International Journal of Applied Sciences: Current and Future Research Trends
( IJASCFRT )
ISSN (Print) , ISSN (Online)

https://ijascfrtjournal.isrra.org/index.php/Applied_Sciences_Journal

# Role of a Cash Register Machine in Improving the Turn Over Tax Revenue in Wolaita Zone, Southern Ethiopia

Sintayehu Sibera Mehale*

*Wolaita Sodo University, Department of Statistics, Ethiopia*
*Email: sintayehu.sibera@wsu.edu.et*

**Abstract**

This study was conducted to examine the role of cash register machine to collect turn over tax in Wolaita Zone Sothern Ethiopia. It has investigated to answer various factors (knowledge and skills, attitude and perception, tax evasion, audit follow up and administration cost) that affect turn over tax from the view point of both tax collectors and payers. To achieve the objectives of the study, both primary and secondary sources of data were used. Using stratified random sampling methods 108 turn over tax payers were selected whereas10 tax experts purposively were selected from total population. The collected data collected through questionnaires were summarized and analyzed using both descriptive statistics and inferential statistics (multiple linear regression model) to investigate the predictors influence on Turn over Tax using EVIEWS 9.1 whereas qualitative data were triangulated to support the quantitative analysis. The results indicated that turn over tax collection using the cash register machine has a positive effect on turn over tax and independent variables (knowledge and skills, audit follow up, operational cost, and tax evasion) have a significant effect on turn over tax at 5% level of significance. However, perception and attitude has no significant effect on turn over tax revenue at 5% level of significance. Thus, knowledge of the turn over tax payer is significant to eradicate the tax evasion and can improve the efficiency of the authority but ministry of revenue need to work with regard to making adequate awareness through training and various media outlets. Besides this, strong audit follow up is a very significant component to increase turn over tax revenue. Regional revenue authority should be improved to design good and fast systems that can reduce the operation and maintenance cost of users.

***Keywords:*** Cash Register Machine; Turn Over Tax; Tax Evasion; Audit Follow up and Revenue.

## 1. Introduction

Tax is a compulsory contribution of wealth of a person or body of persons for the service of the public powers. Taxes are important source of public revenue.

---

* Corresponding author.

The existence of collective consumption of goods and service necessitates putting some of our income into governments hold, all over the world have their stated number of public projects, such as social security protection and other services of public utilities like electricity, water supply, rail ways; etc. common expenditure programs include health and welfare programs, defense spending, social security, and interest and repayment of principal on government debt. Under this view, the role of the tax system is to raise an amount of revenue that is tied to the level of government services. For those developed countries with significant sources of revenue other than taxes, government can fund operations with less reliance on current tax revenue [25].

One of the mechanisms in which countries raise revenue to finance government spending on the goods and service has been used taxation as their tool. As compared to the developing countries, the developed countries have been able to generate substantial revenue through imposing of taxes. One of the reasons for this has been the efficient tax system operating in the developed countries, unlike the developing economies which are characterized by weak monetization and the low development of the formal sectors. In other words, these countries have employed tax systems that have one or a combination of the following desirable characteristics as economic efficiency, administrative simplicity, flexibility, political accountability and fairness [21, 22].

Governments in low income countries have the difficult task of making wide-ranging decisions about public spending, taxation, and borrowing in the aim of helping their countries maintain long-term debt sustainability, achieve higher economic growth, and ultimately reduce poverty. One of the challenging factors of implementing policies is raising public revenues which is difficult in a context of macroeconomic and growth instability, high debt ratios, weak tax administration, and large informal sectors. In 2018, Ethiopia collected ETB 198 billion tax revenue, which undermined by ETB 43.5 billion compared to plan. Total internal tax revenue collection was ETB 120.3 billion in the year, which shares 60.76% of total tax revenue in the country as reported by Ministry of Revenue in 2019/2020.

The tax system needs to be economically efficient, meaning the tax system should not have an impact on the allocation of resources. The tax system countries should adopt easy and not expensive to administer and that should be able to respond to changing economic circumstances. Taxpayers should also be able to determine what they are actually paying so that the political system can more accurately reflect the preferences of individuals [1]. It follows that optimality in a tax system requires the absence of distortion in any economic activity [8].

According to [23] turn over tax is payable on goods sold and service rendered by person not registered for value added Tax .The base of computation of the turn over tax is the gross receipts in respect of goods supplied or service rendered. A person who sells goods and service has the obligation to collect the turn over tax from the buyer and transfer it to the tax Authority as Tax proclamation No.308/2002.

The use of Cash Register Machine began in Ethiopia in Addis Ababa in 2008 for the first time and then has expanded to all regional level in 2010/11 G.C. Nowadays, the government uses various techniques to make the tax collection process convenient, easy to administer and free of illegal activities. From these techniques, most widely used is assigning collection responsibility to different governmental offices. The government also

enforces the use of sales register machine to facilitate the administration of tax easily. The sales register machine can avoid tax evasion specially by keeping records and it also help quickly to process customers transactions and accurate collection of tax [10]. According to [24, 25], the special characteristics of turn over tax are the degree to which implementation of the exposed the need for broader institutional transformation and modernization of revenue administrations. Currently, Ethiopia is administrating its revenue and tax collection by using technology. The Ethiopia government issued regulation No.139/2007.These regulation are issued by the council of minister pursuant to Article 5 of the definition of powers and duties of the executive organs of the federal Democratic Republic of Ethiopia proclamation No.471/2003, Article 64 of the value added tax proclamation No.285/2002 and Article 117 of the Income tax proclamation No.286/2002 part Two obligatory use of sales Register Machine that are accredited in accordance with the provision of these regulation to generate sales receipts as provided for in Article 4. In 2009 G.C the Ethiopian Revenues and Customs Authority adopt digital cash register machine on collection of value added tax, turn over tax and business income tax. The Ethiopian government has initiated a number of processes. These include the design and computerization of the taxpayer registration process; the operational development of taxpayer service activities, return process and debt and audit activities; publicity campaign and taxpayer training. These measures are expected to improve the government's revenue position as Herouy cited from Africa Development Bank in 2003. In 2009 the Ethiopian government knows that using cash registration machine (CRM) for collection of tax can enhance the government's revenue position as well as reducing the degree of tax evasion. Most countries jurisdictions tax law requires customers to collect the receipt and keep it at least for a short while after leaving the shop so as it is better using cash register machine is very important in order to easily provide receipts for the customers while the business sells products or services accordingly the tax law, again to check that the shop records sales, so that it cannot evade sales taxes. Here, we can see that using cash register machine can reduce the extent of tax evasion by allowing the business records. Thus, the main question remains how far do these machines help the tax payers by collecting fair proper revenue collection and enhancing in countries economic capacity.

Therefore, this paper was conducted to assess the role of cash register machine in collecting turn over tax revenue and attempted to answer the following research hypothesis:

**H1:** Audit follow up has a significant effect on using a cash register machine in collecting turn over tax.

**H2:** Knowledge and skills have a significant effect on using a cash register machine in collecting turn over tax.

**H3**: Tax evasion has a negative and significant effect on using a cash register machine in collecting turn over tax.

**H4:** Attitude and perception have a significant effect on using a cash register machine in collecting turn over tax.

**H5:** Administration cost has the negative and significant effect on using a cash register machine in collecting turn over tax.

## 2. Research Methodology

### *2.1 Research Design and Data Collection Instruments*

In this study, both quantitative and qualitative survey methods were used to assess factors that affect turn over tax using cash register machine in Wolaita Zone Southern Ethiopia. The reason of using a mixed methods approach is to gather data that could not be obtained by adopting a single method [11]. The data collection also involved gathering both numeric information (e.g., on instruments) as well as text information such as interviews. Primary data and secondary data were collected to achieve the objectives of this study. As part of primary data source, questionnaires were distributed to machine supplying organization staffs, turn over tax registered customers, tax experts and administrators by using different mechanisms to assess the role of cash register machine to collect turn over tax. The source of the secondary data included researcher papers, journals, textbooks, Internet sites and web pages. Quantitative data were collected by using a questionnaire and qualitative data were collected by using unstructured questions and interviews. The questionnaire was designed as open ended and close ended types of questions. A questionnaire was used to collect data from tax payers concerning factors affecting turn over tax collection using the cash register machine while the interview was used to collect data from cash register machine suppliers.

### *2.2 Sampling Design and Sample Size Determinations*

The target populations of this study were 482 turn over tax registered business entity owners and 38 tax experts and administrators in Wolaita Zone Southern Ethiopia as reported by Wolaita Zone Revenue Authority in 2019/20. Thus, [28] mathematical formula was used for determining the sample size for turn over tax cash register business entity owners assuming a 95 % confidence level and 5% level of precession. Accordingly, 108 turn over tax payers were randomly selected by using systematic random sampling whereas 10 experts were purposively selected. Thus, the total sample size for this study was 118.

### *2.3 Data Analysis Methods*

Descriptive analysis, such as frequencies, percentages, mean and standard deviation were used to present quantitative data in form of tables and graphs. Data from the questionnaire was coded and logged in the computer using software EVIEWS 9.1. This involves coding both open and closed ended items in order to run simple descriptive analyses to get reports on data status. Descriptive statistics involves the use of absolute and relative frequencies, measures of central tendency and dispersion. Econometric methodology employed in this study was multiple linear regression analysis. Multiple linear regression analysis was used to determine the factors of that affect turn over tax revenue by using the cash register machine. The dependent variable of the study was turn over tax revenues and regressed as follows:

$$\begin{aligned}&\text{turn over tax revenue}\\&= \beta_o + \beta_1 \text{Audit follow up} + \beta_2 \text{Knowlege and Skill} + \beta_3 \text{Tax Evasion}\\&+ \beta_4 \text{Adminstration cost} + \beta_5 \text{Attitude and Perception} + \epsilon_i\end{aligned}$$

Where, $\beta_o$ =Constant term, $\beta_i$ =Coefficients of explanatory variables and $\epsilon_i$ =Error term

Cash Register Machine Audits follow up, knowledge and skills, tax evasion, administration cost, and attitude and perception were explanatory variables assumed to have an effect on the dependent variables turn over tax. Data collected through the unstructured questionnaires and analysis of documents was analyzed qualitatively through narration. Based on [11], some of assumptions needed to be fulfilled before using a multiple linear regression model to achieve the objectives of the study are absence of multicollinearity, linearity in parameters, normality of disturbance term, constant variance, no outliers and etc.

## 3. Data Presentation, Analysis and Discussions

### *3.1 Background of the Respondents*

Table 1 indicates the demographic characteristics of respondents. Based on this, 68.4% of the respondents were male and 39.9% were females. This indicates the respondents were the mixture of both male and female as gender has impact in government revenue collection in the case of taxation [5]. Age of respondents is one of important variables of respondents discussed in this study. As shown below, 43.9% of the respondents were of age between 35 to 45 years, 26.3% aged 25 to 34 years, 24.6% were aged above 45 years, and 5.3% aged below 25 years. This implies that most of respondents' age in this study lies between 35 to 45 years. Table 1 also indicates the educational qualification of the respondents. The survey result revealed that 5.3% of respondents had Bachelor degree and above whereas 15.8% of respondents were diploma holder. On the other hands, 29.8% of respondents hold a certificate 49.1% were below certificate. These results suggest that the research covered a broad spectrum of respondents from study area due to various literatures support the knowledge about tax collection and perceptions were related to educational level [6, 27].

**Table 1:** Background of respondents.

| Variables | Category | Respondents | |
|---|---|---|---|
| | | Frequency | % |
| Gender | Male | 81 | 68.4 |
| | Female | 37 | 31.6 |
| | Total | 118 | 100 |
| Age | <25 years | 6 | 5.3 |
| | 25-34 years | 31 | 26.3 |
| | 35-45 years | 52 | 43.9 |
| | >45 years | 29 | 24.6 |
| | Total | 118 | 100 |
| Educational level | Below certificate | 58 | 49.1 |
| | Certificate | 35 | 29.8 |
| | Diploma | 19 | 15.8 |
| | Degree and above | 6 | 5.3 |
| | Total | 118 | 100 |

Source: Own field survey, 2020

### *3.2 Background of the Business Entity*

Concerning the nature of the Business entity, 56.1% of turn over tax payers were retailers and the remaining 43.9% were service givers. This shows most of respondents in this study were retailers.

Table 2 also indicates the experience of turn over tax payers in using a cash register machine. accordingly, 66.7% turn over tax payers had 1 to 3 years of experience, 21.1% had 4 to 5 years of experience, 8.8% had more than 5 years of experience and 3.5% had less than a year experience.

**Table 2:** Background of Business entity.

| Variables | Category | Respondents | |
|---|---|---|---|
| | | Frequency | % |
| Nature of business | Service giver | 49 | 43.9 |
| | Retailer | 59 | 56.1 |
| | Total | 108 | 100 |
| Experience in using a cash register machine | <1 year | 6 | 3.5 |
| | 1-3 years | 70 | 66.7 |
| | 4-5 years | 22 | 21.1 |
| | >5 years | 10 | 8.8 |
| | Total | 108 | 100 |

Source: Own field survey, 2020

### *3.3 Descriptive Statistics factors that affect turn over tax*

#### *3.3.1 Knowledge and skills*

Table 3 indicates the influence of knowledge and skills on turn over tax collection among taxpayers using a cash register machine in Wolaita Zone Southern Ethiopia. The study findings of the mean and standard deviation indicate that knowledge and awareness play average role in turn over tax collection using a cash register machine in Wolaita Zone. This is supported by the statement suggesting that Wolaita Zone Revenue Branch create awareness about collection of turn over tax cash register machine via TV, radio, pamphlets, newspaper, others media (mean=4.39 and SD=0.71), turn over tax implementation can improve your business perception (mean=4.51 and SD=0.60), tax payers do you have awareness about turn over tax collection cash register machine (mean=4.71 and SD=0.64), and ERM Wolaita Zone revenue branch offered you adequate training on usage of a cash register machine for collection of turn over tax (mean=3.02 and SD=0.79).

These findings imply that a moderate improvement of turn over tax payers' knowledge and awareness will greatly lead to the improved turn over tax collection using the cash register machine. These findings are consistent with [18]. This implies a need of awareness creation to improve the collection of turn over tax using a

cash register machine.

**Table 3:** Knowledge and skills.

| Awareness and Knowledge | Mean | SD |
|---|---|---|
| 1. Wolaita Zone revenue branch creates awareness about the collection of turn over tax cash register machine via TV, radio, pamphlets, newspaper, others media. | 4.39 | 0.71 |
| 2. Do you think turn over tax implementation can improve your business perception? | 4.51 | 0.60 |
| 3. As tax payers do you have awareness about turn over tax collection cash register machine? | 4.47 | 0.64 |
| 4. Do you think ERM Wolaita Zone revenue branch offered you adequate training on usage of the collection of turn over tax turn over tax cash register machine? | 3.02 | 0.79 |

Source: Own field survey, 2020

### *3.3.2 Turn Over Tax Evasion*

Table 4 indicates turn over tax evasion. The average result indicates tax payers are neutral (mean=2.98 and SD= 0.71) according to [20] classification. The result also revealed that a higher number of respondents disagree that there is a clear and easy way to identify turn over tax evasion using the cash register machine. However, most of the respondents revealed that audit follows up can reduce turn over tax evasion with mean 3.2 and standard deviation 0.61. This results are in line with the findings obtained by [3] that audit follow up will reduce tax evasion in the Addis Ababa city and [1] that using Cash Register Machine and frequent follow up will reduce tax evasion in Lideta Sub-city.

**Table 4:** Turn over tax evasion.

| Tax evasion | Mean | SD |
|---|---|---|
| **1.** Do you think the measures that taken by the Authority over the enterprises for these evading tax payments are fair? | 2.98 | 0.75 |
| **2.** There is a clear and easy way to identify turn over tax evasion. | 3.70 | 0.64 |
| **3.** Do you think audit follows up can reduce turn over tax evasion? | 3.02 | 0.61 |
| **4.** Do you think turn over tax implementation using Cash Register Machine can improve tax evasion? | 3 3.72 | 0.88 |

Source: Own field survey, 2020

### *3.3.3 Audit Follow up*

Table 5 shows audit follow up on turn over tax collection using cash register machine in Wolaita Zone Southern Ethiopia. Based on this, a large number of respondents disagree with the statements Wolaita Sodo revenue authority branch turn over tax audit follows up to enhance turn over tax revenue as per the schedule of the authority with mean=2.18 and SD=1.01. This is due to the fact that audit follow up reduce fraudulent activities, let tax payers learn from their past experiences, help them to made corrections and makes tax payers to fear and to follow tax rules in case decrease tax evasion. This result is also supported by large mean value 4.0 with a standard deviation of 0.98.

**Table 1:** Audit follows up.

| Tax audit follow up | Mean | SD |
|---|---|---|
| **1.** Does Wolaita Sodo revenue authority branch turn over tax Audit follow up to enhance turn over tax revenue as per the schedule of the Authority? | 2.18 | 1.0 |
| **2.** Do you think your organization ever audit Follow up by Wolaita Sodo revenue authority branch after you started using a cash register machine collection of turn over tax? | 2.21 | 0.7 |
| **3.** Did you face problems with Wolaita Sodo revenue authority branch experts during Audit follow up? | 2.95 | 1.2 |
| **4.** Do you think using a Cash Register Machine collection of turn over tax can simplify Wolaita Sodo revenue authority branch? | 4.0 | 0.9 |

Source: Own field survey, 2020

### *3.3.4 Operational Costs*

The operational cost is one of the important factors influencing the use of a cash register machine for turn over tax revenue collection. The mean and standard deviation supports that turn over tax payers agree with statements that using a cash register machine collection of turn over tax can reduce administration cost with mean 4.07 and SD=D 0.25), cash register machine collection of turn over tax reduces entities compliance cost with mean 4.37and SD=0.48), and ERM Wolaita Zone Revenue Branch support improve your operation cost with mean=4.14 and SD=0.35 with small variation among the responses of the respondents as supported by the small standard deviation. This result shows that using cash register machine for collecting turn over tax reduces administration cost, compliance cost and operational costs. This finding in in line with the findings of [1].

**Table 2:** Operational cost.

| Operational cost | Mean | SD |
|---|---|---|
| **1.** Do you think your organization using a cash register machine collection of turn over tax can reduce administration cost? | 4.07 | 0.25 |
| **2.** Do you think your organization experiencing additional costs after you registered to collect turn over tax? | 4.18 | 0.38 |
| **3.** Using a cash register machine collection of turn over tax reduces your compliance cost. | 4.37 | 0.48 |
| **4.** Do you believe ERM Wolaita Sodo revenue branch support has improved your operation cost? | 4.14 | 0.35 |

Source: Own field survey, 2020

### *3.3.5 Attitude and perception*

Table 7 displays the attitude and perception on using a cash register machine to collect turn over tax revenue in Wolaita Zone Southern Ethiopia. As indicated in the table 7, most of the respondents replied that their staff has enough skills to operate cash register machine collection of turn over tax with mean 4.16 and most of the respondents perceived that turn over tax collection using cash register machine facilitate their business and government revenue with mean 4.09. Similarly a large number of respondents replied that suppliers give technical training to improve the usage of machines to collect turn over tax with mean of 4.04. However, most of the respondents disagreed on ERCA/suppliers gives immediate response for the problems related to machine

usage.

**Table 7:** Attitude and perception.

| Perception and attitude | Mean | SD |
|---|---|---|
| **1.** Does the organization staff have enough skills to operate CRM collection of turn over tax? | 4.16 | 0.44 |
| **2.** Do you think turn over tax turn over tax collection of machine facilitate your business and government revenue. | 4.09 | 0.39 |
| **3.** ERCA/suppliers give you the technical training to improve the usage of machine skill collection of turn over tax | 4.04 | 0.32 |
| **4.** ERCA/suppliers give immediate response to the problems related to machine usage. | 1.70 | 0.65 |

Source: Own field survey, 2020

### *3.4 Factors that Affect Turn Over Tax Collection*

Prior to the use of the multiple linear regression model result in the achievement of the objective of the study, assumptions and the goodness of fit of the model for the data has to be checked. Thus, variables associated with turn over tax collection using a cash register machine has to be checked for a series multicollinearity problem before entering data in the multiple linear regression model. If there is a series multicollinearity problem, that is, the case in which two or more explanatory variables in the regression model are highly correlated, making it difficult or impossible to isolate their individual effects on the dependent variable.

Variance inflation factor (VIF) is used to detect multicollinearity problems among continuous predictor variables. Based on this, VIF greater than 10 shows series correlation problem [28]. Since all variables included in this study (knowledge and skills, turn over tax evasion, Audit follow up, operational cost, and perception and attitude) were all continuous explanatory variables converted from Likert scale by using indexing.

The results of VIF indicated that there was no multicollinearity problem among explanatory variables as VIF is less than 10 for all variables included in the multiple linear regression model, (that is, knowledge and skills=1.33, Turn over tax evasion=1.20, Audit follow up=2.56, operational cost=2.12 ,and perception and attitude=1.22). Therefore, all variables were included in the multiple regression model.

Concerning the normality test of the turn over tax collection using the cash register machine, Shapiro-Wilks test was employed. From the result, it is observed that the variable, that is, turn over tax collection is approximately normal. This reveals, multiple linear regression is the appropriate model to assess the factors that affect turn over tax collection using a cash register machine in Wolaita Zone Southern Ethiopia.

The results of assumptions of Heteroscedasticity where checked by using White test ($TR^2$=34.78 and P-value=0,045) revealing no problem of hetrocedasticty.

Finally, F test in the table 8 indicates that at least one of included explanatory variables significantly affects turn over tax collection using a cash register machine (F=38, P=0.00) at 5% significant level while coefficient of

determination ($R^2$) indicates 83.6% of variation in dependent variable (turn over tax collection) is explained by five included variables (knowledge and skills, turn over tax evasion, Audit follow up, operational cost, and perception and attitude). Table 8 also indicates that knowledge and skills, audit follow up, perception and attitude, operational cost significantly affected the turn over tax collection using a cash register machine at 5% significance level while turn over tax evasion do not significantly affect the turn over tax collection. From variables included, knowledge and skills, and audit follow up had a positive effect on turn over tax collection using a cash register machine at Wolaita Zone while turn over tax evasion and perception and attitude had a negative effect at 5% significance level. This calls ERCA to work on ways to advance the knowledge and skills of taxpayers and employees, frequent audit follow up from the ERCA, and look for ways to improve the operational costs, and give frequent training about the use of cash register machine for turn over tax collection to improve the perception and attitude, thus in turn improve turn over tax revenue using a cash register machine. Knowledge and skills: As various literatures indicated knowledge and skill of using cash register machine have role in turn over tax revenue collection. The empirical results of the study revealed that knowledge and skills have a positive effect (coefficient=0.368 and p value=0.028) and significant at 1% significance level. It revealed that a 5% unit change in knowledge and skills provides a 36.8% increase in turn over tax revenue using cash register machine. Audit follow up: Audit follow up is one of the explanatory variables associated with turn over tax revenue. The empirical results of the study revealed that audit follow up has a positive effect (coefficient=0.733 and p value=0.000) and significant at 1% significance level. It revealed that a 1% unit change in audit follow up provides 73.3% increase in turn over tax revenue using the cash register machine. Operational cost: As various literatures indicated operational cost of using the cash register machine have discouraging role in turn over tax revenue collection. The empirical results of the study revealed that operational cost has a negative (coefficient=-0.949 and p value=0.001) and significant at 5% significance level. It revealed that a 1% unit change in operational cost provides 9.49% decrease in turn over tax revenue using the cash register machine.

**Table 3:** Ordinary least square estimation of factors that affect turn over tax collection.

| Variables | Coefficient | Std. Error | t-ratio | p-value |
|---|---|---|---|---|
| Constant | 2.819 | 1.390 | 2.027** | 0.046 |
| Knowledge and skills | 0.368 | 0.164 | 2.237** | 0.028 |
| Tax evasion | 0.170 | 0.179 | 0.953 | 0.343 |
| Audit follow up | 0.733 | 0.126 | 5.781*** | 0.000 |
| Operation cost | -0.949 | 0.156 | -6.055*** | 0.001 |
| Perception and Attitude | -0.189 | 0.194 | -0.972 | 0.334 |
| | Mean | 2.830 | S.D | 1.108 |
| | SSR | 15.797 | SSE | 0.478 |
| | R-squared | 0.826 | Adjusted R-squared | 0.813 |
| | F(5, 69) | 65.59 | P-value(F) | 0.000 |
| | Log-likelihood | -48.00 | Akaike criterion | 108.019 |

Source: Own field survey, 2020

## 4. Conclusion and Recommendations

### *4.1 Conclusions*

The goal of this study was to assess the factors that affect turn tax revenue by using a cash register machine on case of Wolaita Zone Southern Ethiopia and intended to answer research questions whether cash register machine audit follow up, knowledge and skills, tax evasion, attitude and perception, and administration cost have the effect on using a cash register machine in collecting turn over tax revenue.

Thus, 108 sample size was selected comprising of turn over tax payers and 10 employees. Then, questionnaires concerning factors that affect turn over tax revenue were distributed to category B taxpayers (turn over tax) and employees while secondary data about the planned and actual collected data by using cash register machine were collected from Wolaita Zone Revenue Authority to support the findings of the study.

Descriptive statistics such as percentages, mean, and standard deviations were employed to summarize the general characteristics of the respondents and variables of the study. The result indicated that that 68.4% of the respondents were male and 31.66% were females. The application of cash register machine has a remarkable change on the turn over tax revenue. The findings of the research indicate that turn over tax revenue significantly increases after implementation of cash register machine.

Electronic tax registers increase the operating cost of the turn over tax payers that were incurred to collect turn over tax revenue and also business income. A cash register machine while improving the efficiency and the success of turn over tax payers operations provides timely and accurate turn over tax information to businesses and increases the availability of electronic tax filing.

Turn over tax evasion measurement, which is taken by the government is not enough and not fair furthermore, tax evasion decreases the revenue of government and the result shows that there is direct relationship with turn over tax revenue that means when evasion follow up increases the revenue of turn over tax increase.

Audit-follow up which taken place by the government in controlling the cash register machine user to collect turn over tax revenue is not enough. Moreover, audit follow up affect tax revenue positively, while audit follow up increases tax income also increases.

Perception and attitude about the implementation of cash register machine to collect turn over tax revenue varies among the tax payers. It has positive and significant influence among the turn over tax payers. This calls frequent training is needed for turn over tax payers about the uses and impacts through various media and revenue office experts.

### *4.2 Recommendations*

Implementing cash register machine plays an important role in collecting turn over tax revenues. So, in order to succeed in the using a cash register machine, the Revenue Offices must improve its policy according to the

conditions. Based on the findings, the following recommendations were forwarded; Knowledge and skills of using a cash register machine play an important role in improving the revenues of turn over tax revenue. So, the Revenue Office of Wolaita Zone Branch should look the ways to improve the skills and knowledge of the machine through various media such as TV, radio, Facebook, twitter, etc. Ministry of Revenue should make subsidy and other incentives for the machine importer to decrease the cost of the machine and to increase the number of machines imported to meet the demand of the tax payers. Properly control accreditation of machine suppliers to minimize repetitive machine failure and makes sure whether they give proper training by using competent staff or not. Frequent training is needed to change the perception and attitude of using the machine to collect tax. Awareness of the people is very important to eliminate the tax evasion and enhance the efficiency of the authority, but Revenue Office of Wolaita Zone Branch doesn't work with regard to creating enough awareness through different mechanisms. This can be achieved if Revenues experts give training to layman people while they are at school in the form of course.

**References**

[1] Abraham Tesfaye (2009). Problems and Prospects of implementing VAT in Ethiopia Addis Ababa, Ethiopia

[2] Ainsworth, R. (2019). VAT Fraud and Technological solution, 2nd edition, Cambidge University Press

[3] Alem Zerga (2012). Benefits And Challenges of Cash Register Machine in Arada Sub-City, St. Mary University, MA Thesis, Addis Ababa

[4] Allers. (1994). Administrative and compliance cost of tax and public transfer in Netherland, CRS Press

[5] Caparo, C. (2014). Taxing Men and Women: Why gender is crucial for a fair tax system, London: Christian Aid

[6] Cornelius, R. and Nurhapizah, M. (2017). Factors that influence the tax payers perception on the tax evasion. Advances in Economics, Business and Management Research, 35:1

[7] Federal Democratic Republic of Ethiopia (2002). VAT Proclamation No 285/2002

[8] Hancock Dora (1995). Taxation :policy and Practice .Chapman and Hall,3rd ed.

[9] IMF (2005). VAT Refunds. A review of country experience. IMF Working paper WP/05/218

[10] IMF. (2015). http;//www.imf.orgn/external /pub.ft/wp/2015.

[11] John W. Creswell (2003). Research Design Qualitative, Quantitative, and mixed methods approaches, 2nd ed.

[12] Kerver, R. (2008). VAT in Africa Pretoria University, Law press pulp. Pretoria

[13] Minster of revenue of Ethiopia, (2019). Anual report

[14] Misrak Tesfaye, (2011). Ethiopian Tax Accounting principles and practices, Revised new edition, Addis Ababa, Ethiopia

[15] Negarit Gazeta (2002). Turn Over Tax Proclamation No.308

[16] NegaritGazeta (2002). Value Added Tax Proclamation No.285.

[17] Negarit Gazeta (2007). Cash Register Machine Proclamation No.139.

[18] Obongo, M., Florence S., and Oluoch O. (2018). Influence of Tax Knowledge and Awareness on Tax Compliance Among Investors in the Export Processing Zones in Kenya. International journal of Scientific research and management, 6(10):728-733.

[19] OECD (2013). Electronic Sales Suppression: A Threat to Tax Revenues, 2013

[20] Ryta Dziemianowicz (2017). Tax administrative costs as a component of tax transaction costs in Poland and other OECD countries. Economics and Law, 16:2

[21] Simon Tareke, Yibrah Hagos and Abiy Kassa (2013). Problems and Prospects of VAT implementation in Tigray Region, Journal of Accounting, 1:1-16.

[22] Simon Tareke Abay (2013). Assessment on the Implementation of Value-Added Tax (VAT) in Mekelle City Administration. International Journal of Science and Research, Volume 4 Issue 8, 459-467.

[23] Taye, Y. (2011). The impact of the electronic tax Register on Value Added Tax collection.

[24] Tesfaye (2014). Ethiopia Tax Accounting (2nd Edition) Addis Ababa; Woinshet Chanie Press Print.

[25] Wondwossen Jerene (2016). Challenges of Value Added Tax (VAT) Collection Performance: a Case Study of Hawassa City Revenue Authority (South Ethiopia)

[26] Yalemtesfa Taye (2011).The Impact of Electronic Tax Register on Value Added Tax, the case of Addis Ababa City Ethiopia. Addis Ababa University

[27] Yee, Y., Moorthy, K., and Soon, K. (2017). Taxpayers perception of tax evasion behavior: An empirical study in Malaysia. International Journal of Law and Management, 9(1).

[28] Yamane, Taro, (1967). Statistics, An Introductory Analysis, 2nd ed., New York: Harper and Row.