

Impact of Rate Increment in the Revenue Mobilization from the Value Added Tax in Nepal

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Abstract

Nepal government increased the VAT rate from 10 percent to 13 percent in 2001/02 to finance the resource gap due to increased salary of its civil employees. The study has been undertaken to analyse the impact of this surge in the VAT rate. The study found that the rate could mobilize the revenue. It may be due to low rate of VAT in Nepal not only compared to the South Asian average but also global average. The performance of the VAT revenue administration improved slightly in terms of C efficiency ratio. The revenue collection jumped by nearly more than two times than the before rate change has been a plus point for the rate increment. The performance in other aspects like non-filers, excess credit and zero returns and VAT outstanding which affect the revenue mobilization has been deteriorated after the rate change. So, recommendations have been made to undertake a separate study in this field and in coming days the government should not revise the tax rate and government should stick on adopting present single rate instead of going to the multiple rate as demanded by the business community in Nepal.

Keywords: VAT, Non-filer, Outstanding, C Efficiency, VAT Rate

Introduction

As of June 2023, 175 countries around the world have adopted Value Added Tax (VAT) as the main source of revenue for their governments. (ITD, 2023). They have administered different rates which depend on their economic and social conditions. Some have even implemented multiple rates. Among the single rate the highest rate is found in Norway and the lowest rate is found in Honduras (Bird, 2015). Ten percent rate of VAT is considered as an ideal rate from tax administration and policy perspective. (Tait, 1988). Nepal implemented VAT as part of its economic reform program in 1997 AD. from 1997 to 2003 the ideal rate of VAT was adopted in Nepal and in 2004 the then the government increased the tax rate to 13 percent to meet the liability of salary hike of the civil servants. The increased VAT rate did not work effectively to raise more revenue keeping the other tax administration issues. The analysis of VAT revenue from its initiation to 2003 and from 2004 to 2020 clearly showed that the increased rate has been able to mobilize the revenue for the government but the other

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tax administration issues like non-filer, excess credit returns, VAT outstanding from tax payers have deteriorated after the rate change.

Rate of tax has been one of the major determinants of revenue mobilization for the governments around the world. In modern tax administration emphasis has been laid on broadening the tax base rather than increasing the tax rate for the revenue mobilization. In case of VAT the tax rate apart from exemptions and tax base plays an important role in not only revenue mobilization but also in its compliance and enforcement. In 2004 the then government increased the tax rate of VAT from 10 percent to 13 percent to fill the gap created by increase in salary of the civil servants. Some studies have been done about the impact on revenue after reduction in the existing VAT rate by Ndhlovu, F et al. (2022) but the study on how the revenue mobilization has been affected with the increase in tax rate has not been done. Along with this other administrative issues of VAT like non-filer, VAT outstanding, nature of the returns submitted by the tax payers (credit return, debit return and zero return) VAT efficiency also affect revenue mobilization from this tax. There is a lack of joint study on these topics. The main objective of this study is to examine whether the increment in the VAT rate corresponds to increment in the revenue as evidenced by the experience of other countries.

Methodology of study

The study is based on the secondary data published by the Inland Revenue Department of Nepal. The five-year data before the rate change and after the rate change have been analyzed for this purpose. Five-year averages have been used for trend analysis. The data on VAT outstanding, VAT efficiency and non-filer before and after the rate change, have also been analyzed. The study covers the period before the rate change from 1997 to 2001 and rate change from 2002 to 2006 AD. Now the time has been long enough to draw concrete conclusion from the policy perspective. But some problems of those times like non-filer, VAT outstanding still persist even today. So, the study is considered to be pertinent.

Theoretical framework

Convenience and productivity canons of Adam Smith apply here. VAT is an indirect and consumption tax. It is convenient to tax payers because it is included in the prices of goods and services. As per the canon of productivity the government should incur the minimum cost to collect the tax and the revenue mobilized from the tax should be spent on productive activities. Among the Bastable's canons, the canon of simplicity can be applied here as the VAT is simple tax in the sense that by calculating the output tax and input tax the tax payer can decide one's tax liability easily.

This Laffer curve explains the relationship between tax rate and revenue of the government. As per the theory the zero rate and 100 percent tax rates are extreme tax rates which do not

mobilize any revenue for the government. The theory recommended to reduce the tax rates to mobilize more revenue. If governments reduce tax rate it has to bear arithmetic effect and economic effect. An arithmetic effect emerges in the economy instantly. Reduction of tax-rate by one percent will result in one percent reduction in the government revenue. The economic effect of this will be seen after long time and has a multiplier effects on the economy.

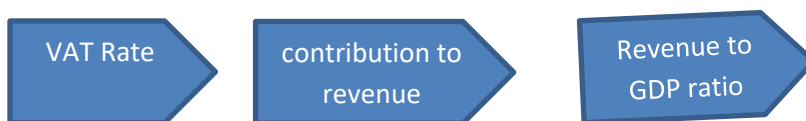
Fiscal adequacy theory or productivity theory.: It explains that the tax should generate enough revenue to the government so that it can meet its financial obligations. This theory states that the tax burden should be based on ability to pay and it should be proportional. It is based on the philosophy " he who receives more should give more". The theory emphasizes on the horizontal and vertical equity in taxation.

Tax laws must be fair, just and effective in administration. Tax laws should remove a feeling of uncertainty among the tax payers. As per the theory the tax system should not affect economic growth of the country. Moreover, the tax should encourage people to work, save and invest in the economy. The tax laws should not impose a high tax rate on raw material and capital goods.

Deterrence Model: The theory explains that the people evade tax when the benefit of tax evasion outweighs the punishment given to them in the form of fines and penalties after they have been caught. Later on, it was found that along with the deterrence fair, respectful behaviour to the tax payers and intrinsic motivation also play an important role in compliance of the tax payers.

The Conceptual Framework

In this study the VAT rate is taken as an independent variable and VAT revenue collection for the government has been taken as dependent variable. Tax exemptions provided for goods and services and tax base are also taken as independent variable and how they have been badly affected by the administrative deficiency like non-filer, VAT outstanding and others have also to be taken consideration as the conceptual framework for this study.



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In the Global Context

Tait, Alan B, VAT in International Perspective (1988) Tait recommends to adopt few rates which satisfy the interest of the politician. He is in favour of adopting a single rate with zero rate for exports and minimum number of goods and services for exemptions. According to Tait the highest single standard rate of 25 percent was adopted by Sweden and the lowest rate of 5 percent was adopted by Panama. When it comes to multiple rates highest rate of 250 percent was adopted by Kenya and lowest rate of one percent was adopted by Turkey. Whether the country adopted single or multiple rate, the effective rate matters more. In the United Kingdom even though it adopted the single rate of 15 percent, the effective rate ranged from 24 percent to 37 percent. He has also explained the effectiveness of standard rate on the system of mentioning tax in the invoice. In fixing standard rate for VAT, the imposition of other levies like excise customs should also be taken into consideration.

Gurumurthi, Value Added Tax Across the World: A cross Country Comparison (2000): The rate of VAT was designed in the European Union to promote free market in goods and services within the union and the free movement of labour and capital within the union. For this purpose, the Standard Rate, the Reduced Rate and Special rates were recommended. There was an issue of revenue loss to the members due to cross border shopping due to rate differential among the member states. Studies done in this field suggest that the small traders and high taxed excise goods pose threats to the members states in revenue loss than the VAT.

The tax revenue from VAT depends on the VAT rate and broadness of the tax base. In the absence of exemptions, the VAT base will be equal to the domestic personal consumption. Studies conducted in the OECD countries found that the 10 percent VAT generates nearly 4 percent of the revenue. This assumes of the (% percent compliance of the VAT process by the tax payers. Moreover, it also assumed that all exemptions are included in the zero rating treatment.

Ebril, L. Kleen M. (2001) opined, that the single rate of VAT system (zero rate for export) is good for both tax payers and tax administration because it simplifies processes for both tax compliance and enforcement. The rate, base and the threshold determine the extent of VAT revenue generation. A tax rate should be fixed on the basis of tax base and revenue needs of the government. Better educated civil servants and business community help the government raise more revenue from this tax than the rate hike. The revenue from this tax is also impacted by the extent of private consumption of the GDP. Ten percent increment in the standard rate will increase seven percent in the VAT revenue assuming that the VAT is imposed on 10 percent of the consumption and tax rate is 15 percent.

Bird, Richard M. and Cendron P.G. (2015) *The VAT in Developing and Transitional Countries: The writers are of opinion that the differentiated VAT rates are not justified on the grounds of equity, efficiency and administrative purposes. There is not any logic behind using the VAT rate below ten percent. The results of the study Japanese VAT and Canadian VAT system does not support this argument. These countries have fixed the VAT rate of below 10 percent and some countries of Eastern Europe have adopted the VAT rate of more than 20 percent. In Jamaica in 1993, a surge of 25 percent increase in the VAT rate has increased VAT revenue by 53 percent in real terms. Some years later the tax revenue increased had been slow compared to the increment in the rate. Studies were also done in developed countries in the context of VAT revenue increment with respect to the increase in the VAT rate. There is a negative relation between the VAT rate increment and increase in the revenue for the government.*

Similarly, Alan Schenk, Victor Thuronyi and Wei Gui, , *Value Added Tax : A Comprehensive Approach (2015) : The authors found that VAT rates are changed frequently in different countries . If the rate of change is low then there will not need new regulations. Often the new higher rate will apply to sales only after certain date. There is a substantial change in the VAT rate, the government should make a provision of retrospective enforcement. It will only can save the revenue mobilization of the government. The writers are of view that higher tax rates will breed the grounds for evading tax from the tax payers.*

Furthermore, Ndhlovu, Faith, Durgesh Bindura et al (2022) *State an Assessment of Implications of Standard Rate reduction towards the Revenue Mobilization in Zimbabwe. The case study of Pam Golding Properties: It is the study done in Zimbabwe one of the poor countries in Africa affected by high inflation and increasing public debt. The study concluded that the standard rate reduction from 15 percent to 14.5 has not been an effective measure to improve the revenue generation for the government. The study not only recommended to increase the standard rate but also the reduce the VAT threshold to enlist and small and medium tax enterprises in the VAT net. In this study very, small number of samples was taken and a case study of an estate company called Palm Holding was done. The study also cited the examples of Germany, China and Ireland where standard VAT reduction was designed for other purposes like increase in the consumer spending, boost manufacturing activities in the country and create conducive environment for the business.*

In the Nepalese Context

Rup Khadka *"Political Economy of VAT (1999): The book was published after two years of VAT implementation in Nepal. It recommended not to increase the VAT rate which would affect the already registered few tax payers. Even in the short experience of VAT implementation the government should review the threshold and exemption list. After two to*

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three years of VAT implementation then the government should initiate the process of revising VAT rate. For this the government should reduce the tax rates of customs and income tax. It also cautioned the government not to increase the tax burden of the tax payers when the VAT rate is hiked.

Rup Khadka (2001) , In his article namely Value Added Tax : the Concept, International Experience and Its Application in Nepal, Mr. Khadka opines that the 10 percent tax rate of Nepalese VAT system was lower than not only Asian average but also in terms of global average which turned out to be 10.4 percent and 16 percent respectively. The time was not ripe enough to raise the rate because it would affect not only compliance but also the revenue generation for the government. The VAT system would formalize the economy and then it would have a positive effect on customs and income tax. If standard VAT rate is raised by one percent point the share of VAT revenue in GDP is supposed to be increased by 0.3 percent. Higher VAT efficiency ratio means better outcome of the VAT administration.

The revision of VAT rate should be considered in the context of Nepal's accession to WTO and implementation of provisions of SAFTA in which Nepal has to reduce the customs duties in its foreign trade. In this context Nepal should consider the revision of excise and income tax and focus should be on effective implementation of VAT to compensate the revenue loss from reduction in customs duties.

Report of the Working Commission on Financial Reform (2003), The commission agreed to increase the VAT rate in Nepal on basis of developing VAT as a main source of revenue for the government and the international experience. It cautioned the government to encourage to have a discrepancy between the registered tax payers and the tax payers who are not registered. The commission emphasized on the tax compliance and improve in the sluggish economic condition of the economy for the revenue mobilization from VAT. A big surge in the VAT rate was undesirable.

High Level Commission on Tax System Review (2014): The commission recommended that the government should guarantee the tax payers that the rate will not change for the next five years. Moreover, the government should stick on adopting single VAT rate in the country. The commission also found that the 13 percent VAT rate is lower than the global average rate of 15.91 percent but slightly higher than the Asian average rate of 12.92 percent. The commission also felt that in the Nepalese context the rate increment is undesirable. The commission also recommended to increase the rate of income tax to meet the increasing revenue needs of the government.

VAT Revenue mobilization, VAT Efficiency Ratio Segregation of VAT Revenue and VAT GDP Ratio before rate change and after rate change

This chapter has been classified into two parts. The first part deals with the revenue performance of VAT before the rate change and after the rate change. Revenue collection, VAT revenue to GDP ratio and VAT efficiency have been used here to assess the effectiveness of the VAT system. The second part deals with some of the performance of the revenue administration which affect the revenue generation from this act. The performance like increment in non-filer of registered tax payers, dues to be paid by the tax payers and domination of credit returns and zero returns in total returns that the tax payers submitted in the revenue offices.

Table 1:

VAT Revenue mobilization before rate change and after rate change (in billion)

VAT Rate of 10 percent			VAT Rate of 13 percent		
Year	VAT Revenue		Year	VAT Revenue	
1997/98	718		2002/03	1882	
1998/99	788		2003/04	2194	
1999/00	985		2004/05	2670	
2000/01	1185		2005/06	2730	
2001/02	1475		2006/07	2981	
Five year's Average	1030.2			2491.4	

Source: Inland Revenue Department, Annual Reports

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Table 2:

VAT Revenue to GDP ratio before and after rate change

VAT Rate of 10 percent			VAT Rate of 13 percent		
Year	VAT /GDP Ratio		Year	VAT /GDP Ratio	
1997/98	2.4		2002/03	2.7	-
1998/99	2.38		2003/04	2.7	-
1999/00	2.6		2004/05	3.2	
2000/01	2.7	-	2005/06	3.3	
2001/02	2.7	-	2006/07	3.6	
Five year's Average	2.54			3.1	

Source: Inland Revenue Department, Annual Reports

Table 3:

VAT Efficiency Ratio before and after rate change

VAT Rate of 10 percent		VAT rate of 13 percent	
Year	VAT Efficiency Ratio	Year	VAT Efficiency Ratio
1997/98	39	2002/03	32
1998/99	33	2003/04	31
1999/00	35	2004/05	35
2000/01	35	2005/06	36
2001/02	33	2006/07	39
Five year's Average	35		35.2

Source: High Level Tax Review Commission 2015

From the above tables except in VAT efficiency ratio, the revenue and VAT GDP ratios have surged after the rate increase. In VAT efficiency calculations the factors like GDP, private consumption and VAT rate have also been included. So, the ratio has improved due to increase in number of registered tax payer and effectiveness of revenue administration (commission. 2014) . In the beginning up to 2001 the VAT was administered by then VAT department but later on the department was merged with income tax department to administer the new Income Tax act of Nepal which came into effect from April 2001.

Table 4:*Segregation of VAT revenue before and after rate change*

VAT Rate of 10 percent					VAT Rate of 13 percent				
Year	VAT revenue import	Rate of change	VAT revenue Domeatic	Rate of change	Year	VAT revenue import	Rate of change	VAT revenue Domeatic	Rate of change
1997/98	502	-	210	-	2002/03	1227	-	662	-
1998/99	507	1	281	33	2003/04	1388	13	805	22
1999/00	613	21	373	32	2004/05	1701	22	968	20
2000/01	730	19	455	22	2005/06	2043	20	926	-
2001/02	900	23	375	-	2006/97	2578	26	1391	27
Five year's Average	650.4			2491.4		893.7			

Source: High Level Tax Review Commission 2015

In the Nepalese VAT system VAT on imported goods contribute nearly two third and the the contribution turns out to be one third. The trend has not changed before the rate change and after the rate change.

Other Aspects affecting the VAT Revenue Collection

As per the VAT Act every tax payer should deposit the tax money in the government treasury after the 25 days of next month if he/she has paid more money in purchase than the money he /she collected in the sale. Such type of tax payer's returns is called debit return. If the tax payer did not pay the tax in time it remains outstanding. The opposite s the credit return. When the registered tax payer does not conduct any transaction then he/ she submits the zero returns. The situation of returns, non-filer and outstanding amount have been presented in the following tables.

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Table 5:

VAT Outstanding

VAT Rate of 10 percent			VAT Rate of 13 percent		
Year		Rate of change	Year		Rate of change
1997/98	3840		2002/03	7934	-
1998/99	1240		2003/04	8591	-
1999/00	883		2004/05	7322	
2000/01	3233	-	2005/06	7475	
2001/02	2549	-	2006/07	1030	
Five year's Average	2349			5020	

Source: High Level Tax Review Commission 2015

Table 6:

VAT non-filer

VAT Rate of 10 percent			VAT Rate of 13 percent		
Year			Year		
1997/98	2.53		2002/03	18.21	-
1998/99	2.50		2003/04	19.81	-
1999/00	2.63		2004/05	21.95	
2000/01	4.50	-	2005/06	24.20	
2001/02	8.03	-	2006/07	25.37	
Five year's Average	4.03			21.9	

Source: High Level Tax Review Commission 2015

Table 7:*Return Detail*

Year	VAT Rate of 10 percent			Year	VAT Rate of 13 percent		
	Credit	Debit	Zero		Credit	Debit	Zero
1997/98	50.8	28.03	21.17	2002/03	46.89	21.86	31.25
1998/99	46.6	29.67	23.73	2003/04	47.63	20.12	32.25
1999/00	56.9	22.32	20.78	2004/05	47.62	19.32	33.06
2000/01	54.4	22.72	22.88	2005/06	47.42	18.86	33.32
2001/02	52.2	21.81	25.99	2006/07	47.36	17.86	34.78
Five year's Average	52.18	24.91	22.91		47.38	19.60	33.02/*/

Source: High Level Tax Review Commission 2015

The study of the above tables reveals the following facts:

The VAT outstanding amount has increased more than two times after the rate change.

The VAT non-filer has increased by more than 5 times after the rate change. It is a serious concern for the VAT administration

The percentage of credit returns has decreased by nearly 4 percent after the rate change but the debit returns have decreased by 5 percent and the zero returns have increased by more than 10 percent which is again the another serious concerns for the revenue administration.

Nearly one third tax payers do not file their returns and the same number of taxpayers submit zero returns. Nearly two thirds of the tax payers submit credit returns in which has to refund the tax payers. Domination of small tax payers and contractors have exacerbated the problem. (Commission, 2014)

Conclusion

Increment in the VAT rate from 10 percent to 13 percent has increased the revenue mobilization, VAT/GDP ratio and the VAT efficiency ratio. The Nepalese VAT rate of 13 percent is lower in comparison to South Asian and the global average. In respect of other factors which affect the VAT revenue mobilization the picture turned out to be bleak. With the increment in the tax rate the tax payers, who furnish zero return and credit return has been increased and debit return filers who are potential tax payers for revenue has decreased. Moreover, the number of non-filers and the due amount to be collected from the tax payers (outstanding) amount has also increased significantly after the rate change. The tax has been

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collected from both imports and domestic production. The ratio of contribution by domestic VAT and import has not been changed before the rate change and after the rate change.

Recommendations

1. The government should constitute a separate high-level commission to undertake a detail study of only VAT in Nepal. Most of the studies done in the past were done in a holistic approach. The recommendations of the previous reports should also be considered in the coming study.
2. The analysis has clearly shown the administrative weaknesses of revenue administration of Nepal. The government should design appropriate measures to enhance its enforcement capability. This may be creating a separate department for the administration of VAT.

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