Khan, Mohd. Azam; Shadab, Nagma

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Impact of Value-Added Tax (VAT) Revenue in Major States of India

Mohd. Azam KHAN and Nagma SHADAB
Department of Economics, Aligarh Muslim University

ABSTRACT

Value Added Tax (VAT) is a type of indirect tax that is imposed on goods and services. In one of the most important reforms of the country’s public finances in over the past 50 years, India has finally launched much delayed Value Added Tax (VAT) from 1st April, 2005 in 21 states. VAT has replaced the existing local sales tax in almost all states of India. The case for state VAT in India has been advocated mainly on the grounds of higher revenue efficiency vis-à-vis the combined revenue from various types of sales/purchase taxes it replaced. The present paper tries to analyze, the impact of VAT on revenue, its buoyancy, and efficiency of states sales tax/value added tax.

Keywords: Sales Tax, Value Added Tax, Revenue Growth, Buoyancy and Indian States

JEL Classification: H25, H2, H21,H7

1. Introduction

Tax earning is one of the most important sources of revenue for any government. In India tax is basically of two types-Direct Taxes and Indirect Taxes. The direct tax is directly paid to the government by the individuals. Income tax is a good example of this type of taxation. Whereas indirect tax (such as sales tax, Value added tax or Goods and services tax) is a tax collected by an intermediary (such as retail store) from the person who bears the ultimate economic burden of the tax (Sartra and Hati, 2009, p1).

There are various kinds of indirect taxes and duties levied in India, at the state and central level. Both the Customs and Excise duties are levied and collected by the government. While the Custom duties are levied, collected and retained by the central Government, the Excise duties are shared by the central Government with the state Government.

The state sales tax is levied and collected by the states on all intra state transactions. Central sales tax is levied by the central government and collected by the states and such levy is restricted to interstate sales originating in the concerned state. The former is regulated by the concerned state sales Tax Act,
while the central sales tax is regulated by the central sales tax act, 1956 (Value Added Taxation, 2006, p2).

Indirect tax system plays an important role in the economic development of a country by influencing the rate of production and consumption. The tax on goods and services in India, contributes almost a quarter of total revenue collected across the nation. In the recent past also commercial taxes has been a significant contributor in the total taxes collected by the central as well as state government.

The Government of India is committed to the world Trade Organization (WTO) regime & has decided to modernize and streamline its indirect taxation in the light of the experience of other WTO member country. In the budget of 2003, the finances Minister of India , after various rounds of consultation with the states of India, proposed the introduction of VAT in India on a national basis, replacing the State Sales Tax Act (India has 28 states and each states has enacted on sales tax). The main motive of Government behind this move was to introduce transparency and raise the efficiency of the tax collection system (The Empowered committee of state finance Minister, 2009, p14 to15).

The model of taxation of goods followed in India for more than fifty years post-independence was characterized by cascading and distortionary tax on production. A cascading tax is turnover tax that is applied at any stage in the supply chain without any deduction for the tax paid at earlier stages. Such taxes are distorting because they create an artificial incentive for vertical integration. This leads to misallocations of resources and dampens the economic growths. Such cascading effect ultimately had a negative impact on tax base, there by hindering the process of revenue generation and resource mobilization of the Government (Purohit, 1986, Pp 299-303). To address the above major problem of the prevailing taxation-system Value – added tax was introduced. VAT has replaced the existing local sales tax in almost all the states of India with effect from April 2005.

VAT introduced in India is a simple and transparent tax collection on the sale of goods. In India VAT is consumption based and applies on destination principal.

VAT is a multi-point levy affording tax credit on purchases at each stage to be set-off against tax payable. On sales at 0%, 1%, 4%, 5% and 20% except in a few states. Goods other than those notified to be covered under the above rates are charged at a general rate ranging from 12.5% to 15% except in a few states. However, liquor, petrol or diesel is taxable at the minimum rate of 20% and may vary from state to state while, gold and bullion are taxable at the rate of 1%. It is proposed that Central Sales Tax (CST), which has been reduced to 2% with effect from June 2008, will be gradually phased out in order to allow movement of goods freely from one state to another state. Under the VAT regime the VAT paid on goods purchased from within the state is eligible for VAT credit. The input VAT credit can be utilized against the VAT/CST payable on the sale of goods; it is thus ensured that the cascading effect of taxes is avoided and that only the value-addition is taxed.

Currently, there is no VAT on imports into India. Exports are zero-rated; this means that while exports are not charged to VAT, VAT charged on input purchase and used in the manufacturing of export goods or goods purchased for exports is available to the purchaser as a refund (Hills, 2012, p4).

The Value-Added Tax makes an evasive attempt on implementation levels as well as execution level. One of the most important requirements is transparency of VAT in all the states of India. It is found that
equal channels of distribution of VAT are found among wholesalers, Retailer and Consumers. The tax applicability and e-filling plays a vital role in the VAT system. It gives mutual benefits to the consumers and Government. Services tax, sales tax and other taxes can be easily vivid due to its implementation process. But the transparency is required at the level in order to obtain effective functioning in the VAT system in all states of India. The introduction of uniform product classification across the country is required to exhibit the implementation process with effective return, the adoption benefits of purchasers and sellers equally.

The single window system and abolition of CST are indispensable to obtain the cent percent success of VAT (Jayakumar, 2012, p29), and second most important requirement is revenue in this context. The various study shows that the state revenue is quite encouraging. The rate of growth of revenue under VAT system is higher than the former sales Tax system. In most of the states such as Andhra Pradesh, Bihar, Karnataka, Kerala, Maharashtra, Orissa Punjab and West Bengal the annual average growth rate is higher in VAT system. The average annual rate of growth of sales tax in these states was only 10.94%, which increased to 18.68% after five years of the introduction of VAT. It clearly shows that VAT has been a revenue raiser for the states. Not only the broadening of the tax base, but also other factors such as increased administration, efficiency resulting from the use of information and communication technology (ICT) and the self policing features of VAT seem to have contributed to the higher efficiency of VAT (Sebastian, 2011, p29).

It is in this background that the present paper tries to analyze the impact of VAT on revenue growth, base and efficiency in major States of India. This paper is organized into five sections. Section two present a brief review of literature. The Third section discusses the research methodologies which are used in this paper. Fourth sections discuss the revenue prospect of VAT in India. The fifth and final part is related to conclusion and some suggestions.

2. Literature Review

Many studies show that Value Added Tax (VAT) at Central and States level has been considered to be a major step—an important breakthrough in the sphere of Indirect tax reform India. VAT proves to be an efficient tool for revenue collection, its performances, therefore, has direct impact on fiscal mobilization, macroeconomic stability and development. The scope of the VAT is very broad; it covers all transactions involving an economic activity. We have tried to cover the studies of various economists related to Value Added Taxation in India.

Burgess Robin, Howes Stephen and Nicholes Sterm (1995) have discussed in their paper “Value-Added Tax option for India” in the existing condition of Indian tax system. According to them the requirement of a reduced role for Custom duties for the liberalization of the economy, and the complexity and strains of the current system together point clearly toward the desirability of tax reform in India.

They have argued that India would benefit from moving toward a system of value-added taxation (VAT) and focuses on the way in which VAT can be best introduced into India given the country’s federal structure. Three different options are distinguished: a central VAT, dual VAT and state VAT: they argue that the first is politically not feasible, the second option represents the best way forward in the short
term and that the third deserve consideration as a long-run option. In the end they suggest that special attention needs to be paid to the problems that would arise under either a states’ or a dual VAT with regard to taxing interstate trade.

Mishra. S.P (2005) estimates in his paper “Elasticity and Buoyancy of sales tax with reference to gross state domestic product (GSDP) of Jharkhand by using the regression approach. He observed that the value of buoyancy of sales tax revenue is more than the change in GSDP (Gross state Domestic product). It may be expected that sales tax revenue will increase more rapidly in future as GSDP is significantly rising.

According to him rising trend of tax revenue will continue if there is no reduction in tax rate and there is no exemption of commodities from taxation. He also suggests in his paper that there is also need to improve the tax administration, so that tax evasion and other malpractices may be avoided. Efforts should be made to minimize the cost and lag period of tax collection. If these measures are adopted in true spirit, it will raise the tax revenue and help to remove revenue and fiscal deficits of the state.

Kulbhushan Chandel DR .S.S Narta and Sudhanshu sood (2006) have analyzed “An integrated approach to value added Tax in Emerging Economic Scenario”. They argue that value-added tax (VAT) is a tax imposed on business at all levels of production and based on the increase in value provided at each level. It is a general consumption tax assessed on the value added to goods and services. They emphasize that it is a consumption tax because it is borne ultimately by the final consumer; it is not charged as a percentage of prices which means that actual tax burden is visible at each stage in the production and distribution. In the production and distribution chain it is collected fractionally via a system of deduction where by taxable person can deduct VAT liability from the amount of tax; they have paid on the taxable person on purchases for their business activities. They ensure that in this mechanism the tax is natural regardless of how many transactions are involved.

J.P Singh (2007) discuss in his study the importance of value-added tax in indirect taxation system because it eliminates the cascading effect of taxes, promotes competitiveness of exports; it has simple and transparent structure and improves compliance. Therefore VAT is a revolutionary innovation in indirect Tax system. The states which have not “historic opportunity”, it is advised to these states to implement the VAT immediately. VAT panel1 has to take decision regarding variations in rates as well as the unjustified rise in price of some products. If all the states do not uniformly implement VAT, companies will be forced to set-up depots in other states and operate through stock transfers. The implementation of VAT must be simple, transparent and easy in its operation.

Roy Poviomi , Ajitava Raychaudhur and Sudip Kumar Shina (2010) has examined the impact of Value-added tax on poverty reduction with the help of concentration curve, Lorenz curve and consumption dominance curve from the data of six major states. They try their efforts to understand the nature of marginal tax reform undertaken by different state governments in India, when they switched over to VAT from sales tax regime. Although VAT is known to be a better tax regime in general, since it avoids cascading, does it benefit the poor more than the rich? The paper has specifically addressed this question with six important states in India, namely Bihar, Gujarat, Karnataka, Madhya Pradesh, Maharashtra and west Bengal. This study finds that the design of the VAT in these states are generally Pro-Poor in are taxed less which are consumed more by people under certain poverty line. In Bihar,
Gujarat and Madhya Pradesh the actual change in tax is found to contradict the desired direction of tax change. The poverty lines differ from commodity to commodity, but pair wise comparison of taxes with help of normalized consumption dominance curve give an unambiguous answer regarding who benefits from increase and decrease in tax rate if the government wants to maintain its revenue target. This study fulfils a gap in the literature on taxes like VAT in India, but the analysis is in partial equilibrium framework. In many cases revenue neutrality is maintained by increase in taxes on products which are finished products but are used by industries and not consumed. Thus many of the tax reductions are not pair-wise truly comparable for revenue neutrality. This study done here give some indication about the design of VAT in India.

Sebastian.Jose (2011) discusses in his paper entitled “India’s experiences with state VAT” the five years of experiences of VAT in Indian states. He traces India’s road to VAT, in this context he says that VAT system is far from the ideal because the tax systems at central and state levels are not integrated. Thus excise levied by the central government at the manufacturing stage are not deductible for the purposes of state VAT. The destination principle, which is a basic principle, of an ideal VAT system is also compromised by the imposition of CST on interstate transactions of goods, and also instead of a single rate , the state VAT system have three rate categories, VAT also does not cover all goods. He also analyses the impact on state tax revenue, tax administration and compliances. In this context he says that VAT has been revenue riser for the Indian states. Not only the broadening of the tax base, but also other factors, such as increased administrative efficiency resulting from the use of information and communication technology (ICT) and the self-policing feature of VAT seem to have contributed to the higher efficiency of VAT.

Finally he concludes that the VAT system of the Indian states not fully comparable to that of a country as vast and diverse as India that has successfully introduced state VAT nationwide. The country is now in the process of changing over to GST, which offers an opportunity for the state to address the inadequacy of the present VAT system. Considering the issues involved in incorporating services in the GST net, it is desirable that the states adopt entirely new legislation rather than make cosmetic change to the existing VAT legislation for the purposes of adapting it to GST. The challenge for the states is to put in place a GST system which is both revenue productive and tax payers’ friendly.

Gupta Arindam Das (2011) entitled in his paper “An assessment of the revenue Impact of State-level VAT in India” have used of data for revenue and GSDP of 29 States in order to analyze the direct revenue impact. The indirect impact of VAT introduction on the VAT base (proxies by GSDP) and base growth were also examined. In his analysis he observed that no indirect impact of the VAT was found to be positive in two third of sample jurisdictions. He says that the state VAT was implemented in 2005 after a decade of preparation and at an unknown but large cost. From the statistical result and the CAG audit it can be inferred that the economic return in terms of revenue and efficiency gains to this expenditure of public funds is at best zero for the country as a whole. However, in Haryana, Orissa and the six identified special category states the return may have been large enough to justify the cost of reform, planning and implementation, given the apparent lack of readiness of states.
He suggested that state by state investigation is needed, particularly of tax administration and tax compliances, to throw more light on the cost and benefits of the 2005 VAT reform and devise more extensive benchmarks for the proposed GST reform.

Jayakumar Dr.A.(2011) examine in his study the importance of value-added tax in the Indian society, its impact and the future prospect for product and services industry in India. Since, India is a developing country, the main source for revenue is generated through tax levied on the individual on the purchases of goods or services. The government-imposes taxes and duty charges on the fellow People for fulfilling the infrastructural, technological, entrepreneurial demand of the country. Whether the imposition of high tax on the society is favourable or unfavourable in the present scenario to meet the technological and infrastructural demand? It has been identified that rural people are charged more tax than urban people due to subsidized rate provided to than in food products, transportation, electricity, water etc. For these facilities they are charged indirectly from their source of income like agricultural and allied activities. The question that arises is do value added taxes promote prosperity and well being for the common men? VAT outcomes and VAT benefits are analyses to each other. The VAT real process and its implementation are able to ascertain the exact VAT feature. The VAT implementation gives the maximum benefits to the consumers and its features are tending towards benefits for the sellers and customers.

Deshmukh S.M (2012) examine in his study the economic impact of VAT on the revenue growth and efficiency in Maharashtra. Revenue growth is an important aspect to study the economic analysis and success of VAT in Maharashtra. Maharashtra introduced a subtraction type VAT in 1995, due to design deficiencies; it reverted to a single point sales tax in 1999, through partial setting off of input costs from 1st April, 2005. The share of BST/VAT has increased from 52.2% to 64.8% during 2001-02 to 2009-10 in sales tax revenue gross receipts of the Maharashtra. MST (Motor Spirit Tax) and CST (Central sales Tax) has become the second and third largest contributor after BST/VAT in sales tax revenue gross receipts of Maharashtra. The annual compound growth rate (CAGR) and Co-efficient of Variation (CV) of BST/VAT in Maharashtra was 17.68% and 40.28% during 2001-02 to 2009-10. The major contributor to the State’s OTR is Value Added Tax (VAT) (55.53%). Among the States’ OTR, VAT/Sales Tax has contributed maximum, which is increased from Rs. 1,53,270 millions crore in 2003-04 to Rs. 4,08,150 millions crore in 2010-2011. In the end he says that universally VAT & GST has been adopted for correcting the fiscal imbalances as it works well within all political and legal constraints. The existing VAT system has increased the tax revenue as well as the profitability of the organization. VAT has simplified the paper work, proved to be user friendly, reduced transaction costs and time; since-e-registration has been made compulsory for every dealer. It is suggested and emphasized that VAT reduce the cascading effect and improves neutrality. Therefore rather than prescribing different rates for different goods, a uniform VAT will improve economic efficiency.

From the above discussion we can say that the replacement of the sales taxes by the Value Added Tax in 2005 marked a significant step forward in the reform of domestic trade taxes in India. In VAT, a deduction on taxes - input tax credit (ITC) has already been made thus removing the problem of double taxation. Moreover, VAT Pre- supposes a uniform floor rate of tax; differential rates of taxation across States get eliminated, which in turn prevents ‘rate war’ among different States. With now VAT being in
place in all states across the country for more than six years, the system of taxation has not only become more transparent, tax compliance has also increased to a great deal. The rate of growth of Tax revenue has sharply increased after the introduction of VAT. Despite VAT' success in mobilizing greater tax revenue, there are certain shortcomings of the Central as well as State VAT. The design of the CENVAT and the State VATs was dictated by constraints imposed by the constitution, which allows neither the centre nor the States to levy taxes on a comprehensive base of all goods and services and all points in the supply chain. The deficiencies of the current VAT system need to be the primary focus of the next reform.

3. Research Methodology and Data Collection

Data has been obtained from the government source like Reserve Bank of India report (State Finance: A study of Budgets) and, Ministry of statistics and programme Implementation (MOSPI) (2009) & (2012), Government of India. The period taken for the study is 2000-01 to 2009-10. 2000-01 to 2004-05 is Pre-VAT period and 2005-06 to 2009-10 is Post –VAT period.

Starting with Haryana and ending with Uttar Pradesh between 2003-04 and 2007-08 VATs on goods were implemented in all Indian States and several union Territories. On April 1, 2005, 21 states implemented state VATs in almost harmonized way with slight deviation. Therefore In this study we have chosen those States in which VAT was introduced on 1 April, 2005 because these states have five years experience with VAT. We have taken six major States of India, which are Andhra Pradesh, Bihar, Karnataka, Kerala Maharashtra, and Orissa.

In this study we have taken two variables first, State Sales Tax/VAT (ST/VAT) and second Gross State Domestic Product (GSDP).

Statistical Tools: In this Study we have shown the impact of VAT on revenue, its buoyancy and efficiency of state sales tax/value added tax. For this we used three statistical tools which are Compound Annual Growth Rate (CAGR), Buoyancy (B), and Co-efficient of Variation (CV). Compound Annual Growth Rate (CAGR) will help us to find the revenue impact of VAT on state sales tax/value added tax. It measures the growth rate of the state sales tax/value added tax. Through Buoyancy test the base impact of a tax is shown. Buoyancy measures the total response of tax revenue to changes in national income. Co-efficient of variation helps us to measure the efficiency impact of revenue. These methods are explained as follows:

**Compound Annual Growth Rate (CAGR):** It measures the growth rate of Sales Tax/VAT. It shows whether VAT is revenue raiser or not. CAGR is calculated by the formula as;

The well known compound interest formula is

\[ Y_t = Y_0(1+r)^t \]  \hspace{1cm} (1)

Where \( r \) is the compound (i.e., over time) rate of growth of \( Y \). Taking the natural logarithm of the equation (1), the equation can be written as :

\[ \ln Y_t = \ln Y_0 + t \ln (1+ r) \]  \hspace{1cm} (2)
Let us consider $\beta_1 = \ln Y_0$ and $\beta_2 = \ln (1+ r)$ then we can rewrite equation (2) as

$$\ln Y_t = \beta_1 + \beta_2 t$$

(3)

Adding the disturbance term from eq (3) then obtained

$$\ln Y_t = \beta_1 + \beta 2 t + U_t$$

This model is like other linear regression model in which the parameter $\beta_1$ and $\beta_2$ are linear. The only difference is that the regress and logarithm of Y and the regressor is the time which taken value of 1,2,3,4, etc.

The compound annual growth rate ($r$) was estimated by using $r = [\text{Antilog} (\beta_2) - 1] \times 100$ (Gujarati, 2010, p.182-183)

Buoyancy: It measures the base of any tax. This indicates whether VAT is broadening base or not. It is calculated by the formula as:

$$\text{Buoyancy (B)} = \frac{[\text{ST/VAT}_t - \text{ST/VAT}_{t-1}]/[\text{ST/VAT}_t]}{[\text{GSDP}_t - \text{GSDP}_{t-1}]}/\text{GSDP}_t$$

(RBI, 2011, p.85)

Coefficient Variation: It measures the efficiency and stability of tax. This clarifies whether the VAT increases the efficiency and stability or not. CV is calculated by the formula as:

$$\text{Coefficient Variation (CV)} = \frac{\sigma \times 100}{\bar{X}}$$

Where $\text{CV} =$ Coefficient of variation

$\sigma =$ Standard Deviation

$\bar{X} =$ Arithmetic Mean (Deshumukh, 2012, p.100)

Revenue Prospect of VAT in India: VAT has direct as well as indirect effects on several economic variables. Effects of VAT are felt all over the economy because the tax influences several macro economic variables such as saving, investment, employment, distribution, price and efficiency of resources. VAT directly affects some of these variables whereas the effect on other is indirect. One of the most important effects is economic growth which is directly linked to revenue efficiency of VAT. In this section we will particularly discuss the revenue prospect of VAT in India (Sharivastava and Gupta, 2004, p.29).

Revenue efficiency aspect of VAT is a debatable issue and experiences vary from country to country and region to region. Provision of set-off leads revenue losses and these vary from 20 to 40 percent in different countries. Revenue losses are recouped through base expansion, higher standard rate, by checking tax evasion or through better tax compliance due to attributes of simplicity and provision of cross-checking. Due to uncertain behavior of this parameter in different countries, VAT is introduced with the assumption of revenue neutrality. Revenue productivity of VAT may not be judged in isolation-to a great extent it depends upon incidence of other consumption taxes also (Ebril L., et al, 2002).

Revenue efficiency of the Value-Added Tax in place of turnover tax or sales tax is based on the assumption of wider coverage, minimum exemptions, a high standard rate, existence of large formal
sector, high level of tax compliance and efficient tax administration etc. As all these conditions are not available at a time, revenue prospects from the tax are not to the desired extent (Purohit, 2001, p.22).

The case for State VATs in India has advocated mainly on the ground of higher revenue efficiency vis-à-vis the combined revenue from various types of sales/purchases taxes it replaced and the central sales tax which is expected to be abolished in phases. During the period 1980-81 to 1996-97 buoyancy coefficient of sales tax in different States were more than 1 in majority of the states with all India average of 1.02. Sales tax buoyancy with respect to GSDP at factor cost for all States taken together for 1993-94 to 2004-05 was 1.1. The buoyancy of sales tax revenue has been generally higher, as compared to those of other State taxes as well as of excise or custom duties levied by the central government. The crucial issue for the State finance is that the revenue efficiency of State VATs at least will remain the same as compared to the taxes like General Sales Tax (GST) and Central Sales Tax (CST) it will replace (Gupta, 2005, p.3919).

At this time many States have five year experiment of VAT. In this paper we have tried to show the impact of VAT on revenue, its buoyancy and efficiency. To analyse the impact of VAT in major states of India, we have randomly selected six major states out of the 28 states. The selected states namely, Andhra Pradesh, Karnataka, Kerala, Maharashtra, and Orissa represent almost all the regions of the India. Andhra Pradesh, Bihar, Karnataka, Kerala, Maharashtra, and Orissa .In all these State VAT was implemented in 1 April, 2005.

Andhra Pradesh: The Andhra Pradesh Value–Added Tax (APVAT) Bill 2003 received presidential assent in December 2004 and the Act came into force from 1April, 2005 repealing the Andhra Pradesh General Sales Tax (APGST) Act, 1957.

Salient features of the APVAT Act; The APVAT Act contains 81 sections and six schedule and each schedule carries a definite rate of tax. Under the APVAT Act, the dealer are divided into three categories:- (a) dealers with annual taxable turnover of Rs 40 lakh and above, are liable to be registered as VAT dealers (b) dealers with annual taxable turnover between Rs. 5 lakh and Rs.40 lakh are liable to registered as turnover Tax (TOT) dealers. TOT dealers are required to pay a composite tax at one percent on total taxable sales; (c) dealers with turnover of less than Rs.5 lakh are not liable for registration.

All the VAT dealers have been assigned an 11 digit unique Tax identification Number (TIN) and TOT dealers with General Registration Number (GRN). The VAT dealers are eligible to claim input tax credit (ITC) i.e. credit for tax paid on the preceding point of purchases of goods from VAT dealers and used in business, TOT dealers on the other hand are not eligible for ITC.

APVAT is superior to APGST, because APVAT is based on the value addition to the goods and the related VAT liability of the dealers is calculated by deducting input tax credit from tax collected on sales during the tax period (a calendar month). Concept of giving credit of tax paid on purchases was introduced in the APVAT there by avoiding double taxation. Levy of tax at first and subsequent point of sale within the state, i.e, cascading taxation prevalent under the APGST Act was done away with the APVAT Act; self assessment by dealers replacing compulsory assessment of all returns of all the dealers by department under the APGST Act(Audit Report, Andhra Pradesh, 2009, p.15 to 16).
Bihar: The Government of Bihar repealed the Bihar Finance Act, 1981 and enacted the Bihar Value Added Tax (BVAT) Act, 2005. Initially, no provision for the levy of surcharge and additional tax was made in the VAT Act. From September 2007, additional tax is leviable in case of dealers of specified commodity whose Gross Turnover (GTO) exceeded Rs.250 crore. Thus, though the Empowered Committee had aimed at abolition of all the other taxes, deviations have been made afterwards under the BVAT Act.

Under BVAT Act, goods are classified into four schedules based on their social and economic importance and are taxable at the rates of ‘nil’ (Schedule I), one (Schedule II), four (schedule III) at the rate as prescribed in the Schedule (schedule IV) and 12.5% for all other goods not specifically mentioned in any of the Schedules (Audit Report, Bihar, 2009, p.16).

Karnataka: In Pursuance, the Government enacted the Karnataka Value Added Tax Act, 2003 (KVAT) Act with effect from 1 April 2005.

The salient features of KVAT Act are as under: - All the dealers registered under the KST Act were liable to get registered under the KVAT Act. Every dealer whose total turnover exceeds or who reasonably expect his total turnover to exceed Rs.2 lakh as computed in the year ending 31 March 2005 was liable to get registered under the KVAT Act. The KVAT Act and rules framed there under also provided for voluntary registration by dealers whose turnover was less than the prescribed limit, Suo moto registration by competent authority of the department after conducting survey, inspection or equity. All dealers registered under the KVAT act were assigned Tax payers identification number (TIN). Under the KVAT Act, every dealer is liable to pay tax on the sale of taxable goods by him after deducting tax paid on his purchases with certain restriction.

Every registered dealer shall be liable to pay tax on his taxable turnover, in respect of goods mentioned in second schedule at the rate of one percent, third schedule at the rate of four percent and fourth schedule at the rate of twenty percent in respect of other goods at the rate of twelve and half percent, in respect of transfer of property in goods involved in the execution of work contract at the rates specified in the sixth schedule from 1 April 2006.

Goods specified in the first schedule and any other goods specified by a notification of State Government were generally exempt.

KVAT Act is Superior to KST Act in Karnataka because; (a) KST was a first point levy at the rates ranging from one to 20 percent. In addition, turnover tax (TOT) at one to three percent on first sales turnover depending on the total turnover and at one percent on second and subsequent sales turnover was leviable up to 31 March, 2002. Further, with effect from 1 April 2002, resale tax (RST) was leviable at the rate of 1.5 percent on second and subsequent sales turnover. Besides, additional tax at one percent was also leviable on first sale with effect from 1 June 2003.whereas the KVAT Act, tax is levied at prescribed rates at every point of sale after allowing deduction towards tax paid at the previous point (input tax credit). (b) Under the KST Act, Supporting documents and declarations were required to be submitted along with the returns whereas KVAT system provides for voluntary payments of tax by dealers and acceptance of returns on self assessment basis without requiring production of any supporting documents and declaration. (c) Under the KST Act assessment were made in all the cases after scrutiny
of books of accounts whereas in the KVAT system scrutiny of books of account are made only in selected cases taken by audit. (d) Under the KST Act, concessional rate of tax was levied on sale of industrial inputs to industrial units, sale of Government department and other specified bodies on production of prescribed declaration. Also sale to 100% Export oriented units (EOU) were exempted subject to production of prescribed certificate obtained from the EOU. However no such concession /exemption are provided under the KVAT Act(Audit Report, Karnataka, 2009, p.13).

Kerala: The Kerala General Sales Tax (KGST) Act, 1963 (up to 31 March, 2005). Kerala Value Added Tax (KVAT) Act, 2003 (introduced from 1 April 2005) and central sales Tax Act, 1956 govern the levy and collection of tax on sale or purchase of goods in the State. Under the KGST Act, tax on the turnover of sale or purchase of goods are leviable only at the specified point, other than the points specified for levy of tax, are exempt subject to the condition that the dealer claiming exemption shall furnish supporting documents or prescribed declaration /certificate. Under the KVAT tax on the turnover of sale of goods is leviable at all points. The assessing authorities (AA) are required to confirm the genuineness of these declaration or documents through cross verification of records of other dealers/State and utilize the information gathered from check post before finalizing the assessment.

Salient features of KVAT Act, (a) under the KVAT Act, in case of transfer of goods involved in the execution of works contract, where transfer is not in the form of goods, but in some other form, the contractor shall pay tax at the rates, applicable to the goods used in the work up to 30 June 2006 and at 12.5% thereafter irrespective of the nature of goods. (b) Under the KVAT Act, any discount allowed after the sale is over by issuing credit notes, which is not reflected in the invoice, shall not be exempted from the turnover.(c) under the KVAT Act, input tax credit on stock transfer of goods outside the state is not permitted. However in such cases input tax paid in excess of four percent can be refunded while input tax of four percent already allowed shall be assessed as revenue tax. (d) Under the KVAT Act, no input tax credit shall be allowed for the purchases of goods processing or packing of goods specified in the first or fourth schedule. (e) Under the KVAT, Rules, if taxable goods are used partly in relation to taxable and exempted transaction, input tax/special rebate should be appropriated in the ratio of taxable and exempted turnover and input tax pertaining to exempted turnover should be disallowed. (f) Under the KVAT Act, no input tax credit shall be allowed for the purchases from a dealer paying compounded tax under the Act. (g) Under the KVAT Act, a dealer can avail input tax credit of tax paid on the purchases made by him (Audit Report, Kerala, and 2009, p.18).

Maharashtra: The Empowered Committee of State Finance Ministers had in its meeting held on 23 January 2002 resolved to implement VAT in India. Accordingly to the Presidential of India accorded approval to the Maharashtra VAT (MVAT) Act, 2002 in March 2005.Further the empowered Committee in its meeting held on 7 March 2005 decided to implement VAT from 1 April 2005 in various States. The Government of Maharashtra (GOM) repealed the Bombay Sales Tax (BST) Act, 1959 and enacted the MVAT Act, 2002 with effect from 1 April 2005.

Salient features of MVAT: - VAT in Maharashtra is levied as per MVAT Act, and the MVAT rules, 2002 made there under. VAT is levied on sale of goods including intangible goods. VAT is a taxation system that avoids double taxation. In addition to granting set-off of tax paid on purchases to the dealers, VAT has various other advantages for both business and Government, such as eliminating cascading effect of
double taxation and promoting economic efficiency. It is primarily a self-assessment system with more trust put on the dealers. It also has the potential for a stronger manufacturing base and more competitive export pricing. It has an improved mechanism resulting in better compliance.

In Maharashtra, registration of dealers is compulsory for importers whose gross turnover of sale or purchases exceeds rupees one lakh for other whose turnover of sales or purchases exceeds rupees five lakh in a financial year. A new dealer has to get himself registered under the Act within 30 days from the date on which he is liable to get registered. There is also a provision for voluntary registration by the dealers, under the VAT Act there are mainly two rates for levying tax on various goods which is for example [Viz, 4% and 12.5% under schedule ‘A’ certain goods are tax free. There is a special rate of 1% on precious metals, stone and jewellery, and liquor, petrol diesel etc. the rate is 20%. Multiple rates as was in existence under the repealed BST Act have been significantly brought down under VAT. There is also a composition scheme for manufacturers and retailers whose turnover of sales/tax liability is within the limit. Specified in the concerned notification dealers opting for composition scheme are not entitled for grant of set-off.

MVAT is superior to BST because, MVAT is a multi-point system; the independent Act which were in existence up to 31 March 2005 such as work contract Tax (WCT) Act, Motor Sprit Taxation Act and Lease Act have been merged with VAT. This system relies more on self compliance of tax by the dealers. Assessment is not compulsory in all the cases unlike in the repealed Acts where return filed by the dealers were subject to cent percent assessment. In VAT, supporting documents, like statements of Sales and purchases, copy of annual accounts, etc, are not required to be produced at the time of assessment. VAT provides for selection of dealers on scientific basis for audit of records. Under the repealed Acts there was assessment in all the cases (Audit Report, Maharashtra, 2009, p.31 to 32.).


OVAT Act superior to OST Act because, the OVAT is a multi-point taxation system the repealed Act had a single point taxation system. The OVAT system relies more on the dealer to pay tax will fully and submit self assessed returns whereas under the repealed Act supporting document were required to be produced along with the returns. The OVAT Act provides for identification of 20% of the dealers for tax audit .No norms has been fixed for separate assessment and the number of assessments depends on the results of tax audits whereas under the repeated Act, hundred percent dealers were being assessed. Under the OVAT regime, the executives have a reduced control over the dealers whereas under OST regime it had more control over the dealers. Under the OVAT Act, the goods are taxable under four different tax groups i.e.1%, 4%, 12.5% and 20% under two schedules and there is no provision for levy of surcharges (Audit Report, Orissa, 2009, p.19)

After the brief introduction of VAT the above States we will now analysis the impact of VAT on revenue, base and efficiency in all of the above States.
Table 1  Performance of Sales Tax/VAT in the selected States (Pre and Post VAT Period)

<table>
<thead>
<tr>
<th>Name of States</th>
<th>Compound Annual Growth Rate (CAGR)</th>
<th>Buoyancy</th>
<th>C0-efficient Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-VAT</td>
<td>Post-VAT</td>
<td>Pre-VAT</td>
</tr>
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<td>Andhra Pradesh</td>
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<td>1.34068</td>
</tr>
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<td>Bihar</td>
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<td>-7.47022</td>
</tr>
<tr>
<td>Karnataka</td>
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<td>14.73921093</td>
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<td>Kerala</td>
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<td>18.28174126</td>
<td>1.021052</td>
</tr>
<tr>
<td>Maharashtra</td>
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<td>14.71763209</td>
<td>0.986338</td>
</tr>
<tr>
<td>Orissa</td>
<td>11.25644072</td>
<td>18.19254334</td>
<td>1.145274</td>
</tr>
</tbody>
</table>

Figure 1  Growth of Sales Tax/VAT in the selected States in Pre &Post VAT period

From the Table 1 we can see that all the six States Andhra Pradesh, Bihar, Karnataka, Kerala, Maharashtra, and Orissa have Compound Annual Growth Rate of Sales Tax/VAT greater in post –VAT period as compared to Pre-VAT period. In case of Andhra Pradesh the average CAGR is 6.44% greater in Post-VAT period as Compared to Pre-VAT Period. In case of Bihar the average CAGR is 11.66% greater in Post-VAT Period as compared to Pre-VAT period. In case of Karnataka the average CAGR is marginally 1.93% greater in post VAT period as compared to pre VAT period. In case of Kerala the average CAGR is 6.54% greater in Post-VAT period as Compared to Pre-VAT period. In case of Maharashtra the average CAGR is marginally 1.86 % greater in post VAT period compared to Pre-VAT period. In case of Orissa the average CAGR is marginally 6.93% greater than pre-VAT period.

From the above table we see that out of six States; Bihar CAGR of Sales TAX/VAT has maximum gain of 11.66% in post VAT period as Compared to Pre-VAT period. Andhra Pradesh, Kerala and Orissa CAGR have almost similar gain in Post –VAT period. But the performances of Karnataka and Maharashtra are not satisfactory because in these states the gain is below 2% of CAGR of Sales Tax/VAT in Post-VAT period.
period as compared to Pre-VAT period. This gain from CAGR of Sales Tax/VAT after VAT is shown in the Figure 2.

**Figure 2  Gap between Pre-Post VAT CAGR**

From the revenue prospect we can say that Bihar is better performing State in post-VAT period. Andhra Pradesh, Kerala, and Orissa are middle performing States in post VAT period. Karnataka and Maharashtra are low performing States in Post-VAT period.

**Figure 3  Buoyancy of Sales Tax/VAT of Six States in Pre and Post VAT period**

From the Figure 3 we can see that out of six states, States Buoyancy of Sales Tax/VAT of Post-VAT period in four States is greater than the Pre-VAT period. Andhra Pradesh and Karnataka have Buoyancy of Sales Tax/VAT less than in Post VAT period as compared to Pre-VAT period. In case of Andhra Pradesh the buoyancy is 33% less than in post VAT period as compared to Pre- VAT period. In case of Bihar the
average buoyancy of sales Tax/VAT is increased by 104.7% in Post –VAT period from the Pre-VAT period. In case of Karnataka the buoyancy of sales Tax/VAT is -18.56%, less in Post-VAT period from the Pre-VAT period. In case of Kerala the buoyancy of sales Tax/VAT is up by 9.36% & increases in Post-VAT period from the Pre-VAT period. In case of Maharashtra the buoyancy sales Tax/VAT is 36.39% & increase from the Pre-VAT period. In case of Orissa the Buoyancy of sales Tax/VAT is 19.65% & increases from the Pre –VAT period.

Figure 4  Gain or loss of buoyancy in Post VAT period

From the Figure 4 we can see that out of six States four States Bihar, Kerala, Maharashtra and Orissa have gained in terms of base of Sales Tax/VAT revenue. Andhra Pradesh and Karnataka are at loss in term of base of Sales Tax/VAT revenue. The maximum buoyancy of sales Tax/VAT was recorded in Bihar in Post-VAT period. Maharashtra is the second, followed by Orissa is third and Kerala at fourth number of gainer in terms of buoyancy of Sales Tax/VAT in Post –VAT period. But the condition of Andhra Pradesh and Karnataka is not satisfactory. Therefore in terms of buoyancy of Sales Tax/VAT we can say that Bihar and Maharashtra are high performing, Orissa and Kerala are middle performing and Andhra Pradesh and Karnataka are low performing States.

Figure 5  Coefficient of Sales Tax/VAT of Six States in Pre and Post VAT period

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From the Figure 5 we can see that out of Six States, five states have Co-efficient Variation greater in post-VAT period as compared to Pre-VAT period. Only Maharashtra’s Co-efficient of variation is less in Post-VAT period as compared to pre-VAT period. Thus we can say that stability Impact of VAT is not satisfactory. In case of Andhra Pradesh Co-efficient of Variation is increased by 7.45% in Post-VAT period as compared to Pre-VAT period. In case of Bihar Co-efficient of variation is increased by 6.78% in Post-VAT Period as compared to Pre-VAT period. In case of Karnataka Co-efficient of Variation is decreased by 2.33% in Post-VAT period as compared to Pre-VAT period. In case of Maharashtra Co-efficient of Variation is decreased by 0.96% in Post-VAT Period. In case of Orissa the Co-efficient Variation is increased by 6.54% in Post-VAT Period as compared to Pre-VAT period.

Stability gap of six States in Pre and Post VAT period given below Figure 6.

![Figure 6 Stability gap in Post and Pre VAT period of Six States](image)

We can conclude that in terms of Stability Impact of Sales Tax/VAT revenue Karnataka has most consistent revenue in post VAT period as compared to Pre-VAT period. The next state in line is Maharashtra which has second most consistent revenue in Pre-VAT period. Andhra Pradesh, Bihar, Kerala and Orissa are inconsistent states in term of Sales Tax/VAT revenue.

From the above discussion we can say that VAT is revenue raiser in all six States. VAT also broadens the base of Sales TAX/VAT in four states out of six states. But when we talk about stability then sales Tax is more stable Tax revenue as compared to VAT.

### 4. Conclusion and Some Policy recommendation

Introduction of State level VAT is the most significant tax reform measure at State level. The State level VAT being implemented presently has replaced the erstwhile sales tax system of the States. Under Entry 54 of list II (State List) in the seventh Schedule to the Constitution of India, “tax on sale or purchase of goods within a State” is a State subject. The decision to implement State level VAT was taken in the
meeting of the Empowered Committee (EC) of State Finance Ministers held on June 18, 2004, where a broad consensus was arrived at amongst the States to introduce VAT from April1, 2005. Accordingly, VAT has been introduced by all States/UTs by now. Uttar Pradesh is the latest State which has introduced VAT on January 1, 2008.

The initial experience of implementation of VAT has been received well by all the stakeholders. The transition to the new system has been quite smooth. The EC is constantly reviewing the process of implementation of VAT. The revenue performance of VAT implementing States/UTs has been encouraging so far. During 2005-06, the tax revenue of the 25 VAT implementing States/UTs had registered an increase of around 13.8 percent over the tax revenue of 2004-05, which is higher than the Compound Annual Growth Rate (CAGR) of sales tax revenues of these States for the last five years up to 2004-05. During 2006-07, the tax revenue of the 31 VAT State/UTs had collectively registered a growth rate of about 21 percent over the tax revenue of 2005-06. This indicates that the VAT system is gradually stabilizing and has started yielding the desired result (Economic survey, 2007-08, p.35).

From the above analysis of Five years of Pre and Post VAT period, we can see that average CAGR of Post VAT period of all six majors States of India is greater than Pre-VAT period. The average CAGR in Post-VAT period is 16.35% as compared to 10.52% in Pre-VAT period of all six states. This indicates 5.83% increase in CAGR in the Post-VAT period as compared to Pre-VAT period. Therefore VAT is revenue raiser in the selected States. The maximum gain of Post-VAT CAGR is in Bihar. The main reasons for this to increases were better tax compliances, stronger enforcement measures and steps taken by the State Government to identify and Plug the gap leading to revenue loss. The middle performing States in terms of CAGR are AP, Orissa and Kerala. In case of AP the good performances is on account of revision of rate of tax on the residuary entries under Schedule V of APVAT Act 2005 from 12.5% to 14.5% and on Aviation Turbine Fuel from 14% to 16% and the cost of collection Sales Tax/VAT is below in Indian average (Audit Report, Andhra Pradesh, 2010, p9). Orissa performed well due to revenue efforts through higher effective rates. Orissa has raised the lower rate from 4% to 5% without the fear of trade diversion. The cost of collection of sales Tax/VAT in Orissa is less than Indian average due to the voluntary tax Compliances mechanism of the OVAT Act and the efficient tax administration (Audit Report, Orissa, 2010, p.9). In case of Kerala VAT revenue rises due to better tax compliance as compared to sales tax (Audit Report, Kerala, 2010, p.9). The least performing States in term of CAGR are Karnataka and Maharashtra. Both of these States have better tax Compliances and cost of collection of VAT/Sales Tax which is less than national average. However, the main reasons for less gain in terms of average CAGR in post-VAT period is the sharp decline in revenue for the year 2008-09 due to economic slow-down (Audit Report, Karnataka, p12to13 and Maharashtra, p.10, 2010 ). In case of broadening the base of tax revenue the VAT has resulted in some amount of success. Only Bihar, Maharashtra and Orissa improved their tax Buoyancy in Post-VAT period. In case of Bihar the Sales Tax system faces many Problems which is removed by the VAT system. In the period 2005-10 the buoyancy of state own tax revenue with respect to GSDP increases 3.53%. Sales Tax/VAT is the main contributor of State own revenue Tax. Therefore buoyancy of Sales Tax/VAT with respect to GSDP increases in these periods significantly (Audit Report, Bihar, 2010, p.8). In case of Maharashtra MVAT reduces the compliance burden on the tax payers and increase the efficiency in tax collection system. The cost of collection of revenue in the Maharashtra is less than the all India average. Therefore the buoyancy of Sales Tax/VAT with respect to GSDP increases in Post-VAT period (Audit
Report, Maharashtra, 2010, p.10). In case of Orissa OVAT improves the tax Compliances mechanism and efficient tax administration. Therefore buoyancy of Sales Tax/VAT with respect to GSDP increases in Post-VAT period significantly (Audit Report, Orissa, 2010, p.9). In other states such as AP, Karnataka the reasons for no improvement in the buoyancy of Sales Tax/VAT in Post –VAT period is because there exist many weaknesses in VAT system. Audit reports, pointed out non/short levy of output tax, incorrect allowance of input tax credit, incorrect/excess allowance of input tax credit, incorrect allowance of tax deducted at source, Non/Short payment of tax deducted at source, Non/short payment of tax, incorrect/excess carry forward of refund, Non/short levy of interest, Non/Short levy of penalty, Non –forfeiture of tax collected in excess and other irregularities involved (Audit Report, Andhra Pradesh, p.16, Karnataka, p.16, 2010). Kerala sales Tax/VAT buoyancy with respect to GSDP slightly increases which is less than satisfactory. VAT failed to have stabilization effect on the above six States. The main reasons for this are the annual growth rate over the previous period is not consistent in these states in Post VAT period. Initially the growth rate increases generally in all states in 2006-07 but decline in 2008-09 due to the economic slow-down and this decline increases in 2009-10. Therefore increasing –decreasing trend of growth make VAT unstable in these states. From the above we see that VAT improve tax compliances and increases the tax administration efficiency of the above states. However, some weakness exists in these States due to which VAT failed to perform up to the mark. Therefore there is need for the improvement in the VAT system and to make it more efficient system. To improve the existing weakness in VAT system some policy measures are suggested which are as follows:

- Coordination reforms should be undertaken at the central, State, and local levels. A major objective should be minimization of distortion and compliance cost. In fact, the sub nation tax system should be revised so that the principles of a common market are not violated. Taxes on domestically traded goods and services should be coordinated in the spirit of cooperative federalism. Domestic and external trade taxes should also be coordinated to ensure the desired burdens of consumption taxes on the community are achieved.

- Broadening the base of both central and state taxes and keeping the tax structure simple-within the administrative capacity of the governments is an important international lesson that should be incorporated in further reform. Phasing out exemption for small –scale industry, maintain exemptions and concessions to industries in the services sector and minimize discretion and selectively in the tax policy and administration are all important not only for further soundness of the tax system but to enhance its acceptability and credibility (Govinda and Kavita, 2005, p.1). 

- Over all transparency of tax collection for the VAT regime has increased compared to the sales tax regime. So, VAT implementation should be more encouraged by providing the necessary administrative machinery for better functioning of this system (Sattwik and Koushik, 2012, p.5).

- VAT features are highly competent to allot benefit to the government. So the channel of distribution and flow of VAT must be reformed.

- The most important reform in the tax administration is making the transition to information-based tax administration, online filing of tax returns, compiling and matching information are key to administrative reform. Tax administrator should assist tax payers in a timely fashion and help to reduce their compliance costs (Deshmukh, 2012, p.104).
Although the VAT system of the Indian States is not fully comparable to that of the most developed countries, it is remarkable that a country as vast and diverse as India has successfully introduced State VAT nationwide. The country is now in the process of changing over to GST, which offers an opportunity for the states to address the inadequacies of the present VAT system. Considering the issues involved in also incorporating services in the GST net, it is desirable that the states adopt entirely new legislation, rather than make cosmetic changes to the existing VAT legislation for the purposes of adapting it to GST. The challenge for the States is to put in place a GST system which is both revenue production and tax payer friendly (Sebastian, 2012, p.33).

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