

ST.MARY'S UNIVERSITY
FACULTY OF BUSINESS
DEPARTMENT OF ACCOUNTING

BENEFITS AND CHALLENGES OF CASH REGISTER MACHINE
IN ARADA SUB CITY

BY

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JUNE, 2014

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ADDIS ABABA

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IN ARADA SUB CITY

A SENIOR ESSAY SUBMITTED TO

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ACRONYMS

ERCA – Ethiopian Revenue and Customs Authority

POS – Point Of Sales

VAT – Value Added Tax

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CHAPTR ONE

INTRODUTION

1.1. BACKGROUND OF THE STUDY

Financing government is a matter of universal concern. Governments all over the world provide a number of public projects like social security, protection and other public utilities like electricity, water supplies, and railways to its people. In order to cover such costs, governments perform various activities like sells of goods and services, borrowing, printing paper money and taxation. But from the listed sources tax is mostly used and covers the highest proportion of the government revenue :-(www.answer.com)

Recently the government of Ethiopia enforced the use of sales register machine to make tax collection effective. Sales register machine is useful to know the actual amount of TAX to be collected and to trace any attempt of tax evasion from the tax authority and it also help traders to process their customers' transactions quickly.(Taddesa Samuel,2004)

There are two types of sales register machines; cash register and point of sale (POS). Cash register machine is a machine that tabulates the amount of sales transactions, makes permanent and cumulative records of them (or records the amount of sales, supplies a receipt for customers, and keeps a permanent journal of daily transactions), and has a drawer in which cash can be kept. In other side, point of sale system is a system that uses computerized technology and connected with fiscal printer to provide receipt. (Wikipedia, 2011/12)

This study intends to see benefits and challenges of cash register machine in Arada sub city.

1.2. STATEMENT OF THE PROBLEM

The major source of government revenue to provide public utilities is taxation. Nowadays, 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 based on their authority such as

kebeles, sub cities and city administration. Government also enforce the use of sales register machine to facilitate the administration of tax easily, Sales register machine can avoid tax evasion specially by keeping three set of books and it also help quickly to process customers transactions and accurate collection of tax.

Most countries' jurisdiction tax laws require customers to collect the receipt and keep it, at least for a short while after leaving the shop. Cash register machine is 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. (<http://www.wikihow.com/Use-a-Cash-Register>) Here, we can see that using cash register machine can reduce the extent of tax evasion by allowing the business records.

Even though sales register machine have benefits for both Ethiopian Revenues & Customs Authority (ERCA) and tax payers, there was misunderstanding between them and complain over the inconvenience and difficulties of use. This behavioral problem arises because of the recentness of the machine. Behavioral problems began as soon as people find out that a system change was being considered. But major behavioral problems often occurred after the new system has been implemented and the change has become a reality.

Because of the recentness of the machine in Ethiopia, there was no adequate research made on it. As a result there are no clearly stated benefits and challenges of cash register machine. Therefore, this study fills this gap.

1.3 RESEARCH QUESTIONS

This study tries to answer the following Research Questions;

- What benefits and challenge does the sub city faced by enforcing traders to use cash register machine? And what benefits are taken by tax payers who use cash register machine?
- What are the challenges encountered by the tax payers?
- What is the user's attitude towards the use of cash register machine?
- What is the impact of cash register machine on TAX collection?

1.4 OBJECTIVES OF THE STUDY

1.4.1. GENERAL OBJECTIVE

The general objective of this study was to assess the benefits and challenges of cash register machine in Arada sub city.

1.4.2. SPECIFIC OBJECTIVES

In light the general objective, the specific objectives of the study were:-

- To assess the benefits and challenges of cash register machine for both tax payers and the authority.
- To assess the attitude of cash register uses towards the machine.
- To assess the impact of cash register machine on tax collection.

1.5 SIGNIFICANCE OF THE STUDY

The study would provide a significant role to identify the benefits and challenges of cash register machines while the business using in it,And the benefits acquired from this machine. As a result the significance of this study is:-

- A fairly clear picture on benefits and challenges of cash register machine created to the people,
- ERCA get information about the attitudes of the machine users and that help to make decisions and revise strategies,
- It can be used as a source of data for other researchers on similar topic, and
- Tax payers will also be benefited because the study will be a voice through which their concerns are heard.

1.6 SCOPE OF THE STUDY

Assessing the revenue of the government from tax starts from cash register machine. Therefore, the study focused on the benefit and challenge of cash register machine on behalf of the tax office and tax payers in Arada sub city for six years(2000-2006 E.C).

1.7 RESEARCH DESIGN AND METHDOLOGY

1.7.1 RESEARCH DESIGN

The method that was adopted in this research was descriptive type .Where by the type of data that was used to address the objectives of the research are primary and secondary data sources.

1.7.2 POPULATION AND SAMPLING TECHNIQUE

From the total population of cash register machine users in Arada sub city i.e.2908 the data was collected from 145 that is 5% of the total population on questionnaire. From the Arada sub city employees who are worked on the area of cash register machine i.e.20 all of the authority employees are selected as a sample (18 for questionnaire and 2 for interview).

The sample respondent would be selected by using simple random sampling techniques. The researcher uses this sampling method because it is more reliable and valid as well as each respondent has an equal probability of being selected. And, the sample can be generalized to the ledger population and they have experienced the centered phenomenon.

1.7.3 TYPES OF DATA COLLECTED AND USED

Both primary and secondary data have been used in our study .The primary data was collected mainly through questioners and interview from TAX officers and TAX payers. Secondary sources of data were obtained from published and unpublished documents issued by ERCA. Furthermore Websites has been visited.

1.7.4 METHODS OF DATA COLLECTION

Self administration questionnaire and structured interview have been used to gather information from the sample population. The questioner consisted of closed and open ended questions and the interview holds predetermined and structured questions. That has been designed to address cash registration machine problems and benefit towards TAX payer's attitude. The questions and interview was prepared to Arada sub city employees where as, for TAX payers only questioners moreover , proclamations , directives ,manuals and different documents issued by ERCA related

to transaction has been used to investigate problems and in commend what ought to be done in the future .

1.7.5 METHOD OF DATA ANALYSIS

After collecting the raw data through questioners and interview the data has been categorized, summarized, analyzed and finally generalization has been made by using quantitative approach such as percentage, and table. The qualitative technique was also used.

1.8 LIMITATION OF THE STUDY

The study has some limitation because it has not explored all the existing information. Since it focused on the benefits and challenge of cash register machine, which is new phenomena in Ethiopia, there were no sample studies on the machine benefits and challenges, thus there were no sufficient background information that highly supported the study. Since, the study needed sufficient data to attain its objective it required huge amount of fund to collect and analyze the data. Thus the lack of finance and time were the other constraints to conduct the study.

1.9 ORGANIZATION OF THE PAPER

The study discussed about cash register machine and covers the benefits and challenges along with the attitude of cash register machine users towards the machine. Chapter one introduced the purpose of the study and research methodologies used to generate data that informs this study. Chapter two tries to organized different literature that relates to the topics of the study. In chapter three findings are presented and analyzed. Finally chapter four provided conclusion for the study and some recommendations for challenges faced.

CHAPTER TWO

LITERATURE REVIEW

2.1. CASH REGISTER MACHINE

Cash register machine: business machine that visually has money drawer and is designed to record sales transaction. The typical cash register of keys, levers and gears often electrically driven, indicated the amount of a transaction at the top of the register where it could be seen by both customer and salesperson. (The new encyclopedia, 1768)

As per Ethiopian council of ministers regulation number 139/2007 article 2, sub article 1 and 2,

1. “sales Register machine” means a cash register machine or a point-of –sale machine:
2. “cash Register machine” means a machine that uses a firmware that is installed in an electronic programmable read only memory chip and can record the sale of goods or services, in lieu of the regular sales receipt;

It also kept separate total of sales by various classifications, printed and issued a receipt on cash sales or over printed a record of the transaction on a document for charge sales, and kept an audit strip within the register some types of machines automatically made change. Frequently, special counters in the register showed the number of customers and the number of transaction of different kinds.

Within a few years, the combined electronic revelation and the increasing ubiquity of digital computer in business operations had used major manufacture to convert from the mechanical cash register to an electronically operated device that performed the same function, often driven by and sometimes feeding information into a computer, enabling instant credit checks recording of transaction and inventory control entries computer-driven cash register often are equipped with an optical scanning device or a light pen that can read printed or coded price information production description, recording it and printing it on the customer’s receipt. (The new Encyclopedia, 1768)

2.1.1. HISTORY OF CASH REGISTER MACHINE

The Abacus: Precursor to the Cash Register

One of the earliest inventions for keeping track of commercial transactions is the abacus, an instrument that helps a person to make arithmetic calculations.

Invented over 4500 years ago in the mid-east, it was further developed by the Egyptians and Chinese into its present form. A variety of different abacus designs exist. The word “abacus” comes from the Greek abax, meaning “counting board.” It works on the principle of place-value notation: the location of the bead determines its value. In this way, relatively few beads are required to depict large numbers. The beads are counted, or given numerical values, by shifting them in one direction.

In ancient times the abacus was composed of a row of grooves in sand into which pebbles were placed. Later, the use of a slate or a board made it a portable device, widely used throughout Asia. Today, it is composed of beads strung on parallel wires in a rectangular frame, and is still in use where electricity and batteries are scarce or expensive. For example, a Russian version, the schoty, was still in widespread use within the last decade.

Cash registers today mechanically implement many of the functions of the abacus. And as stated at [www.answer.com /cash -register.htm](http://www.answer.com/cash-register.htm) it was apparently invented out of desperation. The creator was James Ritty, an Ohio restaurateur. Ritty ran a café in Dayton in the 1870s. The place was popular and always filled with customers. Nevertheless, the business continually lost money. Ritty blamed the dishonesty of his bartenders, who either kept money in their pockets or in an unlocked cash drawer, often nothing more than an old cigar box. This loose monetary system did not provide any way of keeping track of sales. If a customer returned to a shop after buying something, saying he had been overcharged or not given the correct change, there was no objective way to settle the dispute. The open box also meant that employees were always within reach of tempting cash. Ritty changed bartenders many times but continued to lose money until he was driven to a nervous breakdown.

To stop employees from pilfering his profits, Ritty imagined he could make a similar device that would record amounts of money passing through the cash drawer, by observing the workings of an automatic device that recorded the revolutions of the ship’s propellers. Ritty assembled his first cash register named incorruptible cashier in 1879, and patented a second, improved register later that year. Ritty went into business with “Ritty’s Incorruptible Cashier” after perfecting a third model.www.answer.com

Ritty's early machines were entirely mechanical, without receipts and it had two rows of keys running across the front, each key marking a money denomination from five cents through one dollar. Pressing the keys turned a shaft that moved an internal counter. This kept track of total sales for the day. The amount of each individual sale was shown to the customer on a dial similar to a clock face, with one hand for the cents and one for the dollars. Because the machine kept a daily total, any pilfering would be obvious. The employee was required to ring up every transaction on the register, and when the total key was pushed, the drawer opened and a bell would ring, alerting the manager to a sale taking place. Those original machines were noting but simple adding machines. (Wikipedia (2012), answer.com)

As stated in Wikipedia (2012) after his patent, Ritty became overwhelmed with the responsibilities of running two businesses, so he sold all of his interests in cash register business to Jacob H. Eckert of Cincinnati, a china and glassware salesman, who formed the national manufacturing company. In 1884 Eckert sold the company to John H. Patterson, who renamed the company the national cash register company and improved the cash register by adding a paper roll to record sales transactions, thereby creating the receipt. The original purpose of the receipt was enhanced fraud protection. The business owner could read the receipts to ensure that cashiers charged customers the correct amount for each transaction and did not pilfer the cash drawer.

In 1906, while working at the national cash register company, inventor Charles F. Kettering designed a cash register with an electric motor, which is the first powered cash register. (Wikipedia, 2012)

Eighty four companies sold cash registers between 1888 and 1895, only three survived for any length of time. With Patterson's desire to create bigger, better and more thief proof registers, his company was the most successful of all cash register companies in the late 1800's to early 1900's.

As stated in www.answer.com the national cash register company made a science of advertising and selling, becoming the role model for many other industries with its canned sales talks and innovative distribution of sales territories. By 1900, the company had sold over 200,000 registers and sent salesmen throughout Europe and South America. As early as 1896 it had sales in chain, and by the end of World War I, national Cash Register was bringing in almost half its sales from overseas markets represented by at least 50 countries. The number of registers sold in 1922 alone

was over two million. The company dominated the industry, buying up competitors when convenient. National cash Register continued to develop its product line, coming out with new features to respond to customer demands. By 1944, the company had applied for 2,400 patents. Despite a successful entry into the computer market in 1957, NCR was unable to remain competitive as a computer manufacturer in the long run and was victim of a \$7.4 billion hostile takeover by AT &T in 1991. It was renamed AT&T Global information Solutions. In 1994, it took back its name and won complete independence as part of AT&T's decision to split into three separate companies. In an effort to stem its money-losing ways, NCR cut 8,500 jobs. It also got out of the PC manufacturing business and instead focused on high end symmetrical multiprocessing and massively parallel processing computers for commercial data warehousing. (www.moah.org)

As stated by Wikipedia (2012) a leading designer, builder, manufacturer, seller and exporter of cash registers in the 1950s until the 1970s was London based (and later Brighton based) Gross Cash Registers ltd., founded by brothers Sam and Henry Gross. Their cash registers were particularly popular around the time of decimalization in Britain in early 1971, Henry having designed one of the few known models of cash register which could switch currencies from Sweden pound to English pound so that retailers could easily change from one to the other on or after Decimal Day. Sweda also had decimal ready registers where the retailer used a special key on decimal day for the conversion.

With the advent of micro processing technology in the 1970s, the sale register industry changed. Most of the manufacturing moved to factories in Asia, and eventually two basic types of sale register evolved. One type is the generally low end, all-in-one machine usually referred to as an electronic cash register, or ECR. The other wing of the industry is the POS terminal, which is more than a cash register because of its superior data processing ability. Both are manufactured in similar ways, though the ECR may be shipped to the customer complete and ready to go, where the POS is made up of different components that may not meet up until the customer installs the terminal.

Many Cash Register companies produce, market, and sell cash registers today. Some of those cash register companies include Samsung, Sharp Electronics, Casio, Royal, TEC, and Sanyo.

A point-of –sale (POS) terminal is a computerized replacement for a cash register. Much more complex than the cash registers and the system can include the ability to record and track

customer orders, process credit and debit cards, connect to other systems in a network, and manage inventory.

As per Ethiopian regulation number 139/2007 article 2 sub article 6 point of sale machine deigns as a machine that replacement for the cash register machine and had additional capability to record and track customers' orders and debit card accounts, to manage inventory and perform similar tasks.

2.2. FEATURES OF CASH REGISTER MACHINE

As per regulation number 139/2007 article 9 and 10 any cash register machine shall

- Have a non-convertible accumulating grand total sales with at least twelve digits,
- Be tamper free, non-adjustable to other application or free of other manipulations that will avoid the recording of sales transactions,
- Be capable of generating a report showing the reading of daily sales and the accumulated grand total recorded therein,
- Have a non-volatile memory or be equipped with a recovery back-up system,
- Reflect and store information such as sales discounts and refunds,
- Be capable clearly and separately indicating sales transactions that are subject to value Added Tax and those which are non-taxable, and be capable of generating separate summary reports of same,
- Be capable of preserving stored data for a period prescribed by law within which the tax authority is authorized to make assessment and collection of tax,
- Support transmission control protocol (TCP/IP),
- Be supported by e-mobile technology which can transmit sales data to the tax authority,
- Be equipped with a roller or its equivalent for the audit journal tape intended for tax audit purposes, and a second roller for the customer receipts tape the copies of which shall be consequently numbered and issued for the customer receipts tape the copies of which shall be consequently numbered and issued for every sales transaction,
- Have a safely mechanism to prevent the operation of the machine in situations where only one of the rollers is used, and

- Be capable of printing, automatically, information such as sales discounts and refunds on the customer receipt journal tape and on the audit journal tape or its equivalent.

2.3. ADVANTAGES AND DISADVANTAGES OF CASH REGISTER MACHINE;

Nowaday, Electronic cash register has made mechanical cash registers obsolete. The majority of retail stores use cash register to collect payment from their customers. These devices perform the necessary arithmetic and provide a secure place to store checks and cash.

✓ High degree of accuracy is among the major benefits of electronic cash registers. The internal computer system records each transaction, making it easy for managers to compare sales figures with the money in the drawer at the end of the day and isolate the source of discrepancies. This is because, mostly the drawer opened only after a sale, except when using special keys, which only senior employees and the owners have. This reduces the risk of employees stealing from the shop owner by not recording a sale and pocketing the money, when a customer does not need a receipt but has to be given change (cash is more easily checked against recorded sales than inventory). Electronic cash registers also provide an advantage to sales staff who use the system to know exactly how much to charge customers and how much change to return after payment. Electronic registers include features for applying discounts and promotions as well as tools for voiding transactions, all of which help the user provide fast, accurate customer service. In fact, cash registers were first invented for the purpose of eliminating employee theft or embezzlement. (Wikipedia, 2012)

SECURITY

✓ Electronic cash registers offers a degree of security for retailers. They are often large enough to prevent easy theft and feature locking mechanisms for cash drawers, as well as password-protected access that only allows authorized users to log in and use a register. Older mechanical registers have no such mechanism with the exception of a key lock for the cash. Electronic

registers also process cash transactions locally, which mean there's no need to transmit private customer data electronically or over the internet as there is with web based payment methods.

TRAINING

✓ Cash register is easy to use than pos system and no need of high training.

INCONVENIENCE

✓ Cash register not use debit card and credit card accounts. This mandate customer only to use cash for exchange purpose and not convenience for large firms who are use credit sale and purchase. And it cannot record and track customers' orders. Bust pos system better to track inventory and easily grows with business.

2.4. CHALLENGES OF CASH REGISTER MACHINE

According to Birtukan Girma (2011) tax system lacks quality and equity in revenue administration. Individuals who earn equal income are not paying equal tax. Some taxpayers have not used cash registers machines fully because there is a lack of accountability by the Authority. She also cited the presence of some 1,338 unregistered businesses alone in kolfe Qeranyo sub-city.

According to Hussein Abera (2011). Power interruption, software failures, customer unwilling and machine failures have been hindering the effectiveness of their usage. As he indicated, out of the total 31,000 only 3,500 cash registering machine customers are connected to ERCA server.

2.5. TAXATION

Taxation is a system of raising revenue by a government through tax. It is a method of collecting funds by a government from tax sources to finance its operations.

Taxation is also a means, mechanism or an instrument by which a government, through its law making body, raises internal income through tax for the use and support of its functions and responsibilities and to enable it to discharge its appropriate functions.

Every central and state government is expected to fulfill an enormous variety of functions to its citizens. The government has to keep the sovereignty and integrity of the country so that defense is one of the topmost functions of the government. The government has to also maintain law and

order in the country without which the country may be exposed to conflict between different social groups and other forces and social war. Socio-economic development the society such as the provision of social amenities in the form of education, health and sanitation facilities; the provision of public utilities like electricity and water supplies, transportation and communication facilities; the provision of recreation facilities; infrastructure development like roads, bridges and dams; social welfare such as support of the incapable and unemployment insurance, raising the level of per capital income, stabilization and growth of the country's economy, and development of commercial functions like undertaking public enterprises are still the major functions of governments in modern times.

All those and other government functions entail both short and long term expenditures so that governments need various financing sources. Most governments support and finance the expenditures of their functions partly by taking a portion of the wealth of their citizens. The chief means by which governments do this is through tax. Then, what is a tax?

Different attempts have been made by variants of writers in orders in order to define the term 'tax' since its introduction. According to Gupta, "a tax is a compulsory levy and those who are taxed have to pay the sums irrespective of corresponding return of service or goods by the government." Dr. Dalton also defines tax as "a compulsory contribution imposed by a public authority, irrespective of the exact amount of service rendered to the taxpayer in return." "A tax is a compulsory contribution from a person to the government to defray the expenses incurred in the common interest of all, without reference to special benefits conferred." This is also the definition given by prof. Seligman. (Misrak Tesfaye, 2014)

CHAPTER THREE

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

3.1. CHARACTERISTICS OF THE STUDY POPULATION

The general objective of this research was to investigate benefits and challenge of cash register machine users in Arada sub city. To succeed the research target both primary and secondary data were used. To collect data from the primary sources 18 & 145 questionnaires were distributed to the employees of Arada sub city and tax payers respectively, for two employees of the sub city interview was made, for those who worked as higher officer of cash register machine. Among 18 and 145 questionnaires 17 and 130 (90.18%) respondents were returned and totally 9.82% (16) of questionnaires didn't return from expected respondent accordingly.

The secondary data were collected from manuals, FDER NEGARIT GAZETA 2007 proclamation No 139/2007 regulation and published and unpublished papers.

3.2. DATA ANALYSIS AND PRESENTATION

According to low imposing office, Arada sub city perform assessment and collection of category "A" and "B" tax payers began using the cash register machine when it implemented in Addis Ababa as its one of the sub city of Addis Ababa. The sub city began to enforce the use of cash register machine in 2008. Category "A" and "B" traders were enforced to use the machine. 2908 trades started to use the machine at this time and the machine used to collect Vat & Turnover tax.

TABLE 1:-PERSONAL PROFILE OF RESPONDENT OF TAX PAYERS WHO ARE SELECTED AS SAMPLE

No	CHARECTERCTICS	FREQUENCY	%	
1	What is your business Sector?	wholesaler	21	16
		Retailer	18	14
		Sole proprietorship	91	70
		TOTAL	130	100
2	For how many years have use the cash register Machine?	1 Year and below	49	38
		1-3 Year	39	30
		4-5 Year	29	22
		Above 5 year	13	10
		TOTAL	130	100

Source; Questioner

The questioner was distributed to 145 users of the machine who were engaged in various business types i.e. wholesalers 16% Retailers 14% sole proprietorships 70% & 20% private limited companies. From them 10% of them used the machine above 5 years, 22% used the machine for 4-5 years, 30% used the machine for 1-3 years and the rest 38% used the machine below one year.

TABLE 2:-RESPONSE OF CASH REGISTER MACHINE USERS ON CASH REGISTER MACHINE BENEFITS

Question	Total number of respondent	Percentage of response	
		Yes	No
Does the cash register machine help you to collect your income?	130	70%	30%
		91	39
Have you used a cash register machine voluntary or enforced by tax authority	130	Voluntary	Enforced
		10%	90%
Is there any change in tax amount you pay after using the machine?	130	13	117
		Yes	No
		46%	54%
		60	70

Source:-Questioner

As we can see from the above table 1, 70% of the cash register machine users believed that cash register machine has benefited them in collecting their income. This is because they observe the following thing in usage of the machine:-

- It helps to record all the transactions including the time and date of transactions,
- It reduced cashier embezzlement,
- It makes their service clear and efficient to their customers,
- It helped them to know day ,month and annual sells revenue easily within a minute, and
- It helped them to reconcile daily sell with cash.

As we can see from the above table 10% of the respondent was using the cash register machine voluntarily, because they understood that the machine helped them to easily control their daily transactions and the rest 90% of the respondents forced by tax authority. From 130 respondents about 54 % of them responded that, there was no change on the amount they pay after using the machine and the rest 46% observed change on the amount of tax they paid. This is because their customers became aware about the receipt. So, they used cash register machine to record all transactions.

TABLE 3:-RESPONSE OF CASH REGISTER MACHINE USERS ON CASH REGISTER MACHINE CHALLENGES

Question	Total number of respondent	Percentage of response	
		Yes	No
Do you face any problem during use of the machine?	130	60%	40%
		78	52
Do you think that non cash register machine users are more competitive than cash register machine users in the market?	130	68%	32%
		107	23

Source; questioner

Cash register machine users as shown in the above in Table 2, 60% of the respondents faced problems during the usage of machine. These problems were:-

- ✚ Employees developed fear of using the machine as it was new technology and this caused shortage of employees in that business,
- ✚ Whenever there was error registered by this machine there was no good interaction between the user and the tax authority,

- ✚ The other problem was that, high cost of the machine,
- ✚ Low supply or not fit with the demand, and
- ✚ Short time was given to buy the machine by the authority.

40% of the respondents didn't face any problem during the usage of cash register machine.

Based on the data gathered from the questionnaire 82% think those non cash register machines are less competitive than users in the market. Reasons are:-

- ✚ Government never knew their income because non cash register machine users pay less tax,
- ✚ Selling price of non cash register machine users was lower than cash register machine users,
- ✚ The purchase price of cash register machine tied up the capital of cash .
- ✚ register machine user,and
- ✚ There is no nagging with government.

According to the response from the questionnaire 18 % of the respondents emphasized that non cash register machine are less competitive than cash register machine users in the market.

TABLE 4:-RESPONSE OF CASH REGISTER MACHINE USERS ON THEIR ATTITUDE ABOUT CASH REGISTER MACHINE

Question	Total number of respondent	Percentage of response	
		Yes	No
Do you think cash register machine have benefits?	130	68%	32%
		88	41
Do you think you have awareness about cash register machine manual?	130	40%	60%
		52	78

Source:-Questioner

As we can observe from the above table most of the cash register users accept it as useful. Respondents who said it doesn't have benefit 32% (41); they think that it doesn't add value to the manual receipt. But according to the sub city's small tax payers branch office different staff, at its earlier stage people saw the using of the machine as a big deal even some of tax payers' make revocation to their business license. And the reason for respondent who claims that, they don't have awareness about the cash register machine, fear of the machine because it was new, and also have less know how about the machine problems.

Finally, cash registers users were asked for their comment and 22.6 % (33) responded that they don't have comment, 19.4% (28.10) says it's a good if it's continue with its features and 58 % (84.10) commented on the following points:-

- ✚ The purchase price of the machine is high,

- ✚ Inadequacy of training: - the training given by supplier is not good enough to use the machine properly,
- ✚ Availability of suppliers: - they were not available on time when they were asked to maintain and also ask money without good service,
- ✚ Machine annual service: - it was very expensive,
- ✚ Solution on mistakes: - not made by themselves.

There is high argument on process with Ethiopia Revenue Customs Authority and it's baring and consumes work time, and

- ✚ High penalty

Table 5:-PERSONAL PROFILE OF EMPLOYEES OF ARADA SUB CITY CASH REGISTER MACHINE OFFICERS

No.	CHARECTERCTICS		Frequency	%
1	Educational back ground	Other certified level	0	0
		MA	0	0
		BA	9	40%
		Diploma	8	60%
		Certificate	0	0
Total			17	100
2	Work experience	1 year	0	0
		1-3 year	8	60
		4-5 year	4	10
		Above 5 year	5	30
Total			17	100

Source; Questioner

From the above table 40% & 60% of the respondents have Diploma and BA degree respectively and also 60%, 10% and 30% of the respondent have working experience between 1-3,4-5 and above 5 years respectively. This implies that most of the respondent has work experience of 1-3 in the authority.

According to the personal file profile table 5, 36% of respondents are expected to have sufficient knowledge about cash register machine.

Table 6:-ATTITUDE OF ARADA SUB CITY EMPLOYEES ABOUT CASH REGISTER MACHINE BENEFITS.

No.	Question	Total No of respondent	% of response		
			Yes	No	
1	Does the ERCA give you sufficient training about cash register machine?	17	65% 11	35% 6	
2	How do you preserve the people awareness about cash register machine?	17	As useful	As obligation	As useful and obligation.
			52% 9	17% 3	29% 5

Source:-Questioner

As we can see from the above table had 6 shown 35% of the respondent doesn't have a sufficient awareness about the cash register machine .These problems were:-

- ✚ Lack of training :- lack of continuous training for officers,
- ✚ Lack of personal interest ;-doesn't updating themselves by reading and asking senior experts,
- ✚ Shortage of employees ;-it implies that there was load of work.

Based on the above data gathered from the questionnaire 52% ,17%, and 29% of the cash register machine users have considered as useful , obligation and both useful and obligation respectively.

As we can observe from the higher officers staff of Arada employees the sub city give training for tax officers and they are trying to create awareness for tax payers through; news papers, Tv and brochers,but they said that it takes time to raise awareness of tax payers.(source interview)

Table 7:-ATTITUDE OF ARADA SUB CITY OFFICERS ON CASH REGISTER MACHINE POLICY 139/2007 ARTICLE 1 AND 2

No.	Question	Total number of respondent	
		Yes	% of response
1	Do you believe that proclamation No.139/07 agrees with current practice of cash register machine?	Yes	No
		75% 13	25% 4
2	Do you believe that the implementation of cash register machine fully achieved its objective?	Yes	No
		80% 13.6	20% 3.4

Source:-Questioner

As we can see from the above table out of 17 respondent 13 or 75% of them agreed that proclamation No. 139/07 agrees with current practice of the cash register machine. But the rest 4 or 25% are disagreed. These problems are due to:-

- ✚ Lack of understanding of proclamation and
- ✚ No continuous assesment on the machine users.

Based on the data we gathered from the questioner 80% of respondent or 13.6 believed that the implementation of cash register machine fully achieved its objective. But the rest 20% of the respondent are now agreed.

TABLE 8:-CASH REGISTER MACHINE ON TAXATION

No .	Question	Total number of respondent	% of repondent		
			Yes		No
1	Does using cash register machine, can reduce administration cost and time?	17	88%		12%
			15		2
2	Does the goverment t collected tax increased or decreased after the introduction of cash register machine?	17	Increase		Decrease
			90%		10%
3	Does cash register machine reduce tax evasion or fraud?	17	Strongly Agree	Agree	Disagree
			85%	15%	0
			14.45	2.55	

Source:-Questioner

As we can see from the above table out of 17 respondents 15 or 88% of respondents using cash register machine have reduced adminstration cost and time. Because before the usage of cash register machine tax payers income was checked by manual and that tooks goverment's time and money in the time of investigating. But, currently it is easily checked by Z-report. The tax payer's daily sales or by using of monthly summary of tax payers income. But the rest 12% of the respondent have responded no change on the adminstration cost time management.

The information gathered from the tax officers shown that 90% of respondents believed that there was an increment of government income from direct and indirect collection of tax after the introduction of cash register machine. Therefore, the increase in the amount of tax collected benefits the society as the government used it to supplement its expenditure and to issue the general and common benefits of the people as a whole.

As we can see from the above table 8 out of 17 respondents 14.45 or 85% of them strongly agreed and 2.55 or 15% of them agreed that the cash register machine has reduced tax evasion or frauds. So, it shows that cash register machine has an important role to decrease tax evasion. This is because they have observed the following:-

- ✚ Based on the government proclamation, the tax payers can't receive money without issuing the receipt,
- ✚ Nowadays, the people's awareness is improving about the illegal collection of tax so, they didn't pay without receipt,
- ✚ Even though, some tax payers ignore providing receipts, there is a major increase in the collection of tax by the government, because the Z-report shows every sale of the day. (source interview)

3.3. THE IMPACT OF CASH REGISTER MACHINE ON TAX COLLECTION PROCESS.

Formerly, before the introduction of the cash register machine, tax payers used manual receipts printed by the approval of the tax authority and they submitted the used one to the tax audit office. And, the tax audit offices examined and sent it to the tax assessment and collection office. Finally, tax payers' payments to the tax assessment and collection offices were according to the audited value. After the cash register was implemented, what makes the process differ from the former one is instead of manual receipts, tax payers submit Z-reports. It reduces the arguments between the authority and the tax payers because it has reduced the act of tax evasion and helps tax payers to know the amount they pay. Therefore, it's saved the time spent to collect tax. (Source interview)

CHAPTER FOUR

SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.

4.1. SUMMARY OF MAJOR FINDING

According to the data presentation the benefits and challenges of cash register machine can be categorized in to two: benefits and challenges.

The benefit aspect implies positive impact where as the challenge indicates the negative one which affects its administration throughout the subsidy and tax payers point of view.

From the total number of respondent (out of 130 respondents), 70% of cash register machine users believed that it helped them to collect their income, 10% of the respondents use the cash register machine voluntarily but 90% are forced.

46 % of cash register machine users responded that there is an increase in the amount of tax they pay after using the machine but 54% of them responded that, there is no change.

60% of the respondents faced problem during the usage of cash register machine but 40% of them didn't face any problem and also 68% of the respondent responded that non cash register machine users are more competitive than cash register machine users.

68% of cash register officers accept it as useful and 32% of them think it doesn't add value to the manual receipts respondent also stressed the use of cash register machine in collection of tax.

88% of tax officers responded that they have reduced their time and administration cost but, 12% of respondents saw no change in this regard but, 90% of respondents believed that there was an increment of government income from direct and indirect tax collection.

100% of respondent agreed and strongly agreed that cash register machine has reduced tax evasion or frauds.

The impact of cash register machine on tax collection is that it reduced the arguments between the authority and the tax payers because it has reduced the act of tax evasion and help tax payers to know the amount they pay.

4.1. CONCLUSION

Nowadays Cash register machine is highly spreaded in Addis Ababa in the last six years and now in other parts of Ethiopian. Regions are also begun to use the machine. And the people awareness about cash register machine becomes changed from its earlier stage.

Cash register machine benefited Arada sub city to collect accurate amount of tax on time and to increase its tax revenue. And, it replaces the use of manual receipt with “Z”-report that does reduce the action of tax evasion.

Cash register machine benefits the users in such a way; to record all transactions, makes their service clear and efficient, reduce cash embezzlement, to easily know actual sales, revenue and VAT amount, and makes tax payment process trouble-free.

As we can observe from the analysis part the users face challenges like; fear to use the machine, high cost of the machine, insufficient supply, inadequate training, repetitive machine failure, expensive maintenance and purchasing of printing paper, power interruption(for some cash register machines are not able to be charged) and are bored of making mistakes.

The sub city also face Challenges about cash register because the machine users’ have lack of awareness on what to do when they made mistakes, power interrupt and machine fails, all category “A” and “B” tax payers were not began to use the machine.

The attitudes of cash register users towards the machine are changing from time to time. And currently almost all users understand its benefits and appreciate ERCA to implement other technology.

4.2. RECOMMENDATION

Implementing cash register machine is not an end by itself, it’s just the beginning. In order to succeed in the machine use, ERCA must improve its policy according to the conditions. Based on this and the conclusion the researcher’s recommendations are mentioned as follows;

- ✚ ERCA Should make subsidy and other incentives for the machine importer to decrease the cost of the machine and to increase the number of machine imported to meet the demand,
- ✚ 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. And its good if the training given repeatedly,
- ✚ ERCA is better to designed goods and fast systems that can reduce the time of users of cash register machine to make correction for their errors without wasting time and additional cost.
- ✚ Awareness of the people is very important to eliminate the tax evasion and enhance the efficiency of the authority but ERCA doesn't work with regard to creating enough awareness through different mechanisms. This can be achievable if ERCA give training to layman people while they are at school in the form of course.
- ✚ Tax payers should update themselves with ERCA laws.

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ANNEX-I

ST MARY'S UNIVERSITY
FACULTY OF BUSINESS
DEPARTMENT OF ACCOUNTING
QUESTIONNAIR

Dear Respondents tax payers

The purpose of this questionnaire is to collect data for these works in requirement for partial identifying **THE BENEFITS AND CHALLENGES OF CASH REGISTER MACHINES**. We would like to emphasis that your response are extremely valuable for the successful completing of this paper and we would immediately appreciate your response for all questions genuinely. We can assure that the information you provide will be completely anonymous and will not be used for any other purpose it will use only for academic purpose. We thank you very much in advance for your cooperation and for sacrificing your invaluable time.

N.B: please put tick mark in the appropriate answer box

Part I: business profile

1. What is the legal status of your business?

Share company sole proprietorship
Limited partnership Joint venture

2. In which areas of business activity are you engaged?

Wholesaler services
Retailer

3. How many years do you use the cash register machine?

Less than 1 year between 3-4 years
Between 1-2 years above 4 years

Part II Question related to benefits of cash register machine

1. Does the cash register machine help you to collect your income properly?

Yes No

Could you explain for us please

2. Is there any change in tax amount you pay after using the machine?

Yes No

Why.....

Part III: Question related to challenge of cash register machine

1. Do you face any problem during usage of the machine?

Yes No

If your answer is yes please specify.....

.....

2. Do you think that none cash register machine more competitive than cash register machine users in the market?

Yes No

3. Have you used a cash register machine voluntary or forced by tax authority

Forced Voluntary

Part IV: Question related to the Attitude of tax payers about cash register machine

1. Do you think cash register machine have benefit.

Yes No

2. Do you think you have awareness about cash register machine manual?

Yes No

3. Do you think cash register machine have disadvantage?

Yes No

ANNEX -II

ST MARY'S UNIVERSITY
FACULTY OF BUSINESS
DEPARTMENT OF ACCOUNTING
QUESTIONNAIR

Dear Respondents tax officer,

This study is to be conducted in partial fulfillment of the requirement for degree in accounting. This questionnaire has been prepared in view of assessing the benefits and challenges cash register machine in Arada sub city branch office. The primary objective of questionnaire is to collect data, information and opinion for research purpose.

Your valuable responds would help the researchers to find out the benefits and challenges cash register machine and therefore; your responds have a paramount importance to complete the research.

Thank you in advance for your valued time and corporation. You are requested to give your genuine response opinion and views. It is used only for academic research purpose and also kept confidential

N.B. please give your answer on the space provided and put tick mark in the box corresponding to your response.

Part I: Personal Profile

1. Gender

Male

Female

2. Educational Back ground

Masters

BA degree

Diploma

Certificate

Other certified

3. For how many years do you serve in this sub city?
- Above 5 years between 4-5 years
- Between 1-3 years less than 1 year

Part II: Question related to the attitude of tax officer about cash register machine

1. Does the ERCA give you sufficient enough training about cash register machine?
- Yes No
2. How do you perceive the people awareness about the machine
- As useful as obligation

Part III: Question related to cash register machine policy

1. Do you believe that proclamation No.139/07 aggress with current practice of cash register machine?
- Agree Disagree
1. Do you believe that the implementation of cash register machine fully achieved its objective
- Yes No

Part IV: Question Related to Tax

1. Using cash register machine can reduce administration cost and time?
- Yes No
2. After using cash register machine Government collected tax increase or decreases?
- Increase Decreases
3. Cash register machine reduces tax evasion or fraud?
- Strongly Agree Agree
- Disagree

ANNEX -III

ST MARY'S UNIVERSTY

FACULTY OF BUSINESS

DEPARTMENT OF ACCOUNTING

INTERVIEW

- 1 How many cash register machine registrants found in Arada sub city?
- 2 Using cash register machine can reduce administration cost and time?
- 3 Does your sub city give training for the tax officer timely?
- 4 Does your sub city give awareness for cash register machine?
- 5 Do you think that cash register machine reduce tax evasion and fraud?

DECLARATION

We are undersigned, declare that this research paper is out original work prepared under the guidance of instructor Allula Hailu. All sources of materials used for the manure have been duly acknowledged.

NAME

SIGNATURE

Place of submission

Date of submission

Submission Approval sheet

The senior research paper has been submitted for examination with approval of advisor

NAME _____

SIGNATURE _____

DATE _____

