

A decorative border of green arrows pointing downwards, arranged in a rectangular frame around the text.

THE EFFECT OF SERVICE QUALITY AND SERVICE RECOVERY ON CUSTOMER SATISFACTION

(A Case Of Ethiopian Revenue And Customs Authority)

Prepared By: Amanuel Abdissa Dinka

**A Thesis Submitted to the Graduate Studies of Addis Ababa
University School of Commerce in the Partial fulfillment for the
Degree of Masters of Art in Marketing Management**

June 2016

Addis Ababa

**ADDIS ABABA UNIVERSITY,
SCHOOL OF COMMERCE, GRADUATE STUDIES,
MA PROGRAM**

**“THE EFFECT OF SERVICE QUALITY AND SERVICE RECOVERY ON CUSTOMER
SATISFACTION”**

(A CASE OF ETHIOPIAN REVENUE AND CUSTOMS AUTHORITY)

By: Amanuel Abdissa Dinka

Approved by board of examiners

Chairman, Department

Signature

Advisor

Signature

Internal Examiner

Signature

External examiner

Signature

LETTER OF CERTIFICATION

This is to certify that Amanuel Abdissa carried out his project on the topic entitled ***THE EFFECT OF SERVICE QUALITY AND SERVICE RECOVERY ON CUSTOMER SATISFACTION: A Case of ETHIOPIAN REVENUE AND CUSTOMS AUTHORITY***. This work is original in nature and is suitable for submission for the award of Masters of Marketing Management.

DR. Rakshit Negi (Advisor)

Declaration

I, Amanuel Abdissa declare that, this research entitled “*the effect of service quality and service recovery on customer satisfaction: A case of Ethiopian revenue and customer Authority*” is the outcome of my own effort and study and that all sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestion of the Research Advisor. This study has not been submitted for any degree in this University or any other University. It is offered for the partial fulfillment of the degree of MA in Marketing Management.

By: Amanuel Abdissa

Signature _____

Date _____

Acknowledgement

First and foremost I would like to thank and give praise to the almighty God, for the endurance, strength, patience and gift of love he grant me to finish my study.

I wish to express my sincere thanks and gratitude to my advisor Dr.Rakshit Negi for his excellence, guidance and friendly support to make this thesis real.

My next appreciation goes to all my brothers: Mesfin Abdissa, Gemechu Abdissa, Daba Abdissa with their family and my sister Gelane Abdissa for their unlimited support they grant me in my study

Last but not the least, I would also like to thank my classmates and lecturers of Addis Ababa University, school of commerce who share me their idea and provided me moral and valuable information related to this research project.

Table of Contents

Acknowledgement	v
List of tables	ix
List of figures	ix
Abstract	- 1 - x
CHAPTER ONE	- 1 -
INTRODUCTION	- 1 -
1. Background of the Study.....	- 1 -
1.1 Background of the organization.....	- 3 -
1.2 Statement of the Problem.....	- 4 -
1.3 Basic Research Questions	- 5 -
1.4 Objectives of the Study	- 5 -
1.4.1 General Objective	- 5 -
1.4.2 Specific Objectives	- 5 -
1.5 Definition of Terms.....	- 6 -
1.6 Significance of the Study	- 7 -
1.7 Delimitation of the Study.....	- 8 -
1.8 Limitations of the Study.....	- 8 -
1.9 Organization of the Research Paper	- 8 -
CHAPTER TWO	- 9 -
REVIEW OF RELATED LITERATURES	- 9 -
Introduction.....	- 9 -
2.1 Theoretical Framework	- 9 -
2.1.1 Marketing of Services	- 9 -
2.1.2 Customer Perception	- 10 -
2.1.3 Zone of Tolerance	- 11 -
2.1.4 Service Quality.....	- 11 -
2.1.5 Service Recovery	- 22 -
2.1.5.1 Understanding the Customer Complaining Behavior	- 24 -
2.1.6 Customer Satisfaction	- 26 -
2.2 Empirical Review.....	- 29 -
2.2.1 Relationship between Service Quality, Service Recovery and Customer Satisfaction....	- 29 -

2.3	Conceptual Framework.....	31 -
2.3.1	HYPOTHESIS	32 -
CHAPTER THREE		33 -
RESEARCH METHODOLOGY.....		33 -
Introduction.....		33 -
3.1	Research Approach	33 -
3.2	Research Method	34 -
3.3	Research Design.....	34 -
3.3	Population and Sampling	36 -
3.4	Data Collection Instruments	38 -
3.5	Reliability and Validity.....	39 -
3.6	Data Analysis Techniques.....	41 -
3.7	Ethical Considerations	42 -
CHAPTER FOUR.....		43 -
PRESENTATION, ANALYSIS AND INTERPRETATION		43 -
Introduction.....		43 -
4.1	Number and percentage of respondents.....	43 -
4.2	Reliability Test.....	44 -
4.3	Normality Testing	45 -
4.4	Descriptive Analysis	47 -
4.5	The correlation analysis	47 -
4.6	The Regression Analysis.....	51 -
4.6.1	The Effect of Service Recovery on Customer Satisfaction.....	52 -
4.6.2	The Regression Analysis of Service Quality Dimensions on Customer Satisfaction	55 -
4.6.3	The Effect of Service Recovery Dimensions on Overall Service Quality	57 -
4.7	The Sobel Test	58 -
4.8	The Regression Analysis of Overall Service Recovery and Overall Service Quality on Overall Customer Satisfaction	60 -
4.9	Interview Analysis	63 -
4.10	Discussion of findings.....	66 -
CHAPTER FIVE		67 -
SUMMARY, CONCLUSION AND RECOMMENDATION		67 -
Introduction.....		67 -

5.1	Summary of the Findings.....	- 67 -
5.2	The Conclusion	- 68 -
5.3	Recommendation	- 69 -
5.4	Limitations and Directions for Future Research	- 70 -
	References.....	- 72 -
	Appendixes	xii
	Appendix1 questionnaire in English.....	xii
	Appendix 2 questionnaire in Amharic	xv
	Appendix 3: demographic questionnaire frequency distribution.....	xix
	Appendix 4 Normality Testing.....	xxi
	Appendix 5A,B,C: the correlation analysis	xxii
	Appendix 6A,B,C: the regression analysis	xxiv

List of tables and figures

List of tables

Table 3.1 the population size	-39-
Table 4.1 the reliability analysis result	-47-
Table 4.2 the Descriptive statistics	-49
Table 4.3 the relationship between service recovery dimensions and customer satisfaction.....	-49-
Table 4.4 the relationship between service quality dimensions and customer satisfaction.....	-51-
Table 4.5 the relationship between SR, SQ and CS.....	-52-
Table 4.6 The regression analysis of SR dimensions and customer satisfaction.....	-52-
Table 4.7 The regression analysis of SQ dimensions on CS.....	-55-
Table 4.8 the effect of SR dimension on SQ.....	-57-
Table 4.9 The effect of SR and SQ on customer satisfaction	-59-
Table 4.10 sobel test for the SR and SQ	-60-
Table 4.11 sobel test for SR, SQ and customer satisfaction.....	-61-
Table 4.12 the regression analysis of SR and SQ on CS	-62-

List of figures

Figure 2.1 the relationship between customer satisfaction and public employees.....	-23-
Figure 2.2 service recovery with customer satisfaction.....	-27-
Figure 2.3 components of effective service recovery,.....	-31-
Figure 2.4 conceptual framework.....	-33-

ABSTRACT

The study focuses on examining the effect of service quality and service recovery on customer satisfaction in three branches of ERCA local tax payers, by collecting data from customers in a questionnaire form and interview techniques. The three dimensions of service recovery developed by Stephen and Tax (outcome justice, procedural justice and interactional Justice) and the later improved model of SERVQUAL model, the SERVPERF model which only measures the performance of the organization by excluding the expectation part of SERVQUAL model were used. A questionnaire were first translated into Amharic language and distributed to 385 respondents by using a cluster sampling techniques, and 284 respondents (74% response rate) fill all the questionnaires accordingly. The finding shows that the majority of the respondents from large tax payers are satisfied at the operation of ERCA and the respondents in middle and small tax payers are moderately dissatisfied as the result of this survey finding shows. The result of the survey data also shows that Empathy, followed by responsiveness, reliability and assurance respectively are the most determinant of customer satisfaction from the service quality dimensions and interactive , procedural and outcome justice respectively are the most determinant of customer satisfaction from the service recovery dimensions. And when both service recovery and service quality effect on customer satisfaction was analyzed together service quality is the most determinant of customer satisfaction than service recovery. However, their importance is nearly the same. Therefore, it is recommended that, ERCA should provide quality service and also must have effective service recovery system on its work in a more technical way, by enhancing the use of modern technology on its operation and must give individual attention to its customers for giving an individual attention is affecting the satisfaction of customers specially in small and medium tax payers and the interaction the employees of ERCA have with their customers must be also improved.

Key words: service quality, service recovery, ERCA.

CHAPTER ONE

INTRODUCTION

This chapter presents an overview of the entire study. It includes the background of the study, statement of the problem, objective of the study, basic research questions, definition of terms, significance of the study, delimitations of the study, limitation of the study and organization of the study.

1. Background of the Study

It is obvious that customers are a very important asset for an organization, so that an organization must intelligently serve its customers' to be profitable and successful with its vision. Though the ultimate goal of every service giving industry is satisfying customers, more often, many of the service delivering organizations are failed to satisfy customers as a Result of not understanding customers' interest well. Hence, this dilemma creates job Difficulty to most business organizations that focus on customer relations (Munusamy et al., 2010).

In this research paper three variables service quality, service recovery and customer satisfaction where taken under consideration. The first two variables were taken as independent variables and the third (customer satisfaction) were taken as dependent variables.

The impacts of service quality on customer satisfaction on private organization were widely researched by many scholars, even though it is not as much worked on the Revenue and customs Authority and other public organization. But in this study the effect of service recovery and service quality on customer satisfaction on the perspectives of customers were analyzed. And the relevance of service recovery will be assessed for it is a very important action for the learning organization. As Lovelock and Wirtz (2011) reports the work of (Theodore Levitt) one of the surest signs of a bad or declining relationship is the absence of complaints from customer, nobody is ever satisfied, especially not over an extended period of time. (Gronroos;2007) point

out that managers often believe that developing and offering services with 100% quality is impossible. Consequently, the organization accepts the mistakes happen, and failures are allowed. Psychologically, the battle for excellent performance is over before it has begun.

Lovelock and Wirtz (2011) also mention that the first law of service quality and productivity might be do it right first time. But we can't ignore the fact that the failures continue to occur, sometimes for reasons of outside the organization control. So that having only a quality service is not only enough for an organization to get customer satisfaction from its clients. And they draw the components of an effective service recovery system as: do the jobs right first time plus effective complaint handling this implies increased customer satisfaction and loyalty. Lovelock and Wirtz(2007) also points out that the true test of a firms commitment to satisfaction and service quality isn't in the advertising promises or the décor and ambience of its offices, but in the way it responds when things go wrong for the customer, and some recent research as this book mentions suggests that customer satisfaction in which complaints are handled has direct impact on their future commitment to a firm. According to Zemke and Bell (2000), the service firm's true test of commitment to service quality and customer satisfaction depends on how it responds after a service failure.

Complaint handling should be seen as a profit center, not a cost center, because when a dissatisfied customer defects, the firm loses more than just the value of the next transaction. Lovelock and Wirtz (2011) also mention that encouraging customer feedback provides an important means of increasing customer satisfaction.

So that, quality service and service recovery have direct impact on customer satisfaction in which customer satisfaction have great impact on the success of the organization and on the decision of consumers on whether to continue or stop the relationship with the organization. As recent research suggest, the customer satisfaction in which complaints are handled has a direct impact on the trust they place in that supplier and on their future commitment to the firm Lovelock and Wright (2006).Some policy makers also believe that customer satisfaction is an important indicator of national economic health; satisfaction they believe is also an important indicator of well-being (Zeithaml, Bitner & Gremler, 2013)

1.1 Background of the organization

The Ethiopian Revenues and Customs Authority (ERCA) is the body responsible for collecting revenue from customs duties and domestic taxes. In addition to raising revenue, the ERCA is responsible to protect the society from adverse effects of smuggling. It seizes and takes legal action on the people and vehicles involved in the act of smuggling while it facilitates the legitimate movement of goods and people across the border. ERCA traces its origin to July 7, 2008 as a result of the merger of the Ministry of Revenues, the Ethiopian Customs Authority and the Federal Inland Revenues into one giant organization.

As in the case of ERCA, the customer (whether it is Ethiopian citizens or foreigners come for different purpose) have great place for the success and achievement of goal of the organization. Even one of the missions of ERCA is giving customer focused service (Lafto sub-city boards). Because of the fear of Dissatisfaction of customers may result in economic and political crisis in the country, and may result in customer terrorism (lovelock & Wirtz 2011) and also It is the first and most responsibility of ERCA to give quality service and then satisfy its customers. One of objective of ERCA is “To establish modern revenue assessment and collection system, provide customers with equitable, efficient and quality service” (Proclamation number 587, of the FDRE on the establishment of the ERCA. (www.erca.gov.et))

As stated by Anderson and Zemke (1998) “satisfied customers improved the business and dissatisfied customers impair business”. Therefore customer satisfaction must be managed just like physical assets.

Finally, this research paper intends to clarify the factors that affect customer satisfaction by taking the dimensions of quality service SERVPERF Model and service recovery by using the dimensions mentioned by Stephen and Tax in ERCA. Because if the organization is actively and strongly improving itself and acting actively and strongly on giving the quality service and satisfying its customers, its contribution is great in the development of the country in many directions. So, customer must be treated well and the quality of service and complaint handling techniques must be always done intelligently and attractively. This study is going to analyze whether the organization is satisfying its customers by giving quality service and service recovery in case if there is a failure of service. And additionally this paper will try to check the combined effect of service recovery and service quality on customer satisfaction in the case of ERCA.

1.2 Statement of the Problem

Regardless of whether the organizations are governmental or private sectors, the key for the existence and success of any organization lie on their ability to provide quality service. As mentioned by Zeithaml et al (2009) many writers use the term quality and satisfaction interchangeably and Researchers support the concept of customer satisfaction as; Customer satisfactions have great economic benefit for an organization. Some policy makers believe that customer satisfaction is an important indicator of national economic health; satisfaction they believe is also an important indicator of well-being (Zeithaml, et al., 2013). Anderson and Zemke (1998) also mention that satisfied customers improve the business and dissatisfied customers impair business. Banayi(1999) shows that services provided by Customs are very effective in determining customers' satisfaction with export and import issues.

Empirically Researchers support the concept that there is a positive relationship between quality service, service recovery and customer satisfaction (Lovelock & Wirtz 2011).The research reveals that all the dimensions of perceived justice significantly affect complainants' level of satisfaction with the service recovery (Kau & Lau, 2006). Schneider and Bowen (1985) also point out that the quality of the core service influences the overall quality of the service perception and thus leads to customer satisfaction. However, the case in ERCA and other public organization is complex and not as much researched for the importance of customer satisfaction in Ethiopian public service is not as much get focus.

Recently there are many service improvement programs that have been undertaken by the Ethiopian government which aim to improve the operation of ERCA and increase customer satisfaction to achieve the expected productivity gains in ERCA (www.erca.gov.et). However, as the pilot study done on 30 people shows there are still many complaints from customers And customers are complaining on the reluctance of ERCA's employee for lack of confidence and give attention to their problems (capital Ethiopia magazine dated Jan.06/2014) in which this have direct impact on providing quality service and its implication can be great in customer satisfaction. For Service employees are frequently referred to as the “face” of a service organization and they have been the subject of much research – particularly with respect to their role in achieving customer satisfaction (Agus, Barker & Kandampully, 2007). According to research conducted by Planning Organization, about performance of government organization, most people are unsatisfied with quality of providing service. This fact is

due to the lack of strategy and customer-orientation culture in organization. This gap is also in customs and it proposed as Research issue (Ganjinia, et al., 2013).

In general this study focuses on identifying the actual performance of the organization before the eyes of the customers and managements by exploring and identifying the factors that affect customer satisfaction in ERCA by taking the dimension of service quality using SERFPERF model and the three service recovery dimension and Customer satisfaction was assessed through three statements relating to the services provided by the department, services given by employees, and queuing time at the service counter.

1.3 Basic Research Questions

This study is expected to answer the following research questions

1. What are the dominant service quality and service recovery dimension which are affecting customer satisfaction in ERCA
2. Where is the performance of ERCA in providing quality service to its customers?
3. From service quality and service recovery which predictors have great effect on customer satisfaction?
4. How is ERCA recovering the service failures and what does its implication on customer satisfaction?

1.4 Objectives of the Study

1.4.1 General Objective

The general objective of the study is to examine the impact of service quality and service recovery on customer satisfaction by using SERVPERF model to measure service quality and Stephen and tax model for service recovery and Customer satisfaction was assessed through three statements relating to the services provided by the department, services given by employees, and queuing time at the service counter.

1.4.2 Specific Objectives

1. To determine the relationship between service quality and customer satisfaction in the case of ERCA.
2. Assessing the application of effective service recovery at ERCA

3. To assess the answers of ERCA on the complaint of its customers To examine the performance of ERCA on the side of customer perspective?
4. To identify the dominant service quality dimension and service recovery dimension that has strong relationship with customer satisfaction in ERCA.
5. To describe the procedures, rules and policies of ERCA before the eyes of the customers?

1.5 Definition of Terms

ERCA (Ethiopian revenue and customs Authority): is government organization who have the responsibility and Authority to collect custom duties and other revenue from domestic and International Trade, facilitates investment, protect contraband, for Ethiopian Government.

Service- is any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything (Kotler 2003, p.128)

SERVQUAL- measurements of service quality as the parasuraman and Zenith (1988), and also pointed out on Lovelock & Wirtz 2011) as a soft measurement system of service quality (Lovelock and Wirtz 2011, p.409)

Service quality-is a global judgment or attitude relating to the superiority of the service, whereas satisfaction is related to a specific transaction. (parasuraman et al;(1988).

Customer- the user of the service or product of a company or organization

Service Recovery: - is turning a service failure into an opportunity you wish you never had (Lovelock & Wirtz 2011, p. 377)

Customer satisfaction-is an individuals' feeling of pleasure or disappointment resulting from comparing the perceived performance or outcome in relation to the expectation. (Lovelock (2004)

Reliability- is the ability to perform the promised service dependably and accurately (Lovelock and Wirtz 2011, p.407)

Responsiveness- willingness to help customers and provide prompt service (Lovelock and Wirtz 2011, p.407)

Assurance: - is credibility, security competence and courtesy (Lovelock and Wirtz 2011, p.407)

Empathy: - caring, individualized attention the firm provides its customers(Lovelock and Wirtz 2011, p.407)

Tangibles: - is appearance of physical facilities, equipment, personnel, and communication materials. (Lovelock and Wirtz 2011, p.407)

Procedural justice: - concerned policies and rules that any customer has to go through to seek fairness. (Lovelock & wirtz 2011, p.375)

Interactional justice:- involves employees of the firm who provide the service recovery and their behavior toward the customer giving an explanation for the failure and making an effort to resolve the problem are very important (lovelock & wirtz 2011, p.375)

Outcome justice: - concerns compensation a customer receives as a result of the losses and inconveniences incurred because of service failure. (Lovelock and Wirtz 2011, p.375)

1.6 Significance of the Study

Since every citizen of all country want to live in freedom at their country and ERCA is the only government organization to collect revenue for government in Ethiopia. It is expected a lot from this organization to treat its customers wisely and intelligently. Dissatisfaction of customers to this office means dissatisfaction of the citizen to the government, and also dissatisfied customer may not be Faithfull to the organization and also to government which results in the loss of revenue for government and low living status in the country. Some policy makers believe that customer satisfaction is an important indicator of national economic health, satisfaction they believe is also an important indicator of well-being (Zeithaml, et al., 2013). The study is directly significant for ERCA and also to other public service organization in the country.

(Agus et al., 2007) wrote that Service enhancement through customer orientation will provide the public sector with an opportunity to gain confidence from the tax-paying public. Because, it enhances ERCA to give more quality service in a more intelligent way and with the mutual benefit with its customers which may contribute in the performance development of ERCA and helps the customer to work hard and invest in the country and pay taxes willingly.

This study will try to suggest, give a tip of idea and encourage other researchers to do more in the Ethiopian public services. For many researches regarding quality service is done on private business organization and the quality service in public service is not as much researched area.

1.7 Delimitation of the Study

Hence the study focus on examining the effect of quality service and service recovery on customer satisfaction in ERCA, only 3 branches of ERCA was selected for this research paper. ERCA large tax payers, East Addis Ababa middle tax payers and ERCA Lafto sub-city small tax payers.

1.8 Limitations of the Study

There are a number of limitations to this study that influence the reliability of the results and restrict the extent to which the findings can be generalized. This study where done on checking only the performance of the organization using the SERVPERF model for service quality and the 3 dimensions of service recovery on the perspective of the customers. And the respondents selected for this research are managers and customers of these selected 3branches. Therefore, this study is delimited by the absence of employee in the study and also only measures the performance of customers on the service they receive from ERCA when they came to the office to pay their taxes. Therefore, the study will recommend other researchers to do further.

1.9 Organization of the Research Paper

This paper has five chapters. The first chapter deals with background information, statement of the problem, objective of the study, significance of the study, conceptual frame work of the study, scope and limitation of the study. The second chapter deals with review of literature. The third chapter discusses the utilized methodology. In the fourth chapter, presentation, analysis, interpretation and summary of major findings were discussed.

And finally the last chapter consists of the conclusion and recommendation parts.

CHAPTER TWO

REVIEW OF RELATED LITERATURES

Introduction

This chapter demonstrates the review of related literatures which is classified into theoretical frame work, empirical review and conceptual framework. The theoretical frame work part includes the factors that affect service quality, service recovery and customer satisfaction and how they are measured as previous study shows. And the second part of this chapter is empirical review which includes the relationship between the three variables as previous studies and literature shows and finally the last part of the chapter is conceptual framework which is about the basic framework of this study and formulation of hypothesis that this study will justify.

2.1 Theoretical Framework

2.1.1 Marketing of Services

Many writers define 'service' in different ways: kottler (2003) defined Service as any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product. Any intangible actions that are performed by person or Machines or both to create good perception within users called service. Although services Are performed by service providers and consumer together its quality results in perception and value assessment by the customer (Rao; 2007). (Zeithaml et al, 2013) defines services as services are deeds, processes and performances provided or coproduced by one entity or person for another entity. And classify services into four distinct categories:-

- a) Service industries and companies: include those industries and companies typically classified within the service sector whose core product is a service. E.g. American Airlines (transportation), Mayo clinic (health care)
- b) Services as products: represent a wide range of intangible product offerings that consumer value and pay for the market place. Service products are sold by service companies and by non-service companies such as manufacturers and technology companies. E.g. IBM and Hewlett

Packard offer information technology consulting services to the market place and Accenture, which are traditional pure services firms.

C) Customer service: is also a critical aspect of what we mean by “service” customer service is the service provided in support of a company’s core products. E.g. Dell computer provides real-time chat sessions to help customers diagnose hardware problems.

d) Derived service: - is yet another way to look at what service means. In an asset award winning article in the journal of marketing, Steve Vargo and Bob Lusch argue for a new dominant logic for marketing that suggests that all products and physical goods are valued for the service they provide. The value derived from physical goods is the value derived from by the good, not the good itself.

The organization must work hard on improving its services by employing all its resources effectively. Lovelock and Wirtz(2011) mention that the 4 types of resource central to the development of successful service system are Employees, customers, Technology and time. And Gronroos(2007) said that as a co-producers in service processes customers have to be managed as a quality producing resource.

2.1.2 Customer Perception

Zeithaml, et al (2009) wrote that, perceived service quality is a component of customer satisfaction. Customer expectations are dynamic, evaluations may also shift over time- from person to person and from culture to culture. Therefore, the entire discussion of quality and satisfaction is based on customers’ perceptions of service. In considering perceptions, it is important to recognize that customers will have perceptions of single, transaction-specific encounters as well as overall perceptions of a company based on their experiences. Research suggests that. It is important to understand all types of perceptions for different reasons and that the view points are complementary rather than competing.

2.1.2.1 Perceptions of Equity or Fairness

Customer satisfactions are also influenced by perceptions of equity or fairness. Customers ask themselves: Have I been treated fairly compared with other customers? Did other customer get better treatment, better prices, or better quality service? Was I treated well in exchange for what I paid and the effort I expended? Notions of fairness are central to customers’ perceptions of satisfaction with products or services, particularly in service recovery situations; satisfaction with

a service provider following a service failure is largely determined by perceptions of fair treatment Zeithaml, et al (2009)

2.1.3 Zone of Tolerance

The extent to which customers recognize and are willing to accept this variation is called the zone of tolerance. If service drops below adequate service- the minimum level considered acceptable-customers will be frustrated and most likely dissatisfied with the company.

Another aspect of variability in the range of reasonable services is that Different customer possess different tolerance zones. Some customer have narrow zones of tolerance, requiring a tight range of service from providers, whereas other customers would likely always be pressed for time, desire short wait times in general, and also hold a constrained range for the length of acceptable wait times.

According to Zeithaml, et al (2013) an individual customer's zone of tolerance increases or decreases depending on a number of factors. The more important the factor, the narrower the zone of tolerance about unreliable service(broken promises or service errors) than other service deficiencies, which means that they have higher expectations customer expectations are influenced by a variety of factors. Desired service expectations are influenced by personal needs, lasting service intensifiers, explicit service promises, implicit service promises, word of mouth communication and customer's past experience.

2.1.4 Service Quality

What is Quality service? (Zeithaml, et al, 2009) defined service quality as a focused evaluation that reflects the customer's perception of reliability, assurance, responsiveness, empathy and tangibles. According to (lovelock & Wirtz 2011) Quality is about meeting or exceeding customer needs and requirements. The word quality means different things to people according to the context. Common perspectives on quality include:-

The transcendent view of quality is synonymous with innate excellence: a mark of uncompromising standards and high achievements. The manufacturing based approach is supply based and concerned primarily with engineering and manufacturing practices (in services, we would say that quality is operation driven).It focuses on conformance to internally developed specifications that often are driven by productivity and cost-containment goals. User based definitions start with the premise that quality lies in the eyes of the holder. These definitions

equate quality with maximum satisfaction. This subjective demand oriented perspective recognizes that different customers have different wants and needs. Value- based definitions define quality in terms of value and price. By considering the trade-off between performance or conformance and price, quality comes to be defined as affordable excellence.

Gronroos(2007) also tried to define the quality service from different research as:-

Quality is what customers perceive: - quality cannot be determined by management alone, it has to be based on customer needs, wishes and expectations. Moreover, quality is not what is planned in objective measures; instead it is how customers subjectively perceive what is delivered. Quality cannot be separated from the service process (the production and delivery process). The outcome of the service production process is only part of customer perceived service quality. Quality is produced locally in a series of moments of truths of service encounters or buyer-seller interactions. Because of the existence of the important functional quality dimensions of total service quality, the service encounters, including a number of moments of truth (or moments of opportunity) become a pivotal factor in quality perception. And everyone contributes to customer perceived quality. As quality is created and produced in buyer-seller interactions of service encounters, a large number of employees become involved in the production of quality. As co-producers in service processes customers have to be managed as a quality-producing resource. A central characteristic of services is the fact that customers participate as co-producers in the service production process. In that capacity they can influence both the process and its outcome, and hence their own as well as fellow consumers' perception of the quality of the service. Quality has to be monitored throughout the organization by the whole organization. As quality is produced by a large number of people and departments throughout the organization, quality performance has to be monitored and assured at the point where the quality contribution is produced. External marketing has to be integrated into quality management. Customer perceived quality is a function of expectation as well as real experiences. Therefore, improvement of quality experiences may be counteracted by, say, a marketing companion that promises improvements or gives customers reason to believe that improvements will be greater than they really are.

(Zeithaml, et al., 2009) defines service quality as service quality is critical in measuring customer satisfaction and it is also a critical element in customer perceptions, it is also the dominant

element in customer evaluations. Also As described by (Lewis & Booms 1983) giving quality service implies meeting the Requirements to customer expectations regularly.

(Parasuraman, et al.,1985) also defined service quality as “the degree and direction of discrepancy between consumer’s Perceptions and expectations in terms of different but relatively important dimensions of the service quality, which can affect their future purchasing behavior.” This definition clearly shows that service quality is what customers’ assess through their expectations and perceptions of a service experience. Customers’ perceptions of service quality result from a comparison of their before-service expectations with their actual service Experience. Service quality is founded on a comparison between what the customer feels should be offered and what is provided (Parasuraman et al, 1985). Thus, the pursuit of quality services in both private and public sector organizations is driven by the need to survive and remain competitive.

2.1.4.1 Measuring and Improving Service Quality

There are also a number of models described in the literature that conceptualize the construct of service quality is a multidimensional (Bienstock et al., 1997). The models of service quality described in the literature, such as SERVQUAL, can be used in various contexts, but they do not usually provide for managerial evaluation of the interactive nature of service quality in service encounters. While much of the research has been focused on a better understanding of the link between the attributes or dimensions of service quality and consumer satisfaction, little research has specifically been conducted within the conceptual model of SERVPERF or SERVQUAL. Thus, using individual SERVPERF dimensions as predictors for consumer satisfaction reflects the conceptualization of recent studies in the literature. This conceptualization parallels the long-held view in the product category that consumer satisfaction is regarded as a function of attribute-level evaluations of product performance (LaTour and Peat, 1979; Mittal et al., 1999).

The continuous rise in the use of SERVQUAL has been arguably attributed to a practical usefulness in diagnostic analysis for improving service quality, especially when it is applied in an international service setting (Sureshchandar et al., 2001). According to (Parasuraman et al., 1993), the diagnostic application of SERVQUAL dominates commercial use of the instrument and is one of its primary advantages. In their argument, the SERVQUAL measurement has more diagnostics, and therefore more practical implications than has the

performance -only measurement. However, many researchers have questioned the reliability and validity of the difference score measures in SERVQUAL (Buttle, 1996).

As proposed by (Mass Hareeza, Noor Azman and Alias 2010) the attribute determinants of service quality in relation to consumer satisfaction by comparing the dimension-specific SERVPERF model with its counterpart, that is, the dimension-specific SERVQUAL model. They also mentioned that the models of service quality described in the literature, such as SERVQUAL, can be used in various contexts, but they do not usually provide for managerial evaluation of the interactive nature of service quality in service encounters.

On the other hand (Duffy, Miller & Baxley, 2006). Wrote that

The level of service quality can be measured by two dimensions;

1. The outcome or “what” the customer actually receives as part of the firms efforts to recover and
2. The process of recovery and “how” the recovery is accomplished (Duffy, Miller & Baxley, 2006).

On the other hand, (Gronroos2007) mention that managers often believe that developing and offering services with 100% quality is impossible. Lovelock and Wirtz (2011) wrote that service quality is difficult to manage. It is commonly said that “what is not measured is not managed” (Anonymous). Without Measurement managers will not be sure weather service gaps exist, let alone what types of gaps and where they exist. Many organizations are eager to provide good quality services, but fall short simply Because they do not accurately understand what customers expect from the company. The Absence of well-defined tangible cues makes this understanding much more difficult than it would be if the organization were making manufactured goods. (Cole 1995) wrote that Services organizations should ask the following key question:-

- What do customers consider the important features of the service to be?
- What level of these features do customers expect?
- How is service delivery perceived by customers?

The challenge in defining quality is that it is a subjective concept, like beauty. Everyone has a different definition based on their personal experiences. Crosby (1979) defined Quality as “Conformance to requirements”. This definition implies that organizations must establish requirements and specifications. Once these specifications are established, the quality goal of the various functions of an organization is to comply strictly with them. (Juran 1982) defined quality as “Fitness for use”.

As indicated on www.qualitygurus.com quality also defined from different point of views: -

1. From Customer point, from process point of view, from product point of view and from the cost point of view. From customer point of view: “quality means fitness for use and meeting Customer satisfaction.
2. From process point of view: quality means conformance with the process design, standards and specifications.
3. From product point of view: “quality means the degree of excellence at an acceptable price.
4. From the cost point of view: “Quality means best combination between costs and features.

Service quality can be evaluated by assessing customer’s expectations and perceptions of Performance level for a variety of service attributes (Parasuraman et al, 1985). If the customer’s expectations are meeting or exceeded, then the company is perceived to be offering higher service quality. But if on the other hand, the expectations of the customers are not meet, the company is on its way not only to face displeased and hostile customers, which in turn leads to defection to competitors. “Customer’s expectation serves as a foundation for evaluating service quality because, quality is high when performance exceeds expectation and quality is low when performance does not meet their expectation” (Asubonteng et al.1996: p.6).

Perceived service is the outcome of the consumer’s view of the service dimensions, which are both technical and functional in nature (Gronroos, 1984). (Parasuraman et al.,1988:15) define “perceived quality as a form of attitude, related but not equal to satisfaction, and results from a Consumption of expectations with perceptions of performance

The service will be considered excellent, if perceptions exceed expectations; it will be regarded as good or adequate, if it only equals the expectations; the service will be classed as bad, poor or deficient, if it does not meet them (Vazquez et al., 2001).

2.1.4.2 Soft and Hard Service Quality Measures

Lovelock and Wirtz (2011) mentioned that Customer defined standards and measures of service quality can be grouped into two broad categories: soft and hard

- Soft measures cannot be easily observed and must be collected by talking to customers, employees, and others. As noted by Zeithaml and Mary Jo Bither, “soft standards provide direction, guidance and feedback to employees on ways to achieve customer satisfaction and can be quantified by measuring customer perceptions and beliefs. SERVQUAL model is a good example for this one
- Hard measures and standards in contrast are characteristics and activities that can be counted, timed or measured through audits. Such measures might include the number of telephone calls that dropped while the customers were on hold, how many orders were filled correctly, the time required to complete a specific task, how many minutes customers had to wait in line at a particular stage in the service delivery. The number of trains that arrived late and the number of bags lost. Standards often are set with reference to the percentage occasions on which a particular measure is achieved.

2.1.4.3 The SERVPERF Model

While much of the research has been focused on a better understanding of the link between the attributes or dimensions of service quality and consumer satisfaction, little research has specifically been conducted within the conceptual model of SERVPERF or SERVQUAL. Cronin and Taylor (1992) were the first to offer a theoretical justification for discarding the expectations portion of SERVQUAL in favor of just the performance measures included (i.e., what they termed SERVPERF). The term “performance-only measures” has thus come to refer to service quality measures that are based only consumers’ perceptions of the performance of a service provider, as opposed to the difference (or gap) between the consumers’ performance perceptions and their performance expectations. The SERVPERF shared the same concept of service quality as the SERVQUAL (Llusa, and Zornoza, 2000) and performed almost identically in explaining about half of the observed variations in the

perceptions (Quester and Romaniuk, 1997). Original researchers of SERVPERF argued that owing to the limitations of operationalization, conceptualization, measurement and applications of SERVQUAL's scale, the performance based measure was an enhanced means of measuring the service quality construct, triggering an interesting controversy in service quality research. However, later Parasuraman, et al, 1994a) responded to the concerns of Cronin and Taylor (1992) and Teas (1993) by empirically proving that the validity and alleged severity of many of those concerns raised by them were questionable, and in fact elaborated that though their approach for conceptualizing service quality could be revised, relinquishing it altogether in preference of the alternate approaches as proclaimed by the critics did not seem justified. In another empirical work, Parasuraman, Zeithaml and Berry (1994b) refined SERVQUAL's structure to embody not only the discordance between perceived service and desired service, but also the discrepancy between perceived service and adequate service.

The SERVPERF focused on the fact that customer satisfaction is the result of service quality (Murphy, 1999). It was also found to be a better predictor for the purpose of assessing (Quester and Romaniuk, 1997), as well as had higher discriminant validity than SERVQUAL (Angur et al., 1999). Empirical studies evaluating validity, reliability, and methodological soundness of service quality scales clearly point to the superiority of the SERVPERF scale. Role of expectations and its inclusion in the SERVQUAL measuring instrument is a cause of major concern. To a certain extent, in SERVQUAL there is an overlap between the technical and functional dimensions. Furthermore, the use of a perception scale is justified by the dynamic character of the Indian client's expectations and by the greater effort required by the respondents to complete two questionnaires, one prior using the services (i.e. expectations) and another post. The SERVPERF scale is found to be superior not only as the scale is efficient in capturing the true customer's perceived service quality as also more effective in reducing the number of items to be measured by half 22 items in contrast to SERVQUAL's 44 items (Hartline and Ferrell, 1996).

Although, a number of measurement problems have been highlighted by researchers (e.g. Babakus and Boller, 1991 and Lewis, 1993) SERVQUAL and SERVPERF: A Review of Measures in Services Marketing Research performance minus customer expectation (P-E) gap model of SERVQUAL Cronin and Taylor's (1992) SERVPERF scale has been empirically tested

and proven to be a better measure of service quality (Cronin and Taylor, 1992) and Brown, Churchill and Peter, 1993) also confirmed the theory set by Cronin and Taylor(1992).

2.1.4.4 Service Quality in Public Sectors

As with most “new” management practices, private sector organizations have adopted the principles of service quality at a much faster rate than those in the public sector. This can be attributed to the inherent differences between the sectors in terms of their historical and environmental contexts. In particular, the primary objective of most public sector organizations is to provide a social benefit within a limited budget and reduce costs (Dewhurst et al., 1999). This is in direct contradiction to private sector organizations, whose primary focus is on increasing profits. It is not surprising, therefore that, private sector organizations have higher productivity and profitability than public sector organizations (Ehrlichet al., 1994).The slow uptake of service quality practices in public sector organizations is further exacerbated by difficulties in measuring outcomes, greater scrutiny from the public and press, a lack of freedom to act in an arbitrary fashion, and a requirement for decisions to be based in law (Teicheret al., 2002). Irrespective of these difficulties, However, public sector organizations have come under increasing pressure to deliver quality services (Randall and Senior, 1994), improve efficiencies, and respond to government legislation (Robinson, 2003).In most developed countries, quality concepts such as total quality management (TQM) and new public management (NPM) have been adopted by public sector organizations since the early 1990s. The key objective of NPM, for instance, is to improve the delivery of public service quality by taking a customer-oriented approach (Mwita, 2000) and by focusing on performance and measurement. More recently however, the public sector has turned its attention to “electronic government” (“e-government”) (Teicher et al., 2002) in an effort to improve quality by providing greater accessibility. Despite the growing popularity of quality concepts in public service management, the issue remains largely under investigated.

This research is carried out in one of the public sector, governmental organization at Ethiopian Revenue and custom Authority. The major function of ERCA is to ensure that laws regulating tax collection are enforced in order to sustain the social and economic activities of the country. This public department has sub-branches at all over Ethiopia, and its Head Office is found in Addis Ababa, the capital of Ethiopia. The organization can collect taxes from all businesses and individuals both directly and indirectly from Ethiopian citizens and foreign company operating

their business in Ethiopia. According to Donnelly et al. (1995), public sector caters for both customers who pay for the provision of a service and for those who do not pay for the provision of a service. It is pointed out by Robinson (2003) that public services that charge customers are more likely to be in competition with services offered in the commercial sector, thereby offering the customer a choice. The public department chosen for this study charges customers for its service provisions, but this service is not offered by another commercial sector and thus not in direct competition with other service organizations. However, the customers demand a better service for which they are paying. On the other hand, it can also be argued that public services that are free of charge are less inclined to adopt service quality practices unless pushed by customer demands and government legislations.

Since ERCA is a government owned organization many people may relate simply its operation with a political issue. However, providing quality service for ERCA is a must for a country development. In the case of ERCA if the customer didn't get a quality service from custom, they may see living in a country is a challenge and they may be interested to living in another country and foreign investors may also didn't come to operate in this country so that the quality of service in ERCA have a direct impact on the political and economic development of a country. (Lovelock & Wirtz, 2011) mentioned that the dissatisfied customer may take public action, private action or no action, As some policy makers believe that customer satisfaction is an important indicator of national economic health; satisfaction they believe is also an important indicator of well-being (Zeithaml, et al, 2013).

Public sector services are responsible and accountable to citizens and communities as well as to its customers. Several researchers have dealt with service quality in public services (Wisniewski and Donnelly, 1996; Wisniewski, 2001; Brysland and Curry (2001) stated that the literature clearly supported the use of SERVQUAL in the public sector.

According to (Gowan et al.,2001), service provision is more complex in the public sector because it is not simply a matter of meeting expressed needs, but of finding out unexpressed needs, setting priorities, allocating resources and publicly justifying and accounting for what has been done. Additionally, Caron and Giauque (2006) wrote that public sector employees are currently confronted with new professional challenges arising from the introduction of new principles and tools inspired by the shift to new public management. Anderson (1995) also measured the quality of service provided by a public university health clinic. Using 15

statements representing the five-dimensions of SERVQUAL (Parasuraman et al., 1988), she assessed the quality of service provided by the clinic at the University of Houston Health Center. Patients were found to be generally dissatisfied with the five dimensions of SERVQUAL. The highest dissatisfaction was felt with assurance. On the other hand, tangibles and empathy exhibited the lowest level of dissatisfaction. Using the SERVQUAL approach, Wisniewski (2001) carried out a study to assess customer satisfaction within the public sector across a range of Scottish Councils services. Donnelly et al. (2006) also carried out a study to explore the application of SERVQUAL approach to assess the quality of service of Strathclyde Police in Scotland. The survey captures customers' expectations of an excellent police service and compares these with their perceptions of the service delivered by Strathclyde Police. The paper also reports on a parallel SERVQUAL survey of police officers in Strathclyde to examine how well the force understands its customers' expectations and how well its internal processes support the delivery of quality services in the police department. It was found that Strathclyde Police appears to have a good understanding of the service quality expectations of their customers as represented by the responses of elected councilors in the area covered by the force. There is room for improvement in service quality performance both from the viewpoint of the customer and through police force attention to the definition of, and compliance with, service quality standards. Agus et al (2007) carried out a research to identify management and customer perceptions of service quality practices in the Malaysian Public sector. It is important to note that, whereas the SERVQUAL model focused on identifying "gaps" between expectations and actual delivery, their model focused only on perceptions of actual service delivery. They used nine of the ten service dimensions identified by Parasuraman et al. (1985). Their study looked at the perceptions of management and customers. However, Cronin and Taylor (1992) found that SERVPERF measure (performance-only) performs better than any other measure of service quality, and that it has greater predictive power (ability to provide an accurate service quality score) than SERVQUAL. They argue that current performance best reflects a customer's perception of service quality, and that expectations are not part of this concept.

It is thus observed that most of the studies to date, have concentrated on service quality in US and European public service sector, while some more recent studies have looked at service quality in developing countries (Agus et al., 2007).

Service enhancement through customer orientation will provide the public sector with an opportunity to gain confidence from the tax-paying public. In their research on the public sector in Taiwan, Chen et al (2004) proposed a customer-oriented service enhancement (COSE) system that can be effectively used by the public sector to improve the quality of service. They proposed five stages that encompass continuous improvement of quality in the public sector – customer identification; customer needs survey, service system design, service delivery, and service recovery. Which is applicable to Ethiopian revenue and custom Authority but at infant stage on employing it accordingly.

According to Curry and Herbert(1998), Service quality in the public sector tends to make reference to three areas of quality:

- (1) Customer quality (what the customer wants from the service);
- (2) Professional quality (the processes used to meet customer needs); and
- (3) Management quality (the use of resources to meet customer needs)

2.1.4.5 Why is Customer Satisfaction Important in the Public Sector?

The absence of a profit motive does not mean that customer satisfaction is unimportant in the public and non-profit world. Canadian researchers found that service satisfaction is a strong driver of citizen trust and confidence in public institutions. The satisfaction of public sector customers/clients both improved employee engagement and was improved by it.



Figure .2.1 the relationship between customer satisfaction and public employees

This synergy of customer satisfaction and employee engagement has enormous implications for the performance of public agencies and the public workforce: a discreet motivation for good performance—perhaps a stronger incentive than an aim to satisfy the more vaguely defined “general public”. Many human services providers are motivated by their desire to help others; succeeding at this task (and having clear evidence that they have satisfied their “customers”) can help keep them motivated and engaged. A focus on customer satisfaction is essential to creating

the proper attitude and orientation. Management consultant F. JohnReh maintains that “Unless an organization is prepared to guarantee that its customers will be satisfied, that organization will not put the policies and procedures in place, will not empower the employees, will not reinforce the enabling behaviors needed to make its customer the number one priority as it should.”With public trust and confidence in government plunging, customer satisfaction may be increasingly important. The U.K. and other European countries are trying to use customer satisfaction measures to drive government transformation. All residents use public services of some type and have an opportunity to directly experience the effects of widespread customer satisfaction efforts (www.cssp.org)

2.1.5 Service Recovery

Service recovery can be defined as actions initiated by a service provider in rectifying the problem that leads to a service failure, which can affect the level of Customer satisfaction and customer loyalty. Research in this field show that, Service recovery is a rather neglected part of service marketing and thus, more attention should be given to it (Wirtz & McColl-Kennedy, 2010). McCullough and Bharadwaj (1992) clarified that penetrative service recovery may constitute higher satisfaction as Regards to service that accomplished faultless on the first time.

Service recovery refers to the action taken by a service provider to address a customer complaint regarding a perceived service failure (Gronroos, 1988). It is the process by which steps are taken as a result of negative customer perception of initial service delivery. Recovery management is considered to have a significant impact on customers who experienced service failures because they are usually more emotionally involved and observant of service recovery efforts (Berry and Parasuraman, 1991).

Organizations consist of human beings and human beings cannot live without making mistakes. So that, some wrong service representations occur when dealing with organizational activities. This situation named service failure. Bitner et al (1990) assorted service failure into three categories with relationship; the interior service; requested service; and surprise staff movements. Kelley et al (1993) investigated product failures; Hoffman et al. (1995) on the other hand search firm policy failures. (Bitner et al, 1994) explored failures because of the problematic consumers. (Armistead et al., 1995) asserted three sorts of failure; service supplier faults, consumer base faults and organizational faults. There are some different consequences of service

faults, this Rae dissatisfaction, decreasing customer trust, negative word of mouth, losing profit and rising costs, decreasing employee morale and performance (Bitner et al., 1994).

Therefore, service failures are unavoidable, because of human and non-human faults. These inevitable failures will create customer dissatisfaction if not managed well, and Customer dissatisfaction may be dead full for firms. This implies that having effective service recovery system for all organization is a must. The service failure causes the rising of the customer complaints, horrible word of mouth and lastly losing customers. Zemke(1999) stated that unsatisfied customer may tell his/her poor explosions with the service suppliers to 10 to 20 other individuals. Johnston (1995) argued that when a service failure appears, service recovery gets imperative to sustain customer to firm. According to (Lovelock and Wirtz 2011) encouraging customer feedback provides an important means of increasing customer satisfaction and retention. Service failures can evoke dissatisfaction among customers and they would take any of the following actions: 1. in a form of public action (i.e. complaining to the service firm, sharing the problem on social networks such as twitter and face book and spread negative word of mouth (WOM)), 2. Private action (i.e. switch provider) or 3. No action due to the monopoly nature of industry (Lovelock & Wirtz, 2011).

To avoid the negative impacts of service failures, the service provider should try to overcome the problem quickly by implementing the most suitable service recovery (SR) procedures. Service is defined as systematic actions which are taken by a service provider to rectify the error following a service failure in order to regain customers' support (Gronroos, 1990). However, to have effective service recovery can be difficult since to resolve conflicts and managing aggrieved customers require comprehensive procedures (Zeithaml & Bitner, 2000). Successful service recovery can improve customers' perceived quality of the services and lead to positive word of mouth, good customer relationship and customer loyalty (Komunda & Osarenkhoe, 2012). However, ineffective Service recovery will decrease the level of confidence among customers towards the service provider and cause the emergence of negative word of mouth regarding the particular service provider (Komunda & Osarenkhoe, 2012).

The outcome of service recovery is the customer's main concern while the dimension of Service recovery process is more internal and customer usually does not care about them (Duffy et al., 2006, Consequently, in order to provide appropriate response to unhappy customer, service

recovery requires high level of interaction between the service provider and its customer (Kau & Loh, 2006).

Customers often use the equity theory (Adams, 1965) to evaluate service recovery efforts. Adams (1965) first proposed that people felt fairly treated in social exchange relationship when they perceived their own economic outcomes relative to their inputs are in balance. On the contrary, inequity is said to exist if the perceived inputs and outcomes in an exchange relationship are perceived to be unjust or unfair. As such, the presence of inequity is expected to result in both dissatisfaction and behavior that might provoke actions to bring about a balance.

Literatures tells us that customers will respond for different objectives, and organization also tried to prepare the service recovery system for different objectives (Lovelock and Wirtz 2011) mentioned the key objective of effective customer feedback systems as follows:-

- Assessment and benchmarking of service quality and performance
- Customer driven learning and improvements
- Creating a customer-oriented service culture.

2.1.5.1 Understanding the Customer Complaining Behavior

Why do customers complain? According to (Lovelock and Wirtz 2011) the four main purposes of complaining are: - To obtain restitution or compensation, to vent their anger, to Help or improve the service or may be for altruistic reasons

What does customer expect once they have made a complaint? Whenever service failure occurs, people expect to be adequately compensated in a fair manner. However, recent studies neither show that many customers feel they have not been treated fairly nor received adequate recompense. When this happens their reaction tends to immediate, emotional, and enduring.

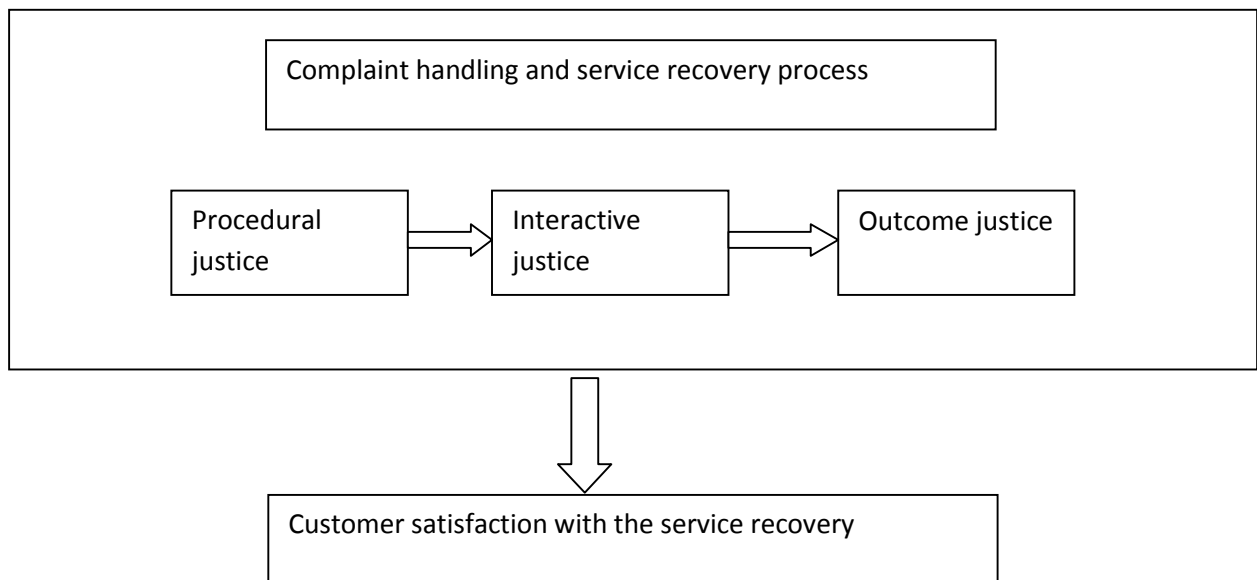
And once the customers make a complaint, they expect firms to deal with them in a fair manner along three dimensions of fairness (procedural, interactional and outcome justice)

(Lovelock & Wirtz 2011) also mention that, Stephen and Tax Brown found that as much as 85% of the variation in the satisfaction with the service recovery was determined by 3 dimensions of fairness:

1. Procedural justice: - concerns policies and rules that any customer has to go through to seek fairness. Customer expects the firm to assume responsibility, which is the key to the start of the fair procedure, followed by a convenient and consideration of customer inputs into recovery process.
2. Interactional Justice:- involves employees of the firm who provide the service recovery and their behavior toward the customer giving an explanation for the failure and making an effort to resolve the problem are very important . However, the recovery must be perceived as genuine, honest and polite.
3. Outcome justice: - concerns compensation a customer receives as a result of the losses and inconveniences incurred because of service failure. This includes compensation for not only the failure but also time, effort and energy spent during the process of service recovery.

Lovelock and Wirtz (2011) also mentions that, service recovery plays a crucial role in restoring customer satisfaction following a service failure and retaining customer’s goodwill.

Figure 2.2 service recovery



Where do customers complain? Lovelock and Wirtz (2011) wrote that, Most dissatisfied customers do not complain as they may not know where to complain, they find it too much effort and unpleasant. Studies show that majority of complainants are made at the place where the service was received, 99% of the customer feedback was given face to face or over the phone to

customer representatives. Less than 1% of all complainants were submitted via e-mail, letters, customer feedback cards, or firm's website.

Who is most likely to complain? According to Lovelock and Wirtz (2011) Research findings consistently show that people in higher socioeconomic levels are more likely to complain than those in lower levels. Their better education, higher income, and greater social involvement give them the confidence, knowledge and motivation to speak up when they encounter problems. Further, those who complain also tend to be more knowledgeable about the product in question.

What proportions of unhappy customer complain? Previous Researches show that on average, only 5 percent to 10 percent of customers who have been unhappy with the service actually complain. Sometimes the percentage is far lower.

2.1.5.2 Service Recovery Paradox

The service recovery paradox referred as the effect that customer who experience a service failure and then have it resolved are sometimes more satisfied than customers who have had no problem in the first place (Lovelock and Wirtz2011)

2.1.5.3 Principles of Effective Recovery Systems

Lovelock and Wirtz (2011) mention the three principles of effective service recovery as:

1. make it easy for customers to give feedback
2. enable effective service recovery:- service recovery should be proactive, recovery procedures needs to be planned, recovery skills must be taught, and recovery requires empowered employees,
3. establish appropriate compensation level:-
 - How generous should compensation be?
 - What is positioning of your firm?
 - How severe was service failure?
 - Who is the affected customer?

2.1.6 Customer Satisfaction

As indicated by Lovelock (2004) many researchers conceptualize customer satisfaction as “an individual’s feeling of pleasure (or disappointment) resulting from comparing the Perceived performance or outcome in relation to the expectation. Service companies have since recently

focused on customers in order to improve competitiveness. Customer satisfaction is one of the important outcomes of marketing activity (Mick and Fournier; 1999).

(Zeithaml, et al, 2009) mentioned that satisfaction is the consumers' evaluation of a product or service in terms of whether that product or service has met the customers' needs and expectations. Failure to meet needs and expectation is assumed to be result in dissatisfaction with the product or service. Good customer satisfaction has an effect on the profitability of nearly every business. For example, when customers receive good service, each will typically tell nine to ten People. However, customers who receive poor service will typically relate their Dissatisfaction to between fifteen and twenty others (Naik: 2010).

Anderson and Zemke (1998) stated that satisfied customers improve business and dissatisfied customers impair Business. Therefore, customer satisfaction is an asset that should be monitored and Managed just like any physical asset. Satisfied customers will be empowered to work hard in the country and will generate more revenue for government, since this will make the working environment comfortable for business, satisfied customers are key to long-term business success (Zeithaml et al., 1996).

2.1.6.1 Factors that Affect Customer Satisfaction

(Matzler et al, 2002) classify factors that affect customer satisfaction in to three factors Structures:-

1. **Basic factors:** - these are the minimum requirements that are required in product to prevent the customer from being dissatisfied. They do not necessarily cause satisfaction But lead to dissatisfaction if absent. These are those factors that lead to the fulfillment of the basic requirement for which the product is produced. These constitute the basic attributes of the product or service. They thus have a low impact on satisfaction even though they are a prerequisite for satisfaction.
2. **Performance factors:** - these are the factors that lead to satisfaction if fulfilled and can lead to dissatisfaction if not fulfilled. These include reliability and friendliness.
3. **Excitement factors:** - these are factors that increase customers' satisfaction if fulfilled but does not cause dissatisfaction if not fulfilled which include project management.

(Zeithaml, et al, 2009) also mentioned that customer satisfaction is influenced by specific product or service features, perceptions of product and service quality and price.

In addition, personal factors such as customer's mood or emotional estate and situational factors such as family member opinions will also influence satisfaction.

2.1.6.2 Reasons for Customer Dissatisfaction

Customer may be dissatisfied because of the reason of Sometimes customers become dissatisfied, as indicated on www.qualitygurus.com some of the reasons for this dissatisfaction are:-

- **Not knowing the Expectations** Customer remains dissatisfied unless the Company knows what the customer actually expects out of their product.
- **Not Meeting the Expectations:** - A customer may become dissatisfied because the Service does not live up to expectations.

In addition to that as a result of the rapid Improvement in the technology, customer may compare the services provided by a company with those of the competitors, which may lead to dissatisfaction and customers over expectations and their changing needs may lead them for dissatisfaction.

2.1.6.3 What Can We Do When We Have Dissatisfied Customers?

Before going to what to do we should have to answer this question, the organization must also make into consideration what do the customer do when they are dissatisfied? According to Lovelock and Wirtz (2011) they may take public action, private action or no action (which is one of the surest signs of a bad or declining relationship between the customer and organization). In case of customs Authority many of them may stop doing that business or exposed to do corruption which will directly affect the revenue of the organization and the development of the Country.

If customers are dissatisfied, the first step is to identify and define their dissatisfaction. Their Wants and needs first must be uncovered and defined to see if the features and benefits of your company's product or services can satisfy those wants and needs. Their dissatisfaction as well as their satisfaction should be measured and analyzed to get a better perception of their true level of dissatisfaction. Once the reason and level of their Dissatisfaction is exposed

then a system to improve that unhappiness can be instituted and a control can be implemented to insure continuation of that improvement in product or Level of service. (www.qualitygurus.com). It will also be explained more in service recovery part mentioned below. This is why some literature suggests that service recovery is inevitable.

2.2 Empirical Review

2.2.4 Relationship between Service Quality, Service Recovery and Customer Satisfaction

The true test of a firm's commitment to satisfaction and service quality isn't in the advertising promises or the decor and ambience of its offices, but in the way it responds when things go wrong for the customer (Lovelock & Wirtz 2011). Recent research suggests that customer satisfaction in which complaints are handled has a direct impact on the trust they place in that supplier and on the trust they place in the supplier and on their future commitment to the firm. (Lovelock & Wirtz, 2011) also pointed out on the components of effective service recovery system as the follows:-

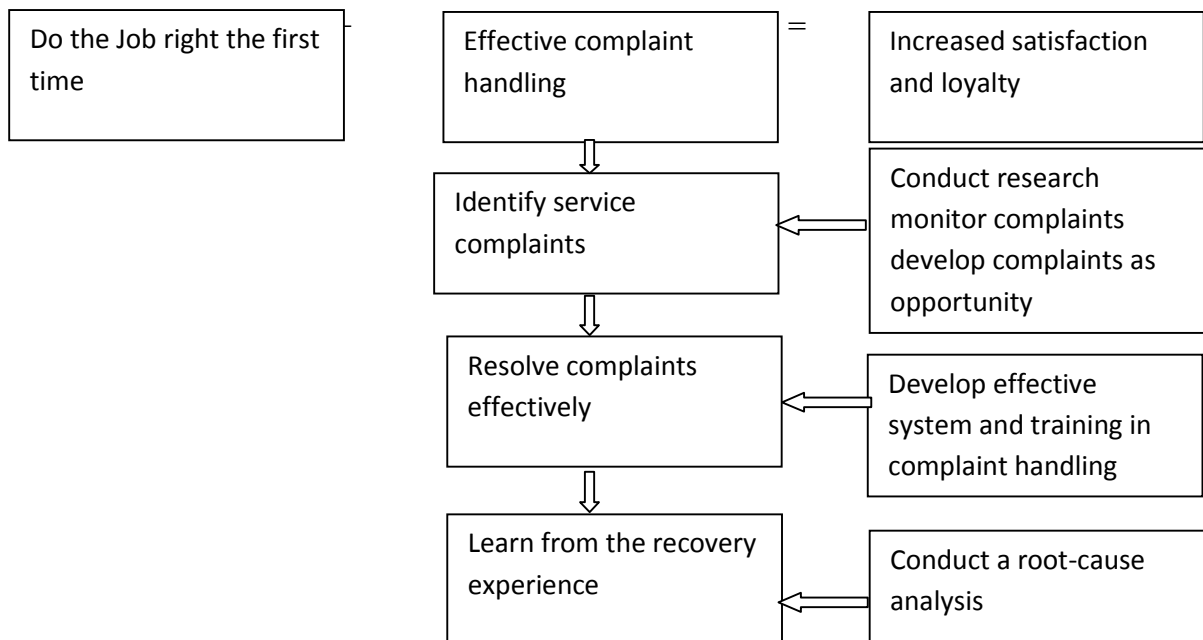


Figure 2.3 components of effective service recovery

Lovelock and Wirtz (2011) also mentioned that service recovery plays a crucial role in restoring customer satisfaction following a service failure.

The relationship between customer satisfaction and service quality has been researched by many scholars, and has received a good deal of attention in the literature (Bolton and Drew; 1994). (Parasuraman et al., 1988) Defined service quality and customer satisfaction as service quality is a global judgment, or attitude, relating to the superiority of the service. Satisfaction is a “post consumption experience which compares perceived quality with expected quality, whereas service quality refers to a global Evaluation of a firm's service delivery system” (Parasuraman et al., 1985).

According to (Zeithaml, et al., 2009) practitioners and writers in the popular press tend to use the terms satisfaction and quality interchangeably, but researchers have attempted to be more precise about the meanings and measurement of the concepts, resulting in a considerable debate. Consensus is that the two concepts are fundamentally different in terms of their underlying causes and outcomes. Although they have certain things in common, satisfaction is generally viewed as a broader concept, whereas service quality focuses specially on dimensions of service. Based on this view, perceived service quality is a component of customer satisfaction. Service quality is a focused evaluation that reflects customer perception of reliability, assurance, responsiveness, empathy and tangibles. Satisfaction on the other hand, is more inclusive: it is influenced by perceptions of service quality, product quality, and price as well as situational factors and personal factors.

Michel, Bowen and Johnston (2009) wrote that successful service recovery can enhance customer's perceptions of the quality of the service and organizations, lead to positive word of mouth communications, enhance customer satisfaction and build customer relationships and customer loyalty. Lovelock (1999), also mention that service recovery plays a crucial role in restoring customer satisfaction following service failure and retaining customers goodwill. Recent research suggests that customer satisfaction in which complaints are handled has a direct impact on the trust they place in that supplier and their future commitment. Lovelock and Wirtz(2011) said that encouraging customer feedback provides an important means of increasing customer satisfaction and retention. And McCullough and Bharadwaj (1992) clarified that penetrative service recovery may constitute higher satisfaction as Regards to service that accomplished faultless on the first time.

Also According to Duffy, Miller and Baxley (2006) the level of quality can be measured by two dimensions:-

1. The outcome or what the customer actually receives as part of the firms efforts to recover and
2. The process of recovery and how the recovery is accomplished

Therefore, as we see from the previous research, there are direct relationships between quality service and customer satisfaction and there are also direct relationship between service recovery and customer satisfaction, there is also a significant relationship between service recovery and quality service. In this research paper the effect of service recovery and quality service to get customer satisfaction can be also checked.

2.3 Conceptual Framework

This paper explains the relationships among service quality, service Recovery and customer satisfaction within the context of the public service. The proposed conceptual model (as depicted in Figure2.4) is based on the three existing service factors; each of which has attracted a large body of research.

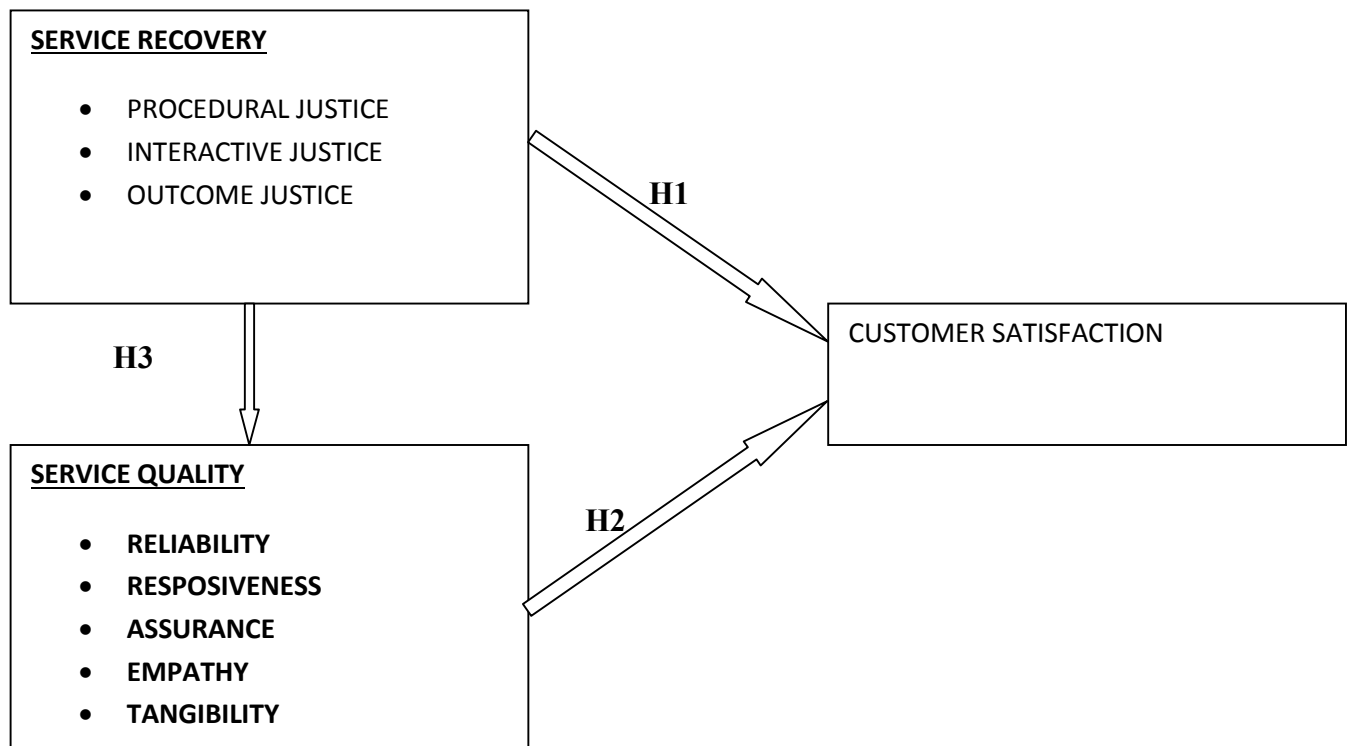


Figure 2.4 conceptual framework (source: Researchers work)

2.3.4 HYPOTHESIS

The theory which support the hypothesis formulation was discussed in the empirical review

H1a: Service recovery has a significantly positive effect on customer satisfaction

H1o: Service recovery does not have a significantly positive effect on customer

H2a: Service quality has a significantly positive effect on customer satisfaction.

H2o: Service quality does not have a significantly positive effect on customer satisfaction

H3a: Service recovery dimension has a significantly positive effect on service quality

H3o: Service recovery dimension does not have a significantly positive effect on overall service quality

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This chapter includes the most important part which is the methodology used in this research paper. It includes research method, research design, the population and sample taken, the instrument for data collection, how the reliability and validity of the study was tested and controlled, how this research paper will be analyzed and the ethical consideration and research procedures will be explained.

3.1 Research Approach

There are four types of research approaches namely quantitative, qualitative, and pragmatic and Advocacy/ participatory approach to research.

The Quantitative research approach: - involves converting data to numerical form. Therefore, statistical calculations can be made and conclusions drawn. Qualitative research approach on the other hand is the approach usually associated with the social constructivist paradigm which emphasizes the socially constructed nature of reality. It is about recording, analyzing and attempting to uncover the deeper meaning and significance of human behavior and experience, including contradictory beliefs. And Pragmatic approach to research (mixed methods) is used when the researcher tried to use both qualitative and quantitative approach at the same time, this involves using the method which appears best suited to the research problem and not getting caught up in philosophical debates about which is the best approach. And finally Advocacy/participatory approach to research(emancipator) To some degree, researchers adopting an advocacy/participatory approach feel that the approaches to research described so far do not respond to the needs or situation of people from marginalized or vulnerable groups. As they aim to bring about positive change in the lives of the research subjects, their approach is sometimes described as emancipator.

This research has the approaches of pure (theoretical) research type. Pure research is usually used to develop new knowledge that advances our understanding of the real world. It evaluates concepts and theories and thus attempts to expand the limits of existing knowledge. It may also help in rejecting or supporting existing theories about the real world (Adams et al, 2007).

In this research paper the pragmatic approach to research (mixed method) approach was applied. The pragmatic approach to science involves using the method which appears best suited to the research problem and not getting caught up in philosophical debates about which is the best approach. In which all the quantitative data was collected from the customers and some qualitative data can be taken from the managers.

3.2 Research Method

Explanatory type research was employed as a main research method of the study in which the effect of service quality and service recovery on customer satisfaction were studied and explained. Cross-sectional studies, also known as one-shot or status studies are the most commonly used design in the social sciences in which two structured surveys were developed. These surveys were prepared based on the five dimensions of service quality dimensions identified by Parasuraman et al (1988), and the three dimensions of service recovery models developed by Stephen and Tax. The data collected in this research are quantitative and qualitative. Because of the complexity of the service quality in public sector as we see in literature part above, the qualitative data can be collected by interviewing branch managers of the of ERCA.

3.3 Research Design

Research design is the blue print for fulfilling research objectives and answering research questions, it is a master plan specifying the methods and procedures for collecting and analyzing the needed information collected is appropriate for solving a problem (Adams et al 2007) Research design represents the major methodology driving the study, which are distinctive and specific research approaches that are best suited to answer the research question (Comack, 1996). The purpose of the research design, as stated by Burns and Grove (2001) is to achieve greater control of the study in examining research problem. According to Adams et al (2007) the research design are classified into 3 groups.

4. Research designs in terms of controlling method are categorized into Experimental, quasi-experimental and observational or non-experimental research design
5. Research design in terms of time sequences are prospective and retrospective designs
6. Research designs in terms of sampling method are categorized into clinical trial, cohort study, case control study and cross-sectional study.

According to (Marczyk, DeMatteo, & Festinger 2005) although there are endless ways of classifying research designs, they usually fall into one of three general categories: experimental, quasi-experimental, and non-experimental. This classification system is based primarily on the strength of the designs experimental control. To determine the classification of a particular research design, it is helpful to ask several key questions. First, does the design involve random assignment to different conditions? If random assignment is used, it is considered to be a randomized, or true, experimental design. If random assignment is not used, then a second question must be asked: Does the design use either multiple groups or multiple waves of measurement? If the answer is yes, the design is considered quasi-experimental. If the answer is no, the design would be considered non-experimental (Trochim, 2001). Although each of the three types of research designs can provide useful information, they differ greatly in the degree to which they enable researchers to draw confident causal inferences from a study's findings.

Therefore, in this study from the research designs mentioned above, experimental, retrospective and case control research design was employed because in experimental design researchers plan to measure the response variable in this case customer satisfaction depending on the explanatory variable (service quality and service recovery). Measuring the effect of service quality and service recovery on customer satisfaction is an outcome measure for predicting or forecasting the purpose of the study. Also in retrospective design, the researcher gathers data at once and classifies the participants simultaneously into group categories (in which the data in the form of survey will be done once). Case control study is a type of research design in which the researcher gathers data once and then looks into the past of the participants to classify them.

The questions in the surveys were tailored to identify management and customer perceptions of service-quality and service recovery practices and outcomes within the Ethiopian revenue and customs Authority. Customer satisfaction was assessed through three statements relating to the services provided by the department, services given by employees, and queuing time at the service counter. Customers rated these statements on a five point Likert type scale from "strongly disagree" (1) to "strongly agree" (5). A manager of the four branches has been given their response in the form of interview the level of service performance on their perceptions of the organization's current performance. And all the survey questions prepared to collect data from customers will be translated to Amharic language.

3.4 Population and Sampling

All individual of interest to the researcher are called population (Marczyk, DeMatteo, & Festinger 2005), and sampling is a procedure that uses a small number of units of a given population as a basis for drawing conclusions about the whole population (Albaum, 1997)

The target population for the study was ERCA tax payers, in which ERCA large, middle and small tax payers found at Addis Ababa was taken as a sampling frame.

According to Marczyk, DeMatteo, & Festinger (2005) a sample size has been identified as a part of the target population and researchers should carefully select the sample to represent the population of the study. In order to get the representatives, sampling procedures should follow certain standards and methodological principles (Sarankos, 2005). In general, sampling procedures vary considerably. Hill.N and Alexander J. (2000) indicated that the sample could be constructed through self-selection or, as was common, could be determined by researchers. Malhotra (2007) claimed that, theoretically, the sampling procedures conducted were mainly based on probability standards (random or probability samples) and non-probability sample method.

Lovelock and Wirtz (2011) wrote that, the 4 types of resource central to the development of successful service system are Employees, customers, Technology and time. On the decision of who will be the respondents of the study the study will focus first on the nature of the variable under consideration as follows. Service recovery is the objective of the organization to recover the service failed, even though the service providers have more clear idea than the customers this research is seen from the perspective of the customers.

Sample size selected for this study were mentioned as follows

The eventual sample size is usually a compromise between what is desirable and what is feasible. Also according to Kereje and Morgan table 1970 the table shows 385 respondents for the population of 32,100 population size (which is taken from ERCA large tax payers, Estern Addis Ababa middle tax payers and Lafto sub-city small tax payers.

	Number of customers	Percent
Large tax payers	1,100	3.426
EA middle tax payers	17,000	52.95
Lafto sub-city small tax payers	14,000	43.61
Total	32,100	100

Table 3.1 the total population and sample size

The Table is constructed using the following formula for determining sample

Formula for determining sample size

$$S = \frac{X^2 NP(1-P) + d^2(N-1) + X^2 P(1-P)}{d^2}$$

Where, s=required sample size

X^2 =the table value of the chi-square for 1 degree of freedom at the desired confidence level (3.841)

N=the population size

P= the population proportion (assumed to be 50 since this would provide the maximum sample size)

d= the degree of accuracy expressed as a proportion (0.05)

(Source: Kereje & Morgan 1970)

The sampling technique planned to be used in this study is:

- **Is cluster sampling techniques** Cluster sampling refers to a type of sampling method in which the researcher divides the population into separate groups, called clusters? Then, a simple random sample of clusters is selected from the population. The researcher conducts his analysis on data from the sampled clusters. Population is observed to be heterogeneous in nature (Large, medium and small tax payers) there is also some data taken from management in an interview form. Therefore, respondents are classified based on the different tax payers they are classified in.

3.5 Data Collection Instruments

According to Anol bhattacharjee(2012) survey research is a research method involving the use of standardized questionnaires or interviews to collect data about people and their preferences, thoughts and behaviors' in a systematic manner.

In this research paper managers and customers are selected as a respondent. In the collection of data, the data collection techniques designed will be:-

Based on the literature the data collection techniques used in this research paper will be:-

- Questioner (for the data taken from customers of ERCA local tax payers).
- Interview technique will be also used to take some part of data on service recovery and service quality and the current performance of ERCA from managers of the branches.

Customer satisfaction was assessed through three statements relating to the services provided by the department, services given by employees, and queuing time at the service counter. The secondary data found on the official website of ERCA, the proclamation of the law of our country, internal memo of the office, and the selected department in the office like the customer service department documentation and guidelines, planning department documentation, research done on the office at different time (N.B as on the proclamation 587 of the organization must do research continuously when needed) will be expected to give important information in the collection of data.

Some of the advantages of survey are; first, survey is an excellent vehicle for measuring a wide variety of unobservable data such as people's preferences, traits, attitudes, beliefs behaviors or factual information. Second research is economical in terms of research time, effort and cost than most other methods such as experimental research and case research. Third, due to their unobtrusive nature and the ability to respond at one's convenience, questionnaire survey are preferred by some respondents (AnolBhattacharjee, 2012)

A questionnaire is a research instrument consisting of a set of questions (items) intended to capture responses from respondents in a standardized manner. Structured questions ask respondents to select an answer from a given set of choices (AnolBhattacharjee, 2012).

So that in this research two types of survey questions was prepared the first one was prepared for customer in the form of questionnaire and the other was prepared in the form of an interview to collect qualitative data from the managements of the organization. The questionnaire will be distributed to the sample of the population designed as per this study was designed in a likert scale questions. Likert scale questions are designed according to Rensislikert, which is a popular rating scale for measuring ordinal data in a social science research. This scale includes likert items that are simply worded statements for which respondents can indicate their extent of agreement or disagreement on a five or seven point scale ranging from strongly disagree to strongly agree. (AnolBhattacharjee, 2012)

The constructs of the study are measured mainly using five point likert scale. Questionnaires using 5-point likert scale was anchor of (1) strongly disagree to (5) strongly agree can reduce reliability of the responses. Besides, it also simplifies coding, analysis and interpretation of data.

3.6 Reliability and Validity

Validity and reliability are interconnected concepts (Sullivan & Feldman, 1979). This can be demonstrated by the fact that a measurement cannot be valid unless it is reliable. Validity is concerned not only with what is being measured, but also how well it is being measured. Think of it this way: If you have a test that is not reliable, how can it accurately measure the construct of interest? Reliability, or consistency, is therefore a hallmark of validity (essential for research).It is believed that validity is more important than reliability because if an instrument does not accurately measure what it is supposed to, there is no reason to use it even if it measures consistently (reliably).(Marczyk, DeMatteo, &Festinger 2005)

Adams et al (2007) mention that Reliability estimates the consistency of the measurement or more simply, the degree to which an instrument measures the same way each time it is used under the same conditions with the same subjects. Reliability is essentially about consistency. That is, if we measure something many times and the result is always the same, then we can say that our measurement instrument is reliable. In other words, when the outcome of the measuring process is reproducible, the measuring instrument is reliable this does not mean that it is valid! It simply means that the measurement instrument does not produce erratic and unpredictable results. It may be measuring a variable wrongly all the time but as long as it measures it consistently wrongly, it will be considered reliable! This may seem odd but what it basically

means is that reliability is a necessary condition for validity but not a sufficient condition on its own.

There are two ways by which reliability is usually assessed: first, by checking the stability of measurement using the test-retest method (repeatability) and second, by examining internal consistency or applying the split-half method.

a. Test-retest Method

Assessing the repeatability of a measure is the first aspect of reliability. The test-retest method is a conservative method to estimate reliability. The idea behind it is that one should get the same score on a given test on repetitive testing.

b. Split-half Method/Equivalent form Method

The technique of splitting halves is the most basic method for checking internal consistency when a measure contains a large number of items. In the split-half method, one may calculate results from one-half of the scale items. However, in the equivalent-form method, two alternative instruments are designed to be as equivalent as possible. Internal consistency estimates reliability by grouping questions in a questionnaire that measure the same concept, this will be tested by preparing two sets of three questions that measure the same concept and after collecting the responses, run a correlation between those two groups of three questions to determine if your instrument is reliably measuring that concept. The closer the correlation coefficient is to one, the higher the reliability estimate of the instrument.

Both the split-half and equivalent-form methods measure homogeneity or internal consistency rather than stability over time.

To test the reliability of this research, The research instrument was analyzed using Cronbach's α values for each dimension using data on perceptions and the differences between the perceptions of customers and managements. Cronbach's coefficient less than 0.6 is weak, 0.7 is acceptable and more than 0.8 is very good (Amirshahi and Mazhari, 2008).

Validity on the other hand refers to the degree of relationship or the overlap between an instrument and the construct it is intended to measure (Crano and Brewer, 2002). According to Adams et al (2007), Validity is the strength of our conclusions, inferences or propositions. It

involves the degree to which you are measuring what you are supposed to, more simply, the accuracy of your measurement.

There are four types of validity commonly examined in research methods.

- (i) Internal Validity asks if there is a relationship between the program and the outcome we saw, is it a causal relationship?
- (ii) External Validity refers to our ability to generalize the results of our study to other settings.
- (iii) Construct Validity is the hardest to understand. It asks if there is a relationship between how the researcher operationalizes concepts in the study to the actual causal relationship that he/she is trying to study.
- (iv) Conclusion Validity asks is there a relationship between the programme and the observed outcome?).

Content-related validity refers to the relevance of the instrument or measurement strategy to the construct being measured (Fitzpatrick, 1983)

Criterion validity is determined by the relationship between the measure and performance on an outside criterion or measure. The outside criterion or measure should be related to the construct of interest, and it can be measured at the same time the measure is given or sometime in the future.

3.7 Data Analysis Techniques

The data were collected from the customers and managers of the organization; the collected data was organized in order to remove errors. The data will be classified, coded and analyzed with the help of statistical package for social science (SPSS) software program. Both descriptive and inferential statistics were used to analyze the data based on objectives of the study.

All the descriptive information on the survey data was analyzed using descriptive statistics; Correlation analyses were conducted to check the relationships among the service-quality dimensions and service recovery dimensions and customer satisfaction. And the regression analysis where done to analyze the main hypothesis of the study the effects between all the predictor variables on the survey data collected in a questionnaire form. And the qualitative data was analyzed manually.

3.8 Ethical Considerations

According to Crano and Brewer (2002) research ethics includes deception and participant wellbeing, explaining the study to participants at the end, protecting confidentiality of data and methodology as ethics (honesty in reporting methods and results).

Based on all the above literatures on research ethics, the following ethical consideration was applied at every step of this study:-

Informed consent: -all the participant was informed the aim of this study before they fill the questionnaire, which is eligible to fill that questionnaire from customer and also from managers, who is the researcher, the purpose of the study and how it directly or indirectly affects them. It was also mentioned on the questionnaire paper that the respondent who is legal to fill this questionnaire must pay his/her taxes by representing organization or by themselves for at least 3 months. All was mentioned in questionnaire paper and also clearly presented to them verbally before they fill the questionnaire.

Seeking sensitive information: - in the case of this study, specially political issues and other similar sensitive cases that may harm the organization, customers and also the relationship between customer and organization will be seriously avoided as much as possible.

Voluntary participation and harmlessness: - the only voluntary participation is needed in giving response to this research and all the data will be kept in security by keeping all the secrets of the organization and also that of the customer in a safe way.

Anonymity and confidentiality: - the responses received from participants was first observed by the researchers and if he/she didn't fill all the questions accordingly, and also if the customer are angry with the office at that time he/she was excluded from the respondent and finally all the data filtered first by the researcher was kept highly confidential.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION

Introduction

This chapter contains the analysis, interpretation and presentation of the survey data collected through structured questionnaire and interview. The data collected through questionnaire from customers were translated to Amharic language and analyzed using SPSS version 20. According to the objectives of the study, the questionnaire was prepared by using SERVPERF model for the service quality and Stephen and tax model of service recovery and the customer satisfaction rating as per the perception of the customers. The entire survey questionnaire was collected from customers and a few qualitative data by interview techniques were collected from managers. And the likert scale questions collected from customers can be analyzed as a scale measurement. The data collected in questionnaire form was structured as a 5 scale likert scale ratings. The analysis includes the correlation analyses and then regression analysis

4.1 Number and percentage of respondents

From 385 distributed questionnaires 330 questionnaires were collected, which represent 87.5% of the total distributed questionnaires. After checking the retrieved questionnaires, the 284 were found valid for statistical analysis. Ultimately 74% of the total sample size taken for this study.

From the 284 respondents 184 respondents or 64.8% were male and 100 respondents or 35.2% of the total respondents were female. And 113 or 39.8% of respondents were between the Age of 18-29 , 108 or 38% of respondents were between 30-39 ages , 41 respondents or 14.4% were between the ages of 40-49 , and there are 22(7.7%) people whose ages are 50 and above. The marital status of the respondents were 114 or 40.1% are single, 163 respondents (57.4%) married and 6(2.1%) of respondents are divorced. The education levels of the respondents are 15(5.3%) were elementary school and below, 39(13.7%) were completed secondary school, 81(28.5) were certificate and diploma holder, 130(45.8%) were first degree holder and 19(6.7%) were holder of masters and above. And 22(7.7%) of the respondents are Large tax payers, 137(48.2%) of the respondents are middle tax payers and 125(44%) of the respondents are from small tax payers. 119(41.9%) of the respondents have complaining experience on the service they get from ERCA and 165(58.1%) of the respondents are not complained before this day on the service they

received from ERCA. the complain experience of respondents have relationship with overall customer satisfaction, and those customers who complain before are less satisfied than those customers who didn't complain on the service they get from ERCA before. Therefore this result indicates that, there may be either of the customers of ERCA didn't familiar with the expectations of ERCA or the service of ERCA does not meet the expectation of customers.

And greatest satisfaction of customers found in ERCA large tax payers and a small satisfaction of customers were a few in small and medium in middle tax payers.

(Source: data survey 2016).

4.2 Reliability Test

(Hair et al., 2007) state reliability as an extent to which a variables or set of variables are consistent in what it is intended to measure". (Siddiqi 2011) said Reliability analysis is used to measure the consistency of a questionnaire. There are different methods of reliability test, for this study Cronbach's alpha is considered to be Suitable. Cronbach's alpha is the most common measure of reliability. For this study the Alpha coefficient for the overall scale calculated as a reliability indicator is 0.972 which is greater than the cutoff value of 0.7 suggested in the literature of (Eze et al.,2008). The alpha Value above 0.8 therefore is good. The individual Alpha coefficients for all the dimensions were between 0.754 and 0.907. As Described by Andy (2005) the value of Cronbach's alpha around 0.8 is good and the value greater than 0.7 is acceptable.

Table 4.1 reliability test

The service quality and service recovery dimensions	Number of attributes	Cronbach's Alpha of Perceived Performance
Service recovery dimensions	(11 questions)	0.920
1. Outcome justice	3	0.824
2. Procedural justice	3	0.797
3. Interactional Justice	5	0.895
Service quality dimensions	(21 questions)	0.953
1. Reliability	4	0.879
2. Responsiveness	4	0.879
3. Assurance	4	0.859
4. Empathy	5	0.861
5. Tangibles	4	0.774
Customer satisfaction	3	0.907

(Source: data survey 2016)

4.3 Normality Testing

The data was checked to exclude the outliers from the data before any analysis can be done to get the right findings and remove false interpretation in this study. Outliers can cause your model to be biased because they affect the values of the estimated regression coefficient(Andy 2005) .And the normality of the data and selection of outliers in this study were done by checking the skewness(the measure of symmetry , or more precisely, lack of symmetry), kurtosis(is a measure of whether the data are heavy-tailed or light-tailed relative to a normal distribution) and histogram(an effective graphical technique for showing both the skewness and kurtosis of data set)of this study first in which all the skewness value is less than two and the value for the kurtosis value is less than six (Mardia 1970) so that this value is checked and there in no data collected for this study which have skewness above 2 and all have the kurtosis value less than six. And the Histogram shows the normal distribution. Andy (2005) mention that the histogram looked like a normal distribution (a bell shaped curve). SPSS draws the show of histogram to show the shape of the distribution, this assumption is also checked.

Andy field (2005) mention that, before conducting any correlation and regression analysis it is essential to plot a scatter plot to look at the general trend of the data. A scatter plot is simply a

graph that plots each person's score on one variable against their score on another (and their score on one variable can also be included in a 3-D scatter plot). A scatter plot tells us several things about the data such as whether there seems to be a relationship between the variables, what type of relationship it is and whether any cases are markedly different from the others. A case that differs substantially from the general trend of the data is known as an outlier and such cases can severely bias the correlation coefficient. From the Graph of the survey data (2016) described in appendix part it seems that, there are no obvious outliers in this study because in most points it falls within the vicinity of other points. There are some general trends in the data such that medium levels of service recovery are associated with medium level of customer satisfaction or as the service recovery increased customer satisfaction also increased. And because of the treatment given to customers in large taxpayers, medium tax payers and small tax payers differs in quality, the low service recovery process is highly related to dissatisfaction of customers. As we see from this data it seems there are some outliers because of the varied customer satisfaction and treatment in three branches undertaken in this study. Also from the graph those customers who complain before to these organization was not satisfied with the service they take from ERCA. Most of the dissatisfied customers are from small and middle tax payers.

4.4 Descriptive Analysis

Table 4.2 Descriptive Statistics

	mean	Std. Deviation	N
Overall customer satisfaction	2.79	1.105	284
Overall service quality	2.82	0.846	284
Overall service recovery	2.84	0.860	284
Responsiveness	2.82	1.021	283
Assurance	2.73	0.973	284
Empathy	2.70	0.930	281
Tangibility	3.21	0.953	283
Reliability	2.66	1.016	283
Interactive justice	2.92	1.041	279
Procedural justice	2.83	1.007	283
Outcome justice	2.76	0.925	282

5. This table tells us the mean and standard deviation of each variable in our data set and all the number of the respondents.

4.5 The correlation analysis

The Pearson Correlation Coefficient(r) was used to check the correlation between all the variables used in this study. Pearson correlation is applicable for the data measured as an interval scale for the accurate measure of the linear relationship between two variables (Andy 2005) Correlations are the measure of the linear relationship between two variables. A correlation coefficient has a value ranging from -1 to 1. Values that are closer to the absolute value of 1 indicate that there is a strong relationship between the variables being correlated whereas values closer to 0 indicates that there is little or no linear relationship (Fikre et al, 2009:78)

Table 4.3 the **relationship between service recovery dimensions and customer satisfaction**

	Outcome justice	Procedural justice	Interactional justice
Customer satisfaction	0.685	0.671	0.766

The correlation is significant at the 0.01 level (2 tailed)

(Source data 2016)

- a. **Outcome Justice:** is one of the dimensions of service recovery taken in this study and it concerns compensation a customer receives as a result of the losses and inconveniences incurred because of service failure. (Lovelock and Wirtz 2011). In the context of ERCA it concerns the correction on the complaint of customers and the fair treatment ERCA gives to its customers.

From the SPSS output the Pearson correlation (r) between outcome justice and customer satisfaction is 0.685 by bivariate correlation and the p-value is .000 which is less than the significant level 0.01. This shows that positive correlation coefficient (0.685) indicates that there is a positive correlation between outcome justice and customer satisfaction in the Ethiopian revenue and custom Authority's selected branches. From this we conclude that when there is an increase in the outcome justice (fair and right compensation and correction in response to the customer complain) there is an increment in customers' satisfaction

- b. **Procedural justice:** -concerned policies and rules that any customer has to go through to seek fairness. (Lovelock & wirtz 2011, p.375) in the context of ERCA and this study, it is about the rules and policies and processes on work and how smart and intelligent are the rules policies that ERCA are currently employing.

The correlation(r) for procedural justice is 0.671 by bivariate correlation at p value of 0.000 which is less than the significant level 0.05. This positive correlation coefficient indicates that there is a large positive correlation between procedural justice and customer satisfaction in the case of ERCA's selected branches for this study. From this result we conclude that when there is an increase in quality of procedural justice (short processes at work place) there is an increment in customer satisfaction.

- c. **Interactive justice:**-involves employees of the firm who provide the service recovery and their behavior toward the customer giving an explanation for the failure and making an effort to resolve the problem are very important (lovelock & wirtz 2011, p.375).

So by using the Pearson correlation, The correlation(r) for interactive justice is 0.766 by bivariate correlation coefficient at p value 0.000 which is less than the significance value of 0.05 this shows that there is a positive correlation between interactive justice and customer satisfaction even more than the other dimensions taken in this study, in the case of ERCA's selected branches for this study. From this result we conclude that when there is an increase in quality of procedural justice (smart and intelligent processes at work place) there is an increment in customer satisfaction.

Therefore, we conclude that there is a positive correlation between service recovery dimensions and customer satisfaction.

Table 4.4 **the relationship between service quality dimensions and customer satisfaction**

	Reliability	Responsiveness	Assurance	Empathy	Tangibility
Customer satisfaction	0.752	0.748	0.74	0.753	0.527

The correlation is significant at the 0.01 level (2 tailed)

(Source: survey data 2016)

And the dimensions of service quality's relationship with customer satisfaction can be explained as follows:-

- a) **Reliability:** - is the ability to perform the promised service dependably and accurately. And this gets great correlation with customer satisfaction than any other service quality (SERVQUAL) dimensions in many other studies. In the case of ERCA, The correlation (r) of reliability with customer satisfaction is 0.752; at significance 0.000 this shows that there is a strong correlation between reliability and customer satisfaction.
- b) **Responsiveness:** - is willingness to help customers and provide prompt service. From the Pearson correlation the correlation between one of the service quality dimension (responsiveness) and customer satisfaction is 0.748 and it is significant so that this shows that there is a great correlation between responsiveness and customer satisfaction.
- c) **Assurance:** -credibility, security competence and courtesy. As shown in the table above the Pearson correlation between assurance and customer satisfaction is 0.74 which shows there is great correlation between this dimension and customer satisfaction.
- d) **Empathy:** -caring, individualized attention the firm provides its customers. Therefore the correlation analysis using Pearson correlation for the correlation between empathy and customer satisfaction at a 0.000 significance level is 0.753 which again show that there is a strong correlation between empathy and customer satisfaction.
- e) **Tangibles:** -is appearance of physical facilities, equipment, personnel, and communication materials. The Pearson correlation(r) between tangibles and customer satisfaction is 0.5627, which have a significant value, shows that there is a relationship between tangibility and

customer satisfaction but it have little correlation value than all other dimensions of service quality taken in this study.

Therefore it is safely concluded that, there is a relationship between service quality dimensions and customer satisfaction.

Table 4.5 the relationship between service recovery dimension and overall service quality

	Outcome justice	Procedural justice	Interactive justice
Overall service quality	0.686	0.720	0.821

Therefore we can safely conclude that the three service recovery dimension taken in this study have a positive relationship with service quality.

Table 4.6 the relationship between overall service recovery, overall service quality and overall customer satisfaction

	Overall service quality	Overall service recovery	Overall customer satisfaction
Overall service quality	1	0.852	0.836
Overall service recovery	0.852	1	0.830
Overall customer satisfaction	0.836	0.830	1

The correlation is significant at the 0.01 level (2 tailed)

(Source survey data 2016)

Table 4.5 shows that there is a strong correlation(r) between the two independent variables (service recovery and service quality) and customer satisfaction when displayed by the bivariate correlation. The correlation coefficients for each path that is, the links between each of the variables are statistically significant. These results indicate that, at the bivariate level, each of the conditions necessary to test for the possible role of a mediator has been met.

The correlations between all the three variables which are also discussed in the correlation part above. In addition to the one discussed in correlation part, this table shows the value of the Pearson correlation coefficient between every pair of variables, the one-tailed significance of

each correlation is displayed which is 0.000 and this is acceptable because the value of $p < 0.001$ is significant) and finally the table shows the total number of respondents.

Both predictors and outcome are highly correlated and service quality has more correlation with customer satisfaction than service recovery with the value of $R=0.863$, $p=0.000$ which shows the correlation of service quality dimension with customer satisfaction is higher than that of service recovery. Therefore, it is likely that service quality will best determine customer satisfaction.

4.6 The Regression Analysis

We have seen the correlation between service recovery, service quality with customer satisfaction in the correlation part above, and we get the result which shows there is a correlation between all the three variables taken in this study. However, the correlation part tells us only the relationship between the variables and it is in regression part that the interpretation will be done

According to Andy (2005) to draw conclusions about a population based on a regression analysis done on a sample, several assumptions must be true (Berry 1993)

1. All predictor variables must be quantitative and measured by interval and the outcome variable must be quantitative, continuous and unbounded. In this measurement all our data are measured as a scale and the outcome (customer satisfaction) is quantitatively measured. So that it is correct to conclusion using the regression analysis according to this assumption.
2. Non-zero variance, the predictor should have some variation in value(i.e. they do not have variances of zero), so the variance of the predictor for this study is different from zero, so that drawing conclusion by regression analysis is correct according to this assumption.
3. No perfect multicollinearity: - there should be no perfect linear relationship between two of more of the predictors. So, the predictor variable predictor variable should not correlate too highly.

The perfect multicolliniarity exists when the correlation between all the variables becomes 1, and it is identified that the correlation between all the variables in this study didn't have the perfect multicollinearity, this assumption was also checked by the VIF

and tolerance value from the regression analysis table that the value of VIF are less than ten and this assumption was also checked.

4. Predictors are uncorrelated with external variables: - external variables are variables that haven't been included in the regression model which influence the outcome variable. There are no external variables that correlate with any of the variables do correlate with the predictors therefore this assumption is also checked
5. Homoscedasticity:- at each level of the predictor variables, the variance of the residual terms should be constant. This just means that the residuals at each level of the predictors should have the same variance (homoscedasticity). When the variances are very unequal there is said to be heteroscedasticity.
6. Independent errors: - for any two observations the residual terms should be uncorrelated (or independent). This eventually is sometimes described as a lack of autocorrelation. This assumption is tested with the Durbin-Watson test, which tests for serial correlations between errors, the value for this test is between 0 and 4 and the value greater than two shows there is residual uncorrelation and the value less than two shows there is a positive residual correlation. As a very conservative rule of thumb, values less than 1 or greater than 3 are definitely cause for concern; however, values closer to 2 may still be problematic depending on your sample and model.
7. It is assumed that all of the values of the outcome variable are independent (the values of the outcome variable comes from a separate entity).
8. Normally distributed errors:- the differences between the model and the observed data are most frequently zero or most frequently zero
9. Linearity: - the mean values of the outcome for each increment of the predictors lie along a straight line. In plain English this means that it is assumed that the relationship we are modeling is a linear one. If we model a non-linear relationship using a linear model this obviously limits the generalizability. This are checked by the scatter plot and the result shows that there is linear relationship between the service recovery, service quality and customer satisfaction.

4.6.1 The Effect of Service Recovery on Customer Satisfaction

The effect of all service recovery dimensions where analyzed by linear regression analysis

1. Hypothesis 1

Ha: Service recovery has a significantly positive effect on customer satisfaction

Ho: service recovery does not have a significantly positive effect on customer satisfaction

To check the first hypothesis we have identified in the correlation part that there is a positive relationship between service recovery dimensions and customer satisfaction and the effect of all the service recovery dimensions were clearly explained in this regression part.

Table: 4.7 the regression analysis of service recovery dimensions and customer satisfaction

Model	Unstandardized		Standard ized beta	T	Sig	F	R	R ²	sig
	B	st.error							
Constant	-0.211	0.126	-	-1.670	0.096	212.073	0.833	0.694	0.000
Outcome justice	0.308	0.56	0.257	5.1529	0.000				
Procedural justice	0.241	0.051	0.220	4.711	0.000				
Interactional justice	0.501	0.051	0.468	9.812	0.000				

(Source: the data survey 2016)

Table 4.7 above tells us that, The B value tells us about the relationship between the three predictors and customer satisfaction, this shows that there is a positive relationship between the three predictors (outcome, procedural and interactional justice). This means when the three predictors increase customer satisfaction also increase.

The significant value of t indicates that the slope of the regression is line is significantly different from zero. If the t-test associated with B value is significant $\text{sig} < 0.05$. Then the predictor is making a significant contribution to the model. The smaller the value of sig (the larger the value of t) the greater the contribution of that predictor. Therefore, in this study the interactional justice is the greatest contributor to the model.

The standardized beta tells us the number of standard deviations that the outcome will change as a result of one standard deviation change in the predictor. From all the three predictors taken interactional justice will contribute 0.468 so that this variable is the most degree of importance in predicting customer satisfaction and outcome and procedural justice have less degree of importance to the model.

- a. **Outcome justice** : as the outcome justice is improved by one standard deviation, customer satisfaction can be improved by 0.257, when the other variable keep constant
- b. **Procedural justice** : as the procedural justice is improved by one standard deviation, customer satisfaction can be improved by 0.220, keeping all other variables constant
- c. **Interactional justice**: as the interactional justice is improved by one standard deviation, customer satisfaction can be improved by 0.468, keeping all other variables constant.

Model analysis and tolerance below 0.2 indicates a potential problem (Menard 1995)

And all the tolerance value for this model is more than 0.4 then our model didn't show any problem.

Outcome justice has a 0 degree of variance on dimension 2 and procedural justice have 0.87 degree of variance on dimension 3 and interactive justice has 0.72degree of variance on dimension 4).

The value of R tells us that there is a multiple correlation coefficient of 0.833 between the service recovery dimensions and customer satisfaction and the value of R square 69.4 %($R^2=0.694$) tells us that the variance in the overall satisfaction is explained by the service recovery dimension by this percent. In addition, the results demonstrate that there is positive and statistically significant ($p<0.01$, $F=212.073$) relationship between the service recovery dimensions and overall customer satisfaction. Therefore, the three service recovery dimensions (outcome justice, procedural justice and interactive justice) collectively are significant to affect the satisfaction of the customers of ERCA. Thus, this finding supports hypothesis 1 (H1), that there is positive effect of service recovery dimensions on the customer satisfaction of ERCA's customer. The adjusted R^2 gives us some idea of how well our model generalizes and ideally we would like its value to be the same. Or very close to the value of R^2 . The difference between R^2 and adjusted R^2 tells us ($0.694-.691=0.03$) shows that if the data were taken from all population it will show the variance of 0.03 than the data taken from this sample size. Specifically F-ratio represents the improvement in prediction that results from fitting the model, relative to the inaccuracy that exists in the model. This model have the degree of freedom and $F=212.073$ at $P<0.001$, which tells us that the model have good ability to predict customer satisfaction. Because if the improvement due to fitting the regression model is much greater than the inaccuracy within the model then the value of F will be greater than 1.

Therefore, we conclude that, service recovery have a positive effect on customer satisfaction, so that we reject the null hypothesis and accept the alternative hypothesis of hypothesis number one (H1)

4.6.2 The Regression Analysis of Service Quality Dimensions on Customer Satisfaction

Hypothesis 2(H2)

Table 4.8 service quality dimensions and customer satisfaction

Model	Unstand ardized B	Standa rdized Beta	T	Sig	R	R squar e	F	Si g
Constant	-0.115		-0.872	0.000	0.845	0.714	138.626	0.000
Reliability	0.274	0.252	4.371	0.000				
Responsiv eness	0.219	0.202	3.171	0.002				
Assurance	0.191	0.168	2.753	0.006				
Empathy	0.362	0.303	5.604	0.000				
Tangibles	0.018	0.015	0.359	0.720				

a. Predictors: (Constant), service quality reliability, service quality tangibility, service quality empathy , service quality assurance, service quality responsiveness

a. Dependent Variable: overall customer satisfaction

(Source: survey data 2016)

Table 4.8 above shows

The B value tells us about the relationship between the five predictors and customer satisfaction this value show that there is a positive relationship between the five predictors (reliability, responsiveness, assurance, empathy and tangibility). This means when the five predictors increase customer satisfaction also increase.

The significant value of t test indicates that, the slope of the regression line is significantly different from zero. If the t-test associated with B value is significant $\text{sig} < 0.05$. Then the predictor is making a significant contribution to the model. The smaller the value of sig (the larger the value of t) the greater the contribution of that predictor. Therefore, in this case

Empathy is the greatest contributor to the model followed by reliability, responsiveness and assurance respectively and tangibility is insignificantly contributing to the model.

The standardized beta tells us the number of standard deviations that the customer satisfaction will change as a result of one standard deviation change in the predictor. From all the five predictors taken in this model empathy contributes 0.303 and have a significance 0.000 which shows that Empathy is the most degree of importance in predicting customer satisfaction in the model followed by reliability, responsiveness, assurance respectively and tangibility is insignificantly contributing to the model.

1. For empathy as empathy is improved by 1 unit of standard deviation, customer satisfaction can be improved by 0.303 rates, keeping all other determinant constant.
2. Reliability (beta=0.252) shows that as reliability is improved by one standard deviation, customer satisfaction can be improved by 0.252, keeping other determinant constant.
3. Responsiveness (beta=0.202) shows that as responsiveness is improved by one unit of standard deviation, customer satisfaction can be improved by 0.202, keeping other determinant constant.
4. Assurance (beta=0.168) shows that as the assurance is improved by one unit of standard deviation, customer satisfaction can be increased by 0.168, keeping other things constant.
5. Tangibility (beta=0.015) shows that as the tangibility is improved by one unit of standard deviation, customer satisfaction can be improved by 0.015, keeping other things constant.

the value of R which tells us that there is a multiple correlation coefficient of 0.845 between the service quality dimensions and customer satisfaction and the value of R square 71.4%($R^2=0.714$) tells us that the variance in the overall satisfaction is explained by the service quality dimension by this percent. In addition, the results demonstrate that there is positive and statistically significant ($p<0.01$, $F=138.626$) relationship between the service quality dimensions and overall customer satisfaction. Therefore, the five service quality dimensions (reliability, responsiveness, assurance, empathy and tangibility) collectively are significant to affect the satisfaction of the customers of ERCA. Thus, this finding supports hypothesis 2 (H2), that there is positive effect of service recovery dimensions on the customer satisfaction of ERCA's customer. The adjusted R^2 gives us some idea of how well our model generalizes and ideally we would like its value to be the same. Or very close to the value of R^2 . The difference between R^2 and adjusted R^2 tells us ($0.714-0.709=0.005$) shows that if the data were taken from all population it will show the variance of 0.005 than the data taken from this sample size.

The ANOVA table tells us that whether the model is significantly better at predicting the outcome than using the mean as a ‘best guess’ specifically F-ratio represent the improvement in prediction that results from fitting the model, relative to the inaccuracy that exists in the model. This model have the degree of freedom and F=138.626 at P<0.001, which tells us that the model have good ability to predict customer satisfaction. Because if the improvement due to fitting the regression model is much greater than the inaccuracy within the model then the value of F will be greater than 1.

Therefore, we conclude the analysis for the hypothesis number 2(H2) that service quality has a significant positive effect on customer satisfaction and reject null hypothesis.

Hypothesis three (H3)

4.6.3 The Effect of Service Recovery Dimensions on Overall Service Quality

Table 4.9

Model	Beta	T	Sig	R	R ²	F
Constant		5.296	0.000	0.864	0.747	263.191
Outcome justice	.183	4.238	0.000			
Procedural justice	0.249	5.703	0.000			
Interactive justice	0.538	12.034	0.000			

The above table 4.9 tells us that about 74.7% of the variance in service quality can be explained by the service recovery dimension. The results also demonstrate that there is positive and statistically significant (p<0.01, F=263.191) relationship between service recovery dimension and overall service quality. Therefore the 3 service recovery dimensions (outcome, procedural and interactive justice) collectively are significant to service quality. Additionally the table also tells us that the service recovery dimensions have the same significance levels. So that interactive Justice (beta=0.538) is the most important predictor of the model, followed by procedural justice and outcome justice respectively.

Therefore it was safely concluded that service recovery dimensions have significant contribution to the quality of service in ERCA and hypothesis three (H3) is also checked service recovery have a positive effect on overall service quality. And the mediation effect of service quality between service recovery and customer satisfaction was checked by using sobel tests as follows.

4.7 The Sobel Test

The sobel test checks whether service quality have a mediation effect on service recovery on contributing to customer satisfaction. We checked the Pearson correlation(r) in correlation part for the relationship between service recovery and service quality which is 0.852 and significance level 0.000. The correlation coefficients for each path, that is, the links between each of the variables, is statistically significant. The particularly strong association between customers perceptions of service quality and service recovery is sufficiently large that it may lead to a specific problem (termed multicollinearity) in subsequent stages of the analysis. These results indicate that, at the bivariate level, each of the conditions necessary to test for the possible role of a mediator has been met.

In order to conduct the Sobel test for mediation, we need to compute the raw regression coefficient and standard error for this regression coefficient for the association between the Independent variable and the mediator. And the association between the mediator and dependent variable.

Table 4.10 Coefficients table when service recovery affects service quality

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.448	.093		4.827	.000
	overall service recovery	.837	.031	.852	26.769	.000

a. Dependent Variable: overall service quality

To show the value of A and s_A

(Source data survey 2016)

Table 4.11 **Coefficients when both predictors taken**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.490	.121		-4.055	.000
	overall service recovery	.545	.075	.427	7.290	.000
	overall service quality	.613	.076	.472	8.060	.000

a. Dependent Variable: overall customer satisfaction

(Source data survey 2016)

So that, the value taken to test the sobel test is $A = 0.448$ $SE_A = 0.093$ $B = 0.613$, $SE_B = 0.0713$

and shows the result the test statistic for the sobel test = 0.779, probability=0.42, The fact that the observed p-value does not fall below the established alpha level of .05 indicates that the association between the customer perception of service recovery and customer satisfaction is not reduced significantly by the inclusion of the service quality in the model; in other words, there is no evidence of mediation.

Therefore it can be safely concluded **that, there is no mediation effect of service quality in service recovery and customer satisfaction relationship, but service recovery dimension has a positive significant effect on overall service quality.**

4.8 The Regression Analysis of Overall Service Recovery and Overall Service Quality on Overall Customer Satisfaction

Table 4.12 the effect of overall SQ and overall SR on customer satisfaction.

Model	B	Beta	T	F	R ²	Sig
1.(constant)	-0.276		-2.175	633.168	0.692	0.03
Overall SQ	1.087	0.832	25.63			0.000
2.constant	-0.509		-4.253	410.873	0.743	0.000
Overall SQ	0.616	0.471	8.445			0.000
Overall SR	0.550	0.428	7.668			0.000

a. Predictors: (Constant), overall service quality, overall service recovery

b. Dependent Variable: overall customer satisfaction

(Source survey data 2016)

The above table 4.12 tells us what the outcome variables was and what the predictors in each of the two models (when the service quality is the only determinant of customer satisfaction and when both service recovery and service quality were taken as a predictors for customer satisfaction).

In the column labeled R are the values of the multiple correlation coefficients between the predictors and outcome. When only service quality is used as a predictor, this is the simple correlation between service quality and customer satisfaction. The next column on the summary model table gives us R² which we already know is a measure of how much of the variability in the outcome is accounted for by the predictors. For the first model its value is 0.692 or 69.2% of the variation in customer satisfaction. However, when the other predictors' service recovery is added to service quality to predict the customer satisfaction, this value increases to 0.745 or 74.5% of the variance in customer satisfaction. Therefore if service quality is the only predictors it measures 69.2%, we can conclude that service recovery account for an additional 5.3% increase. Therefore, the inclusion of service recovery has explained quite a little amount of the variation in customer satisfaction.

The adjusted R^2 gives us some idea of how well our model generalizes and ideally we would like its value to be the same or very close to the value of R^2 , in fact the difference is 0.2% (0.745-0.743) this shrinkage means that if the model were derived from the population rather than from samples it would account for approximately 0.2% less variance in customer satisfaction.

The change statistics are provided only if requested and this tells us whether the change in R^2 is significant. The significance of R^2 can actually be tested using an F-ratio. The change in this F is reported for each block of hierarchy. Therefore, Model one when only service quality is a predictor for customer satisfaction causes R^2 to change from zero to 0.692 and this change in the amount of variance explained the F-ratio of 633.7 which is significant with a probability less than 0.001. the addition of the new predictors (service quality) causes R^2 to increase by 0.053, so change in the amount of variance that can be explained gives rise to an F-ratio of 58.8 which is again significant at $P < 0.001$. The change statics therefore tell us about adding new predictors to the model.

From the Anova table the F-ratio represents the ratio of the improvement in prediction that results from fitting the model, relative to the inaccuracy that still exists in the model

This table again split into two sections , one for each model , the sum of squares for the model represents the improvement in prediction resulting from fitting a regression line to the data rather than using the mean as an estimate of the outcome, the residual sum of squares represent the total difference between the model and the observed data. df(degree of freedom) is one for the first model and two for the second model.

The first model when only service quality is taken as the only predictors has two coefficients (one for the predictors and one for the constant). Whereas, the second has three (one for each of SQ and SR and CS). Therefore model 1 has 282 degrees of freedom and model 2 has 283 degrees of freedom. The average sum of squares (MS) is then calculated by dividing SS by df. The F-ratio is calculated by dividing the average improvement in prediction by the model (MSm) by the average difference between the model and observed data (MSR). If the improvement due to fitting the regression model is much greater than the inaccuracy within the model then the value of F will be greater than 1 and SPSS calculates the exact probability of obtaining the value of F by chance. For the initial model the F-ratio is 633.168 which is very unlikely to have happened by chance ($p < 0.001$) for the second model the value of F 410.873 which is also highly

significant at $p < 0.001$ we can interpret this results as meaning that the initial model significantly improved our ability to predict customer satisfaction but the new model is also important but not as much important than the first model but F-ratio is more significant.

Table 4.12 gives us estimates for these b-values and these values indicate the individual contribution of each predictor to the model. If we replace the B-values we find model as follows

Customer satisfaction = $B_0 + B_1 \text{service quality} + B_2 \text{service recovery}$

Customer satisfaction = $-0.509 + 0.616 \text{ service quality} + 0.550 \text{ service recovery}$.

The B-values tell us about the relationship between customer satisfaction and each predictor. If the value is positive, we can tell that there is a positive relationship between the predictor and customer satisfaction. Whereas, the negative coefficient represents a negative relationship. For this data the two predictors have positive b-value which indicates that there is a positive relationship. So as the quality of service and service recovery improved customer satisfaction can also be increased more. The B-values also tell us what degree of each predictor affects the outcome if the effects of all other predictors are held constant.

- **Service quality (B=0.616)** :-this value indicates that as the quality of service increases by one unit, customer satisfaction increase by 0.613 units, this interpretation is true only if the effect of all other predictors are held constant.
- **Service recovery (B=0.550)**:- this value indicates that as the service recovery given to the customers increase by one unit, customer satisfaction will be increased by 0.550 units, when the effects of all other predictors are held constant.

Each of these beta values has an associated standard error indicating to what extent these values would vary across different samples and this standard error are used to determine whether or not the b-value differs from zero, t-static can be derived that tests whether a b-value is significantly different from zero. In simple regression, a significant value of t indicates that the slope of the regression line is significantly different from horizontal, but in multiple regressions, it is not so easy to visualize what the value tells us. If the t-test associated with b-value is significant (if the value in the column labeled sig. is less than 0.05) then the predictor is making a significant contribution to the model. The smaller the value of sig. (the larger the value of t) the greater the contribution of that predictor. And in this study t for the service quality is 8.45 and t for the

service recovery on the samples taken are 7.668 both at the significance $p < 0.001$ from the magnitude of the t-statistics we can see that service quality had more impact than service recovery on customer satisfaction. The standardized beta value tells us the number of standard deviations that the outcome will change as a result of the one standard deviation change in the predictor. The standardized beta values are all measured in standard deviation units and so are directly comparable. Therefore, they provide better insight into the importance of the predictor in the model. The standardized beta values for service quality and service recovery are virtually identical if is 0.471 and 0.428 respectively indicating that both variables have comparable degree of importance in the model. This concurs with the magnitude of the t-statistics told us and this is what is justified by many Zeithaml, et al 2013, which said that do the jobs right first plus effective service recovery and this will bring customer satisfaction and loyalty. To interpret these values literally, we need to know the standard deviation of all variables from the descriptive tables presented above.

- ✓ Service Quality (Beta=0.471)= this value indicates that as service quality increases by one standard deviation (0.846) the customer satisfaction increase by 0.471 standard deviations, therefore as the quality of service is improved by 0.846 the extra 0.471 of customer satisfaction will occur, keeping the service recovery and others constant.
- ✓ Service recovery(Beta=0.427)= this value indicates that as the service recovery given to customers improved by one standard deviation(0.860), the customer satisfaction can be increased by 0.427 , keeping service quality and others constant

Therefore it is safely concluded that service quality measured by using SERVPERF model and service recovery measured by the three fairness dimension are the two most predictors of customer satisfaction at ERCA. And service quality is the most predictors than service recovery dimension.

4.9 Interview Analysis

Interviews were conducted with the three branch managers of ERCA, in order to complement the customer response and to examine the service quality delivery, service recovery and customer satisfaction from the organizations perspective. The responses raised in the interview are presented as follows.

1. How is your office providing the accurate service to your customers? How do you explain the accuracy of the service provided by your organization?

The managers of the three branches answer this question as, it is anonymous that there may be some failures and challenge on their organization in providing 100% quality service, however we are working hard and providing quality service to our customers, we are working also extra time and also creating knowledge for employees and customers. They also said that they have great confidence on their customers that their customers are receiving high level quality service they said they are giving important training to their customers'. However, the feedback from customers in the middle and small tax payers' show that they are not satisfied at the service they are getting from ERCA. The great cause for this dissatisfaction as the managers also justified is that there is a system problem, because of it is not frequently working and on this idea the managers of small tax payers said that the system they are currently using is done before many years and it was designed to do for a fewer customers but unexpectedly the number of customers are increasing specially at small tax payers which is above the capacity of the system and they are working for that to bring out good improvement as the managers said.

2. Do you think that your employees have enough knowledge, moral and willingness to help customers accordingly? How do you know that?

They answered yes, and the comment they raised is that with the employees didn't as much satisfied with the rules and procedures of ERCA, because of there is strict control and rigid rules on employees. As a result of this, most of the time the employees leave their work unexpectedly. However, we will provide training in different techniques including on job training and the 40 day training that will be given for all new entrant from university. The managers also didn't hesitate that, there is the sign of fear on the confidence of employees of our organization for the rules are strict and risky for them.

3. Do you think that the physical facilities, equipments and software also systems you are using are enough to deliver a good service to your customers?

The managers of large tax payers responded that he did not mind if there is such type of problems however, the other managers agreed that the network problem is the problem that we are facing as a country and this facility is not as much fulfilled. Because of the number of customers are unexpectedly increasing and there is no potential to treat them even with good facility as a result of many scarcity the equipments they have are not

enough but we hope that there are many preparation that ERCA is working to solve this problem.

4. Do you think that you branch can give attention to the problem of your customers? They answered yes. However, as the customers write their suggestion on the other suggestion part the survey for this study, the employees and ERCA didn't give attention to their problems and even we choose to work illegally for working legally have many problems. didn't want to work legally for it have many costs even for paying the taxes, Some customers said that there is a word which said that the customer is a king at ERCA, but this word is practically not seen at ERCA. They also said that they have customer charter which shows all the operation of ERCA the responsibility and right of customers it have also the steps on how to seek fairness if needed, and the time at which and in how many minutes the customer must be served.
5. Do you think that the service recovery system of ERCA are smart, intelligent and didn't have too many processes to seek fairness? The managers said that we are working for our best to improve our service and yes the rules and procedures on the recovery and service are simple and attractive and does not contain extra unwanted processes, however, the customer are saying that first the employees didn't have confidence on their work as a result of these we will go to different departments to get one service and there is some unwanted additional processes at ERCA.
6. What are the rules, processes and rules for the complaint of the customer?
They said that this is clear to our customers on the customer charter and it is attractive it is identified based on cases and the duration of one service to be completed.
7. Do you think that the overall rules and procedures of ERCA are smart and answer all the problems that customers frequently face? Even though there is some cases which are as a gap and the rules and procedures didn't answers, the rules we have are smart and attractive. There is a problem outside the cases but there are a few cases.
8. Generally how do you explain the customer satisfaction at your branch?
For we are doing our best to makes our customers happy our customers are giving good feedback on our work and satisfied at the service they are receiving from ERCA.
9. What additional factors do you think are affecting customer satisfaction at ERCA? they answered this questions that:-
 - Lack of building /physical facility,

- For we work at other building which may not be designed for this work and by renting we didn't make that building as much comfortable to our work.
- The unexpected increase of customer in which we didn't able to give them a quality service.
- Unexpected professional employees leave the organization
- The undeveloped infrastructure in our country (network).

4.10 Discussion of findings

The findings in this research paper shows that empathy is most contributors to customer satisfaction from service quality dimension and interactional justice is the most contributors of service recovery dimensions to customer satisfaction and service quality. And the dimensions of service quality except tangibility were positive significant effect on customer satisfaction and all the three dimension of fairness in which service recovery was measured in this study can also significantly contribute to customer satisfaction. kau and Lau (2006) also identified that all the service recovery dimension can significantly contribute to customer satisfaction. The finding in this study confirms the problems reported by capital magazine on 2014 on the operation of ERCA. Therefore, the interaction of employees with customers and giving individual attention to customers are the area to be improved to bring out customer satisfaction.

In addition to the questions analyzed using SPSS on the data collected from customers, there is an additional suggestion that the customers provided to this survey questions in a written form and the data explains that, There is big gap between what the managers are answering and the perceptions of customers specially at middle and small tax payers. The managers are saying that they are providing a quality service and giving individual attention to all their customers, and they believe that their customers are satisfied even though there is a network and infrastructure problem and even though we didn't hesitate there are some failures which may occur in the operation of their work. The customers on the other hand are complaining on the knowledge and confidence of employees of ERCA first and the meeting on the time of work, network problem as the managers said and the unpunctuality of employees are also another challenge as they said. And generally the customers are saying that ERCA needs reformation, even some of the customers are losing their hope for customer satisfaction at ERCA, and they commented that many things need to be improved at ERCA from its operation and they show their motive that

ERCA spends many years on work but its operation is still at infant stage and some of them recommended that, it is advisable if it takes an experience of banks for treating customers.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

Introduction

As this unit is the last chapter of this study it explains the summary of all the findings and issue raised in this study and conclusion of all the issue raised in the 4 previous chapters and the recommendation part that the researcher observes and should be improved.

5.1 Summary of the Findings

The objective of the study is to analyze the effect of service recovery and service quality on customer satisfaction at ERCA. The study was done on three branches of ERCA (ERCA large tax payers, ERCA East Addis Ababa middle tax payers and ERCA Lafto sub-city small tax payers). The survey data were collected from managers and customers of the three branches. From the data expected to be collected, 284(74% of the planned) data were collected from customers of the 3 branches and analyzed using the SPSS version 20. The overall cronbach Alpha for all questions are between 0.972 and 0.920 for all the service recovery questions and 0.955 for service quality questions and 0.907 for customer satisfaction questions. All the likert scale questions were measured by using a point Likert scale range from highly dissatisfied (1) to highly satisfied (5). From all the data collected from customers a Total of 47 % respondents are dissatisfied, 19.4% neutral and 33.6% are satisfied on ERCAs operation.

The effect of service recovery dimensions and service quality dimensions on customer satisfaction was measured using multiple regression models. The results shows that there is a positive and statistically significant ($p < 0.01$) relationship between the overall service recovery, overall service quality and overall customer satisfaction.

Regarding hypothesis number one (H1) this study is showing that there is a large correlation coefficient between service recovery and customer satisfaction and from the service recovery dimensions interactional justice is the most contributors to the customer satisfaction than the other two other measurement of service recovery in determining customer satisfaction and for

the hypothesis number 2 (H2) this study is showing that there is a large correlation coefficient between service quality and customer satisfaction. Empathy is the most important contributor of service quality followed by reliability, responsiveness and assurance. The result also demonstrates that there is insignificant relationship between the other tangibles and customer satisfaction. And for the service recovery the result of the study show that interactional justice is the most important contributor to customer satisfaction followed by outcome justice and procedural justice respectively. In which both are significantly contributing to customer satisfaction.

Generally, the effect of overall service quality and overall service recovery on customer satisfaction is analyzed using the multiple regression model and the result justifies that service quality is the most important contributor than service recovery, even though their importance according to this model is nearly the same and significantly contributing to customer satisfaction. The third hypothesis H3, which is checked by the sobel test shows that service quality does not have a significant mediation effect between service recovery and customer satisfaction.

Additionally the qualitative data from managers show that the quality of service and the service recovery procedures and rules for ERCA are interesting and smart. The customers are also highly satisfied at their service and the rules and procedures of ERCA are simple and attractive to seek fairness. The problem found in customer satisfaction regarding the failure of systems are common and their customer charter show all the procedures on clarifying all the rights and responsibility of customers and how the work must be done including the time limitation of the service provided. And the employees of ERCA are well trained but have a sign of fear regarding his/her job because of the strictness on the rules of ERCA. However, the managers of all branch also agreed that the problem of network, lack of their own buildings at different place is also affecting the satisfaction of customer at ERCA.

5.2 The Conclusion

The objective of the study was to analyze the effect of service quality and service recovery on customer satisfaction at ERCA. This paper has proposed that service recovery and service quality can influence customer satisfaction. A number of studies that has been discussed earlier confirmed that all three (3) dimensions (outcome, procedural and interactional justice) of service recovery and the five SERVQUAL dimensions (reliability, responsiveness, assurance, Empathy and tangibility) of service quality can affect customer satisfaction. With a growing concern of

customer satisfaction in public sectors to improve the wellbeing of the society, it is believed that customer satisfaction in public sector is the most important instrument which can enhance the success of the organization and citizen trust in the institution. The findings show that service quality and service recovery contributes the greatest percent for the customer satisfaction at ERCA in which the contribution of service quality is better. And from all the dimensions used Empathy followed by responsiveness, reliability and assurance respectively is the most important element of service quality in influencing customer satisfaction and interactional justice is the most important element of service recovery and the other two dimensions outcome justice and procedural justice was also significantly contributing in bringing out customer satisfaction at ERCA. and as mentioned by Duffy, Miller and Bexley (2006) the level of quality can be measured by the outcome or what the customer actually receives as part of the firms efforts to recover and the process of recovery and how recovery is accomplished and the findings of this study also shows that interactional justice, procedural justice and outcome justice was significantly contributing for service quality. And in ERCA customers at large tax payers are more satisfied on the operation or ERCA than middle and small tax payers.

5.3 Recommendation

Customer satisfaction is an important indicator of national economic health (zeithaml et al 2013); Canadian researchers found that service satisfaction is a strong driver of citizen trust and confidence in public institution. However, customer satisfaction is not something comes as a chance to the organization; it is the result of providing quality service and having effective service recovery system and knowing the expectation of customers and becoming ready to achieve the designed goal. ERCA is one of a government organization in which its operation is a backbone to the economy of Ethiopia, and the findings in this study show that service quality and service recovery have great effect in bringing out customer satisfaction at ERCA. From the service quality dimensions empathy, responsiveness, reliability and assurance respectively are the most significantly contributing dimensions in bringing out customer satisfaction and interactive justice, outcome justice and procedural justice respectively are the most significantly contributing dimensions of service recovery dimensions to bring customer satisfaction. Great dissatisfaction of customers lies on giving individual attention to customers and the interactions of employees with customers.

Based on the findings and observation of the researcher the following recommendation is given to ERCA:

1. ERCA should do the assessment from time to time on how its customers are being satisfied at its operation and what is affecting customer satisfaction. For the managers are not as much aware of what is in the minds of customers, there is a perception difference between what the managers are saying and the perceptions of customers. The managers are saying that the challenge they are facing are on tangibility and the result show that empathy is the most important contributor to customer satisfaction.
2. ERCA should give individual attention to the problem of customers. And this must be supported by more advanced technology to be achieved.
3. ERCA should work hard on improving its quality service especially on Empathy and interactional justice for this two elements are identified as the most determinant of customer satisfaction at ERCA.
4. ERCA should work hard in solving the problem on network and infrastructure, and the operation of ERCA must be supported by more advanced technology.
5. ERCA should work hard on developing the new software to make simple its work and reduce the overcrowded number of customers at office, for its current operation is more traditional.
6. The rules and procedures which hinders the employees of ERCA from working confidently and contribute the sign of fear of employees must be identified and ERCA should work hard again to develop the confidence and knowledge of its employees.
7. The rules and procedures of ERCA must be checked and adjusted from time to time
8. In ERCA the research and information technology department must get more focus and work cooperatively than before to employ more advanced technology in a right way to provide quality and prompt service in line with giving answers to all the current challenges of ERCA.

5.4 Limitations and Directions for Future Research

In This study, the effect of service recovery and service quality on customer satisfaction on the ERCA tax payers was analyzed. However, it is difficult to say that this study touches all points which may affect customer satisfaction at ERCA. Furthermore, this study was limited by the absence of service employees from the study, and the analysis were done only on three branches

(ERCA large tax payers, ERCA East Addis Ababa middle tax payers, and Lafto sub-city small tax payers) therefore the study was seen only from the perspective of tax payers (customers).

With respect to the future projects, the issue identified in this study are mostly related with service employees (the Empathy and interactional justice where the most contributor of customer satisfaction) and this study also clarifies that the attention given to customer problem is also affecting customer satisfaction.

By considering the complexity of what affect customer satisfaction in public organization, The following directions were given for the future research

1. Service employees should be included in the study
2. Such type of assessment must be done in other Ethiopian public organization, to conclude the factors that affect customer satisfaction at ERCA. Because many writers identified that the customer satisfaction in other public organization may also affect customer satisfaction in tax payers' office.
3. It is also helpful to first apply the Gap analysis in such type of research because sometimes the organization didn't know what the customers perceive. And there may be a difference on what the organization thinks regarding customer and the way the customer think. And if the data was collected only from a organization or customer only the information may be biased.
4. The study must be done by taking sample from more additional branches. Because the service provided may be different from branch to branch.

References

- Adams, J.S. (1965), "Inequity in social exchange", in Berkowitz, L. (Ed.), *Advances in Experimental Social Psychology*, Academic Press, New York.
- Amirshahi, S.A and Mazhari, SH. (2008): Consumer ethnocentrism in small appliances industry of Iran. *Journal of Marketing Management*, vol. 12, pp. 71-88.
- Anderson, E. (1995) "Measuring service quality in a university health clinic", *International Journal of Health Care Quality Assurance*, vol. 8(2), pp. 32-37
- Adil, M.(2013). "The relationship between service quality and customer satisfaction in India's rural banking sector: An item analysis and factor-specific approach", *The Lahore Journal of Business* Vol. 1, No. 2, pp. 43-63.
- Agus, Arawati, Barker, Sunita & Kandampully, Jay (2007) "An exploratory study of service quality in the Malaysian public service sector," *International Journal of Quality and Reliability Management*, vol.24 (2), p. 177-190
- Baggaley & Hull (1983) "The effect of nonlinear transformations on a Likert scales". *Evaluation & the Health Professions*, vol. 6, pp. 483-491
- Bitner, Blooms, and Tetreault(1990), "The service encounter: diagnosing favorable and unfavorable incidents", *Journal of Marketing*, Vol.54, January, pp. 71-84.
- Bowen, D.E. (1986) "Managing customers as human resources in service organizations,"
- Buttle, F (1996). SERVQUAL, review, critique, research Agenda, *European Journal of marketing*.vol. 30 No.1, pp. 8-32
- Chen, Yu, Yang, and Chang, (2004), "A customer-oriented service-enhancement system for the public sector" *Managing Service Quality*, Vol.14 No. 5, pp. 414-25.
- Christian Gronroos(2007) "service management and marketing" John Wiley and Sons Ltd, England.
- Christopher Lovelock & John Wirtz (2011): *services marketing*, seventh edition, *Human Resources Management*, vol. 25,
- Cronin and Taylor (1992), "Measuring service quality: A reexamination and extension", *Journal of Marketing*, Vol. 56, No.3, pp. 55-68.

- Cronin and Taylor (1994), "SERVPERF versus SERVQUAL: Reconciling performance based and perceptions minus expectations measurement of service quality", *Journal of Marketing*, Vol. 58, pp. 125-31
- Crosby Philip (1979), *Quality Is Free: The Art of Making Quality Certain*, New York: McGraw-Hill.
- Curry, A.C. and Herbert, D. (1998), "Continuous improvement in public services – a way forward", *Managing Service Quality*, Vol. 8 No. 5, pp. 339-49.
- Donnelly, M., Wisniewski, M., Dalrymple, J.F. and Curry, A.C. (1995), "Measuring service quality in local government: the SERVQUAL approach", *International Journal of Public Sector Management*, Vol. 8, pp. 15-20
- Ehrlich, I., Gallois-Hammano, G., Liv, Z. and Lutter, R. (1994), "Productivity growth and firm ownership: an empirical investigation", *Journal of Political Economy*, Vol. 102, pp. 257-98.
- Eze, C. U., Sin, K. T., Ismail, H. & Siang, Y. P. (2008). ISPs' Service Quality and Customer Satisfaction in the Southern Region of Malaysia. Pp 290-299
- Geoffrey Marczyk, David DeMatteo, and David Festinger 2005. *Essentials for research design*, Wiley & Sons, Inc., Hoboken, New Jersey Canada.
- Hartline, Michael D. and Ferrell, O.C. (1996), "The management of customer contact service employees: An empirical investigation", *Journal of Marketing*, Vol. 69, pp.52-70.
- Ho, C., & Wu, W. (1999). Antecedents of customer satisfaction on the Internet: An empirical study of online shopping, In Thirty-second Annual Hawaii International Conference on System Sciences, 5, IEEE Computer Society. Retrieved on October 28, 2011, from (<http://www.computer.org>)
- Ganjinia . H, Gilaninia. S and Hasheminasab S. M (2013): The Effect of Different Factors on Customer's Satisfaction with Affiliated Agencies to Customs with Applying ZEITHAMEL Model. A Case of Guilan Customs. *International journal of business and behavioral sciences*. Vol.3 (2), pp. 101-108.

- John Adams, Hafiz T.A.Khan, Robert Reaside, David white (2007): Research Methods for graduate Business and social science students, New Delhi.
- Kadir, A..H.,Rahmani, N. and Masenaei, R.(2011). Impacts of service quality on customer satisfaction:study online banking and ATM services in malaysia. *Internal journal of Trade, Economics and Finance*.
- Llusar, Juan Carlos Bou & Zornoza, César Camisón(2000): Validity and reliability in perceived quality measurement models – an empirical investigation in Spanish ceramic companies. *International Journal of Quality & Reliability Management* vol. 17(8), pp. 899-918.
- Kau and Loh (2006) “ The effects of service recovery on customer satisfaction: a comparison between complainants and non-complainants”. *journal of services marketing* , Vol 20, pp. 101-111.
- Kelley, S.W., Hoffman, D.K. and Davis, M.A. (1993),“A typology of retail failures and recovery”, *Journal of Retailing*, Vol. 69 No. 4, pp. 429-52
- Kerejie & Morgan (1970): Determining Sample Size for Research Activities. *Educational and Psychological Measurement* vol.30 pp. 607-610.
- Kotler Philip (2003): Marketing Management; 10th edition; New Jersey, Prentice-Hall.
- Musad Ibrahim(2014): service recovery and customer satisfaction case of Uganda telecom, *journal of business and management* vol.6 pp
- McCollough, M.A. and Bharadwaj, S.G. (1992),“The recovery paradox: an examination of consumer satisfaction in relation to disconfirmation, service quality and attribution based theory”, in Allen, C.T.et al. (Eds),Marketing Theory and Applications, American Marketing Association, Chicago, IL.
- Michael S.,Bowen S., and Johnston R.,(2009): why service recovery fails, tensions among customer, employee and process perspectives, *journal of service management*, 20(3), pp. 253-73
- Parasuraman, A.; Zeithaml, V.A and Berry, L.L.(1985): a conceptual model of service Quality and its implications for future Research. *Journal of Marketing*, 49(4): pp.41-45

- Parasuraman, A.;Berry, L.L. and Zeithaml, V.A(1988): SERVQUAL: A multiple item scale form ensuring consumer perceptions of Quality. *Journal of retailing*. Vol. 64(1).
- Patrick Asubonteng, Karl J. McCleary and John E. Swan (1996): SERVQUAL revisited: acritical review of service quality, *Journal of Service Marketing*, Vol. 10 No.6, pp. 62-81
- Potluri, R. M. and Mangnale V. S (2010): An Assessment of Ethiopian Telecom Customer Satisfaction. *Global Journal of Management and Business Research*
- Schneider B. and Bowen D.E1985: Employee and customer perceptions of service in Banks: replication and extension. *Journal of applied psychology*, vol. 70, pp.423-33
- Sureshchandar, G.S; Rajendran, Chandrasekharan & Kamalanabhan, T.J., (2001): Customer perceptions of service quality: A critique" *Total Quality Management*, Vol.12, No.1, pp.111-124
- Valerie A.Zeithaml, Mary Jo Bitner & Dwanye D.Gremler(2009), services marketing, fifth edition, Mcgraw-Hill/Irwin, Newyork
- Valerie A.Zeithaml, Mary Jo Bitner & Dwanye D.Gremler(2013), services marketing, sixth edition, Mcgraw-Hill/Irwin, Newyork.
- William D.crano and MarilynB.Brewer(2002), Principles and methods of social research, second edition. Lawrence Elrbanm associates, publishers, Manwah, New Jersey, London.
- Wisniewski, M. (2001). Using SERVQUAL to assess customer satisfaction with public sector Services. *Managing service quality*, 11(6), 380-388.
- Zeithaml, V., Berry, L. and Parasuraman, A. (1993), The Nature and Determinants of Customer Expectations of Service, *Journal of the Academy of Marketing Science*, Vol. 21 No. 1, pp. 1-11.
- Zemke, R. (1999), Service recovery: turning oops into opportunity, in Zemke, R. and Woods, J. (Eds), Best Practices in Customer Service, AMA Publications, New York,NY, pp. 279-88.

Website used

1. <http://www.cssp.org>
2. <http://www.erca.et>(the official website of Ethiopian Revenue and Custom Authority).
3. (<http://www.aau.edu.et>).
4. <https://en.m.wikipedia.org>

APPENDIXES

Appendix1. Questionnaire in English

Dear Respondent,

I am a graduate student at Addis Ababa university school of commerce, and currently I am conducting a research on the Topic "The effect of Service recovery and service quality on Customer Satisfaction" A case of Ethiopian revenue and customs Authority. The purpose of this questionnaire is to collect primary data for the partial fulfillment of the Masters of Marketing Management(MA) Program at Addis Ababa University college of Business and Economics, school of commerce. I kindly request you to provide me reliable information. Your response will be kept confidential.

Instruction:-

- ✓ If you are new customer please don't fill this questionnaire(you have to pay your taxes at least for three months at this branch)
- ✓ No need of writing your name
- ✓ Only give marks (X) on your answers

Thank you in advance for your cooperation.

Section 1

1. Sex male female
2. Age Between 18-29 Between 40-49
 Between 30-39 50 and above
3. Marital status single married divorced
4. Education level elementary school or below certificate and diploma
 High school first degree masters and above
5. you're in which Tax payers group small tax payers middle tax payers
 large tax payers
6. Did you complain before on the failure of service you received from ERCA?
Yes No

Section 2. Encircle on what you decide for the questions below

		Strongly disagree	disagree	neutral	agree	Strongly
	Service recovery					
	1. Outcome Justice					
1	I believe that The treatment given for customers in response to the failures of the service are fair	1	2	3	4	5
2	I believe that the correction and answers given for the complaint of customers are adequate	1	2	3	4	5
3	I think ERCAs answers and response for the complain will satisfy and accurately give right solution when there is a problem	1	2	3	4	5
	2. procedural Justice	1	2	3	4	5
4	The rules and processes of ERCA when delivering service are simple and attractive to seek fairness	1	2	3	4	5
5.	The policies and procedures of ERCA answers all the problem I frequently encountered at this office	1	2	3	4	5
6.	The company's policies and procedures considered my class and my status	1	2	3	4	5
	3. interactional justice					
7.	When there is a service failure the employee apologized for the failure and handled my case in a professional way	1	2	3	4	5
8..	The service employee gave me an honest explanation for my questions	1	2	3	4	5
9.	The employee of ERCA are polite and willing to help customers	1	2	3	4	5
10	The employee were patient , confident and empowered	1	2	3	4	5

		Strongly disagree	disagree	neutral	agree	Strongly
11.	The employees have a knowledge and respect to go extra mile to solve my problem.	1	2	3	4	5
	4. Reliability					
12.	When ERCA employees promised to do something by a certain time they will do so	1	2	3	4	5
13.	When customer have a problem, ERCA will show a sincere interest in solving it	1	2	3	4	5
14.	ERCA will do the Job right first	1	2	3	4	5
15.	ERCA will provide the service at the promised time	1	2	3	4	5
	5. Responsiveness					
16.	Employees of ERCA will tell customers exactly when services will be performed	1	2	3	4	5
17.	Employees of ERCA will give prompt service to customers	1	2	3	4	5
18.	Employees of ERCA will always be willing to help customers	1	2	3	4	5
19.	Employees of ERCA will never be too busy to respond to customer requests	1	2	3	4	5
	6. Assurance					
20.	The behavior of the employee of ERCA will instill confidence in customers	1	2	3	4	5
21.	I feel safe in the operation of ERCA	1	2	3	4	5
22.	Employees of ERCA will be consistently courteous with customers	1	2	3	4	5

		Strongly disagree	disagree	neutral	agree	Strongly
23.	Employees of ERCA will have the knowledge to answer the customers questions	1	2	3	4	5
	7. Empathy					
24.	ERCA can give customers individual attention	1	2	3	4	5
25.	The operating hours of ERCA is convenient to all its customers	1	2	3	4	5
26.	ERCA have employees who give customers personal attention	1	2	3	4	5
27.	ERCA will have the customers best interest at heart	1	2	3	4	5
28.	Employees of ERCA can understand the specific needs of their customers	1	2	3	4	5
	8. tangibles					
29.	ERCA have modern looking(up to date) equipments	1	2	3	4	5
30.	The physical facilities (such as office furniture) the service providing office are visually appealing in	1	2	3	4	5
31.	Front line employees are well dressed and neat in their appearances	1	2	3	4	5
32.	Materials associated with the service(such as pamphlets or statements will be clear and visually appealing at ERCA	1	2	3	4	5

CUSTOMER SATISFACTION

33.	I am satisfied with the interactions I had with the personnel of the company during the overall process	1	2	3	4	5
34.	I am satisfied with the overall service recovery process	1	2	3	4	5
35.	Generally I am satisfied with all the operation of ERCA	1	2	3	4	5

Any additional comment.....

(Thank you)

Appendix 2. Questionnaire in Amharic

✓

✓

✓

(x)

1

1.
2. 18 29 40 49
 30 39 50
3. / / /
4. / / /
- 2 / / /
-
5.
-
6. ?

	1.					
1		1	2	3	4	5
2		1	2	3	4	5
3	/	1	2	3	4	5
	2.					
4		1	2	3	4	5
5	/	1	2	3	4	5
6		1	2	3	4	5
	3.					
7		1	2	3	4	5
8		1	2	3	4	5
9		1	2	3	4	5
10		1	2	3	4	5
11		1	2	3	4	5

	4.					
12		1	2	3	4	5
13		1	2	3	4	5
14		1	2	3	4	5
15		1	2	3	4	5
	5.					
16		1	2	3	4	5
17		1	2	3	4	5
18		1	2	3	4	5
19		1	2	3	4	5
	6.					
20		1	2	3	4	5
21		1	2	3	4	5
22		1	2	3	4	5
23		1	2	3	4	5

	7.					
24		1	2	3	4	5
25		1	2	3	4	5
26		1	2	3	4	5
27		1	2	3	4	5
28		1	2	3	4	5
	8.					
29		1	2	3	4	5
30	()	1	2	3	4	5
31		1	2	3	4	5
32		1	2	3	4	5

33		1	2	3	4	5
34		1	2	3	4	5
35		1	2	3	4	5

Appendix 3: Demographic questions frequency distribution

education level of the respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	elementary school and below	15	5.3	5.3	5.3
	completed secondary school	39	13.7	13.7	19.0
	completed certificate and diploma	81	28.5	28.5	47.5
	First degree holder	130	45.8	45.8	93.3
	masters and above	19	6.7	6.7	100.0
	Total	284	100.0	100.0	

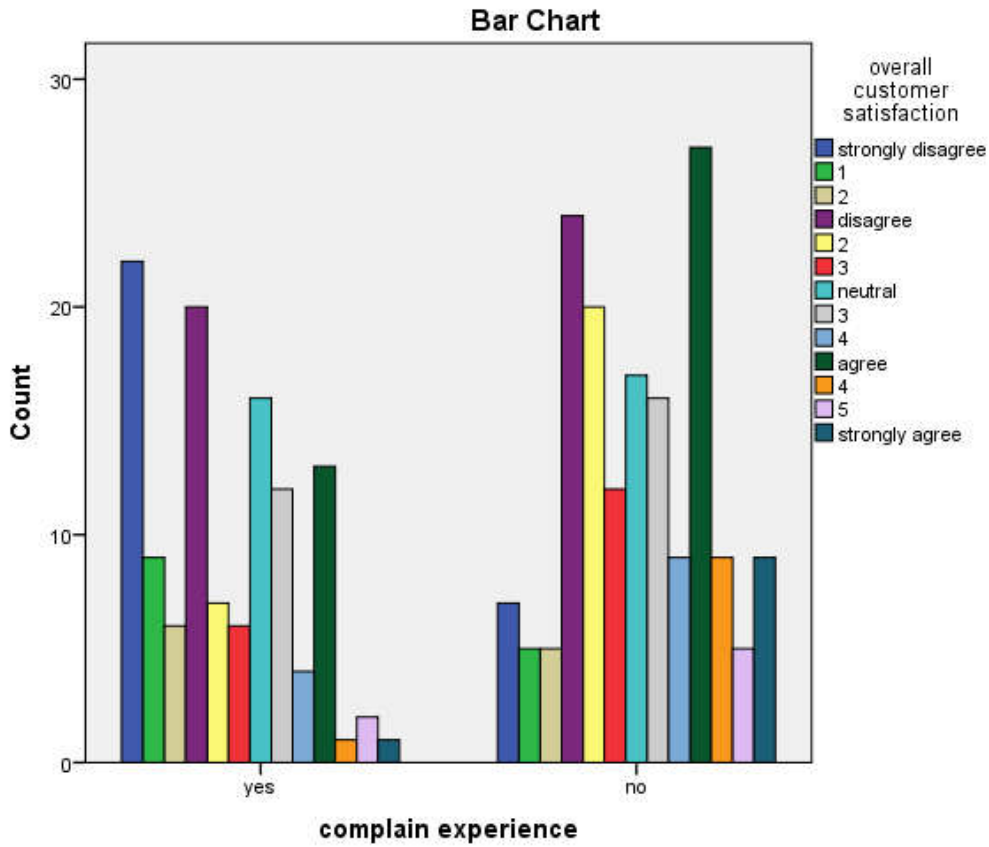
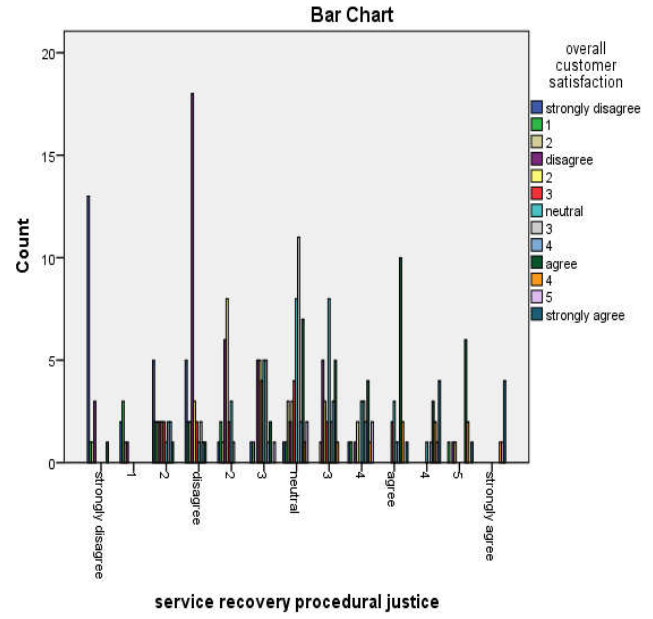
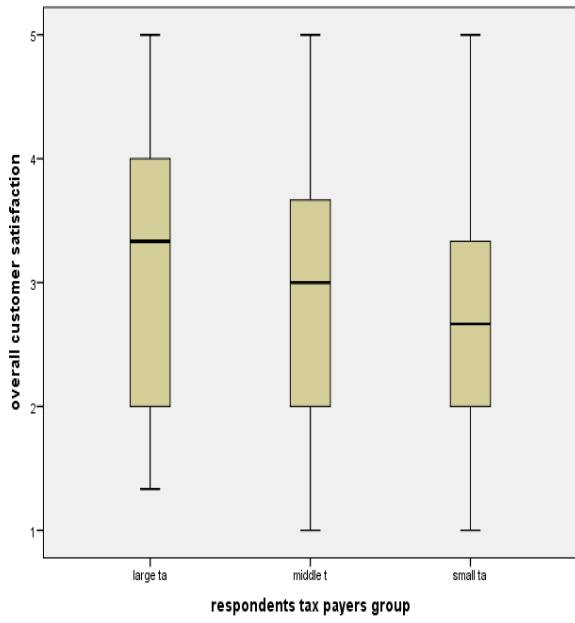
respondents tax payers group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	large tax payers	22	7.7	7.7	7.7
	middle tax payers	137	48.2	48.2	56.0
	small tax payers	125	44.0	44.0	100.0
	Total	284	100.0	100.0	

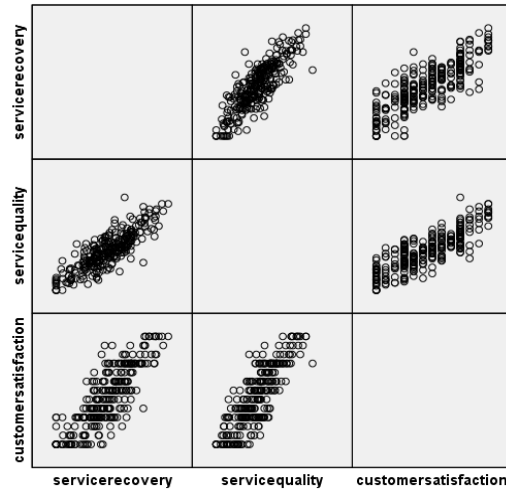
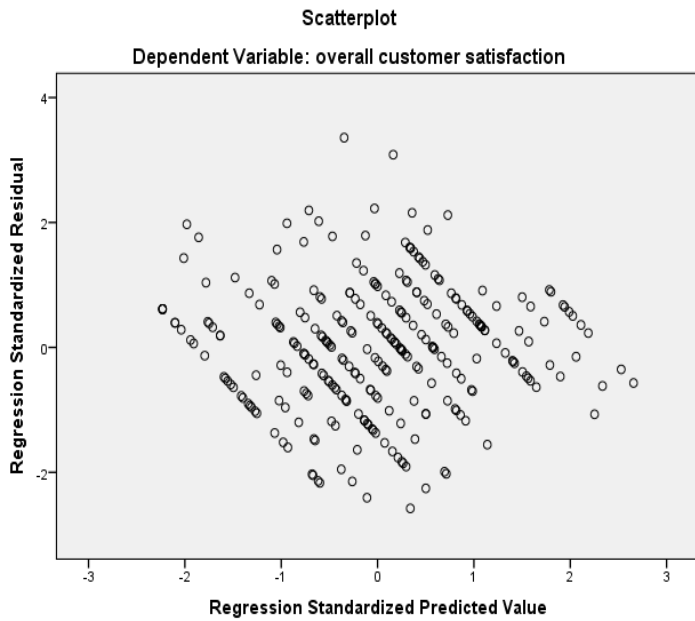
complain experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	119	41.9	41.9	41.9
	No	165	58.1	58.1	100.0
	Total	284	100.0	100.0	

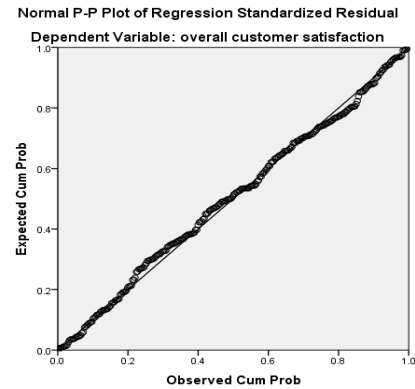
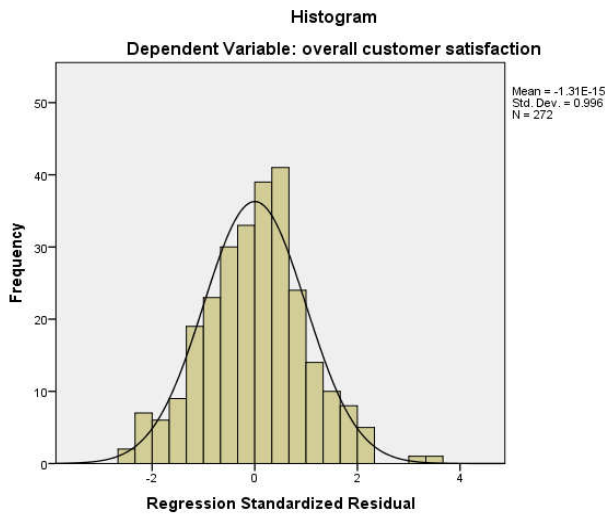
(Source: survey data 2016)



Appendix 4. Normality testing



The 3D scatter plot for all the variables



Source survey finding (2016)

Appendix 5A,B,C:The correlation between service recovery dimension and customer satisfaction

Correlations

		service recovery outcome justice	service recovery procedural justice	service recovery interactional justice	overall customer satisfaction
service recovery outcome justice	Pearson Correlation	1	.629**	.651**	.699**
	Sig. (2-tailed)		.000	.000	.000
	N	282	281	277	282
service recovery procedural justice	Pearson Correlation	.629**	1	.656**	.687**
	Sig. (2-tailed)	.000		.000	.000
	N	281	283	279	283
service recovery interactional justice	Pearson Correlation	.651**	.656**	1	.783**
	Sig. (2-tailed)	.000	.000		.000
	N	277	279	279	279
overall customer satisfaction	Pearson Correlation	.699**	.687**	.783**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	282	283	279	284

** . Correlation is significant at the 0.01 level (2-tailed).

(Source survey data 2016)

Appendix 5B: The correlation between service quality dimension and customer satisfaction

		overall customer satisfaction	service quality responsiveness	service quality assurance	service quality empathy	service quality tangibility	service quality reliability
overall customer satisfaction	Pearson Correlation	1	.770**	.757**	.765**	.562**	.762**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	284	283	284	281	282	283
service quality responsiveness	Pearson Correlation	.770**	1	.795**	.740**	.604**	.803**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	283	283	283	280	281	282
service quality assurance	Pearson Correlation	.757**	.795**	1	.759**	.616**	.756**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	284	283	284	281	282	283
service quality empathy	Pearson Correlation	.765**	.740**	.759**	1	.612**	.698**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	281	280	281	281	280	280
service quality tangibility	Pearson Correlation	.562**	.604**	.616**	.612**	1	.545**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	282	281	282	280	282	281
service quality reliability	Pearson Correlation	.762**	.803**	.756**	.698**	.545**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	283	282	283	280	281	283

** . Correlation is significant at the 0.01 level (2-tailed).

Appendix 5C: The correlation between overall service recovery, overall service quality and overall customer satisfaction

		overall customer satisfaction	overall service recovery	overall service quality
overall customer satisfaction	Pearson Correlation	1	.830**	.836**
	Sig. (2-tailed)		.000	.000
	N	284	277	278
overall service recovery	Pearson Correlation	.830**	1	.852**
	Sig. (2-tailed)	.000		.000
	N	277	277	272
overall service quality	Pearson Correlation	.836**	.852**	1
	Sig. (2-tailed)	.000	.000	
	N	278	272	278

** . Correlation is significant at the 0.01 level (2-tailed).

Hypothesis test

Appendix 6A,B,C: The regression results of service recovery dimension and overall customer satisfaction

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig.
1	.833 ^a	.694	.691	.614	0.000

- a. Predictors: (Constant), service recovery interactional justice, service recovery outcome justice, service recovery procedural justice
- b. Dependent variable customer satisfaction.

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	239.881	3	79.960	212.073	.000 ^b
	Residual	105.572	280	.377		
	Total	345.453	283			

a. Dependent Variable: overall customer satisfaction

b. Predictors: (Constant), service recovery interactional justice, service recovery outcome justice, service recovery procedural justice

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.211	.126		-1.670	.096
	service recovery outcome justice	.308	.056	.257	5.529	.000
	service recovery procedural justice	.241	.051	.220	4.711	.000
	service recovery interactional justice	.501	.051	.468	9.812	.000

a. Dependent Variable: overall customer satisfaction

Source: researcher's survey finding (2016)

Appendix 6B: Regression results of the effect of service quality dimension on customer satisfaction.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig
1	.845 ^a	.714	.709	.596	0.000

a. Predictors reliability, responsiveness, assurance, empathy and tangibility

b. Independent variable: customer satisfaction

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	246.562	5	49.312	138.626	.000 ^b
	Residual	98.891	278	.356		
	Total	345.453	283			

a. Dependent Variable: overall customer satisfaction

c. Predictors: (Constant), service quality reliability, service quality tangibility, service quality empathy , service quality assurance, service quality responsiveness

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.115	.132		-.872	.384
	service quality responsiveness	.219	.069	.202	3.171	.002
	service quality assurance	.191	.069	.168	2.753	.006
	service quality empathy	.362	.065	.303	5.604	.000
	service quality tangibility	.018	.050	.015	.359	.720
	service quality reliability	.274	.063	.252	4.371	.000

a. Dependent Variable: overall customer satisfaction

(Source: researcher's survey finding 2016)

Appendix 6C: Regression Results for the overall SR, overall SQ and overall customer satisfaction.

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.832 ^a	.692	.691	.614	.692	633.168	1	282	.000	
2	.863 ^b	.745	.743	.560	.053	58.800	1	281	.000	1.570

a. Predictors: (Constant), overall service quality

b. Predictors: (Constant), overall service quality, overall service recovery

c. Dependent Variable: overall customer satisfaction

Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error				Beta	Zero-order	Partial	Part	Tolerance
1	(Constant)	-.276	.127		-2.175	.030					
	service quality	1.087	.043	.832	25.163	.000	.832	.832	.832	1.000	1.000
2	(Constant)	-.509	.120		-4.253	.000					
	service quality	.616	.073	.471	8.445	.000	.832	.450	.254	.291	3.436
	service recovery	.550	.072	.428	7.668	.000	.825	.416	.231	.291	3.436

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	239.005	1	239.005	633.168	.000 ^b
	Residual	106.448	282	.377		
	Total	345.453	283			
2	Regression	257.426	2	128.713	410.873	.000 ^c
	Residual	88.028	281	.313		
	Total	345.453	283			

a. Dependent Variable: overall customer satisfaction

b. Predictors: (Constant), overall service quality

c. Predictors: (Constant), overall service quality, overall service recovery