11	9	22	103	13
Himachal Pradesh	20	22	21	21	22	19	16	19	160	20
Jammu & Kashmir	16	19	20	20	20	27	18	21	161	21
Jharkhand	19	17	18	17	15	17	19	18	140	17
Karnataka	5	5	5	5	6	4	2	6	38	5
Kerala	11	11	8	7	7	6	11	8	69	7
Madhya Pradesh	7	8	11	11	13	12	6	9	77	10
Maharashtra	1	1	1	1	1	2	5	4	16	1
Manipur	24	25	25	26	25	25	27	29	206	25
Meghalaya	26	24	24	24	23	23	22	26	192	24
Mizoram	29	28	29	29	29	28	29	24	225	29

States	R A N K I N G O F								Rank Sum total	Composite Rank Index
	Total Revenues	Tax Revenue	State's Own Tax Revenue	Taxes On Commodities & Services	Sales Tax	VAT	State Excise	Taxes On Vehicles		
Nagaland	27	26	27	27	26	24	28	25	210	26
New Delhi	17	15	12	10	9	9	10	13	95	11
Orissa	12	12	14	14	14	13	17	11	107	14
Punjab	13	13	13	13	12	14	7	10	95	12
Rajasthan	9	10	9	8	10	10	8	5	69	8
Sikkim	28	27	26	25	28	29	25	28	216	28
Tamilnadu	4	4	3	2	3	3	1	3	23	3
Tripura	22	23	23	23	24	22	24	23	184	23
Uttar Pradesh	2	2	4	4	4	5	3	7	31	4
Uttaranchal	21	20	19	19	19	21	15	17	151	19
West Bengal	8	7	7	9	8	8	12	12	71	9

As it could be seen in table, in the case of total revenue, Maharashtra ranked first in terms of the rank sum total for the indicators considered to measure the performance. The order of the other states in terms of declining rank is: Uttar Pradesh, Andhra Pradesh, Tamilnadu, Karnataka, Gujarat, Madhya Pradesh, West Bengal, Rajasthan, Bihar, Kerala, Orissa, Punjab, Haryana, Assam, Jammu & Kashmir, New Delhi, Chhattisgarh, Jharkhand, Himachal Pradesh, Uttaranchal, Tripura, Goa, Manipur, Arunachal Pradesh, Meghalaya, Nagaland, Sikkim and Mizoram.

In the case of Tax Revenue, the order of the states in terms of rank is given as follows: Maharashtra, Uttar Pradesh, Andhra Pradesh, Tamilnadu, Karnataka, Gujarat, West Bengal, Madhya Pradesh, Bihar, Rajasthan, Kerala, Orissa, Punjab, Haryana, New Delhi, Chhattisgarh, Jharkhand, Assam, Jammu & Kashmir, Uttaranchal, Goa, Himachal Pradesh, Tripura, Meghalaya, Manipur, Nagaland, Sikkim, Mizoram and Arunachal Pradesh.

In terms of Taxes on Commodities & Services, the order of the states in terms of their ranks obtained can be given as: Maharashtra, Tamilnadu, Andhra Pradesh, Uttar Pradesh, Karnataka, Gujarat, Kerala, Rajasthan, West Bengal, New Delhi, Madhya Pradesh, Haryana, Punjab, Orissa, Bihar, Chhattisgarh, Jharkhand, Assam, Uttaranchal, Jammu & Kashmir, Himachal Pradesh, Goa, Tripura, Meghalaya, Sikkim, Manipur, Nagaland, Arunachal Pradesh and Mizoram.

In the case of Sales Tax, the order of the states in terms of their ranking can be given as: Maharashtra, Andhra Pradesh, Tamilnadu, Uttar Pradesh, Gujarat, Karnataka, Kerala, West Bengal, New Delhi, Rajasthan, Haryana, Punjab, Madhya Pradesh, Orissa, Jharkhand, Bihar, Chhattisgarh, Assam, Uttaranchal, Jammu & Kashmir, Goa, Himachal Pradesh, Meghalaya, Tripura, Manipur, Nagaland, Arunachal Pradesh, Sikkim and Mizoram.

In the case of the revenue on value added tax (VAT), Andhra Pradesh has taken up the first rank followed by Maharashtra, Tamilnadu, Karnataka, Uttar Pradesh, Kerala, Gujarat, West Bengal, New Delhi, Rajasthan, Haryana, Madhya Pradesh, Orissa, Punjab, Bihar, Chhattisgarh, Jharkhand, Assam, Himachal Pradesh, Goa, Uttaranchal, Tripura, Meghalaya, Nagaland, Manipur, Arunachal Pradesh, Jammu & Kashmir, Mizoram and Sikkim.

In the case of the revenue of the states from Taxes on Vehicles, the order of the states in terms of ranking can be given as: Gujarat, Andhra Pradesh, Tamilnadu, Maharashtra, Rajasthan, Karnataka, Uttar Pradesh, Kerala, Madhya Pradesh, Punjab, Orissa, West Bengal, New Delhi, Bihar, Chhattisgarh, Goa, Uttaranchal, Jharkhand, Himachal Pradesh, Assam, Jammu & Kashmir, Haryana, Tripura, Mizoram, Nagaland, Meghalaya, Arunachal Pradesh, Sikkim and Manipur.

Given the ranking of the states in the case of each category of taxes, the order of the states in terms of overall ranking on the basis of Composite Rank Index (CRI) can be given as: Maharashtra, Andhra Pradesh, Tamilnadu, Uttar Pradesh, Karnataka, Gujarat, Kerala, Rajasthan, West Bengal, Madhya Pradesh, New Delhi, Punjab, Haryana, Orissa, Bihar, Chhattisgarh, Jharkhand, Assam, Uttaranchal, Himachal Pradesh, Jammu & Kashmir, Goa, Tripura, Meghalaya, Manipur, Nagaland, Arunachal Pradesh, Sikkim and Mizoram.

The overall ranking of the states arrived at by summing up the ranking of the states for the various categories of the taxation for the initial period of the analysis (2001-02), the end

period of the analysis (2012-13), the average value of the taxes for the entire study period, the coefficient of variation and the growth rates (linear and compound growth rates) indicated that: 1) in the case of total revenue, Tax revenue, States' Own Tax revenue and Taxes on Commodities and Services and Sales tax, Maharashtra has taken up the first rank. 2) In the case of the revenue from Value Added Tax (VAT) Andhra Pradesh has registered the first rank. 3) In the case of the revenue from the State Excise duty Tamilnadu has recorded the highest rank. 4) In the case of the revenue of the states from Taxes on Vehicles, Gujarat has registered the overall first rank.

In nutshell, as a result of a majority of the tax indicators Maharashtra has taken up the first rank, in terms of Composite Index a measure of the overall ranking also Maharashtra ranked first. Interestingly, Tamilnadu ranked third in the overall tax revenue collection followed by Andhra Pradesh. The order of the other states in terms of overall ranking can be given as: Uttar Pradesh, Karnataka, Gujarat, Kerala, Rajasthan, West Bengal, Madhya Pradesh, New Delhi, Punjab, Haryana, Orissa, Bihar, Chhattisgarh, Jharkhand, Assam, Uttaranchal, Himachal Pradesh, Jammu & Kashmir, Goa, Tripura, Meghalaya, Manipur, Nagaland, Arunachal Pradesh, Sikkim and Mizoram.

The above results of the ranking of the states clearly show the states in south and west India display a superior tax performance compared to the remaining states of the country. This may be due to a number of reasons – viz., relatively larger taxable capacity of these states, relatively greater tax effort made by these states or some deep-seated political-economic characteristics that these states may share. Also, from the economic point of view, it can be said that economic, demographic and socio-political determinants of these two factors that explain the differential tax performances of the states. Such a conclusion has been arrived at by a research study carried out in the case of Dipankor Coondoo et.al. (2004).

7. Findings

Among the 29 states considered for analyzing the growth in the tax revenue, the average level of tax revenue recorded the highest by Uttar Pradesh for the entire study period. In terms of volatility or inequality in the growth of tax revenue Jharkhand recorded the least. In terms of growth rates, Mizoram registered both the highest linear and compound growth rates. There is a significant difference among states in terms of tax revenue generation. Among the 29 states considered for analyzing, the growth in sales tax (VAT) revenue Andhra Pradesh

recorded the highest amount of tax collection. The least volatility is being registered in the case of Goa, while the highest growth in VAT revenue is being registered in the case of Arunachal Pradesh during the study period. There is a significant difference among states in terms of VAT revenue generation. The contribution of tax revenue to total revenue of the states is positive and significant and for a majority of the states, the elasticity coefficient is greater than one. Both the gross domestic product of the state of Tamilnadu and the gross sales tax revenue and the net sales tax revenue have increased with a slightly lower rate of growth of revenue than the gross state domestic product of the state of Tamilnadu.

8. Discussion

As found in the study, there is a significant difference among states in terms of revenue from taxes on vehicles. Similarly, motor vehicle and passenger tax also has a good revenue potential. The state government should reconstruct and rationalize the rate structure of motor vehicle and passenger tax to generate more revenue. The study reveals while analyzing the growth in commercial and services tax revenue generation Maharashtra recorded the highest amount of tax collection with the least volatility during the study period. However, in terms of growth rate Mizoram register the highest rate of growth. There is a significant difference among states in terms of commodities and services tax revenue generation. There is an urgent need to plug the loopholes in stamp and registration fee to increase the productivity from this tax. This tax has a very good revenue potential because of growing economic activities, the increasing level of land prices, and increase in number of transactions in land and property.

The study could identify from analyzing the growth in sales(VAT) tax revenue Andhra Pradesh recorded the highest amount of tax collection. The least volatility is being registered in the case of Goa, while the highest growth in VAT revenue is being registered in the case of Arunachal Pradesh during the study period. The low revenue states have to create awareness among the customers that demanding no bill for the items purchased by them not only puts the government in loss but it also deprives them of all their rights like warranty/ guarantee against the items purchased. The Excise and Taxation Departments in both the states under study should take a serious note of any complaint received in this regard and punish the tax evaders by imposing hefty fines on them. Curtailing tax evasion would mean more revenue to the state exchequer from VAT.

Among the various components of tax revenue, a lion's share of revenue on the commercial tax during the study period is from Value Added Tax (VAT). In this age of science and technology, when more and more new techniques of entertainment are emerging, the government should consider to evolve a new form of entertainment tax so as to mobilize more revenue from this source. It is suggested that the government should conduct taxpayer education programmes at major business centres to make manufacturers/traders aware as to how to file returns and other forms with the taxes department. Supply of pamphlets and booklets at very low price describing as to how to file returns and other forms and organizing workshops will also help the manufacturers/traders to file the returns and other forms by themselves.

More than three fourth of the tax revenue comes from VAT/Sales tax. But, the efforts of the state government requires appreciation in the efficient collection of VAT tax. But it also to be noted that relying too much on a single tax is not a good proposition as this would discourage further increase in production which ultimately would have an impact on the overall development of the state. Hence, an enhancement in other forms of taxes like revenue from the registration fee and stamps, motor vehicle tax, etc. is necessary to strengthen the economy of the state. The existing provisions in the VAT Act/Rules need to be reviewed to see whether additional revenue can be generated by making the desired amendments keeping in view the massive revenue generation.

9. CONCLUSION

The analysis of the secondary data collected for a period of twelve years for 29 states indicates that in all the states the tax revenue has increased significantly during the study period. It was also established that all the components of tax revenue have shown acceleration with a relatively higher rate of growth registered in the case of the state of Maharashtra. Overall, Tamilnadu ranks third in tax revenue generation. For the majority of the states, a high elastic nature of tax revenue indicates the possibility of increasing the tax structure and the tax base. The collected data have provided the major conclusion that the revenue from VAT constitute a lion's share of tax revenue to all the states of India.

References

- Bansal, Nidhi (2008), “VAT in Delhi: A Critical Study”, Retrieved from www.caclubindia.com/articles/brief-note-vat-in-delhi-3254.
- Bagchi, Amresh (1995), “VAT and States: Misconceived Fears”, *The Economic Times*, February 8, p. 6.
- Bezborah, P.; and Singh, Ranjit (2005), “Value Added Tax: Problems and Prospects”, in Pramanik, Alok Kumar (Ed.), *Value added Accounting and Reporting VAT*, Kanishka Publishers, New Delhi, pp. 345-356.
- Bird, Richard M. (2007), “Is a State VAT the Answer? What's the Question? ”, *International Tax Program*, University of Toronto, Ontario, Canada, pp. 3-23.
- Burgess, R.; Stephen, Howes; and Nicholas, Stern (1995), “Value- added Tax Options for India”, *International Tax and Public Finance*, Vol. 2, No. 1. February, pp. 109-141.
- Empowered Committee (2005), *A White Paper on State-Level Value Added Tax*, Committee Constituted by the Ministry of Finance, Government of India, New Delhi, January 17, pp. 1-18.
- Jayakumar, A., 2012. *A Study on Impact of Value Added Tax (VAT) Implementation in India*. *World Journal of Social Science*, Vol .2(5), 2012, Pp. 145-160.
- Michael (2000), “VIVAT, CVAT and All That: New Forms of Value Added Tax for Federal Systems”, *IMF Working Paper*, Apr. p. 1.
- Misra, Prakash Ch. (2005), “Problems and Prospects of Value Added Tax”, in Pramanik, Alok Kumar (Ed.), *Value added Accounting and Reporting VAT*, Kanishka Publishers, New Delhi, pp. 361-368.
- Mukhopadhyay, Sukumar (2005), “The Economics of Value Added Tax: Theory and Practice”, *Centax Publications*, New Delhi, pp. 5239-5240.
- Mukhopadhyay, Sukumar (2002), “Value Added Tax: How Implementation is Going Wrong”, *Economic and Political Weekly*, Vol. 37, No. 36, September 7, pp. 3700-3703.
- Murti, M.N. (1995), “Value Added Tax in a Federation: Commodity Tax Reforms in India”, *Economic and Political Weekly*, Vol. 30, No. 11, March 18, pp. 579-584.
- Nour, Abdul Naser I.; and Pramanik, Alok Kumar (2005), “Value Added Tax: A Suggested Method”, in Pramanik, Alok Kumar (Ed.), *Value Added Accounting and Reporting VAT*, Kanishka Publishers, New Delhi, pp. 329-342.

- Purohit, Mahesh C. (1982), “Structure of Sales Tax in India”, *Economic and Political Weekly*, Vol. 17, No. 34, August 21, pp. 1365-1379.
- Purohit, Mahesh C. (1993), “Adoption of Value Added Tax in India: Problems and Prospects”, *Economic and Political Weekly*, Vol. 28, No. 10, March 6, pp. 393-404.
- Purohit, Mahesh C. (1995), “Structure and Administration of Sales Taxation in India: An Economic Analysis”, *Gayatri Publications*, New Delhi, pp. 42-60.
- Purohit, Mahesh C. (1997), “Value Added Tax in a Federal Structure: A Case Study of Brazil”, *Economic and Political Weekly*, Vol. 32, No. 2, February 15, pp. 357-362.
- Purohit, Mahesh C. (2001a), “National and Sub-national VATs: A Road Map for India”, *Economic and Political Weekly*, Vol. 36, No. 9, March 3, pp. 757-772.
- Purohit, Mahesh C. (2001b), “Sales Tax and Value Added Tax in India”, *Gayatri Publications*, New Delhi, pp. 13-80.
- Rao, R. Kavita (2004), “Impact of VAT on Central and State Finances”, *Economic and Political Weekly*, Vol. 29, No. 26, June 26, pp. 2773-2777.
- Roy Poviomi , Ajitava Raychaudhur and Sudip Kumar Shina, “Is Value Added Tax (VAT) Reform in India Poverty Improving? An analysis of data from six Major States”, *Indian Economic Review*, Vol.45 (1), 2010, Pp. 131-158.
- Sei, O. (2000), “Political Liberalization and the Implementation of Value Added Tax in Ghana”, *Journal of Modern African Studies*, Vol. 38, No. 2, pp. 255-275.
- Sthanumoorthy, R. (2005), “State-level VAT in India: Issues, Challenges and Experiences”, *ICFAI University Press*, Hyderabad, pp. 220-248.