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Determinants of value added tax on revenue administration using logit regression: an evidence from Ethiopia

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ABSTRACT

The study was conducted with the aim of examining the determinants of Value Added Tax administration at the revenue office in Dessie town. The research used descriptive and regression analysis technique to analyze the data. Based on the logistic regression analysis, it was found that the determinants of VAT administration which affect positively on the awareness of VAT registered tax payers, capacity and efficiency of revenue office, and knowledge and understanding of VAT rules and regulations, and objectives where as resistance against value added tax registration affects negatively. And at the same time, willingness of customers to buy goods and services with VAT receipt has no significant impact on VAT administration. Based on the findings this study recommends designing of mechanisms to reduce the resistance against Value Added Tax registration by tax payers, intensifying the VAT audit, increase the capacity and efficiency of revenue Office in all aspects to improve VAT administration capacity in the town to earn high revenue from VAT collection through public media, Campaign, Auditor's Training and conferences.

Keywords: Value Added Tax, Registered tax payers, Capacity and efficiency.

INTRODUCTION

Value Added Tax (VAT) is a type of indirect tax and an important and major source of revenue in many countries. VAT is a consumption tax levied at each stage of the consumption chain and borne by the final consumer of the product or service (Aderetietal., 2011). In addition, Value Added Tax (VAT) is a general tax levied on all goods and services bought and sold for use or consumption within a region. It is calculated on the value added to goods and services by a trader at each stage of the production and distribution chain (Lamon, 2013). VAT is based on the value addition of the goods and the related value added tax liability of the dealer is calculated by deducting in put tax credit from tax collected on sales during the payment period (Dasgu, 2005).

Ethiopia has introduced VAT in to its tax system as a replacement sales tax in 2002 which came into force as of January, 2003 with the objective of enhancing economic growth; and enhancing saving and investment. To sustain Value Added Tax's revenue role in the government's finance, it is important to ensure that the revenue generated by this tax is raised as efficiently as possible (Wollela, 2008). However, researches reveal that in Ethiopia revenues raised by Value Added Tax are usually garnered at the expense of erosion in its salient features. This may be caused by factors including poor Value Added Tax administration and poor culture of paying tax of the tax payers i.e., the incapacity of tax authorities to implement the attributes of the tax in practice. A good tax administration is essential in achieving government's policy objectives at large and fully

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implementing the design features of Value Added Tax (Yesegat W., 2008). Thus, this study examines the determinants of VAT administration in Dessie town. And at the same time, willingness of customers to buy goods and services with VAT receipt has no significant impact on VAT administration. Based on the findings this study recommends designing of mechanisms to reduce the resistance against Value Added Tax registration by tax payers, intensifying the VAT audit, increase the capacity and efficiency of revenue

Research Problem

The main problem of Value Added tax implementation practice in Ethiopia are lack of tax payers awareness, lack of selling goods and services without tax invoice or lack of use proper Value Added Tax invoices, weak culture of taxpayers, and lack of fairness, lack of experience of Value Added Tax registrants, weak follow-ups and controlling mechanisms against those unregistered and registered Value Added Tax payers (Bizualem, 2015). For instance, the main problems in VAT administration that East Wollega revenue authority office encountered were lack of awareness of taxpayers, resistance against registrations for Value Added Tax by some traders, weak culture of taxpayers, poor Value Added Tax administration system which made the office ineffective (Habtamu et al., 2015).

Similarly, Tefera (2011) found that due to constraints of skilled man power, low awareness of taxpayers, low commitment of local leader and complexity of VAT law end up with improper VAT administration which imposes VAT administration burden on tax payers, and weak enforcement in VAT administration in the Amhara Regional State. In conclusion, Dessie town administration revenue office could not be out of these problems. According to Dessie Revenue office 2016 /2017 annual report showed the inefficiency and ineffective administration of VAT administration of the office which performs 60.1 percent on the average from its plan. Therefore, this study tries to assess and identifies the determinants of value added tax administration in Dessie town.

Objectives of the Study

To identify the main determinants of VAT administration and effect of the capacity and efficiency, willing of customers to buy goods and services, tax payers' resistance against value added tax registration and the level awareness of VAT registered tax payers of Dessie revenue office on VAT administration and implementation in Dessie town

LITERATURE REVIEW

The study of Nelson H., (2011) found that the determinants of VAT in Kenya include GDP, institutional, demographic, and structural features of the economy. Among the notable ones that seem to have had positive influences on VAT revenues are introduction of sales tax in 1973, coffee and tea booms, introduction of sales tax on imports in the fiscal year 1984/85, budget rationalization program, establishment of Kenya Revenue Authority in 1995, favorable weather, log monetary GDP, and the volume of international trade. VAT revenues respond with lags to changes in their respective tax bases. This means that the previous levels of tax bases (such as GDP, volume of trade, and volume of imports) have significant influence on the present levels of VAT revenues. This further means that new policy guidelines contained in the budget speeches are not usually implemented immediately. Hence the long time lag in the response of the taxes influences VAT revenue collected from various sources at a point in time.

Yalemtesfa (2011) states that Weak tax administration stems from a number of interesting factors: overly complex and out dated tax laws and procedures, weak or out dated operating and management information systems, poorly trained staff, low remuneration packages for civil servants, bureaucratic civil service procedures, poor infrastructure and equipment and corruption in tax administration. In addition to that strong audit follow up is very important element to enhance VAT income. The findings of Yalemtesfa regarding to cash register machine showed that the cash register machine has a positive impact on VAT income, It reduces the cost of organizations in

terms of money, timely filling the monthly VAT returns, led to improved sales audit for the business, reduce the operating cost of the government, improving the efficiency and effectiveness of government operations it also reduces the VAT evasion. The result shows that awareness and VAT income have direct relationship that means when awareness increases VAT income also increases, audit follow up affect VAT income positively which means audit follow up increase

Tezera (2012), on his study on assessing Value Added Tax administration in Dire Dawa City Tax Authority using questionnaires, Interview and observation as instrument of data analysis and employing descriptive statistics for analysis of the data, found that the main problems found in administering VAT in the Authority were inefficient organizational structure, lack of technical skill of the officers, inefficient use of SIGTAS software were from the tax Authority side, VAT evasion mainly done on invoices, unwillingness of tax payers, lack of awareness, from the taxpayers' side .

Habtamue, etal, 2015, founded that Value added Tax Administration in East Wollega Z one has faced different problems/ challenges. The main problems that encountered are the following such as: Lack of Awareness of Taxpayers, resistance against registrations for Value Added Tax by some traders, weak culture of taxpayers, poor Value Added Tax administration system. All these problems hinder the Administration of Value Added using descriptive types of research, open ended and close ended types of questionnaires to gather primary information from a total of 60 samples selected from Value Added Tax registrant's taxpayers employing simple random sampling techniques employees of the Authority Office judgmental sampling method and by analyzing collected data through descriptive statistics method with table, charts, and figure and percentage by computer using (Statistical Package for Social Sciences) SPSS software.

SUMMARY GAP AND CONCLUSION

The empirical studies that have been reviewed in the preceding section focused on the problems

on tax compliance and the problems on VAT implementation and practice, in some way on VAT administration problems. These studies revealed that there is divergence between the effective VAT taxation and the legislation. The main areas where there are gaps and problems include taxpayers identification and registration, VAT refunds, VAT audits, penalties and VAT invoicing. In addition, the outcomes of the surveys showed a paucity of tax awareness among the society and strong education programs as well as lack of trust between taxpayers and administrators as major challenges to the VAT system. It was noted that VAT noncompliance appeared to be prevalent, especially in developing countries (Wollela, 2008). This research has emphasized on the gap between legislation and implementation practice in Ethiopia.

However, to the knowledge of the researcher, it is possible to conclude that although there have been a number of studies on VAT implementation and practice related issues both in developed and developing countries, Ethiopia in particular, there are no so many studies that exhaustively examine specifically the determinants of VAT administration. In Ethiopia, there are some studies conducted regarding the problems on the implementation and practice of VAT and its revenue. They did not focus clearly on determinants of VAT administration by taking in to consideration the major VAT administration tasks like including taxpayer identification and registration, VAT filing and payment, control of VAT filing and payment, VAT invoicing, VAT auditing, penalties and VAT refunds etc. as discussed above.

Conceptual Frame Work

The following conceptual frame work was developed by the researcher to describe the relationship between dependent variable VAT administration and the independent variables awareness and resistance of VAT registered Tax payers, capacity and efficiency of the revenue office, willingness of customers to buy goods and services with VAT receipt, knowledge and understanding of VAT rules and regulation, objectives and importance as shown below.

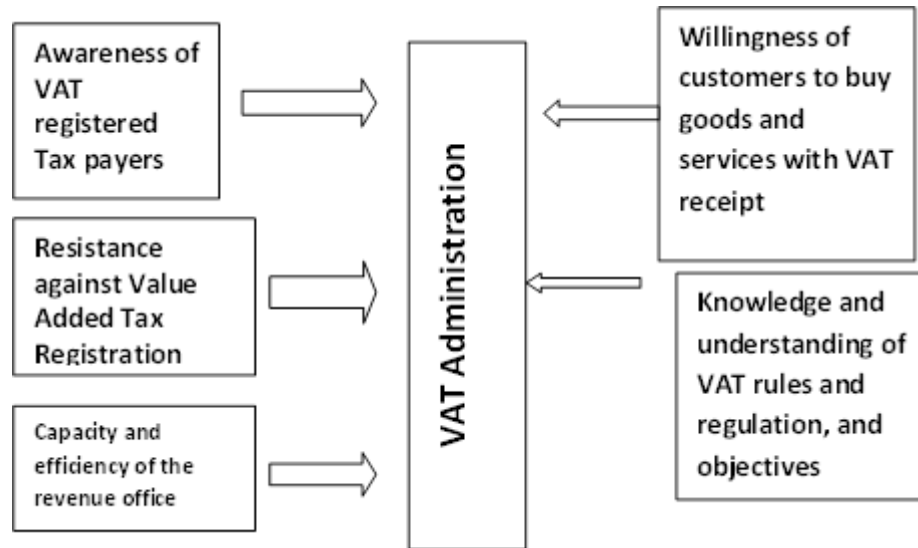


Figure.2.1. Conceptual Framework of VAT Administration and its Determinants

METHODOLOGY

The types of research approach and design used under this study are descriptive and explanatory design. Target population of this study was 1286 VAT registered traders.

The sample size in this study determined by using simplified and easy Yamane (1967) formula to determine the sample size from the VAT registered tax payers. Sample size from VAT registered is $n = N / 1 + N (e^2)$ Where n = is the sample size N = is Population e = is the error limit or the level of precision (which is 0.05 on the basis of 95% Confidence level) Thus, the sample size for this study is $n = 1286 / 1 + 1286 (.05^2) = 305$. Probability stratified sampling was used in this study. Under stratified sampling, the population is

divided into several sub-populations that are individually more homogeneous than the total population (the different sub-populations are called 'strata') and select items from each stratum to constitute a sample. The sample elements are selected from different business sectors; the study followed the method of proportional allocation under which the sizes of the samples from the different strata was kept proportional to the sizes of the strata. That is, if P_i represents the proportion of population included in strata i , and n represents the total sample size, the number of elements selected from strata i is $n \cdot P_i$ (Kothari, 2004). Consequently, the sizes of elements were selected from the strata are depicted in the following table

Table.3.1. Sample Size Selected from Business Sectors

Business Sector	Numbers	Sample Item
Spare Parts	85	$n \cdot p / N, 305.85 / 1286 = 20$
Stationeries	88	$n \cdot p / N, 305.88 / 1286 = 21$
Super Markets	10	$n \cdot p / N, 305.10 / 1286 = 2$
Building Materials	195	$n \cdot p / N, 305.195 / 1286 = 46$
Contractors	138	$n \cdot p / N, 305.138 / 1286$

		=33
Hotels	208	n.p/N, 305.208/1286 =49
Electronics	104	n.p/N, 305.104/1286 =25
Importers	126	n.p/N, 305.126/1286 =30
<hr/>		
Read Made Cloth Shops	42	n.p/N, 305.42/1286 =10
Photo	6	n.p/N, 305.6/1286 =1
Fruit and Vegetables	8	n.p/N, 305.8/1286 =2
Gold Smith	28	n.p/N, 305.28/1286 =7
Merchandising Shops	118	n.p/N, 305.118/1286 =28
Shoes Shops	45	n.p/N, 305.45/1286 =11
Coffee Retailers	85	n.p/N, 305.85/1286 =20
Total Sample Size	20+21+2+46+33+49+25+30+10+1+2+7+28+11+20 =305	

The researcher used secondary data from the reports of the revenue authority to collect the number of VAT registered traders and the primary data collected through questionnaire. Regarding the sources of data, the sources of the primary data for this study was information or responses of the respondents which are collected through self-administered closed and structured questionnaire.

Logistic regression analysis was employed to examine the relationship between dependent variable VAT administration and the independent variables awareness and resistance of VAT registered Tax payers, capacity and efficiency of the revenue office, willingness of customers to buy goods and services with VAT receipt, knowledge and understanding of VAT rules and regulation, objectives. Moreover, Statistic package for social science (SPSS) computer program used to analyze data that are collected through questionnaires to identify the determinants of VAT administration in Dessie Town.

Model Specification

Logistic regression sometimes called the logistic model or logit model, analyzes the relationship between multiple independent variables and a categorical dependent variable, and estimates the probability of occurrence of an event by fitting data to a logistic curve(2013). Binary Logistic regression is a prognostic model that is

fitted where there is a dichotomous/binary dependent variable like in this instance where the researcher is interested in

Whether there was an increase in stock price or not. Usually, the categories are coded as "0" and "1" as it results is a straightforward interpretation. Normally the category of interest also affectionately referred to the case is typically coded as "1" and the other group is also known as a "no case" as "0"(Muchabaiwa, 2013).

According to Park (2013) a logistic regression modal can be constructing with the equation

$$\text{logit}(y) = \ln(p / 1-p) = \alpha + \beta_1 \chi_1 + \dots + \beta_k \chi_k$$

Where p is the probability of interested outcome, α is the intercept parameter, β is a regression coefficient, and χ is a predictor, \ln natural logarithm, and forming the general model

$$Li = \ln(p / 1-p) = \alpha + \beta_1 \chi_1 + \dots + \beta_k \chi_k + U_i$$

Where, Li - logs of odds ratio/logit

Ln - natural logarithm

Bi - coefficient for each independent variable

$B0$ -intercept of the regression

Xi – each independent variable and U_i - error term

In this study, the following logistic regression model was used.

$$Li = \beta_0 + \beta_1 \text{Awvrtaxp} + \beta_2 \text{Reagvrtp} + \beta_3 \text{Capefrof} + \beta_4 \text{Wcubgsvr} + \beta_5 \text{Knunvrrro} + ui$$

Where,

Awvrtaxp =Awareness of VAT Registered Tax Payers

Reagvrtp=Resistance against Value Added Tax Registration

Capetrof=Capacity and Efficiency of Revenue Office

Wcubgsvr =Willingness of Customers to buy goods and services with VAT Receipt

Knunvrro =Knowledge and understanding of VAT Rules and Regulations, and Objectives

β_0 = is the coefficient of the constant term/intercept

β = coefficient of variables

U_i = Error factor

RESULTS AND DISCUSSION

Binary Logistic Regression Analysis

Model Fitness

There are three methods of model fitting used for fitting multivariable binary logistic regression to establish the variables that are associated with changes in dependent variable. The three methods of model fitting are the Enter method, forward conditional selection, and backward stepwise conditional elimination method (Muchabaiwa, 2013). In this study enter method was used. The enter method of model fitting which involves the entering of all variables at the same step. The results in Table 4.7 show the model chi-square and the significance levels.

Table.4.1 Omnibus Tests of Model Coefficients

Omnibus Tests of Model Coefficients				
		Chi-square	Df	Sig.
Step 1	Step	70.280	5	.000
	Block	70.280	5	.000
	Model	70.280	5	.000

The model chi-square value which is the difference between the null model and the current (full) (chi-square values =70.280) the p-value is less than 0.05 (significance level), implying that the addition of the independent variables improved the predictive power of the model. The block and

the step values are equal to the model values since all values were entered at the same time. In other words table above shows that when all five predictor variables are considered together, they significantly predict the VAT administration problems.

Table.4.2.Case Processing Summary

Case Processing Summary			
Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	305	100.0
	Missing Cases	0	.0
	Total	305	100.0
Unselected Cases		0	.0
Total		305	100.0

If weight is in effect, see classification table for the total number of cases.

The Case Processing Summary simply tells us about how many cases are included in our analysis. The second row tells us that there are no missing

data on all of the variables included in the analysis and the Dependent Variable Encoding reminds us how outcome variable is encoded „0“for absence and „1“for presence of VAT administration.

Prediction Power of the Null model

Block 0: Beginning Block

Table.4.3. Classification Table^{a,b}

Classification Table ^{a,b}					
		Observed	Predicted		
			Vatad		Percentage
			mtn	Correct	
			N	Y	
			o es		
Step 0	Vatadmtn	N	2	0	100.0
		o	88		
		Y	1	0	.0
		es	7		
Overall					94.4
Percentage					

a. Constant is included in the model.

b. The cut value is .500

The **Block 0** output is for a model that includes only the intercept (which SPSS calls the constant). Given the base rates of the two decision options (288/305 = 94.4% decided to stop the research, 5.6 % decided to allow it to continue), and no other

information, the best strategy is to predict, for every case, that the subject will decide to stop the research. Using that strategy, you would be correct 94.4% of the time to identify the determinants of VAT administration.

Table.4.4. Variables in the Equation

Variables in the Equation			
	B	S.E. Wald	Sig. Exp(B)
Step 0	Constant	-2.830	.250
		128.540	.000
			.059

Under Variables in the Equation we see that the intercept-only model is (B) = -2.830. If we exponentiation both sides of this expression we find that our predicted odds $\text{Exp}(B) = .059$. That is, the predicted odds of deciding to continue the research are .059. The significance of the models with only constant at (0.000) which is less than the level of significance of 0.05 (i.e. $p < 0.05$). Moreover, the overall statistic is correct to extent of 94.4 % – so it is better than a cut point 0.5 (better than just guessing). Then the finding of this significance indicates this null model should be rejected.

Assessment of the Significance of Predictors Not Included In Null Model

Once the prediction power of null model and its significance level is identified, the next important thing to do is checking the significance of predictors that not included in null model. The enter method of model fitting which involves the entering of all variables at the same step. Thus, Table 4.3 and Table 4.4, revealed the significance of each independent variable that is not included in the base line model and the omnibus tests of model respectively. As evidenced in table 4.10: the independent variable that are not included in the base line model is less than 0.05 (i.e. $p < 0.05$) and significant, except willingness of customers to buy goods and services with VAT Receipt. Moreover,

the omnibus tests of model are significant for all predictor. Therefore, this indicates that new model with explanatory variable is different and including all predictors improve new model over baseline model. Then the variable not in the equation table tells us whether each independent variable improves the model. Also, that when all seven

predictor variables are considered together, they significantly predict the budget control in public organization at $\chi^2 = 70.280$, $df = 7$, $N = 305$, $p < .05$. The table labeled variables not in the equation tell us that the residual chi-square statistic is 70.280 which is significant at $p < 0.05$ (it labels this statistic overall statistics).

Table.4.5. Variables not in the Equation

Variables not in the Equation		Score	df	Sig.
Step 0	Awareness of VAT Registered Tax Payers	59.335	1	.000
	Resistance against Value Added Tax Registration	9.978	1	.002
	Capacity and Efficiency of Revenue Office	8.539	1	.003
	Willingness of Customers to buy goods and services with VAT Receipt	.033	1	.855
	Knowledge and understanding of VAT Rules and Regulations, and Objectives	53.30	1	.000
	Overall Statistics	71.475	5	.000

Table.4.6. Omnibus Tests of Model Coefficients

Omnibus Tests of Model Coefficients		Chi-square	Sig.
		df	
Step 1	Step	70.280	.000
	Block	70.280	.000
	Model	70.280	.000

Model Summary

Model summary have values shown in Table 4.7 indicate how good the model fits the data. Accordingly, table 4.7 with Cox & Snell R Square and the Nagelkerke's R^2 , they provide an indication of the amount of variation in the dependent variable. But, the Nagelkerke's R^2 modification that does range from 0 to 1 is a more reliable

measure of the relationship with a better model displaying a value closer to 1 and provides an indication of the model fitting information. Thus, there is good relationship between the predictors and the response variable at 58%. And also, as per table 19 model with all predictors is 95.4 % accurate in determining the dependent variable.

Table.4.7.Model Summary

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	60.916 ^a	.206	.589
a. Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.			

Table.4.8. Classification Table^a

Classification Table ^a					
Observed		Predicted		Percentage Correct	
		Vatadmtn			
		No	Yes		
Step 1	Vatadmtn	No	280 8	97.2	
		Yes	6 11	64.7	
Overall Percentage				95.4	
a. The cut value is .500					

Goodness Fit of the Model

The Hosmer-Lemeshow test shown in Table 4.9 explores whether the predicted probabilities are the same as the observed probabilities. An overall goodness of fit of the model is indicated by p-values > 0.05. This model produced insignificant difference between the observed and predicted probabilities indicating a good model fit. In other words, small values (with large p-value closer to 1) indicate a good fit to the

data, i.e. an insignificant chi-square indicates a good fit to the data and, therefore, good overall model fit. Since the p-value is 0.950 which is insignificant therefore our fitted logistic regression model is good fit (20). Based on this, Hosmer-Lemeshow test suggesting that the model was fit to the data well at statistics χ^2 , 1.631 & p value of .950 which is ($p > .05$) which means that the data fit the model adequately (Hosmer and Lemeshow, cited in Muchabaiwa, 2013)

Table.4.9.Hosmer and Lemeshow Test

Hosmer and Lemeshow Test		
Step	Chi-square	Sig.
1	1.631	.950

Analysis of Binary Logistic Regression Model Results

Table.4.10. Variables in the Equation

Variables in the Equation		B	S.E.	Wald	Sig.	Exp(B)
					f	
Step 1 ^a	awareness of VAT registered tax payers	1.733	.647	8.065	.006	!8
	resistance against value Added tax registration	-	.919	1.756	.014	3.296
	capacity and efficiency of revenue office	1.218				
		3.056	.812	12.008	.001	21.235
	willingness of customers to buy goods and services with VAT Receipt	-.317	.632	227	.063	415.728
	knowledge and understanding of VAT rules and regulations, and objectives	1.928	.642	237	.004	6.395
	Constant	-	5.1007		.265	348.625
		5.864	232			

a. Variable(s) entered on step 1: Awvrtaxp, Reagvatp, Capeprof, Wcubgsvr, Knunvrro.

Table 4.10 represents the parameter estimates of the resulting logistic regression model:

$$Li = \beta_0 + \beta_1 \text{Awvrtaxp} + \beta_2 \text{Reagvrtp} + \beta_3 \text{Capeprof} + \beta_4 \text{Wcubgsvr} + \beta_5 \text{Knunvrro} + ui$$

$$= -5.864 + 1.733 \text{Awvrtaxp} - 1.218 \text{Reagvrtp} + 3.056 \text{Capeprof} - 0.317 \text{Wcubgsvr} - .928 \text{Knunvrro}$$

Where,

Awvrtaxp =awareness of VAT registered tax payers

Reagvrtp=resistance against value addedtax registration

Capeprof=capacity and efficiency of revenue office

Wcubgsvr =willingness of customers to buy goods and services with VAT Receipt

Knunvrro =knowledge and understanding of VAT rules and regulations, and objectives

The Wald statistics has a chi - square distribution that provide an index of effect of the predictors on dependent variable in the equation which used to test whether all predictors coefficients are different from zero to show and to enable to understand that at least one predictors" has effect on outcome, and the *P* value is simplest way to assess the significance of each predictor (Park, 2013).

In this case, if predictors *p* value is less than 0.05 (*P*<0.05); then each predictors have a

significance effect on response/ dependent variable. Moreover, EXP(β) is namely called as odd ratio, it meant that it is the exponential of the logistic coefficients revealed relationship type between the predictors and the outcomes and also presents the extent or influence level to which raising the corresponding measure by one unit influences the odds ratio. Consequently, if the EXP (β) value just below 1 indicate the event is less likely to happen in the comparison than in the base group, and mean that there is no effect of that variable on the outcome at which result of the Wald statistic is near and became to zero and result of *p*-value is non-significant, if the EXP (β) value is just above 1 to infinity indicate the event is more likely to happen in the comparator than in the base group (Muchabaiwa,2013 and Park,2013,).

Awareness of VAT Registered tax payers:

The coefficient of awareness of VAT registered tax payers was B= 1.733, *p* –value 0.006, and exp(B) = 6.28. Thus, it is significant at *p*<0.05significance level and it affects VAT administration positively.

Resistance Against Value Added Tax Registration:

in dimension of resistance against value added tax registrationits coefficient of awareness was B= -1.218, *p* –value 0.014, and

$\exp(b) = 3.296$ thus, it is significant at $p < 0.05$ significance level and it affects VAT administration negatively.

Capacity And Efficiency of Revenue Office:

The coefficient of capacity and efficiency of revenue office was $B = 3.056$, p -value 0.001 , and $\exp(B) = 21.235$. Therefore, it is significant at $p < 0.05$ significance level and it affects VAT administration positively.

Willingness of Customers to Buy Goods and Services With VAT Receipt: The coefficient of willingness of customers to buy goods and services with vat receipt was $B = -3.317$, p -value 0.0634 , and $\exp(B) = 15.728$. Thus, it is not significant at $p < 0.05$ significant level and it does not affect VAT administration.

Knowledge And Understanding Of VAT Rules And Regulations, And Objectives: The coefficient of knowledge and understanding of vat rules and regulations, and objectives was $B = 1.928$, p -value 0.004 , and $\exp(B) = 6.395$. Thus, it is significant at $p < 0.05$ significant levels and it affects VAT administration positively.

To conclude, based on this binary logistic regression result the determinants of VAT administration were awareness of VAT registered tax payers, resistance against value added tax registration, capacity and efficiency of revenue office, and knowledge and understanding of vat rules and regulations, and the determinants of VAT administration which affect positively are awareness of VAT registered tax payers, capacity and efficiency of revenue office, and knowledge and understanding of vat rules and regulations, and objectives whereas resistance against value added tax registration affects negatively. In addition, the major determinant factor which affect VAT administration is capacity and efficiency of revenue office having $B = 3.056$, p -value 0.001 , and $\exp(B) = 21.235$.

CONCLUSION AND RECOMMENDATION

The study found that the revenue office employees have good knowledge, understanding

and awareness on VAT rules and regulations, procedures, implementation and administration effectively. Majority of the respondents agreed that the occurrence of events those customers who are not willing to purchase goods and services with VAT receipt are high and their willingness of customers to buy goods and services with VAT receipt is low. VAT registered tax payers have high level of knowledge and understanding of VAT rules and regulations, and objectives, and they have good attitude towards VAT rules and regulations, and objectives.

The regressions analysis result also showed the determinants of VAT administration which affect positively are awareness of VAT registered tax payers, capacity and efficiency of revenue office, and knowledge and understanding of vat rules and regulations, and objectives whereas resistance against value added tax registration affects negatively. At the time of or based on this study in general, willingness of customers to buy goods and services with VAT receipt have no significant impact on VAT administration.

Recommendations

This study recommends that revenue authority or concerned body should sought mechanisms to reduce the resistance against Value Added Tax registration by tax payers. The tax authority at each level in south Wollo zone should intensify the audit to increase the level of tax compliance and thereby tax revenue. Dessie town revenue office or other concerned body should increase and highly intensify the mechanisms which can improve and increase the capacity and efficiency of revenue Office in all aspects to improve VAT administration capacity in the town to earn high revenue from VAT collection. The concerned body should find mechanisms to improve the Knowledge and understanding of VAT rules and regulations, and objectives through public media, conferences etc.

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