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FACULTY OF COMMERCE
DEPARTMENT OF ACCOUNTING

BCom. HONOURS ACCOUNTING

***THE IMPACT OF FRAUD AND CORRUPTION ON THE
EFFECTIVENESS OF CUSTOMS DUTIES COLLECTION: CASE OF
ZIMBABWE REVENUE AUTHORITY.***

BY

Tiriboyi Cosmas

Student Number R114141M

*This dissertation is submitted in partial fulfillment of the requirements of the Bachelor of
Commerce Honours Degree Programme in the Department of ACCOUNTING at MSU.*

Gweru: Zimbabwe, May 2015

APPROVAL FORM

The signatory below confirms that they supervised Cosmas Tiriboyi on a dissertation titled: **The impact of fraud and corruption on the effectiveness of custom duties collection: Case of Zimbabwe Revenue Authority.** The dissertation was submitted in partial fulfillment of the requirements of the Bachelor of Commerce Honours Degree in ACCOUNTING at Midlands State University.

.....
SUPERVISOR

.....
DATE

.....
CHAIRPERSON

.....
DATE

.....
EXTERNAL EXAMINER

.....
DATE

RELEASE FORM

NAME OF STUDENT

Cosmas Tiriboyi

DISSERTATION TITLE

The impact of fraud and corruption on the effectiveness of custom duties collection: Case of Zimbabwe Revenue Authority

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The interpretations or solid reports in this study by any way do not represent university's statements or the project supervisor and in any way are not predestined to insult anyone, person, institution or organisation but rather there are preordained only for academic purposes.

DEDICATION

I would like to dedicate this dissertation to my lovely sister (Lynmary), my late mother and father and to Dr Strive and Mrs Tsitsi Masiyiwa for without those people, I wouldn't have made it this far academically. I appreciate the love and support that you have continuously gave me throughout my studies.

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ABSTRACT

The Zimbabwe Revenue Authority has been suffering from fraud and corruption challenges due to inadequate controls, discretionary interface, lack of accountability and the network of accomplices. It is against this background that the study seeks to investigate the impact of fraud and corruption on the effectiveness of custom duties collection with specific emphasis on the relationship between fraud and revenue. The objectives of this study were to identify the causes of fraud and corruption, assessing the risk of material misstatements of revenue due to fraud and to determine the anti-fraud strategies, their effectiveness and the relationship between fraud, corruption and revenue. Both primary and secondary sources of data were made use of with the questionnaires and interviews standing out as the research instruments to gather the data. Time series data for the period of January 2009 to January 2014 was regressed using a multi-regression technique the Ordinary Least Squares method (OLS). The e-views 4 software was adopted to make all the necessary estimations. Literature from various scholars who investigated the causes and impact of fraud and corruption on revenue collection was reviewed. The study indicates that there is a negative relationship between fraud and revenue collected. The study concluded and recommended to organisations that they should develop anti-fraud framework policies, automate operations and integrate application systems to reduce human intervention than when processing is manual and also ZIMRA should also protect witnesses and whistleblowers by establishing confidential communication channels to relay information pertaining to fraud and corruption.

TABLE OF CONTENTS

DESCRIPTION		PAGE
	Approval form	i
	Release form	ii
	Dedications	iv
	Acknowledgments	v
	Abstract	vi
Chapter 1 : Introduction		
1	<i>Background of the study</i>	1
1.1	<i>Problem statement</i>	4
1.2	<i>Main research topic</i>	4
1.3	<i>Purpose of the study</i>	4
1.4	<i>Research objectives</i>	4
1.5	<i>Research questions</i>	5
1.6	<i>Significance of the study</i>	5
1.7	<i>Delimitation of the study</i>	5
1.8	<i>Limitation of the study</i>	6
1.9	<i>Assumptions</i>	6
1.10	<i>Abbreviations and acronyms</i>	6
1.11	<i>Chapter Summary</i>	7
Chapter 2: Literature review		
2	<i>Introduction</i>	8
2.1	<i>Causes of fraud</i>	8
2.1.1	<i>Inadequate controls</i>	8
2.1.2	<i>Poor hiring practices</i>	9
2.1.3	<i>Lack of accountability</i>	10
2.1.4	<i>Lack of training</i>	11
2.1.5	<i>Poor ethical values</i>	12
2.1.6	<i>Causes of corruption in the customs environment</i>	12
2.1.7	<i>Discretionary interface</i>	13

2.1.8	<i>Low wages of staff and limited job satisfaction</i>	14
2.1.9	<i>Network of accomplices</i>	14
2.2	<i>The risks of material misstatement of revenue due to fraud</i>	16
2.2.1	<i>Side agreements</i>	16
2.2.2	<i>Roundtrip transactions</i>	17
2.2.3	<i>Bill and holds</i>	18
2.2.4	<i>Altering shipping documentation</i>	18
2.2.5	<i>Upfront fees</i>	19
2.2.6	<i>Holding accounting periods open</i>	20
2.2.7	<i>Failure to record sales provisions, allowances and rebates</i>	20
2.3	<i>Anti-fraud and anti-corruption strategies and their implementation</i>	21
2.3.1	<i>Establishment of an anti-corruption framework policy</i>	21
2.3.2	<i>Strategies impacting on the change of incentives in order to discourage corruption</i>	22
2.3.3	<i>Strategies to detect, prevent and combat graft</i>	23
2.3.4	<i>Training, Information and Communication</i>	23
2.3.5	<i>Educating role players about the negative impact of corruption on the economy</i>	24
2.4	<i>Evaluation of anti-corruption and anti-fraud's strategies effectiveness</i>	25
2.4.1	<i>Monitoring and punishment</i>	26
2.4.2	<i>Information, Technology and Communication</i>	26
2.4.3	<i>Incentives</i>	27
2.4.4	<i>Designing of anti-corruption strategies</i>	28
2.5	<i>The relationship between (fraud and corruption) and revenue</i>	29
2.5.1	<i>As corruption increases government revenue decreases</i>	29

2.5.2	<i>As corruption increases tax revenue increases</i>	32
2.6	<i>Chapter summary</i>	34
Chapter 3: Research methodology		
3	<i>Introduction</i>	35
3.1	<i>Research Design</i>	35
3.1.1	<i>Mixed research approach</i>	35
3.1.2	<i>Descriptive research</i>	36
3.1.3	<i>Correlation research design</i>	36
3.1.4	<i>Regression model</i>	37
3.1.5	<i>Case study research</i>	38
3.2	<i>Population, sampling and sample size</i>	39
3.2.1	<i>Sampling technique and sample size</i>	39
3.3	<i>Sources of data</i>	41
3.3.1	<i>Primary data</i>	41
3.3.2	<i>Secondary data</i>	41
3.4	<i>Research instruments</i>	42
3.4.1	<i>Interviews</i>	42
3.4.2	<i>Questionnaires</i>	43
3.5	<i>Data presentation</i>	44
3.6	<i>Data analysis</i>	45
3.7	<i>Chapter summary</i>	45
Chapter 4 : Data presentation and analysis		
4	<i>Introduction</i>	46
4.1	<i>Questionnaire questions analysis</i>	46
4.1.1	<i>Response rate</i>	46
4.2	<i>Professional and academic qualifications</i>	47
4.3	<i>Years of experience with the organization</i>	48
4.4	<i>Causes of fraud and corruption</i>	50
4.4.1	<i>Inadequate controls</i>	51
4.4.2	<i>Poor hiring practices</i>	52
4.4.3	<i>Lack of accountability</i>	52
4.4.4	<i>Lack of training</i>	53

4.4.5	<i>Poor ethical values</i>	54
4.4.6	<i>Discretionary interface</i>	54
4.4.7	<i>Low wages and salaries of staff and limited job satisfaction</i>	55
4.5	<i>Fraud risks that leads to material misstatement of revenue</i>	56
4.5.1	<i>Side agreements</i>	57
4.5.2	<i>Roundtrip transactions</i>	58
4.5.3	<i>Bill and holds</i>	59
4.5.4	<i>Altering shipping documentation</i>	59
4.5.5	<i>Upfront fees</i>	60
4.5.6	<i>Holding accounting periods open</i>	60
4.6	<i>Anti-corruption strategies in place</i>	61
4.6.1	<i>The use of incentives</i>	62
4.6.2	<i>Strategies to detect and combat graft</i>	64
4.6.3	<i>Training, information and communication</i>	64
4.6.4	<i>Education and awareness</i>	65
4.7	<i>Effectiveness of the anti-corruption strategies</i>	66
4.7.1	<i>Monitoring and punishment</i>	67
4.7.2	<i>Information technology and communication</i>	68
4.7.3	<i>Incentives</i>	69
4.8	<i>Relationship between fraud, corruption and revenue</i>	70
4.8.1	<i>Quantitative analysis</i>	70
4.8.2	<i>Diagnostic tests</i>	71
4.8.3	<i>Unit root test results</i>	71
4.8.4	<i>Cointegration Test</i>	72
4.9	<i>Regression results</i>	73
4.9.1	<i>Presentation of Regression Results</i>	73
4.9.2	<i>Interpretation of Regression Results</i>	73
4.9.3	<i>Rsquared</i>	74
4.9.4	<i>F statistic</i>	74

4.9.5	<i>Fraud index</i>	74
4.9.6	<i>Corruption index</i>	75
4.10	<i>Interview responses analysis</i>	75
4.11	<i>Chapter summary</i>	78
Chapter 5: Summary, conclusions and recommendations		
5	<i>Introduction</i>	80
5.1	<i>Summary of the research study</i>	80
5.2	<i>Major research findings</i>	81
5.2.1	<i>To identify the causes of fraud and corruption</i>	81
5.2.2	<i>To assess the risk of material misstatements of revenue due to fraud</i>	82
5.2.3	<i>To determine the anti-corruption strategies and assess their implementation</i>	82
5.2.4	<i>To evaluate the effectiveness of anti-corruption strategies in place to mitigate the risk of fraud and corruption</i>	82
5.2.5	<i>To determine the relationship between fraud, corruption and revenue</i>	83
5.3	<i>Conclusion</i>	83
5.4	<i>Recommendations</i>	83
5.5	<i>Suggested areas of study</i>	84
References		85

LIST OF TABLES

TABLE	DESCRIPTION	PAGE
1	Customs duties collections in USD	3
3.1	Population, sample size and sample	40
3.2	Likert scale rating	44
4.1	Questionnaire response rate	47
4.2	Professional and academic qualifications	47
4.3	Years of experience at ZIMRA	49
4.4	Causes of fraud and corruption	50
4.5	Fraud risks	56
4.6	Anti-corruption strategies in place	61
4.7	Effectiveness of anti-corruption strategies	66
4.8	Data set	70
4.9	Unit root test results	72
4.10	Summary of unit root on residual	72
4.11	Regression results	73
4.12	Response rate of interviews	75

LIST OF FIGURES

FIGURE	DESCRIPTION	PAGE
Figure 4.1	Duration with the organization	49
Figure 4.2	Causes of fraud and corruption	51
Figure 4.3	Fraud risks that lead to revenue misstatements	57
Figure 4.4	Anti-corruption framework policy	62
Figure 4.5	The use of incentives	63
Figure 4.6	Strategies to detect and combat graft	64
Figure 4.7	Training, information and communication	65
Figure 4.8	Education and awareness	66
Figure 4.9	The effectiveness of monitoring and punishment	67
Figure 4.10	The effectiveness of information, technology and communication as an anti-corruption strategy	68
Figure 4.11	The effectiveness of incentives in combating corruption	69

LIST OF APPENDICES

APPENDIX	DESCRIPTION
APPENDIX A	Cover letter
APPENDIX B	Questionnaires
APPENDIX C	Interview guide
APPENDIX D	Regression estimation results

Chapter 1: Introduction

1 Background of the study

This study's main objective is to assess the impact of fraud and corruption on the effectiveness of customs duties collection. Previous studies and researches in Zimbabwe conducted by Tizora (2009), Mundia (2014) and Matamande et al (2012) hinged on bureaucratic corruption in Zimbabwe, Anti-corruption strategies and the effectiveness of internal controls in revenue management. In other countries the research was conducted by Imam and Jacobs (2007) focusing on the consequence of fraud on tax income in the middle east where the countries are developed than Zimbabwe and by Hwang (2002) who focused on the developing economies. However, the researches by Imam and Jacobs (2007) and Hwang (2002) combined all the taxes together and little has been carried out on the impact of fraud and corruption on specifically customs duties: revenue collection hence this gap has prompted this study to be undertaken.

According to Pasi (2014), in 2014 customs duty accounted for 9% of Zimbabwe total revenue. According to the ZIMSTAT (2009) the Zimbabwean economy's growth declined to a GDP of -17.7% in 2008 from the effects of the 2007-2008 hyperinflations but it registered its first growth of 6.3% in 2010 soon after the introduction of the multicurrency system. This led to a continuous increase in imports from 2.159 billion Euros in 2009 to 3.992 billion Euros in 2013 according to the European Commission (2014). Imports continued to increase having a significant increase of 42.1% in 2010 after the introduction of the multicurrency system and continued to increase at a decreasing rate recording an increase of 16.4% in 2011, 10.1% in 2012 and in 2013 increased insignificantly by 1.6% European commission (2014). This continual increase of imports meant that customs duty on these imports has to increase

as more goods would be levied customs duty when entering into Zimbabwe. However, according to Moyo (2012; 2) for instance revenue collection on customs duty decreased from 13% to 11% during the first quarter of 2012. The ZIMRA 2012 first quarter report described the decrease in imports and thus revenue as a result of improved industrial production capacity in Zimbabwe.

However, this assertion is found wanting as the number of cross border traders and imports registered a 10.1% growth in 2012 European Commission (2014) and with the economic growth decreasing from 6.3% in 2010 to 3.7% in 2014 according to ZIMSTAT (2015). According to Mundia (2013) one of the effects of economic hardship was an increase in imports to reach a total of \$7,362 538,674 creating a trade balance of (\$3, 480 109,584) Comtrade (2012) this implies the increase of migrants, cross border traders. However, according to Tizora (2009) as soon as one steps into the country they are confronted with corruption from both sides particularly at the points of entry into the country especially the customs offices.

This is evidenced by the following cases of fraud and corruption that took place in ZIMRA resulting in the revenue collection declining by the potential revenue of \$7 159 868.77. In the first case goods worth \$20000 crossed the border illegally without any customs duty being paid (ZIMRA: 2013, 1). Additionally, two ZIMRA officials raised a tax bill of \$1 500 000 instead of \$6 764 868 .77 which the owner of those companies had prejudiced the state. The officials were then given \$40 000 and a Range Rover vehicle in return (ZIMRA Investigation report case number IA7/11/2014). Moreover, in another case the official committed transit fraud of clearing goods as if they were transiting through Zimbabwe via Nyamapanda Border Post when in actual fact they were destined for the local market prejudicing the state customs duty amounting to \$75000 (ZIMRA Internal Audit report AR/16/092014/). Also, ZIMRA was prejudiced of \$335 000 on 29/12/2013 in potential revenue by bogus clearing agents with

the assistance of a ZIMRA official by clearing goods using fake bills of entries (ZIMRA Internal Audit report AR/16/092014). To explicitly illustrate the decline in customs revenue collections' contribution to the Zimbabwe's total revenue collected the table below has been drawn.

Table 1: Customs duties collections in USD

Year	2011	2012	2013	2014
Total collections	\$334 million	\$352.2 million	\$355.3 million	\$341.6 million
Actual target	\$325 million	\$376.9 million	\$392 million	\$430 million
Variance %	3%	(6%)	(9%)	(23%)
% contribution to total revenue	12%	11%	10%	9%

Source: ZIMRA revenue performance reports for the years 2011, 2012, 2013 and 2014.

As shown by the table above the contributions of customs duties to the total revenue collected continued to decline during the 4 year period with the most significant negative variances of 9% and 23% being experienced in 2013 and 2014 respectively, despite a 10.1% and 1.6% growth in imports respectively European Commission (2014). On the other hand with the decline of the customs duty collections as shown above what is of interest is that the corruption perception index for Zimbabwe continued to rise from 134 in 2010, 154 in 2011, 156 in 2012, 157 in 2013 and 163 in 2014 thus according to the www.transparency.org. The above cited cases of fraud and corruption that took place within the authority resulted in the

revenue collected declining by (\$7 159 868.77) and it is against this backdrop that this study was carried out with the objective to assess the impact of fraud and corruption on the revenue collection system of customs duty.

1.1 Problem Statement

Although, the ZIMRA claims to be intolerant of corruption and fraud this malfeasance continues unabated in the revenue collection system and in Zimbabwe as evidenced by the cases outlined above and this research seeks to assess the impact of corruption and fraud on the effectiveness of customs duties revenue collection system.

1.2 Main research topic

An assessment on the impact of fraud and corruption on the effectiveness of customs duties collection: A case study of Zimbabwe Revenue Authority

1.3 Purpose of the study

From the problem statement as articulated above, this study's purpose is to assess the impact of fraud and corruption on revenue collection.

1.4 Research objectives

The research seeks to achieve and establish among other things the following:

- To identify the causes of fraud and corruption that took place in ZIMRA.
- To assess the risk of material misstatements of revenue due to fraud.
- To determine the anti-corruption strategies and assess their implementation.
- To evaluate the effectiveness of anti-corruption strategies in place to mitigate the risk of fraud and corruption.
- To determine the relationship between (fraud and corruption) and revenue

1.5 Research questions

To boost the research into producing sound findings in order to fulfill the objectives outlined above the following research questions will be utilized.

- What forms of fraud and corruption are rampant in ZIMRA?
- What are the risks posed by fraud and corruption on revenue recognition?
- What are the current anti-corruption strategies in ZIMRA?
- How effective are the anti-corruption strategies?
- What is the relationship between revenue collection and (fraud and corruption)

1.6 Significance of the study

The study contributes to the already existing literature and enhances knowledge building on the impact of fraud and corruption on the effectiveness of revenue collection. It enhances understanding on various causes of fraud and corruption and seeks to determine the relationship between fraud, corruption and revenue collection. This study will also be a useful source of reference to ZIMRA in making decisions and may also be of importance in making some recommendations to the organization and will act as an eye opener to the management on the impact of fraud on revenue collection.

1.7 Delimitation of study

The study was carried out using data stored at ZIMRA and it will also be limited to a period from 2009 to 2014. The study focused on the impact of fraud and corruption on collecting customs duties revenue hence the respondents were limited to the customs officials, management and internal auditors.

1.8 Limitations of the study

Sampling

The study was partly hindered by the sampling size that the researcher had intended at the planning stage. It actually turned out that the sample was rather small as some respondents failed to reply. Ultimately, the sample base had to be enlarged to allow for more respondents.

Time constraints

The process of carrying out this study was time consuming. It was therefore necessary to work extra hours to finish this research on time.

Financial challenges

The research required a lot of printing, travelling and internet data bundles for researching. This engulfed the whole budgeted expenditure leaving the researcher with no option except to seek for financial assistance so as to cover the unbudgeted expenditures.

1.9 Assumptions

The study was carried out on the following underlying assumptions which are the researcher had all the material required to conduct the research, the study respondents were co-operative and provided unbiased information, the limitations encountered had not affected negatively on the viability of the research, the respondents were a true representative of the whole population and all provided information was treated with utmost confidentiality. Also, there are no fundamental changes to the structure and core business of ZIMRA during the research period.

1.10 Abbreviations and acronyms

GDP – Gross domestic product

ZIMRA – Zimbabwe Revenue Authority

1.11 Summary

The introduction chapter presented the background of the study, statement of the problem. Main research topic, research objectives, sub-research questions, significance of the study, delimitation of the study, assumptions to the study and abbreviations

The next chapter is going to present the literature review in line with the research.

Chapter 2: Literature review

2 Introduction

This chapter covers and discusses in detail the impact of fraud and corruption on the effectiveness of customs duties revenue collection and it sheds more light on the causes of fraud and corruption. Specifying the fraud risks and their impact on revenue recognition, the relationship between (fraud and corruption) and revenue, evaluating the effectiveness of the anti corruption strategies. The student acquired information from textbooks, journals, internet and other related sources.

2.1 Causes of fraud

2.1.1 Inadequate controls

Inadequate controls according to Khanna and Arora (2009) makes and improve the probability of fraud. Inadequate controls are experienced in an association where there is a poor control environment, need segregation of obligations, absence of physical security, absence of checks and balances, appropriate authorization, absence of legitimate documentation and record control and lacking bookkeeping framework. Also of the same view are researchers Idolor (2010) and Hamilton and Gaburiel (2012) who asserted that the majority of fraudsters identifies escape clauses in control methods and policies and then weigh the potential rewards of embarking into the fraud act and the potential costs should they be caught. Similarly, the authors cited above are of the same view that absence of appropriate is one of the noticeable reasons or fraud and agree that individuals are perpetrated into committing fraud when internal controls are lax.

However, an interesting point of view and a counter agreement is postulated by Buoni (2012) who pointed out that fraud usually occur as a result of conflict of interest between the

employees and the owners of the organization. He argued that the perpetrators of fraud are the ones who should control possible irregularities and maintain the internal controls. Moreover, Kim (2005) and Ashraf (2010) shared the same view and argued that inadequate internal controls are not the sole contributor to the causes of fraud since the personnel in charge of the internal controls are involved in fraud. He argues that internal controls constitute a positive work environment which the personnel is supposed to implement however if the implementers commit fraud then the motivator is not the lack of adequate controls. This justifies the need for the researcher to determine if inadequate controls could be held responsible and be the motivator for the fraud and corruption that took place in ZIMRA.

2.1.2 Poor hiring practices

Additionally fraud happens in an organization according to Albrecht and Albrecht (2004) when the organization is rehearsing poor enlisting practices when recruiting its personnel. He argues that a work society of trustworthiness, openness and support is critical to avoid fraud and to achieve this, organizations need to recruit trustworthy and legitimate individuals by conducting good hiring practices for example carrying out background checks, training them in fraud awareness and in the code of conduct or ethics. Similarly the ACFE (2014) pointed out in their study that organizations were losing income from employee theft and this occurred mostly in organizations that did not do the employing process even handedly. Moreover, Ashraf (2010) includes the same note by pointing out that those poor contracting practices leads to recruiting untrustworthy personnel whose mandate will be to defeat and circumvent even the comprehensive internal controls of an organization to commit fraud.

However, Buoni (2012), FSN and Oracle (2011) and Milliken argue that even after practicing best practices in hiring personnel by doing background checks, the personnel can be compelled to commit fraud by the superiors the compliance being rooted on the idea of

avoiding to have trouble with the superiors, not necessarily because people fear the revenge of their superiors, but simply to have an easy job life. Moreover, they disapprove this factor stating that fraudsters are not criminals from birth as supported by CFE (2010) report 85% of the perpetrators had not been previously charged or convicted of any fraud charges hence. The research will determine if ZIMRA is applying the best practice in hiring personnel and identify if poor hiring practices in ZIMRA cause fraud and corruption.

2.1.3 Lack of accountability

As indicated by Okekeocha (2013) absence of responsibility in organizations and governments causes fraud, he argues that the absence of accountability creates room for fraudsters to infiltrate and commit fraud as it results in lax leadership and inefficiency in the execution of duties. Morse (2010) adds that the absence of responsibility and accountability results in internal auditors being constrained to access to the annual financial statements hence hindering them from properly assessing the finances of the company or organization. This according to Morse (2010) will give the fraudster a chance to commit and have the capacity to conceal the fraud. Similarly, according to Balkin (2002) corporate scandals such as the Enron and Worldcom lacked managerial accountability which inevitably led to fraud and self dealing.

Apaza (2009) argues that since the principal agent theory exists the way corruption happens is affected. The principal and the agent need to maintain higher levels of transparency and integrity in addition to accountability for corruption to be shunned. Similarly, the effects of lacking accountability cannot be really linked to corruption taking place but Dye (2007) pointed out that it leads to misrepresentations which will then makes it possible to conceal corruption. Similarly Ssonko (2010) is of the same view and pointed out that to link lack of accountability to the causes of corruption can be insurmountable given the fact that accountability, ethics and integrity are hardly inseparable. From the literature reviewed it has

been indicated that managerial accountability led to the corporate scandals such as the Enron and Worldcom, however these organizations were public companies listed on the stock exchange with their main objectives being to attract investors and not government agency as with the ZIMRA hence the link between lack of accountability and corruption needs to be researched upon. Therefore this research will determine if the factors motivating listed organizations to commit fraud or engage in self dealing also applies to government authority agency whose mandate is to collect revenue for the Government such as ZIMRA.

2.1.4 Lack of training

According to Ashraf (2010) lack of training contributes to the becoming of fraud. In the WorldCom's case Audit Committee neglected to meet with the Internal Auditors of the organization, who had the obligation to furnish the Audit Committee with an independent and objective view on how to improve and add value to WorldCom's operations Louwers et al (2008). Not only were the personnel in the internal audit division insufficient for a vast organization but rather they additionally did not have the best possible training and experience to direct the testing of the organisation's controls. Idolor (2010) adds to the fact that lack of training causes fraud by arguing that absence of training and retraining of employees both on the technical and theoretical aspects of organizational activities and operations for the most part prompts poor execution of duties. Such inefficient performance generates loopholes which can be easily be exploited by fraudsters.

However, according to the CFE (2010) and the KPMG (2006) what is not known is whether it is the lack of training itself or that the fraud and misconduct awareness are not integrated into the training packages of employees. This applies to organizations such as ZIMRA which concentrate on a specific area of revenue collection for the state. Customs officials and other tax collectors need to be well versed with the procedures, regulations and policies with regards to customs duties, VAT on imports and international trade procedures at the same

time with the fraud and misconduct awareness initiatives hence the research will determine and assess if lack of training causes fraud or if it is the training that lacks integration with the fraud and misconduct policies that leads to employees committing fraud and corruption..

2.1.5 Poor ethical values

According to the ACFE (2010) there is an association between fraud and the moral environment created by the organisation's leadership. The ACFE argues that if the top administration or management maintains morals and honesty (ethics) workers will be more obliged to maintain those same values. Also, Gabriel and Hamilton (2012) assert to the view that poor ethical values causes fraud in organizations. They postulated that if the upper management shows up not to be concerned with ethics employees will be prone to commit fraud because to them ethical conduct is not a focus priority, with the similar view is Beresford, Katzenbach, and Rogers (2003), who pointed out that implementing a code of ethics and have personnel read and sign it fortifies moral behaviour and implies that training on the consciousness of fraud is conducted. The ultimate goal is reduced motive to commit fraud.

Li (2009) and Walt and Spiegel (2012) are of the view that personnel are capable of behaving unethically without realizing it hence poor ethics do not motivate personnel to commit fraud . They argue that the organizational culture and perceptions need to be introspected also. The research will determine if top management has been able to identify and uphold the organizational values of integrity and its ethics and to determine if the lack of that causes employees to commit fraud and corruption.

2.1.6 Causes of corruption in the customs environment

Extensive study and research has been carried out in recent years by various researchers including Jain (2001), Lambsdorff (2006), Hors (2001), Marshal (2011), Rotberg (2009)

Heymans and Lipietz (1996) on the determinants of corruption and fraud. According to Hors (2001:15) researches that have been carried out in the developing economies which include Pakistan, Philippines and Bolivia, provided common causes corruption within the customs environment which are discretionary interface between customs officers and individual cross border traders or private operators, lack of effective and efficient controls and customs officers working inside a system of accomplices, low salaries, weak legislative and the judicial system among others. These factors are reviewed below.

2.1.7 Discretionary interface

According to Hors (2001) discretionary interface causes corruption because it gives the customs officer to execute duties judgmentally without applying objective methods and procedures usually written down on manuals. This can lead the personnel to misclassify, undervalue, or misdeclare goods and services in customs transactions. With the same view is Myint (2000:37) who pointed out that the absence of decisive rules and definitive standards governing an economic activity leads to operators utilizing that loophole in engaging in corrupt activities. According to the Management System International (MSI) (2006:2) discretionary interface entails the idea that customs management leaves customs officials more discretion in their operations such as in valuing goods, assessing duties and taxes giving them enormous opportunity to commit corruption by utilizing or abusing the discretionary powers to extort operators.

However, Rotberg (2009:31) argues that there is no way one operates as a public servant and lacks room for discretionary interface. He argues that committing corruption is a breach of duty and justifying the fact is baseless and lacks clear understanding of being a public servant. Additionally, Gatti (1999:2) postulated that it is when the discretionary powers lack the monitoring tools that create the opportunity to commit corruption. Similarly, Mundia (2014) argues that even if discretionary interface exist if transparency is in existence economic

rent for committing corruption will not be common thus limiting the occurrence of corruption. Given that this factor was conducted in countries such as Bolivia, Pakistan and the Philippines whose democratic principles such as transparency accountability do not exist according to NORAD (2009:23). Given the above arguments the research will determine the impact of monitoring tools and transparency on the discretionary powers held by the ZIMRA customs officials in causing corruption. This will enable the researcher to identify if the existence of discretionary powers within the customs officials causes corruption and fraud.

2.1.8 Low wages of staff and limited job satisfaction

Another cause of corruption in the customs environment is low salaries according to Hors (2001). Hors further postulated that low salaries tempt officials to engage in corrupt activities. Additionally, Mundia (2014) asserts to the same view that low salaries on customs official that do not cover their daily family requirements results in paltry corruption being the norm. For example poverty will drive the employees to solicit bribes and gifts from clients. Similarly, Tarar (2010) agreed to low salaries causing corruption, the author postulated that to top up the low salaries the customs officers resort to corruption.

However according to Begovic et al. (2002) and Rotberg (2009) are of the view that despite low work incentives as compared to corruption incentives indulging in corruption is a breach of duty which needs punishment so as to de-motivate the workers from engaging in corruption. This is the missing link which the research will look into that is, to identify if ZIMRA has been implementing the punishments effectively so as to discourage other employees from engaging into this evil act.

2.1.9 Network of accomplices

The creation of a network of accomplices by customs officials causes corruption; they are created when appointments on job openings or promotions base on bribery thereby

continuing their corrupt actions and dealings within the customs departments according to Hors (2001:16). Similarly, Mundia (2014) also added that these networks of accomplices are developed through enrollment, redeployment and transferring of low-grade or junior employees through spurious means not based on professional worthiness this is done so as to reinforce these networks. It is widespread in developed economies where there is improved communication accessibility thus according to Hors (2001).

However, Ndonga (2009) argues that the network of accomplices' theory causes corruption if only the power is stemming from the concept of monopoly. Similarly, Mynt (2000:36) states that the concept of monopoly occurs when one person possesses something unique or special stemming either from its nature or limited supply. This enables the owner of the item to charge an exorbitant rate thus earning economic rent which creates a higher incentive for the bureaucrats with the controlling powers to engage in corruption. Examples of such firms and bureaucrats include the national revenue authorities and national land registration bodies which are given the sole power to exercise their duties. For instance the land registration body is exclusively empowered to register land ownership and land registrars are the only officials authorized to issue land titles. According to Ades and Di Tella (1999) corruption will then arise because clients served by such bureaucrats, thus the higher economic rent create a higher incentive for the bureaucrats with controlling powers to engage in corruption. This applies to ZIMRA which is the only customs collection authority with the sole power to exercise its duties. Moreover according this was mostly widespread in the developed economies where there is improved communication access and not linked to the developing economies hence the justification to this study.

2.2 The risk of material misstatement of revenue due to fraud

Revenue can be misstated in the annual financial statements as a result of fraud or it can be misstated fraudulently through manipulation and alteration of accounting records,

misrepresentation or intentional omission from the financial statements of events and through intentional misapplication of accounting principles pertaining to classification, disclosure and presentation PCAOB (2013). Organizations should determine the fraud risks associated with misstating revenue so as to implement the counter measures AICPA (2009). This part of literature review seeks to assess or determine the fraud risks in play within organizations that lead to revenue being misstated.

Fraud risks leading to misstatement of revenue.

2.2.1 Side agreements

According to Deloitte (2004) side agreements poses a risk of revenue being misstated. They take place when the terms of sale and conditions are customized or amended outside the accurate recognized sales process or reporting channels thereby impacting revenue recognition. According to KPMG (2009) common modifications comprise granting of rights of return, unmitigated payment terms, refund, or exchange. Sellers may present these terms and conditions in concealed side letters, emails or in verbal agreements in order to recognize revenue before the sale is complete.

However according to AICPA (2009) the study on if side agreements may significantly misstate revenue was carried out in low technology industries organizations and it was discovered that low technology industries and organizations provide terms that do not preclude revenue recognition. This was also supported by Ritternberg et al (2011) who postulated that side letters are the most important contributors to revenue misstatements in the software industries. From the above findings by the cited authors their researches reviewed that side agreements cause revenue misstatement mostly in high technology industries and no study pertaining to revenue collection organizations such as ZIMRA has been carried out hence the justification to this study.

2.2.2 Roundtrip Transactions

Revenue can be misstated materially through fraud by utilizing round trip transactions. According to Deloitte (2004) round trip dealings misstate revenue since they take place between two or more organizations for which there is no business purpose or economic benefit to the involved organizations. These transactions blow up revenues or craft the appearance of sturdy sales growth and can include sales between organizations for the same amount within a short time period, or they can involve a loan to or investment in a customer so that the client has the ability to purchase the goods KPMG (2009). Cash may change hands but compensation alone does not legitimize the transaction or give good reason for the recognition of revenue if no underlying business economic benefits for the transactions exist.

However, Hanlon (2015:6) argues that round tripping that usually affect revenue collection agencies occurs when an individual disguises investments as coming from a foreign corporation or a non resident thus enabling the investor to evade paying customs duties and taxes. Moreover, Hanlon and Slemrod (2009) and Lisowsky (2010) pointed out that although round tripping of transactions leading to offshore tax evasion there is no evidence of its effects or determinants. Hence, this study will identify and assess the risk of material misstatement of revenue collected due to round tripping of transactions in a Zimbabwean set up that is, its effects on the revenue recognized.

2.2.3 Bill and holds

Bill and holds transactions also carries the risk of them being fraudulently utilized to misstate revenue significantly Chui (2010). According to Deloitte (2004) a bill and hold transaction fraud occurs when products have been booked as a sale but delivery and transfer of ownership has not occurred as of the date the sale is recorded thus resulting in improper revenue recognition. The transaction can involve a genuine sale or purchase order; though the customer is not prepared, ready, or able to agree to delivery of the product at the time the sale

is recorded Deloitte (2004). To cover up this sellers will possibly hold the goods in its facilities or may transport them to diverse locations, including third party warehouses.

According to Shipalana and Kenneth (2010) in the customs context bill and holds transactions occurs when goods are declared for in-transit removal to other country but kept in the original country for sale in the local market. This includes diversion or acquittal fraud, which occurs when records are provided to the revenue authority that misleadingly indicates that the merchandise has been exported (also known as ghost exports), then the product sold in the local market. Moreover, VAT fraud is a further form of acquittal fraud which takes place when false records are submitted to show that the product was exported (ghost exports), when the product was not exported and VAT is claimed back dishonestly. The bill and holds transactions have been linked to revenue material misstatements by Deloitte (2004) and KPMG (2009) in organizations other than those in the customs duty collection. This research will introspect on the likelihood of revenues being materially misstated in the accounting records through this factor if linked to the customs context.

2.2.4 Altering shipping documentation

According to Deloitte (2004) an organization may misleadingly record sales transactions and improperly recognize revenue by creating spurious shipping records altering the quantity sold or by usually changing the shipment dates and terms. IASB (2005) postulates that an organization can increase revenue in a specific accounting period regardless of the facts and circumstances that the transaction and the resulting revenue should have been recorded in the subsequent accounting period by altering shipping documentation and fraudulently record fictitious revenue.

However according to Shipalana and Kenneth (2010) in the customs context alteration of shipping documentation usually happens through under invoicing, under valuation and split

invoicing for instance false declaring weight, quantity or value, and creating fictitious invoices differing from the bill of lading so as to minimize import duty. However, as has been highlighted by Shipalana and Kenneth (2010) the altering of shipping documentation commonly lies in the individual traders and not the revenue collection authority hence the need to determine if this factor can really lead to revenue being materially misstated in the financial statements of the revenue authority.

2.2.5 Upfront fees

Upfront fees takes place on some sales transactions or service provisions that require customers to pay up-front fees for services that will be provided over an extended period of time or after a certain period Deloitte (2004). Similarly, KPMG (2010) asserts that this can lead to revenue misstatement if the organizations recognize the full amount of the fees received before the services are granted or performed as revenue. In some instances, the scheme possibly will involve the falsification or modification of accounting records such as purchase orders, invoices and sales contracts.

This applies to revenue authority organizations as cited by Matamande et al (2013) and Mundia (2014) that revenue authorities engage and transact with temporary deposits. Hence the need to research on this factor if it poses a risk that revenue can be materially misstated in revenue authorities' financial statements.

2.2.6 Holding accounting periods open

Revenue can be misstated materially when organizations holds the accounting records open for an extended period beyond the end of an accounting period Deloitte (2004). Additionally, Earnst and Young (2009) agree to this and points out that this enables companies to record revenue transactions that become apparent after the end of the reporting period in the current accounting period. This fraud risk impacts revenue recognized as it involves recording sales

cash receipts and temporary deposits that occur after the end of a reporting period in the current accounting period and report them jointly with the transactions pertaining to the just ended financial reporting period.

According to Dutta (2013) the fraud scheme of holding books open at the end of the period was mainly used by computer associates and this gives the need to research if this scheme can be used in government agencies and authorities. Similarly, Shiplana and Kenneth (2010) and Ahmad, Jensen and Frank (2009) argues that holding of accounting periods open as a fraud risk that leads to material misstatement of revenue is always not sufficient to inflate income to an organization whose fraud risk that leads to revenue misstatements is perpetrated against it and not by it. This applies since fraud risks pertaining to the customs context are normally frauds against the corporation and not perpetrated by the organization hence their effect is revenue loss Shiplana and Kenneth (2010).

2.2.7 Failure to record sales provisions, allowances and rebates

According to Deloitte (2004) some sales or service transactions require organizations to record provisions, rebates and reductions allowed on the gross sales amounts. This poses a fraud risk that may lead to misstatement of revenues by overstating or by understating if the allowed provisions and reductions are more than the actual given.

However according to DiNapolis (2006) failure to record the sales provisions, allowances and rebates can be laid on the control environment considerations that may be in place in an organization which pose risks of misstating revenue. These control environment considerations include the existence of aggressive accounting policies or practices, senior management pressures to increase revenues and the lack of involvement by the accounting or finance department in service or sales transactions.

From the literature reviewed the risks posed by fraud and corruption on revenue recognition were evidenced in the financial fraudulent financial reporting schemes such as failure to record sales provisions or allowances, holding accounting periods open, altering of shipping documentation according to Deloitte (2004), KPMG (2009), Earnst and Young (2009) and DiNapolis (2006). However, in context within the customs environment little has been researched as to the fraud risks in existence that may cause material misstatements in revenue recognition hence the need for this study.

2.3 Anti fraud and corruption strategies and their implementation

In order for organizations to counter the effects of fraud and corruption in their businesses they need to set up anti fraud and anti corruption strategies to mitigate the risks posed by fraud and corruption. This part of literature review seeks to determine the anti corruption strategies and their implementation thereof as cited by other researchers in the customs context.

2.3.1 Establishment of an anti corruption framework policy

According to Mundia (2013) establishing an anti corruption framework policy can be used in combating fraud and corruption in organizations. The framework establishes clear and visible anti-corruption and anti bribery policies, as a component of an overall culture of integrity in all operations of an organizations. As a result of having the framework in place corruption and fraud is reduced since it helps in restoring accountability thereby requiring all employees to ensure compliance with the organization anti corruption policy sanctioning those caught in cases of non compliance. Bell (2010) an anti-fraud policy should clearly define fraud and misconduct including specific, relevant examples of behavior that is not acceptable within the organization. According to Moyo (2014) the anti-fraud framework policy together with the anti-corruption policy ought to include the entire stakeholders affiliated to the customs

departments dealings by developing a code of procedures to be applied to an official engaging or participating in corrupt actions.

However Eric and Melnikov (2011:4) argue that most organizations do have policies to address corruption but to no avail the malfeasance still persist. The authors pointed out that anti corruption framework policies fail in combating corruption because of how they are implemented. The research will determine if designing an anti fraud framework policy in ZIMRA will deter and prevent fraud and corruption from occurring.

2.3.2 Strategies impacting on the change of incentives in order to discourage corruption

Low incentives for revenue collectors were among the distinguished causes of fraud and corruption in the general society Mundia (2013). More positive incentives ought to be disbursed to the employees in order to effectively fight fraud and corruption in the customs department. Hors (2001:25) additionally, states that great rewards to revenue collectors are required to counterbalance bribes and other various types of fraud and corruption that promote fraudulence among revenue collectors since this will encourage them to value their earnings other than bribes. Thus if incentives and earnings surpass the advantages of corruption employees will not indulge in corruption according to UNODCCP (2001:20)

However according to Poverello (2012:1) incentive to the customs officials cannot obviate the need to pay bribes if the customs officials are under staffed, this shortage results in long queues thus attracting touts and bogus clearing agents. Moreover, Tizora (2009) argues that there is no scientific data linking the reduction of corruption to the improved incentives of the employees hence this research will determine if the ZIMRA organization is appropriately staffed to ensure that the anti corruption strategy of using incentives works and also to identify if there is a link between the reduction in corruption to the improved incentives.

2.3.3 Strategies to detect prevent and combat graft

According to Hors (2001) strategies to prevent and detect graft include introducing and enforcing investigation with a specialized intelligence and enforcement team. This will help the organization to detect corruption taking place within the customs department. Riley (1998) asserted that it is the best move to prevent corruption hence preventive controls should be established. Spot checking helps to detect graft.

However, Tizora (2009) argues that strategies to detect and prevent corruption are limited with the existence of inherent controls and cannot be utterly relied on. This therefore implies that to successfully combat corruption diverse strategies need to be carried out Matamande et al (2012). In essence this means that the organizations employees and other anti-corruption agents can make spontaneous roadblocks, inspections at border post and monitor the use of surveillance mechanisms to detect corrupt activities. The researcher will identify the strategies with the ZIMRA is implementing in order to detect and prevent combat graft.

2.3.4 Training, Information and communication

All employees should receive tailored training in order to be able to detect bribery or other fraudulent conduct in an early stage Bell (2010). Whistle-blowing or confidential channels should be established to provide opportunities for employees to raise concerns obtain advice or report incidents KPMG (2009). The collection of data and information systems should identify and process relevant information and ensure that records are maintained. Once the anti-fraud policy is published, periodic trainings can be held throughout the organization to provide its employees with a forum to discuss the importance of ethical behavior ACFE (2010). In addition to defining fraud, this policy can also address how the company intends to respond to fraud and misconduct allegations. Communicate policy both internal and external communication on the enterprise's anti-corruption policy should take place on a regular basis

Bell (2010). The Sarbanes Oxley Act (2002) requires that audit committees establish procedures for the receipt, retention, and treatment of employee complaints across a variety of issues, including fraud and misconduct and such a procedure is establishing a whistleblower hotline. According to the ACFE Report (2008) approximately 46% of all fraud was uncovered through tips. However, the existence of a hotline may not be enough hence management should consider conducting periodic evaluations to determine the effectiveness.

The research will determine if whistle blowing facilities occur in ZIMRA and establish the strength with regards to the protection of whistleblowers. Additionally, the research will strive to identify the way in which information relating to corruption and fraud is relayed to the deserving personnel.

2.3.5 Educating role players about the negative impact of corruption on the economy

According to Kennedy (1999) anti-corruption strategy ought to include campaigns and awareness on the negative effects posed by the identifiable corrupt activities. Moreover, Eric and Melnikov (2011:2) stated out methods of battling corruption in different parts and divisions of government and its agencies such as revenue collection authorities. Firstly, fighting corruption starts with individual myths that fraud and corruption is entwined and cannot be separated from tradition and culture; and also that, it obliges individuals to speak widely about the unfavorable effects and impacts of corruption on the society and economy. This will allow individuals to desist from corrupt activities since they will be in a position to know and have a significant comprehension of how corruption can be damaging to society thus according to Shah (2007:296). Shah (2007:296) further expresses that customs departments must have an obviously outlined and spelt out code of ethics on appropriate and unsuitable conduct for all revenue collectors. When unsuitable conduct is clearly spelt out, punishing those who are perpetrators of corruption becomes easier. When customs officials

understand the principle of good leadership, which includes provisions on misuse of state property, accepting gifts disclosure, assets and liabilities Shah (2007:298) it becomes easier to combat corruption.

2.4 Evaluation of anti-corruption and anti fraud strategies effectiveness

Evaluation means the systematic and objective assessment of an ongoing or completed project, program, or policy, including its design, implementation, and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency effectiveness, impact, and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process OECD/DAC (2002: 21). Thus, monitoring and evaluation are interlinked but independent exercises, with different processes and purposes

Internal controls are processes designed and affected by those charged with governance, management and other personnel to provide reasonable assurance on the achievement of an organization's objective thus according to Mawanda (2008) cited in Abdulkadir (2014:61). Internal controls play a pivotal role as they provide reasonable assurance on the reliability of financial statements, compliance with laws and regulations and on good corporate governance, an effective internal control system that manages risk, guards businesses against failures IFAC (2012). However, internal controls just like any other anti fraud strategies needs constant evaluation so as to maintain or improve their effectiveness.

2.4.1 Monitoring and punishment

Monitoring involves supervision, auditing and management in line with the anti fraud and anti corruption policy. Monitoring reduces corruption however this anti corruption strategy in practices have resulted in individuals tasked with monitoring and enforcing being corruptible.

In evaluating the effectiveness of monitoring Okinen (2007) in the study of roads in Indonesia found substantial effects of monitoring through government audits reducing corruption by 8% but however could not wipe out corruption to zero. Similarly, Ferraz and Finan (2010) evaluated the effectiveness of monitoring and punishment in combating corruption and found out that corruption was reduced by 27%. Moreover, Bjorkman and Svensson (2010) examined a community monitoring intervention in Uganda in which NGO's encouraged communities to be more involved in the state of health service provision. The intervention increased quality and quantity of education and healthcare facilities implying the reduction in corruption which was impeding on their provision.

However, the researches on evaluating the effectiveness of monitoring and punishment did their researches in projects other than in a revenue collection agency such as ZIMRA giving the researcher the need to evaluate the anti corruption strategy of monitoring and punishment in a revenue collection agency set up.

2.4.2 Information technology and communication

Duflo et al (2010) asserted to the view that technology help in fighting corruption because it ensures that certain policies and procedures are followed. This was also supported by Young (2008) who also pointed out that information technology and communication has an enormous impact on corruption. However, to evaluate its effectiveness Kleven et al (2010) studied the impact of technology in the design and administration of tax system where it allowed for double reporting and discovered out that the tax evasion rate in such cases recorded a very low of 0.3% but a high of 37% for self reported income.

However the effectiveness of technology in combating corruption was mainly evidenced in the developed world as reviewed by Kleven et al (2010) and Pomeranza (2010) hence it

should be possible to evaluate the effectiveness of technology in combating corruption and fraud in Zimbabwe a developing economy.

2.4.3 Incentives

This is another anti corruption strategy and according to Olken and Pande (2011) evidence that directly links performance pay or another incentive scheme with corruption outcome is largely lacking. However, Duflo et al (2010) conducted a study on evaluating the effectiveness of incentive schemes on worker absenteeism and found mixed results similar to Muralidhara and Sundaraman (2009). Kahn et al (2001) used the tax reform by the Brazilian government in 1989 to study the effect of incentive schemes on tax collectors in an economy with widespread tax evasions and found out that the fine collection per inspection rose by 75%. However, according to Banerje (2008) the effectiveness of this anti corruption strategy can be limited in the medium term if the service providers collude.

On the whole this evidence from the past researches conducted by the above cited authors shows that there is room for incentives to succeed in the fight against corruption, but that caution must be taken to design the incentives well and prevent them from being undermined. It is striking that very few studies directly examine the impact of improved incentives on corruption outcomes hence this study's aim to evaluate the effectiveness of the incentive scheme as an anti corruption strategy

2.4.4 Designing of anti-corruption strategies

The effectiveness of the anticorruption strategies depends on how they are designed. In a research by Abdukadir(2014:59) it was found that the quality of the design of internal controls is very critical to the success of an organization. Yang (2009) confirms that to ensure the efficiency of internal controls, managers have to pay attention to the design of internal controls. McCusker (2006) pointed out that sound anti-corruption strategies involve the

construction of a set of incentives to encourage rule abiding, and discourage rule averse, behaviour by agents who are predisposed to be opportunistic and driven by self interest within their currently corrupt working environment. To achieve this outcome Hart (2001) asserts to increasing the cost of corruption through external monitoring and sanctioning, reducing the scope for corruption through policy change and through devising systems to induce self restraint.

On the other hand according to McCusker (2006) the one-size fits all approach to anti-corruption strategies is no longer acceptable or practicable. Anti-corruption strategies should be designed with longevity in mind. To meet this long-term goal, a number of assessments need to have been made if the anti-corruption strategy is to be successful. Similarly Man-wai (2002) postulated that the experience in Hong Kong makes it difficult for one to rely on a single solution to fight corruption as it requires well thought and comprehensive strategic plan. Additionally Costa (2003) pointed out that corruption is complex problems which requires complex responses addressing as many aspects of corruption and as many of the different factors which contribute to it as possible. Therefore, to be effective these responses must be integrated with one another into a single unified anti corruption strategy

However, Mundia (2009:22) argues that because of the inherent limitations infested in the internal controls of revenue collection authorities, corruption permeates almost every area of public life of ordinary citizens, particularly in African countries. Failure by some countries to combat corruption has led to the proliferation of ungovernable state institutions and caused economic decline Uneke (2010:124) and Mauro (1998:12). It is therefore imperative to assess some of the consequences of corruption such as loss of government revenue, distorted government expenditure, instability of the country, poverty, lack of economic growth, and wastage of state resources when evaluating the effectiveness of the anti corruption strategies.

From the literature quoted above it has to be emphasized that business transactions take place in an environment of internal controls for completeness, accuracy and validity of transactions reported. It is therefore of interest to employ all the literature as given above to assess the effectiveness of internal controls in place. Hence, most if not all the sources quoted will be of interest to the researcher in this study.

2.5 The relationship between (fraud and corruption) and revenue

2.5.1 As corruption increases government revenue decreases

According to Potanlar, Samimi and Roshan (2010) corruption can change the government revenue. The alteration happens in many ways such as the decrease in the whole total amount of government revenue. This happens because corruption reduces tax revenue if it compels to evasion, improper exemptions being granted or to weak tax administration. Moreover, Tanzi (1998) and Tanzi and Davoodi (1997) asserted to the view that corruption and fraud reduces the total government revenue since it contributes to the reduction of the tax revenue over GDP. However, according to Bardhan (1997) corruption “greases the wheels” of business and commerce also Leys (1965) asserts that bribers grow into entrepreneurs who incite development. Conversely, according to Shleifer and Vishny (1993) the more shrewd view of corruption is it creates severe inefficiencies in the economy, giving way to a wide series of unfavorable effects.

Atilla (2008) examines the impact of corruption on growth through a tax revenue channel. This study finds that a combination of high levels of corruption and public revenue reduce growth, which is consistent with a detrimental effect of corruption on taxes. According to McClellann (2013) as corruption decreases tax revenue, governments can respond by increasing tax burdens to compensate, leading to more distortionary effects and lower growth. Other channel by which corruption reduces tax revenue is through its effect on tax morale.

Corruption has been demonstrated to lower tax morale which is associated with lower tax compliance (Torgler 2004).

The above empirical findings by Attila (2008), Potanlar et al. (2010), Tanzi (1998) and McClellan applies to the Zimbabwean economy specifically the revenue authority (ZIMRA) as according to Pasi (2014) the Zimbabwean economy has lost an estimated \$2 billion dollars due to corruption and fraud. In addition, Potanlar et al (2010) postulated that a country whose corruption level is high imposes greater taxes on international trade as a source of the government revenue, which in turn leads to an increase in tax evasion and tax collection costs. One potential channel for corruption's effect is through the reduction in government revenue from lower tax receipts. In corrupt societies, individuals wishing to evade taxes simply bribe their tax collector and the revenue goes at least partially uncollected. Particularly in cash-strapped developing nations, the resulting shortfall in revenue can seriously affect the government's ability to deliver public goods, such as education or health that have been shown to increase growth McClennar (2013). This also is evident in the ZIMRA as the authority increased the customs duties on vehicles from 66% to 89% according to www.herald.co.zw the aim was to increase the government revenue as alluded to by Potanlar et al. (2010).

The degree of corruption present in an economy affects both the tax revenue level and mix according to Ghura (1998). Tanzi and Davoodi, (2000) further argued that to a greater extent corruption in tax collecting drives some businesses into the informal sector adversely affecting investment and growth, hence tax revenues from the profits of those small owner-operated businesses in the informal sector will tend to shrink. Tanzi and Davoodi (2000) assessed the effect of an index of corruption on the total government revenue and their findings proved that corruption had a noteworthy depressing effect on the total government tax revenue, but not on its non-tax revenue component. Within the total tax revenue portion,

corruption had a larger negative impact on direct taxes as a group compared with indirect taxes. Also, Fisman and Svensson (2002) analyzed the effect of corruption on firms' growth using statistical data on 243 firms in 14 different industries in Uganda during the years 1997-1995. The results also showed that corruption reduces the firms' growth and they argued that in the long-term this reduces government tax revenue.

Jinyoung Hwang (2002) also traced the impacts of corruption on government revenue and identified that several corruption indices are positively and significantly associated with the taxes on international trade over current government revenue. Moreover, Agbeyegbe et al. (2004) concluded that corruption is negatively and significantly related to the domestic tax revenue as well as total amount of government revenue over GDP. Agbeyegbe et al. (2004) estimated equations for the total tax revenue and taxes on income, international trade, and goods and services (all as ratios of GDP) for a sample of twenty-two countries of the sub-Saharan Africa over a period covering 1980-96.

Hwang (2002) found that corruption does indeed affect the composition of government revenue as well as its total amount. From the results of the study conducted Hwang (2002) found that taxes on international trade over current government revenue were significantly and positively affected by corruption. However, he argued that corruption and fraud were not the only determinants on the government revenue. For example, in most developing countries, non budgetary funds are a common feature due to earmarking and underdeveloped government accounting system, which are basically hard to observe and differentiate across countries hence the justification of undertaking this study.

2.5.2 As corruption increases tax revenue increases

Another finding from McClellan (2013) is that, corruption with respect to tax evasion has negative as well as positive effects. The positive effect of corruption as also supported by

Mookherjee (1997) is that it increases tax revenue through the increased efforts of corrupt tax collectors in order to maximize the number of bribes. The argument rests on the fact that inspectors have an incentive to work harder; increasing the probability a tax evader will be caught. Since the standard tax evasion decision model is decreasing in probability of being caught, fewer people will engage in evasion, resulting in higher revenues and more public goods than in a non-corrupt society McClellan (2013).

However, Imam and Jacobs (2007) in their study investigated the effect of corruption on tax revenues in 12 countries in the Middle East region during the period 1990-2003. The results suggest that some variables affect both the level and composition of total tax revenue while others affect its components in opposed directions rendering their net effects on revenue level statistically insignificant. They argue that corruption does not have a statistically significant impact on total tax revenues in the Middle East as there are several determinants of corruption that affect the collection of diverse taxes differently. The real effect of corruption should be looked at by analyzing individual taxes instead Imam and Jacobs (2007). When total taxes are broken down into individual ones, the results suggest that taxes requiring frequent interactions between tax authorities and individuals, namely trade taxes, are most affected by corruption. Taxes on exports, customs and other import duties, and international trade taxes," which are important sources of revenue in the Middle East, are all negatively and statistically significantly affected by corruption Imam and Jacobs (2007)

Slemrod (2003) emphasized the fact that tax evasion influences corruption by limiting the ability to raise funds that may be diverted for private use. According to Ivanyna et al. (2008) the corruption-evasion interaction makes each variable more responsive to changes in parameters and helps target observed evasion levels without assuming a high degree of aversion to illegal activity. The corruption-evasion interaction and the lower aversion to illegal activity makes evasion more responsive to tax rates and causes the government to set

much more reasonable tax rates. The weak response of tax evasion to tax rates without a culture-of corruption effect creates a counterfactual prediction tax revenues rise with corruption. More corruption officials set higher tax rates. If evasion only responds weakly to corruption and tax rates, then the government will collect more tax revenue the more corrupt it is. This result is consistent with the empirical literature that finds a robust inverse correlation between corruption and tax revenue Johnson et al (1999), and Kaufmann (2010).

Imam and Jacobs (2007) further argues that although some studies by Friedman, Johnson, Kaufmann and Zoido-Lobaton (2000) have shown that corruption negatively affects overall revenue from taxation. These studies have, however, looked at the effect of corruption on tax revenues in general, combining all taxes together ignoring the fact that different taxes are likely to be affected differently by corruption. For example if a taxpayer bribes a revenue officer to expedite processing of a tax refund this does not entail a loss of tax revenue. Hence the effect of corruption on tax revenue has to be qualified.

On the whole from the empirical literature by Imam and Jacobs (2007) it was discovered that taxes requiring frequent interactions between tax authorities and individuals namely trade taxes are the most affected by corruption and also according to Hwang (2002) divers of determinants exist that impact revenue decrease or increase hence the above assumptions by these authors justifies the undertaking of this study.

2.6 Chapter summary

This chapter brought to light the objectives and the research questions posed in chapter one. It also provided a platform for doing a background review on the research focusing on the causes of fraud and corruption in ZIMRA, determining the relationship between fraud and revenue, the risk of material misstatements due to fraud and also the anticorruption strategies

and practices by revenue authorities was looked upon. Chapter three focuses on the research methodology and research design implemented in this study.

Chapter 3: Research methodology

3 Introduction

In this chapter the researcher outlines the process used to gather information and data, the research design, research techniques, target population, sampling techniques and the sample size used. Also highlighted in this chapter are the research instruments used, sources of data, presentation and analysis of data.

3.1 Research design

According to Thomas (2010:18) a research design is the logic or master plan of a research that highlight how the study is carried out. It is the overall plan connecting the conceptual research to the pertinent empirical research Wyk (2002). Yin (2003:19) also highlighted that a research design is an action plan for getting from here to there, where ‘here’ may be defined as the initial set of questions to be answered and ‘there’ is some set of conclusions or answers. According to research to Marx et al (2010:5) research design addresses sources of data, types of data, gathering techniques and analysis as well as interpretation of data. It points out the required data, the method to be used and how the research question is going to be addressed. The research design helped the researcher to gather relevant data to address the given research problem with the limitations in place. To be able to achieve valid and accurate information the descriptive and the case study designs were utilized.

3.1.1 Mixed research approach

According to Jones and Bartlett (2009) mixed approach integrates both qualitative and quantitative methods. Moreover, Johnson and Onwugbuzie (2004:17) postulates that mixed methods research is defined as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language

into a single study. In this study the researcher applied the mixed approach concept whereby the qualitative approach was conducted to address the objectives and research questions that where subjective and the quantitative approach was utilized in addressing the objective that aimed at testing the relationship between the variable corruption and revenue collected.

3.1.2 Descriptive research

The descriptive research design provides a picture of a situation as it naturally happens thus according to Burns and Grove (2003:201. It may be used to justify current practice and make judgment and also to develop theories. Moreover, Cohen et al (2008) defined the descriptive research design as a scientific process that describes or is related to some past events that has influenced or affected a present condition. For the purpose of this study, descriptive research was used to ascertain the impact of corruption and fraud on the effectiveness of customs duties collection in ZIMRA. Additionally, descriptive research design was conducted by the researcher since it provides accurate and applicable factors that relate to the research problem and is also commonly used for quantitative research designs as it gives some important pointers on variables worth testing quantitatively. Descriptive research design allows the researcher to apply the mixed methodology (qualitative and quantitative) in finding data and classifying its characteristics according to Jones (2010). Similarly, descriptive research is useful in this study because it identifies the areas of research that can be used as aid in analysing abstract information where models cannot be developed and also it is very flexible and reports on happenings according to Dawson (2002).

3.1.3 Correlation research design

According to Simon and Goes (2011) correlational studies review relationship between variables hence their main purpose is to determine if a relationship exist between variables. Additionally, Thompson et al (2005) and Michael (2009) asserts to the fact that correlation

research study stretches to the extent to which two variable factors are in relation and not to the causality extent whereby one factor causes changes in another factor. In this study correlation design was implemented because the researcher wanted to test the relationship between corruption and government revenue collected through ZIMRA and to determine the strength of the relationship between these variables. To achieve this objective existing data records were utilized, with regards to corruption data from the Transparency Organization was utilized and from other related sources and the ZIMRA annual revenue performance provided the revenue values collected from the years 2009 to 2014.

3.1.3.1 Dependent-Variables

According to Kathoori (2009) for a researcher to conduct an effective descriptive research design, the researcher should have clearly defined variables to be measured stating the measurement methods to be used. In this study, the dependent variable revenue collected was extracted from the ZIMRA revenue performance reports for the period 2009 to 2014.

3.1.3.2 Independent-Variables

Fraud indices

According to the ZIMRA fraud indicator reports are developed on quarterly basis to provide the most robust of fraud loss to date and the level of fraud indicated.

Corruption indices

The corruption perception index for Zimbabwe was extracted and calculated by the Transparency Organization and it measures the perception of corruption in Zimbabwe.

3.1.4 Regression Model

In order to analyze the relationship that exist between revenue collected and fraud and corruption the researcher used the regression model. It is illustrated as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$$

Where:

Y = dependent variable, which measures the percentage change of revenue collected.

β_0 =constant terms

β_1 - β_4 =beta coefficients

Independent variables

X1 = Fraud indices

X2 = Corruption indices

e = is the error term and there is an assumption that it follows a normal distribution with mean 0 and constant variance.

3.1.5 Case study research

Gillham (2000:1) defines a case study as an investigation to answer specific research questions which seek a range of different evidence from the case setting. Case study narrows down a broad field of research into one easily researchable study thus deepening the study. According to McMillan and Schummacher (2001) a case study examines a case over time in detail employing divers of sources of data giving the researcher a great understanding of why the instance happened as it did and is used when conducting an in depth analysis of a project or an organization. According to Tull (2010) a case study is an in depth study of a particular research rather than an extensive statistical survey. Moreover, Thomas (2010:19) postulated that a case study allows for the adoption of both the qualitative and quantitative data collection which presents a more complete picture of a specific problem. The researcher adopted the case study design because it provides a systematic way to collect data, analyze information and report the results allowing a descriptive review of the impact of fraud and corruption on the effectiveness of customs duties collection in ZIMRA. According to Luck and Rubin (2010), a case study research design provides more information and it saves time and resources since it focuses on a particular case thus time and cost effective as compared to

gathering market wide data though studying each and every element of the research population especially where there are common factors impacting the firm and the industry. The case study research design was used because the researcher wanted to get an in-depth analysis on this research area from an organisation where no prior research as this has been embarked on and also for easier collection of data since the researcher previously worked at this organisation.

3.2 Population, sampling and sample size

A population is a group of individuals, persons, objects, or items from which samples are taken for measurement. For this research the target population is 70 individuals which consist of the internal auditors, loss control officers, finance personnel and customs operations management.

3.2.1 Sampling technique and sample size

Sampling is the process in which a representative part of a population for the purpose of determining parameters or characteristics of the whole population is selected. Polit et al (2001:234) defines a sample as a proportion of a population. The sample was chosen from ZIMRA employees stationed at the Head office in Harare. Additionally, Burns and Grove (2003:31) refer to sampling as a process of selecting a group of people events or behavior with which to conduct a study. In sampling a portion that represents the whole population is selected. In this study the sampling was non-probable and purposive. According to Thomas (2010) in non-probability sampling researchers use their judgment to select the individuals to be included in the study. According to Cresswell and Clark (2011) purposive sampling involves identifying and selecting individual or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest in this case fraud and corruption. The rationale for choosing this approach was that the researcher was seeking

knowledge of the impact of fraud and corruption on revenue collection which the participants would participate by virtue of their experience. In this study only groups of individuals who were eligible were purposively chosen to participate in this study. This sampling technique was used because it was a well timed technique and relatively easier given the time limitation of this study. A sample should be a true representation of the target population and in this study the researcher used a sample size of 50 respondents consisting of Internal Auditors, Loss control officers, customs operations managers and finance personnel.

Table 3.1 Population, sample size and sample

Respondent group	Target population	Sample size	% of population	Data collection method
Internal Audit	25	18	72%	Questionnaires and interview
Loss control	15	10	66.67%	Questionnaire
Finance	10	7	70%	Questionnaire and interview
Customs	20	15	75%	Questionnaire
Total	70	50	71.42%	

To be able to gain a reliable insight the sample should not be too small according to Dessel (2013) this is supported by Smith (2013) who asserted that a larger sample can yield more accurate results thus validating the research. A sufficient sample size should be more than 50% Of the target and should be representative of the target population Jones (2012). The

researcher used a sample size of 71.42% of the target population which is more than 50% that was alluded to by Jones (2012) and David (2010).

3.3 Sources of data

For the study purpose the researcher used both primary and secondary data. The primary data collected from the target population which includes internal auditors, loss control officers, customs officials and finance personnel dealing with the review of internal controls and the collection of revenue. The secondary data collected from records of the authority, news bulletins and the organization's magazine. The primary and secondary data have been collected to cover every aspect of the study. The primary data are related to the response of the target population.

3.3.1 Primary data

Thi Ut (2013) defines primary data as data collected by a researcher specifically for a research assignment. In other words, primary data is data that the researcher gathers because no one has compiled and published the data before. Primary data are original in nature and directly related to the issue or problem and current data. The researcher used interviews and questionnaires to gather primary data. Primary data was used as a source of data in this study because the researcher wanted original and current data as to the impact of corruption and fraud on revenue collected in Zimbabwe particular since other researches by Imam and Jacobs (2007), Hwang (2002) focused on the effects of corruption on tax revenue in other countries without specifically studying a particular revenue component in the developing economies.

3.3.2 Secondary data

Secondary data are the data collected by a party not related to the research study but collected these data for some other purpose and at different time in the past Saunders et al (2011). The

researcher used the data already existing in the form of newspapers, ZIMRA revenues, and internal audit reports as well as published ZIMRA revenue performance reports. The secondary data helped the researcher in formulating the research objectives and gain an insight on the existing problem and also, helped the researcher in help uncover the impact of fraud and corruption on the effectiveness of customs duties collection. According to Thi Ut (2013) the purpose of secondary data is to extract relevant information from other sources and to provide descriptive information to support research. This source of data was used in this study as it enabled the researcher to determine the relationship between fraud and corruption and revenue collected through correlational research design. Existing data about the revenue performance and corruption was extracted from the already existing data sources such as the ZIMRA annual revenue performance reports and the already formulated corruption indices from the Transparency organizational reports. Bearing in mind the time factor for the study and its research requirements the researcher utilized both sources in this study of the impact of fraud and corruption on revenue collection with ZIMRA as the case study. The researcher used both sources so as to obtain and benefit from a proper coverage to the topic.

3.4 Research instruments

According to Greef (2011) research instruments are ways the researcher used in the gathering of data and in this study the researcher used interviews and questionnaires.

3.4.1 Interviews

Thi Ut (2013) defines an interview as a conversation with a purpose and the participant's views are valuable and useful. In this study of the impact of fraud and corruption on the effectiveness of customs duties collection in ZIMRA the researcher had to personally meet the selected individuals to ask necessary questions regarding the subject of enquiry. The

structured interview was used and the questions were designed carefully in a bid to provide appropriate coverage on the research questions regarding fraud and corruption. The researcher cross examined the respondents and had to be very tactful to get the accurate and relevant data from the respondents. In this study the researcher utilized the face to face interview technique as according to Phellas (2011:3) the presence of an interviewee allows for complex questions to be explained if necessary to the interviewee hence this improves the validity of the responses from the respondents. The researcher utilized interviews in this study because it allowed for further clarification on the questions and improved the reliability of the data collected as the researcher personally collected the data.

3.4.2 Questionnaires

According to Phellas et al (2011) a questionnaire is a set of questions has been prepared to ask a number of questions and collect answers from respondents relating to the research topic. A number of questions usually in printed or electronic form are to be answered by the individuals. The researcher distributed the questionnaires to the selected respondents ZIMRA staff and their respective working groups for them to answer in relation to the research topic. The researcher utilized both the open ended questions and closed ended questions in the questionnaire so as to obtain statistically useful information about a given topic. Additionally, according to Richard (2011) open ended questions allow for unrestrained response giving a chance for the respondents to fully express themselves. According to Thomas (2013) when questionnaires are properly constructed and responsibly administered they become a vital instrument by which statements can be made about specific groups or people or entire populations. Questionnaires reduces biasing error caused by the characteristics of the interviewer and the variability in interviewer's skills and also they are cheap to administer thus according to Phella (2011). The researcher utilized the likert scale rating type of a questionnaire in collecting data. According to Bucci (2003:73) a likert scale enables

respondents to express their responses on a scale which generally consist of 5 points. The likert scale assumes that the strength or intensity of experiences is linear thus it assures that attitude can be measured according to Tustin et al (2005:400). This ordinal and interval data scale was used in this research and the rating scale is shown below.

Table 3.2 Likert scale rating

5	Strongly agree
4	Agree
3	Neutral
2	Disagree
1	Strongly disagree

The likert scale is more useful as it shows the strength of a person’s feelings to the matter in question thus allowing data to be treated as quantitative however, the validity of the likert scale can be compromised due to social desirability that individuals may not be completely honest.

3.5 Data presentation

According to Phellas (2011) data presentation is the process by which raw data is classified and structured in a meaningful form to enhance understanding. The data gathered in this research was illustratively presented through the use of bar graphs, tables and pie charts. The justification of using these presentation methods is that they are easy to understand and they strive to depict a clear trend of events and summarizes clearly the gathered information.

3.6 Data analysis

It encompasses examining the data presented to come up with a conclusion. It is a process that includes inspecting and modeling of data with the goal of enhancing decision making. According to Wegner (1995:238) data analysis is the process of systematically applying statistical techniques to illustrate and evaluate data. In this research questionnaires gathered were checked for relevance and completeness only relevant data was consolidated for analysis. Since this study utilized the mixed approach to research design qualitative data were analyzed using spreadsheets enhancing the analysis by the use of graphs and charts. The correlational analysis was used on the quantitative data and was run using the E-Views software package. E-Views is a software that is used for regression purposes and can be used together with Microsoft excel and Microsoft word. Also, regression analysis was used since the bivariate correlational study was conducted in testing the relationship between corruption and revenue collected.

3.7 Chapter summary

The chapter discussed the research methodology used in the study and the reasons behind the use of the selected methods. It explained how the researcher carried out the research. In this study the descriptive research design, purposive sampling for selecting respondents at ZIMRA was used.

Chapter 4: Data presentation and analysis

4 Introduction

This chapter explicitly outlines the presentation of data and the analysis thereof of the information collected through the primary research conducted. The findings were gathered from the respondents through the use of questionnaires, interviews and from the already existing secondary data. The analysis consist both qualitative and quantitative data and is presented using bar graphs, pie charts and through tabulations. To enhance understanding of the findings interpretations and explanations to the presented data are used.

4.1 Questionnaire questions analysis

4.1.1 Response rate

Questionnaires totaling 50 were administered to the respondents, but only 40 out of the 50 questionnaires administered were returned successfully by the respondents equating to 80% of the targeted population. The non response rate mainly was prevalent in the Loss control and Internal audit departments due to the fact that most of the workers had assignments outside their base office in Harare. The table below illustrates the questionnaires administered and the responses the researcher got.

Table 4.1 Questionnaire response rate

Respondents Group	Sample size	Number of questionnaires administered	Number of questionnaires received	Response Rate
Internal Audit	18	18	13	72%
Loss control	10	10	5	50%
Finance	7	7	7	100%
Customs	15	15	15	100%
Total	50		40	80%

The overall response of 80% is a representative of the whole sample and justifies the researcher making conclusions and recommendations as it surpasses the 50% mark of the respondents implying it constitutes the majority of the respondents hence it is reliable and valid to draw conclusions from the respondents.

4.2 Professional and academic qualifications

Table 4.2 Professional and academic qualifications

Professional qualification	Responses	Percentage of respondents
Certificate	7	17.5%
Diploma	2	5%
Degree	23	57.5%
Masters	8	20%

Total	40	100%
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From the table above results show that 7 out of 40 respondents (17.5%) had certificates, 2 out of 40 (5%) had diplomas, and 8 out of the 40 respondents (20%) had masters and 23 out of 40 respondents which is the substantial number of the respondents had degrees equating to 57.5% of the sample size. The levels of professional and academic qualifications reflected by the table above shows that the sample size constitutes of educated intellectuals who have the ability to contribute to this research through their knowledge and expertise.

4.3 Years of experience with the organization

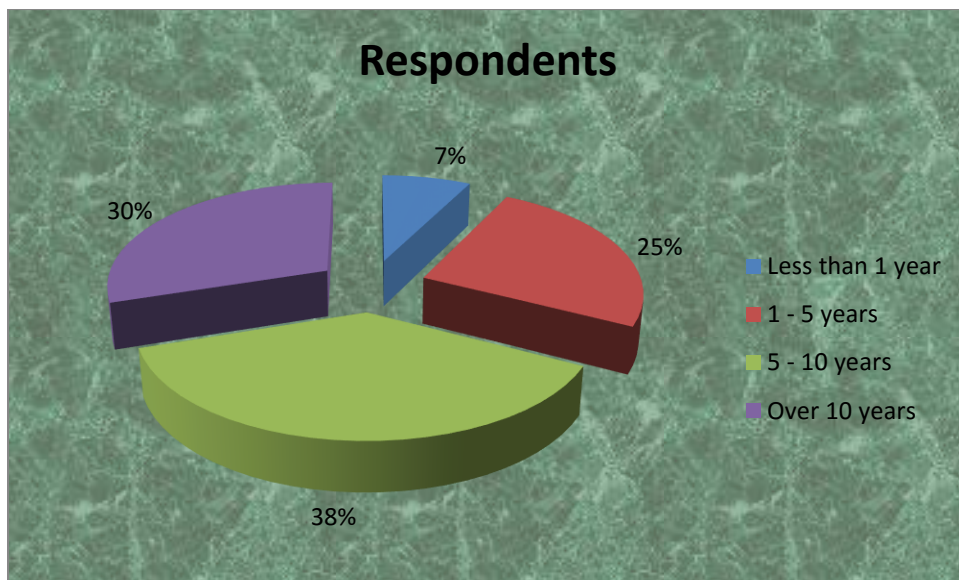
The researcher asked the respondents their duration with ZIMRA so as to ascertain their relevance to the research in terms of the period under assessment which is from 2009 to 2014 and also to assess the level and period of engagement with the organization so as to measure the relevance and validity of their responses. The table 4.3 and figure 4.1 below depicts the years the respondents had spend working at ZIMRA

Table 4.3 Years of experience at ZIMRA

Duration with the organization	Less than 1 year	1 – 5 years	5 -10 years	Over 10 years	Totals
Number of respondents	3	10	15	12	40
Percentage of respondents	7.5%	25%	37.5%	30%	100%

As illustrated by fig 4.1 12 out of 40 (30%) of the respondents have been working at ZIMRA for over 10years, 10 out of 40 (25%) of the total respondents have been engaged with ZIMRA for a period stretching from 1 to 5 years, 15 out of 40 (37.5%) respondents which is the group that constitute the majority of the respondents have been working at ZIMRA for a period which ranges from 5 to 10 years and only 3 of the 40 respondents (7.5% of the respondents) have worked at ZIMRA for less than 1 year.

Figure 4.1 Duration with the organization



The above pie chart shows that the majority of the respondents had been working at ZIMRA for more than 5 years. The researcher therefore assumes that the respondents are knowledgeable with the impact of corruption and fraud on the collection of revenue specifically the customs duties at ZIMRA, thereby, able to relay reliable information on this study.

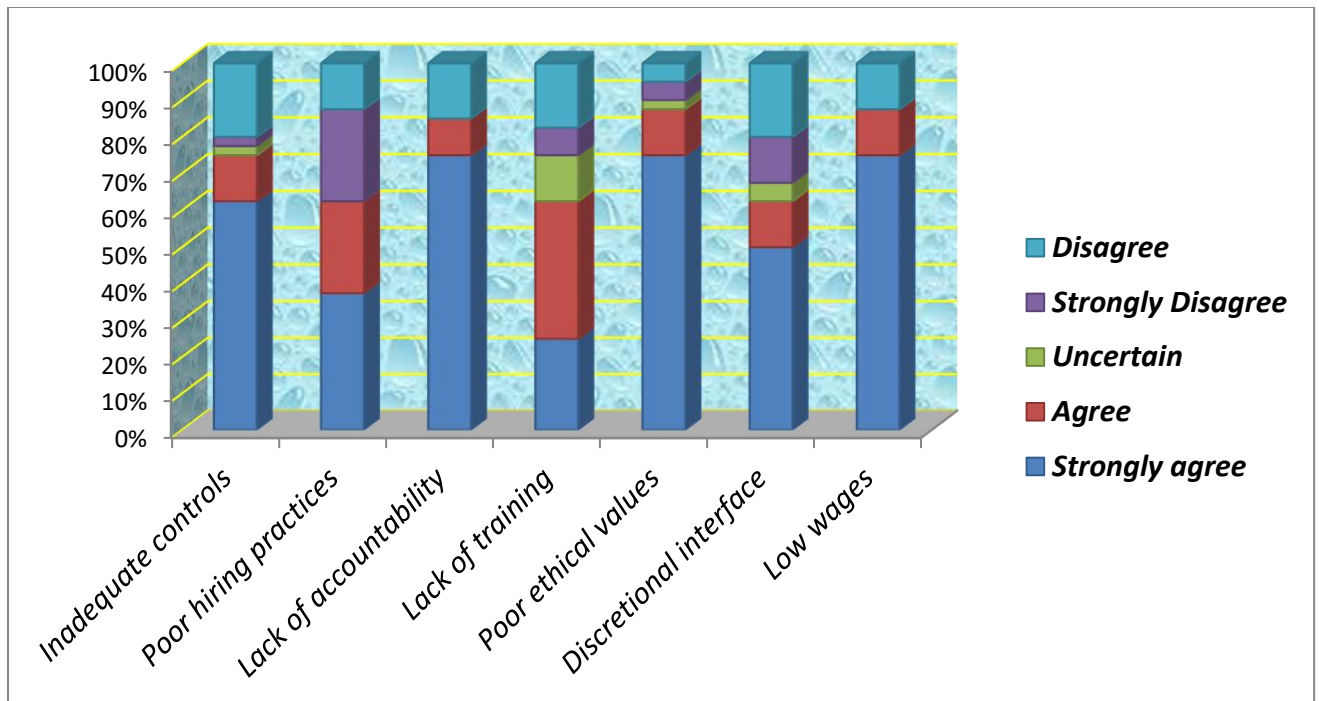
4.4 Causes of fraud and corruption

Table 4.4 Causes of fraud and corruption

Causes	Strongly agree	Agree	Uncertain	Strongly Disagree	Disagree	Total
Inadequate controls	25	5	1	1	8	40
Poor hiring practices	15	10	0	10	5	40
Lack of accountability	30	4	0	0	6	40
Lack of training	10	15	5	3	7	40
Poor ethical values	30	5	1	2	2	40
Discretionary interface	20	5	2	5	8	40
Low wages	30	5	0	0	5	40

Source: Raw data

Figure 4.2 Causes of fraud and corruption



4.4.1 Inadequate controls

The researcher asked the respondents if inadequate controls in an organization caused fraud and corruption to occur the results of the question are illustrated in Table 4.4 and Figure 4.2 above. 25 out of 40 (62.5%) of the respondents strongly agreed to the fact that inadequate controls actually caused fraud and corruption to occur in ZIMRA, 5 out of 40 (12.5%) of the respondents agreed, and only 1 of the 40 respondents (2.5%) strongly disagreed and in the same vein 8 out of the 40 respondents (20%) disagreed to this factor. Overall, 30 out 40 (75%) of all the respondents make those who agreed that inadequate controls caused fraud and corruption to take place in ZIMRA with only 1 of the respondents (2.5%) standing uncertain on whether inadequate controls causes fraud and 9 out of 40 (22.5%) disagreed.

It can be concluded that inadequate controls contributed to the causes of fraud and corruption that took place in ZIMRA which the majority of the respondents (75%) concur to. This is in line with what was postulated by Khana and Arora (2009) that inadequate controls create and

increase the likelihood of fraud. However, Buoni (2012) is in line with the 22.5% of the respondents who disagreed stating that fraud usually occurs as a result of conflict of interests between owners of the organizations and the employees.

4.4.2 Poor hiring practices

The question sought to determine if poor hiring practice causes fraud and corruption to occur and the responses are illustrated in Table 4.4 and Figure 4.2 respectively above. 15 out of 40 (37.5%) of the respondents strongly agreed that poor hiring practices contribute to the causes fraud and corruption in an organization, 10 out of 40 (25%) of the total respondents also agreed, however, 10 out of 40 (25%) of the respondents strongly disagreed to poor hiring practices causing fraud and corruption in an organization. Similarly, 5 out of 40 (12.5%) of the respondents disagreed to this factor causing fraud and no respondent was unsure as to whether poor hiring practices causes fraud.

On the whole, 25 out of 40 (62.5%) of the total respondents alienated themselves to the fact that poor hiring practices causes fraud and corruption to take place in an organization however, 15 out of 40 (37.5%) of the respondents disagreed to this fact. It can therefore be concluded that poor hiring practices in an organization leads to corruption and fraud. This is supported by Ashraf (2010) who asserted that poor hiring practices leads to the organization breeding fraudsters. However, Milliken (2003) argued that what causes fraud is a complex combination of different variables with no sole variable claiming the responsibility.

4.4.3 Lack of accountability

As shown by Figure 4.2 and Table 4.3 above, 30 out of 40 (75%) of the respondents concurred to the point that lack of accountability is a factor that causes corruption and fraud in organizations thus they strongly agreed. 4 out of 40 (10 %) of the respondents agreed while 6 out of 40 (15%) of the respondents disagreed there were no respondents who were unsure

as to whether the lack of accountability causes fraud. The majority of the respondents 34 out of 40 (85%) of the total respondents agreed that the lack of accountability causes corruption and fraud. This therefore implies that lack of accountability causes fraud and corruption and this is supported by Okekeocha (2013) who pointed out that lack of accountability in organizations and government causes fraud by creating a room for fraudsters to penetrate and commit fraud as it results in lax leadership and inefficiencies. However, Dye (2007) postulated that lack of accountability leads only to misrepresentations in order to conceal the already occurred fraud or corruption.

4.4.4 Lack of training

This was an inquiry on whether corruption and fraud is caused by lack of personnel training and retraining in organizations. As shown by Figure 4.2 and Table 4.4 10 out of 40 (25%) respondents strongly agreed that lack of training causes fraud and 15 out of 40 (37.5%) respondents agreed that lack of training caused fraud and corruption in ZIMRA. 5 out of 40 (12.5%) of the respondents were uncertain as to whether lack of training causes corruption and fraud to take the toll. However, 3 out of 40 (7.5%) of the respondents strongly disagreed and 7 out of 40 (17.5%) of the total respondents disagreed to lack of training causing fraud.

On the whole, the majority of the respondents 25 out of 40 which constitute 62.5% of the total respondents agreed that lack of training cause corruption and fraud in organizations while 10 out of 40 (25%) of the total respondents jointly disagreed to lack of training causing fraud and corruption. Moreover, 5 of the 40 respondents (12.5%) were unsure as to whether the lack of training in an organization can cause corruption and fraud to penetrate. According to Ashraf (2010) and Strawser (2008) lack of training contributes to the becoming of fraud this is similar to what 62.5% of the respondents agreed to.

4.4.5 Poor ethical values

This question sought to determine if poor ethical values among personnel in an organization contributes to the causes of corruption and fraud in an organization. As shown by Figure 4.2 and Table 4.4 30 out of 40 of the respondents (75%) strongly agreed to poor ethical values causing fraud, 5 out of 40 of the respondents (12.5%) agreed that poor ethical values in an organization causes fraud and corruption and 1 out of the 40 respondents (2.5%) was uncertain as to whether poor ethical values causes fraud. However, 2 out of 40 respondents (5%) strongly disagreed and also 2 out of 40 respondents (5%) disagreed to poor ethical values causing fraud.

Inclusively, 35 out of 40 respondents (87.5%) of the respondents agreed and 4 out of 40 (10%) of the respondents disagreed that poor ethics causes fraud and corruption in an organization. According to ACFE (2010) a connection between fraud and the ethical atmosphere exist hence the role of poor ethical values in causing fraud exist. This is in line with what 87.5% of the respondents who purports its existence. However, Walt and Spiegel (2012) discredited the impact of poor ethical values on corruption and fraud as they argued that personnel are capable of behaving unethically without their realization.

4.4.6 Discretionary interface

The researcher also asked the respondents if discretionary interface caused the personnel to commit fraud and corruption in organizations and Figure 4.2 and Table 4.4 above shows that 20 out of 40 (50%) of the total respondents strongly agreed, 5 out of 40 (12.5%) of the respondents agreed to discretionary interface causing fraud and 2 out of 40 (5%) were uncertain. however, 5 out of 40 (12.5%) of the respondents strongly disagreed and 8 out of 40 (20%) respondents disagreed that discretionary interface causes fraud and corruption.

Inclusively, 25 out of 40 respondents (62.5%) agreed that discretionary interface causes fraud and corruption while 13 out of 40 (32.5%) of the total respondents disagreed. According to Hors (2001) discretionary interface causes corruption because it allows employees to execute duties on a discretionary basis lacking the application of objective procedures this was also supported by Myint (2000).

4.4.7 Low wages and salaries of staff and limited job satisfaction

This question sought to determine if low wages of staff and limited job satisfaction contributed to the causes of fraud and corruption in organizations. From the results shown in Figure 4.2 and Table 4.4 above illustrate that 30 out of 40 (75%) of the total respondents strongly agreed that low wages and limited job satisfaction causes fraud, 5 out of 40 (12.5%) agreed and 2 out of 40 (5%) of the total respondents were uncertain as to whether low wages caused fraud and corruption to take place in ZIMRA for the period 2009 to 2014. However, 5 out of 40 (12.5%) respondents disagreed to low wages causing fraud. Inclusively, 35 out of 40 (87.5%) respondents agreed that low wages of staff and limited job satisfaction causes fraud and corruption whereas 5 out of 40 (12.5%) respondents jointly disagreed to low wages and limited job satisfaction causing corruption and fraud. According to Mundia (2014) low salaries on customs officials that do not meet their daily family needs results in petty corruption being the norm. This is in tandem to what 87.5% of the respondents agreed to however, the views of the 12.5% who disagreed are supported by Begovic et al (2002) who argues that the root cause lies in the type of the employees employed and not about the salaries offered.

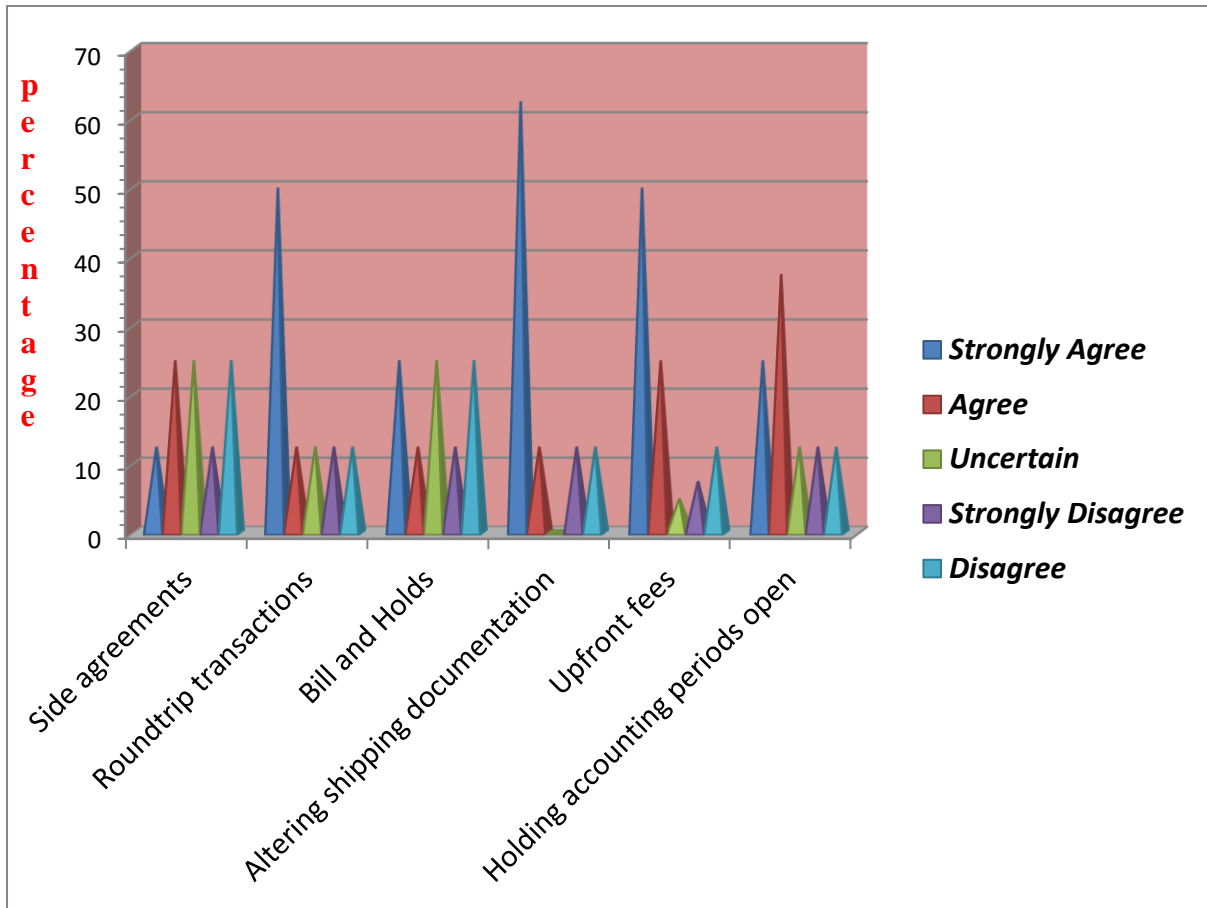
4.5 Fraud risks that leads to material misstatement of revenue

Table 4.5 Fraud risks

Fraud Risks	Strongly Agree	Agree	Uncertain	Strongly Disagree	Disagree	Total
Side agreements	5	10	10	5	10	40
Roundtrip transactions	20	5	5	5	5	40
Bill and Holds	10	5	10	5	10	40
Altering shipping documentation	25	5	0	5	5	40
Upfront fees	20	10	2	3	5	40
Holding accounting periods open	10	15	5	5	5	40

source: raw data

Figure 4.3 Fraud risks that lead to revenue misstatements



4.5.1 Side agreements

The researcher asked the respondents if side agreements leads to revenue being materially misstated in the financial statements of organizations. Figure 4.3 and Table 4.5 above shows the respondents' responses on which 5 out of 40 (12.5%) respondents strongly agreed that side agreements posed a risk of revenues being materially misstated, 10 out of 40 (25%) respondents agreed and 10 out of 40 (25%) respondents were uncertain as to whether side agreements led to revenue being materially misstated, however, 5 out of 40 (12.5%) of the total respondents strongly disagreed and 10 out 40 (25%) respondents disagreed to side agreements causing revenue to be materially misstated.

Inclusively, 15 out of 40 (37.5%) of the total respondents agreed and 10 out of 40 (25%) were indifferent as to whether side agreements led to revenue being materially misstated. However, 15 out of 40 (37.5%) jointly disagreed to side agreements causing revenue to be materially misstated. The findings from the research goes hand in hand with the postulations by AICPA (2009) and Ritternberg et al (2011) that side agreements pose a risk of revenue being materially misstated mostly in high technological industries and are major contributors to revenue misstatement in software industries.

4.5.2 Roundtrip transactions

This question sought to determine if round tripping and roundtrip transactions lead to misstatement of revenue in the financial statements of organizations. As shown by Figure 4.3 and Table 4.5 above 20 out of 40 (50%) of the total respondents strongly agreed, 5 out of 40 (12.5%) respondents agreed and 5 out of 40 (12.5%) respondents were uncertain, however, 5 out of 40 (12.5%) respondents strongly disagreed and 5 out of 40 (12.5%) respondents disagreed.

Inclusively, 25 out of 40 (62.5%) respondents jointly agreed that roundtrip transactions lead to revenue being materially misstated in the annual financial statements of organizations, 10 out of 40 (25%) respondents jointly disagreed to this factor. According to Deloitte (2004) round trip transactions can misstate revenue since they can occur between two or more companies for which there is no business purpose or economic benefit involved. This results in inflated revenue figures. However, in line with the view of the 25% of the respondents who jointly disagreed is Hanlon (2015) who argues that round tripping that affects revenue collection agencies is in investments and not in the customs duties collection.

4.5.3 Bill and holds

From the question of fraud risks that lead to material misstatements of revenue in organizations with regards to bill and hold the following responses were received. As shown by Figure 4.3 and Table 4.5 above 10 out of 40 (25%) respondents strongly agreed, 5 out of 40 (12.5%) agreed that bill and holds posed a risk of revenue being materially misstated and 10 out of 40 (25%) respondents were uncertain. However, 5 out of 40 (12.5%) respondents strongly disagreed and 10 out of 40 (25%) respondents disagreed.

Inclusively, 15 out of 40 (37.5%) respondents jointly agreed to bill and holds posing a risk of revenue being materially misstated, 15 out of 40 (37.5%) respondents jointly disagreed whilst 10 out of 40 (25%) were uncertain as to whether bill and holds transactions posed a risk of revenue being materially misstated. This was supported by Hanlon and Slemrod (2009) who pointed out that there is no evidence of the effects and determinants of round tripping on revenue.

4.5.4 Altering shipping documentation

This question sought to identify if the altering of shipping documentation leads to material misstatements of revenue in the financial statements of organizations. From Figure 4.3 and Table 4.5 above it was discovered that 25 out of 40 (62.5%) respondents strongly agreed, 5 out of 40 (12.5%) respondents agreed, however, 5 out of 40 (12.5%) respondents strongly disagreed and 5 out of 40 (12.5%) respondents disagreed. Inclusively, 30 out of 40 (75%) respondents jointly agreed that altering shipping documentation leads to material misstatement of revenue in the financial statements of organizations. However, 10 out of 40 (25%) respondents jointly disagreed. It can therefore be concluded that the altering of shipping documents leads to revenue being materially misstated since 75% of the total respondents agreed to that. This view is supported by Deloitte (2004) who postulated that

falsely recording sales transactions and improperly recognizing revenue leads to revenue being misstated. However, 25% of the respondents jointly disagreed and this is similar to Shipalana and Kenneth (2010) who highlighted that altering of shipping documentation usually lies with the individual traders and not the revenue collection authority.

4.5.5 Upfront fees

This question sought to determine if upfront fees pose a risk of revenue being materially misstated in the financial statements of organizations. As shown in Figure 4.3 and Table 4.5 above 20 out of 40 (50%) respondents strongly agreed, 10 out of 40 (25%) respondents agreed and 2 out of 40 (5%) respondents were uncertain, however, 3 out of 40 (7.5%) respondents strongly disagreed and 5 out 40 (12.5%) respondents disagreed.

Inclusively, 30 out of 40 (75%) respondents jointly agreed that the use of upfront fees pose a risk that revenue will be materially misstated. However, 8 out of 40 (20%) respondents jointly disagreed. Overall, it can be concluded that the use of the upfront fees facility posed a risk that leads to revenue being materially misstated since 75% of the respondents agree. This asserted to by KPMG (2010) as they postulate that upfront fees for services that will be provided over an extended period can cause revenue to be materially misstated if recognized before the service is granted.

4.5.6 Holding accounting periods open

This question sought to identify if holding accounting periods open for an extended period can pose a risk that leads to revenue being materially misstated in the financial statements of the organization. Figure 4.3 and Table 4.5 above shows that 10 out of 40 (25%) respondents strongly agreed, 15 out of 40 (37.5%) respondents agreed and 5 out of 40 (12.5%) respondents were uncertain, however, 5 out of 40 (12.5%) respondents strongly disagreed and

5 out of 40 (12.5%) respondents disagreed to holding accounting periods open for an extended period posing a risk of revenue being materially misstated.

Inclusively, 25 out of 40 (62.5%) respondents jointly agreed and 10 out of 40 (25%) jointly disagrees. In can therefore be concluded that holding accounting periods open is a fraud risk that leads to misstatement of revenue since 62.5% of the respondents agreed. This is supported by Ernst and Young (2009) who highlighted that the risk occurs since there is a possibility that organizations can record revenue transactions that transpire after the end of the reporting period in the current accounting period.

4.6 Anti-corruption strategies in place

Table 4.6 Anti-corruption strategies in place

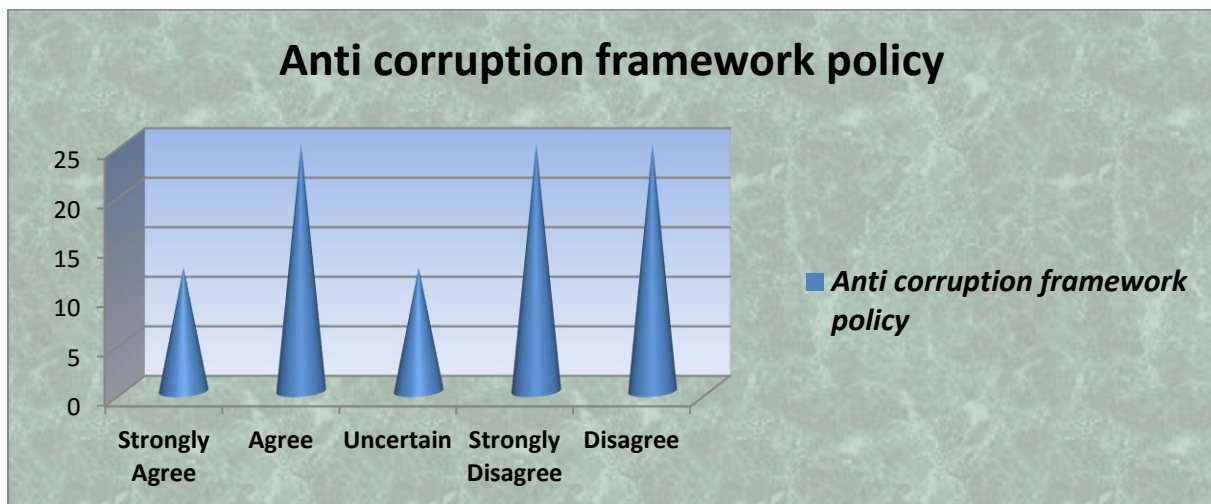
Strategies	Strongly Agree	Agree	Uncertain	Strongly Disagree	Disagree	Total
Anti corruption framework policy	5	10	5	10	10	40
The use of incentives	10	5	10	5	10	40
Strategies to detect and combat graft	15	10	0	10	5	40
Training, information and communication	5	10	0	10	15	40
Education and awareness	10	10	5	5	10	40

Source: raw data

4.6.1 Anti-corruption framework policy

This question sought to investigate if an anticorruption framework policy existed at the organization. As shown by table 4.6 above and figure 4.4 below 5 out of 40 (12.5%) respondents strongly agreed that the anti corruption framework exist, 10 out of 40 (25%) respondents agree and 5 out of 40 (12.5%) respondents were uncertain, however, 10 out of 40 (25%) respondents strongly disagreed and 10 out of 40 (25%) respondents disagreed. Inclusively, 20 out of 40 (50%) respondents disagreed that the anti corruption framework policy existed at ZIMRA. 15 out of 40 (37.5%) agreed that the anti-corruption framework policy existed.

Figure 4.4 Anti-corruption framework policy



According to Bell (2010) establishing an anti-corruption framework policy helps an organization in combating corruption and fraud since it restores accountability thereby enhancing compliance.

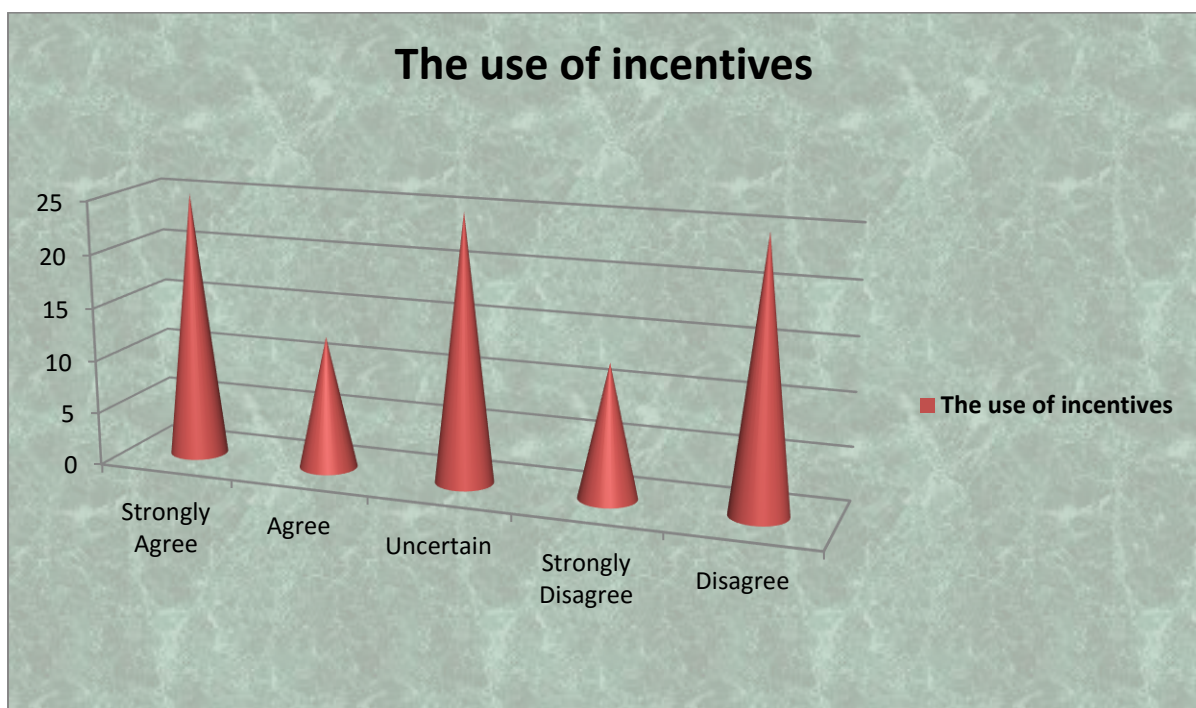
4.6.2 The use of incentives

The researcher sought to determine if the organization was using incentives as a strategy to combat corruption to ascertain if it can combat corruption and data collected from

respondents as shown by table 4.6 above and figure 4.5 below shows that 10 out of 40 (25%) respondents strongly agreed, 5 out of 40 (12.5%) respondents agreed and 10 out of 40 (25%) respondents were unsure, however, 5 out of 40 (12.5%) respondents strongly disagreed and 10 out of 40 (25%) respondents disagreed to the use of incentives as an anti-corruption strategy.

Inclusively, 15 out of 40 (37.5%) respondents jointly concurred to the existence and to fact that incentives can be used by an organization as an anti-corruption strategy. This is similar to the postulations by Hors (2001) that as a strategy to combat corruption more positive incentives should be awarded to employees. As highlighted by Mundia (2013) an anti-corruption framework helps in combating corruption and should be established in organizations. However, 15 out of 40 (37.5%) disagreed to the use of incentives as an anti-corruption strategy and according to Tizora (2009) there is no scientific data linking the reduction of corruption to the improved incentives of employees.

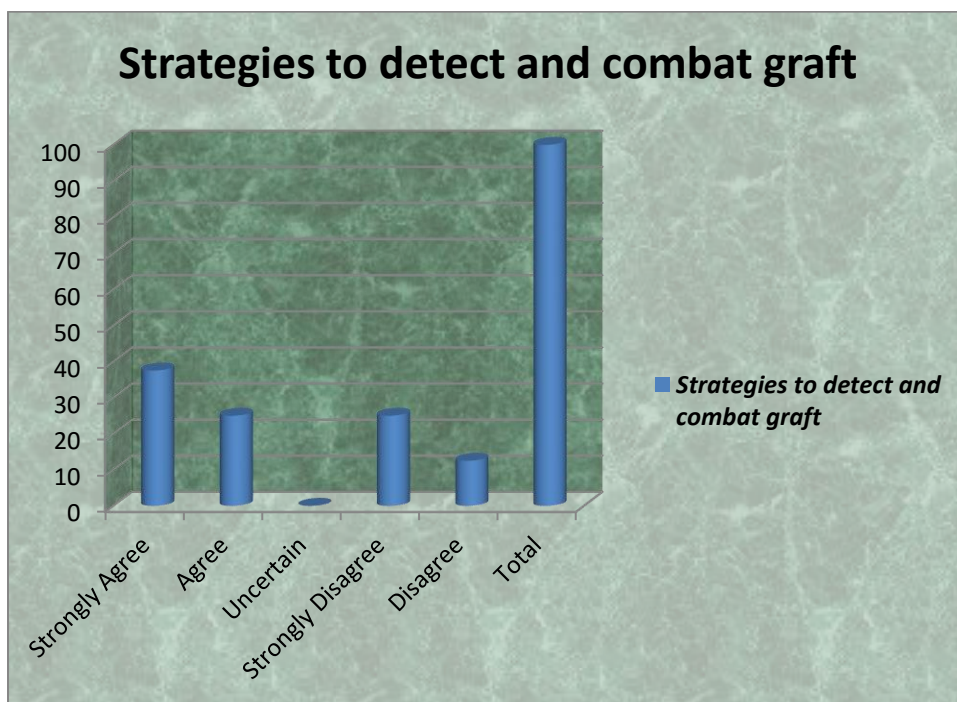
Figure 4.5 The use of incentives



4.6.3 Strategies to detect and combat graft

This was an inquiry as to whether the organization had strategies in place to detect and combat graft. As shown by table 4.6 above and figure 4.6 below 15 out of 40 (37.5%) respondents strongly agreed that the organization used strategies to detect and combat graft, 10 out of 40 (25%) agreed, however, 10 out of 40 (25%) respondents strongly disagreed and 5 out of 40 (12.5%) disagreed.

Figure 4.6 Strategies to detect and combat graft



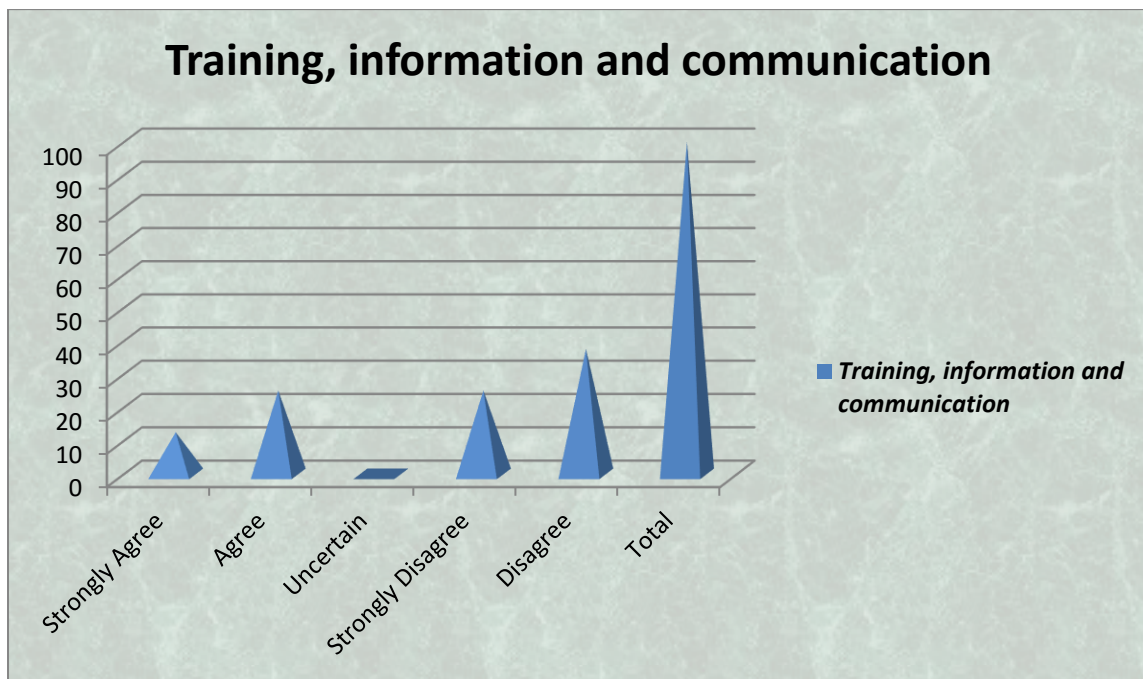
Conclusively, 25 out of 40 (62.5%) respondents agreed to the existence of strategies to detect and combat graft in ZIMRA against 15 out 40 (37.5%) who disagreed hence it can be concluded that strategies to detect and combat graft are in place.

4.6.4 Training, information and communication

This question sought to determine if the organization was conducting trainings and upholding communication and information policies as strategies to combat anti-corruption and fraud. The responses from the respondents pertaining to this question are presented in figure 4.6. As

shown by table 4.6 and figure 4.7 below, 5 out of 40 (12.5%) respondents strongly agreed, 10 out of 40 (25%) agreed, however, 10 out of 40 (25%) of the respondents strongly disagreed and 15 out of 40 (37.5%) respondents disagreed.

Figure 4.7 Training, information and communication



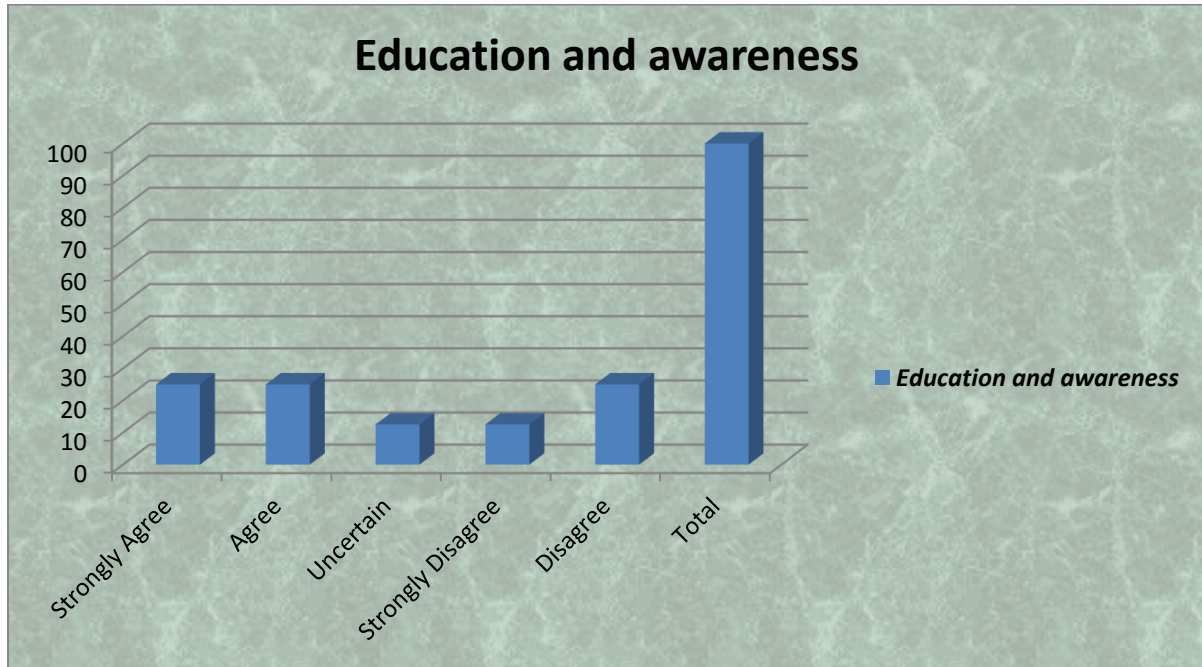
Overly, the respondents that disagreed that the organization was training personnel and providing information and communication channels that help in combating corruption were 25 out of 40 (62.5%) outweighing the 15 out of 40 (37.5%) respondents who agreed to the existence of this anti-corruption strategy.

4.6.5 Education and awareness

This was an inquiry on whether education and awareness helps in combating corruption and fraud and the results are shown by table 4.6 above and illustrated in figure 4.8 below, 10 out of 40 (25%) respondents strongly agreed, 10 out of 40 (25%) agreed whilst 5 out of 40 (12.5%) respondents were unsure. However, 5 out of 40 (12.5%) respondents strongly

disagreed and 10 out of 40 (25%) respondents disagreed. This information is presented in figure 4.8 below.

Figure 4.8 Education and awareness



On the whole, the majority of the respondents 20 out of 40 constituting 50% of the total respondents agreed to education and awareness playing a vital role in combating corruption whilst 15 out of 40 (37.5%) disagreed to this factor being implemented as an anti-corruption and anti-fraud strategy. It can therefore be concluded that education and awareness can be used as an anti corruption strategy by an organization.

4.7 Effectiveness of the anti-corruption strategies

Table 4.7 effectiveness of the anti-corruption strategies

Strategy	Strongly Agree	Agree	Uncertain	Strongly Disagree	Disagree	Total
Monitoring and	5	10	5	15	5	40

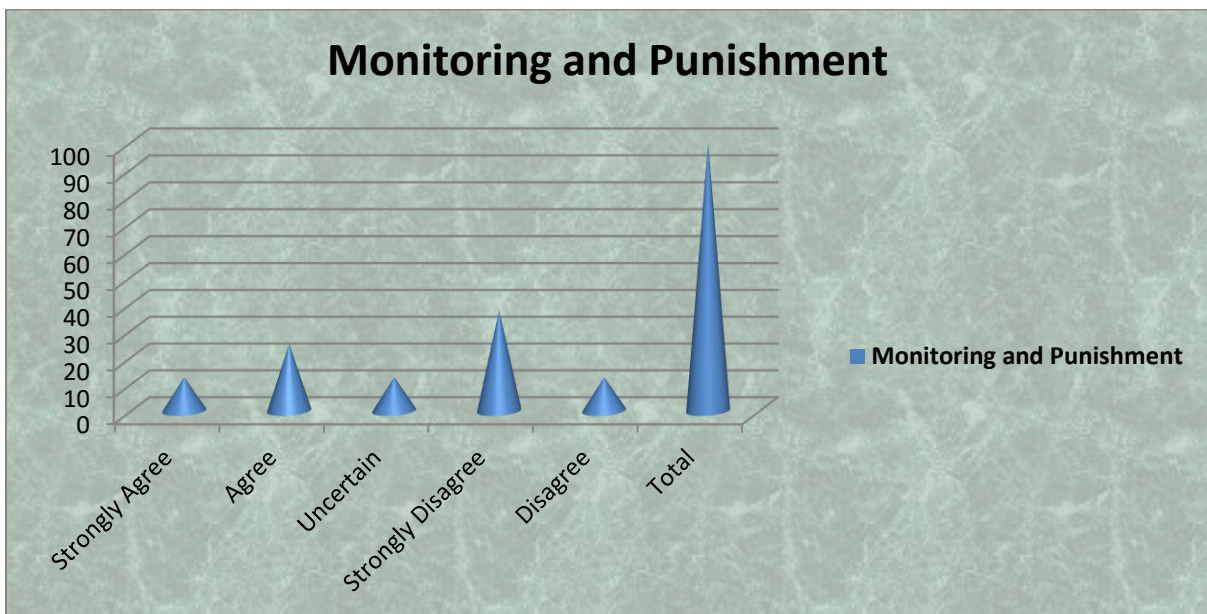
Punishment						
Information						
Technology	10	5		10	15	40
Incentives	10	15	5	5	5	40

Source: raw data

4.7.1 Monitoring and punishment

This question sought to determine if monitoring and punishment as an anti-corruption strategy is effective in combating corruption in ZIMRA and the results are tabulated in table 4.7 above. 5 out of 40 (12.5%) respondents strongly agreed, 10 out of 40 (25%) respondents agreed whilst 5 out of 40 (12.5%) of the respondents were unsure if it was effective. However, 15 out of 40 (37.5%) respondents strongly disagreed and 5 out of 40 (12.5%) respondents disagreed. This information is presented in figure 4.9 below.

Figure 4.9 The effectiveness of monitoring and punishment as an anti-corruption strategy

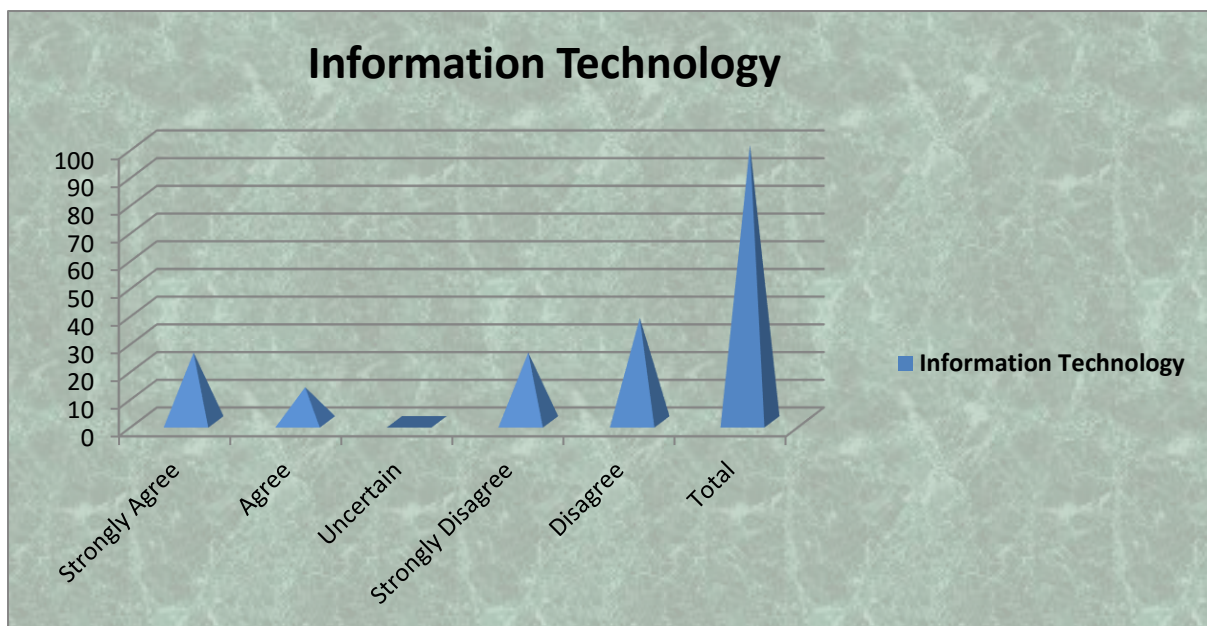


Conclusively, it can be stated that monitoring and punishment is not effective in combating corruption in ZIMRA since the majority of the respondents 20 out of 40 constituting 50% of the total respondents disagreed outweighing the 15 out of 40 (37.5%) respondents who agreed that it was effective in combating corruption and fraud.

4.7.2 Information technology and communication

This was an inquiry on whether the use of information technology and communication was effective in combating corruption and fraud at ZIMRA the results are tabulated in table 4.7 above and 10 out of 40 (25%) respondents strongly agreed that it was an effective anti-corruption strategy, 5 out 40 (12.5%) respondents agreed. However, 10 out of 40 (25%) respondents strongly disagreed and 15 out of 40 (37.5%) respondents disagreed. This information is presented and illustrated by figure 4.10 below

Figure 4.10 the effectiveness of information, technology and communication as an anti corruption strategy.



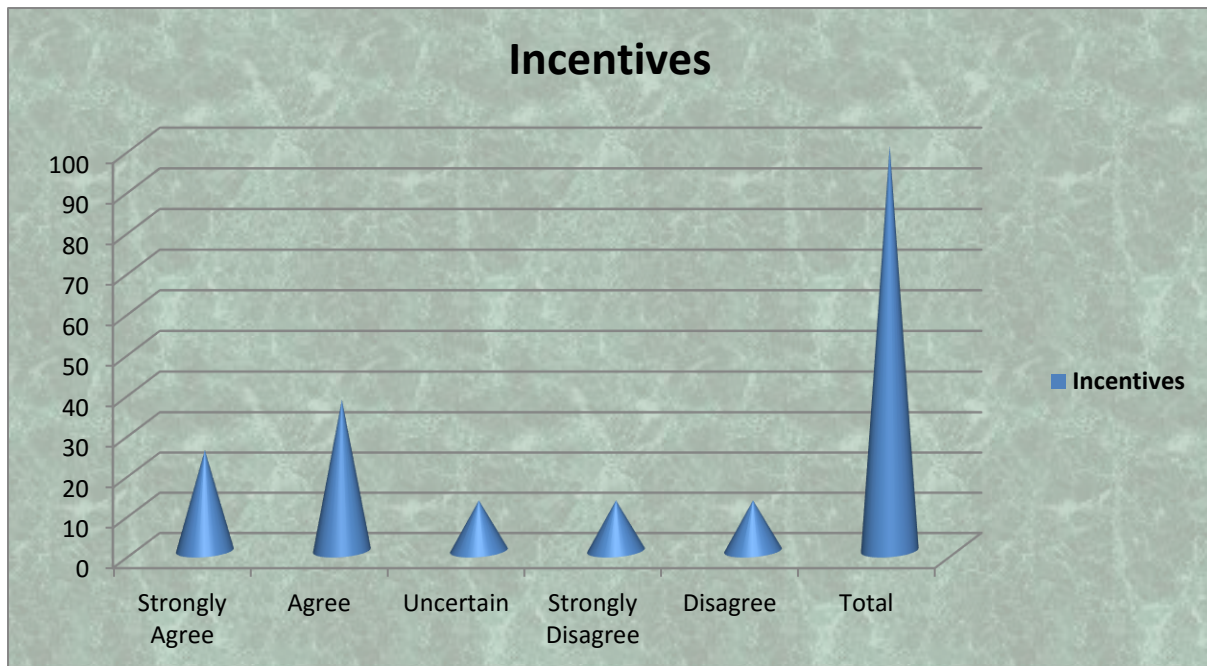
On the whole, the use of information, technology and communication as an anti-corruption strategy at ZIMRA is not effective since the majority 25 out of 40 respondents constituting

62.5% of the total respondents outweighing the 15 out of 40 (37.5%) respondents who agreed. According to Kleven et al (2010) and Pomeranza (2010) the effectiveness of technology in combating corruption was mainly

4.7.3 Incentives

This question sought to determine if the use of incentives as an anti corruption strategy is effective in organizations and from the responses received it was discovered that 10 out of 40 (25%) respondents strongly agreed, 15 out of 40 (37.5%) respondents agreed whilst 5 out of 40 (12.5%) respondents were unsure if this strategy was effective in combating corruption and fraud. However, 5 out of 40 (12.5%) respondents strongly disagreed to it being effective and 5 out of 40 (12.5%) disagreed. This information is tabulated in table 4.7 above and illustrated in figure 4.11 below.

Figure 4.11 the effectiveness of incentives in combating corruption



Conclusively, it can be stated that the use of incentives as an anticorruption strategy in ZIMRA was effective since the majority 25 out of 40 respondents constituting 62.5% of the total respondents agreed outweighing 10 out of 40 (25%) of the total respondents who disagreed.

4.8 Relationship between fraud, corruption and revenue

4.8.1 Quantitative analysis

Table 4.8 Data set

Year	Fraud Index	Revenue	Corruption index
2009;1	3.106	5.5135	21.5
2009;2	4.56	7.456	21.3
2009;3	6.45	8.123	20.4
2009;4	6.24	8.98	21.7
2010;1	6.78	9.89	22.8
2010;2	8.24	11.34	27.2
2010;3	8.43	11.24	36.4
2010;4	8.7	11.12	32.4
2011;1	9.8	10.9	36.5
2011;2	10.1	10.32	41
2011;3	10.45	9.78	36
2011;4	10.87	9.4576	44.6
2012;1	12.4	8.7865	45.1
2012;2	12.3	8.2345	33.5
2012;3	12.86	7.345	35.9

2012;4	18.45	6.875	32.9
2013;1	23.4	6.5674	35
2013;2	27.34	6.1234	38.1
2013;3	25.45	5.6754	41.6
2013;4	28.7	5.4763	42.5

Source: ZIMRA annual fraud indicator reports, ZIMRA quarterly revenue performance reports and the Transparency International corruption indices reports.

4.8.2 Diagnostic Tests

The researcher used the Augmented Dickey Fuller test (ADF) when he carried out stationarity test on the variables; he also conducted the cointegration test. The table below depicts a synopsis of the unit root test results

4.8.3 Unit Root Test Results

Table 4.9 Unit root test results

Variable	ADF statistic	Critical values	
Revenue	-6.216516	1%	-3.886751
		5%	-3.052169
		10%	-2.666593
Fraud Index	3.242241	1%	-2.692358
		5%	-1.960171
		10%	-1.607051
Corruption Index		1%	-2.699769

	-4.922954	5%	-1.961409
		10%	-1.606610

Source: Raw Data

Stationarity tested was carried out using the ADF test. According to Gujarati (2004) the null hypothesis of a unit root is rejected if the ADF statistic is greater than the 5% critical value. In testing for stationarity the unit root test was conducted for the variables separately. The results shows that revenue was stationery at level and fraud index and corruption index were stationery when differenced once. Refer to appendix D.

4.8.4 Cointegration Test

Cointegration test is used to test if the variables have a long run relationship in a time series thus according to Gujarati (2004). When the residual is found and tested for unit root, at 5% level of significance if the ADF (Augmented Dickey Fuller) of the residual is found to be larger than the critical value then a conclusion of no unit-root is passed thus the variables will be cointegrated. The researcher tried the unit root of the residual and concluded that the variables are cointegrated since there is no unit root on the-residual. The table below shows a summary of unit root on residual:

Table 4.10 Summary of unit root on residual

Variable	ADF statistic	Critical value	
RESIDUAL	-3.282877	5%	-1.9601171

Source: Raw Data

4.9 Regression results

4.9.1 Presentation of Regression Results

The table underneath shows results of the ordinary least squares regression conducted by the researcher between the variables.

Table 4.11 Regression results

Variable I	Coefficient	Std. Error	t-Statistic	Prob.
Fraud Index (FI01)	-0.233849	0.055540	-4.210470	0.0006
Corruption Index (COR)	0.127399	0.052402	2.431191	0.0264
C	7.192444	1.471651	4.887330	0.0001

R-squared = 0.510780

Adjusted R-squared = 0.453224

F Statistic = 8.874580

P value (F- statistic) = 0.002295

After conducting the OLS regression, the model is specified as

$$RE = -0.23384864006*FI01 + 0.127398955019*COR + 7.19244400995$$

4.9.2 Interpretation of Regression Results

The above regression model was adopted as an estimation of fraud and corruption as determinants for effective customs duties collections. Signs of coefficients are adopted in the

interpretation of the results. The time series ranges from January 2009 to December 2013, divided into 20 quarters. Fraud index has a negative sign whilst the corruption index has a positive sign. This implies that a 1% change in fraud index brings about a reduction of 0.2338 in revenue whereas a 1% change in corruption leads to a 0.1274 increase in revenue collected.

4.9.3 R Squared

The total variation in the level of revenue that is explained by the explanatory variables fraud index and corruption index is measured by R squared. In this model, from the results calculated above 51.07% of the total variations in the revenue collected are linked to the explanatory variables existing in the model whilst 48.93% are linked to the other variables not included in this model.

4.9.4 F statistic

According to Gujarati (2004) for the regression model to be statistically significant the F statistic should be greater than 5 as is in this case where the F statistic is 8.87... this is greater than 5 as required by the 2T rule of thumb. Also, there is no spurious regression in this model since the Durbin Watson Statistic (DWS) 0.540502 is greater than R squared 0.510780 as shown in appendix D

4.9.5 Fraud index

Fraud index is statistically significant in this study because its *t*- statistic value is -4.210470 in absolute terms. A negative relationship exists between fraud and revenue which is indicated by a negative coefficient of variation of -0.2338486. This means that a unit increase in fraud will result in 0.2338486 decreases in revenue collected. Mundia (2012) stated that there is a negative relationship between fraud and revenue collection.

4.9.6 Corruption index

The corruption index is significant statistically in this research because its t statistic value is 2.431191. A positive relationship between corruption and revenue exist this is evidenced by a positive coefficient of 0.1273989550. This means that an increase in the unit of corruption will result in an increase of revenue collection by 0.127398. This therefore implies that corruption has a positive effect and this is also supported by Mookherjee (1997) who cited that corruption increases tax revenue through the increased efforts of corrupt tax officers and collectors in order to maximize the number of bribes

4.10 Interview responses analysis

Three interviews were conducted successfully by the researcher out of the 5 respondents sampled.

Table 4.12 Response rate of interviews

Respondents group	Sample size	Actual Respondents	Response rate as a percentage
Internal Audit	3	2	66.7
Finance	2	1	50

The table above shows the response rate of interviews and 3 out of 5 respondents were interviewed constituting 60% of the total targeted respondents. Since the response rate is above 50% as cited by Simon and Goes (2011) the researcher considered the responses to be reliable and representative.

Question 1 - Do you think that inadequate controls can be held responsible from the fraud and corruption that took place in ZIMRA from 2009 to 2014?

Two internal auditors interviewed said that the existence of inadequate controls in the organization was the most factors that led to fraud and corruption to occur between the periods in question. According to Idolor (2010) inadequate controls ranks as the most frequent cause of fraud and corruption since they give the fraudster an opportunity to commit and conceal the fraud. However, the personnel from finance department argued that fraud and corruption was mainly orchestrated by poverty which is rampantly affecting the employees in Zimbabwe.

Question 2 – What are the other causes of fraud and corruption that can be held responsible in this customs and taxes environment?

The three interviewed respondents cited out that different other causes of fraud exist agreeing to the fact that there are divers of causes of fraud and corruption in an organization. The respondents from the Internal Audit department highlighted that the evolution to this information age has brought different types of fraud such as cyber crime whose causes differ in every aspect. Another interviewed respondent from the Finance department stated out that fraud and corruption is also caused by making employees work on one workstation for a long time to such an extent that he or she will be well vested with all the weaknesses in the system. Moreover, the other respondent from the internal audit said that the lack of fully operational automated systems leads to employees committing fraud and corruption this is supported by Mundi (2014) who asserted that manual processing of customs and tax at the borders reduces efficiency and effectiveness.

Question 3 – Do you think it is of paramount importance for the authority to uphold and establish an anti-fraud framework policy?

The three respondents cited out that establishing an anti-corruption framework policy is vital for an organization in the fight against fraud and corruption. Interviewees from the internal audit highlighted that an anti-fraud framework policy enhances accountability thereby reducing the emergence of fraud and corruption. This is supported by Bell (2010) who postulated that an anti-fraud framework policy is vital in an organization as it clearly defines fraud and misconduct and other specific activities not tolerated by the organization.

Question 4 – The internal audit, use of incentives, strategies to prevent and detect graft and training, information and technology are some of the anti-corruption strategies that were developed to solve the problems associated with fraud. From the above strategies which measure do you think will be the best practice?

The finance personnel interviewed highlighted that the use of information and technology tools is the best practice measure of fighting fraud and corruption in this information age. The two respondents from internal audit cited out that confidential information channels should be established in order to allow for the effectiveness of whistle blowing. This is supported by Bell (2010) who asserted that information technology gives room for organization to exploit and shield their organizations from fraud and corruption in this information age as they allow for instant communication to take place, automated signaling and the minimization of the human effort hence increasing the effectiveness and efficiency of the activity being carried out.

Question 5 – Do you think there is relationship between fraud and corruption and revenue collection and what do you think is the relationship?

Interviews with the finance personnel of ZIMRA proved that fraud and revenue collection have a negative relationship implying that as personnel and other accomplices commit fraud depletion in revenue a financial resource is experienced. Another respondent from the internal audit highlighted that with the rate that fraud is rising, corruption is being slowly assimilated into the day to day living experience as the normal way of conducting business thereby leaving the organization with little revenue available in its coffers. This is supported by Roshan (2010) who asserts that fraud and corruption alters the government revenue by making the total amount of government revenue to decrease since it compels to evasion and weak tax administration.

Question 6 - Any other suggestions you can add to the above questions?

The most point raised by the respondents was that fraud and corruption were the most impediments to maximal revenue collection and that since ZIMRA has anti-corruption strategies in its toolkit to combat this anomaly there is a serious problem with the implementation so the study should have also looked at this. Moreover, it was highlighted that a full quantitative study is most paramount and particularly required so as to shed light on the nature of the revenue leakages and also to quantify the impact of the existing anti-corruption strategies.

4.11 Chapter summary

This chapter constituted data presentation and analysis. The information relayed by respondents to the researcher obtained primarily from the questionnaires administered and the interviews conducted was analyzed through the use of spreadsheet and presented on graphs, pie charts and tables into meaningful data. To enhance understandability explanatory remarks

were put across. The next chapter summates the whole research stating the major findings and the recommendation thereof.

Chapter 5: Summary, conclusion and recommendations

5 Introduction

This chapter is a summation of the whole research and constitutes the major research findings, conclusions, recommendations and areas in need of further research. In this chapter research findings are related to the research objectives and the sub-research objectives outlined in the first chapter.

5.1 Summary of the research study

Chapter 1

The research commenced in chapter 1. Chapter 1 concentrated more on bringing the research gap of the study and the research problem statement. It also brought into the picture the facts and cases on which the malpractices of fraud and corruption impacted on the revenue of the authority. On the whole, this introductory chapter presented the background of the study, statement of the problem, research objectives, sub research questions and the significance of the study.

Chapter 2

Chapter 2 was necessitated by the need to assess the impact of fraud and corruption on the effectiveness of revenue collection at ZIMRA. It was more concerned about reviewing literature and this brought light to the subject area and helped the researcher link the research problem to the already body of existing literature. The review of literature was rooted on the objectives of the research study, to critically analyze the literature about the impact of fraud and corruption on the effectiveness of revenue collection as postulated by other scholars and authors. The review of literature also helped the researcher acquire information that drives the

research towards an effective assessment and also provided other methods of combating the research problem as applied in other countries and economies as cited out by other scholars and authors. Major authors reviewed include Mundia (2014), Tizora (2009), Hors (2001), Hwang (2002) and Imam and Jacobs (2007).

Chapter 3

Chapter 3 outlined the process used in gathering data and information from the respondents. It highlighted the research approach used in this study of utilizing both the qualitative and quantitative data and that for qualitative data descriptive design was utilized. The correlational design was also used in this study because of the need to determine the relationship between corruption and revenue. Moreover this chapter highlighted the research instrument used to gather data which were questionnaires and interviews. This chapter also highlighted the sample size; the researcher used a sample size of 50 respondents consisting of internal auditors, loss control officers, customs operations managers and finance personnel.

Chapter 4

Chapter 4 focused on the presentation and analysis of data gathered in chapter 3. The information that was relayed to the researcher by respondents obtained from questionnaires administered and interviews conducted was analyzed and presented on graphs, pie charts and tables. To ascertain the relationship between fraud, corruption and revenue the researcher utilized the multi regression model.

5.2 Major research findings

5.2.1 To identify the causes of fraud and corruption

An analysis gathered through questionnaires showed that 62.5% of the total respondents agreed that inadequate controls are the main causes of fraud and corruption in organizations.

Also, from the interviews the researcher conducted 80% of the respondents concurred to this factor as the main cause of fraud and corruption.

5.2.2 To assess the risk of material misstatements of revenue due to fraud

Data gathered through questionnaires, reviewed that round trip transactions, the use of upfront fees such as the temporary deposits and the alteration of shipping documentation were the most fraud risks leading to revenue being materially misstated in organizations.

5.2.3 To determine the anti-corruption strategies and assess their implementation

From the analysis of the data collected through questionnaires it was reviewed that ZIMRA has anti-corruption strategies in place such as those to detect and combat graft, the use of incentives to discourage corruption and the use of educational awareness. However, from the interviews conducted it was discovered that there is a problem with the implementation of these anti-corruption strategies.

5.2.4 To evaluate the effectiveness of anti-corruption strategies in place to mitigate the risk of fraud and corruption

From the analyzed data which was collected through questionnaires it was reviewed that the anti-corruption strategies in place under monitoring and punishments and information and technology are not effective this was evidenced by the responses of the respondents which were 50% disagreed that monitoring and punishment were effective with the 25% unsure and also 62.5% of the total respondents pointed out that information and technology was ineffective in combating corruption and fraud. From the interviews conducted the respondents pointed out that poverty in Zimbabwe is a major hindrance undermining the

existence of these anti-fraud and anticorruption strategies and that the capacity to deal with corruption is depleted.

5.2.5 To determine the relationship between fraud, corruption and revenue

The research findings proved that a negative relationship exists between corruption, fraud and revenue collection indicated by 80% of the interviewed respondents who highlighted that there is a negative relationship. Quantitatively, this stance was supported by the negative coefficient of variation which is -0.2338486. However, for corruption and revenue quantitatively the relationship was positive with a positive coefficient of variation of 0.127398.

5.3 Conclusion

The study indicates that fraud impacts negatively the effectiveness of revenue collection whereas corruption greases the wheels of revenue collection as found through the use of the quantitative data. Qualitatively, it was discovered that both fraud and corruption impacts negatively on revenue collected. From the regression model conducted it was discovered that corruption and fraud account for only 51.07% of the total variation in the revenue collected whilst 48.93% are linked to other variables not included in the model hence other factors are in play that impacts variations to the revenue.

5.4 Recommendations

5.4.1 Recommendations to ZIMRA

According to Mundia (2014) restructuring of management and the rotation thereof of operation helps organizations break networks of accomplices and since in this study it was discovered that network of accomplices contributed also to the existence of corruption ZIMRA is therefore recommended to restructure its employees and rotate them from one area of operation to the other. Also, more education awareness and campaigns should be upheld.

Additionally, ZIMRA should develop an anti-fraud framework policy so as to root out fraud and corruption within the vicinity of ZIMRA. This is supported by Bell (2010) who postulated that an anti-fraud framework policy helps organizations root out fraud and corruption. Moreover, there is need to automate operations technologically and integrate application systems as this reduces human intervention than when the processing is manual. ZIMRA should also protect witnesses and whistleblowers by establishing confidential communication channels to relay information related to fraud and corruption.

5.5 Suggested areas of study

During the course of the research the researcher found out further areas that are essential to this study which include a full quantitative study on the nature of revenue leakages and the fraud respectively. Also, a further study on other variables that affect revenue collection in organizations is paramount.

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APPENDIX A: Cover letter



Midlands State University

P Bag 9055

GWERU

08 April 2015

To whom it may concern

REF: QUESTIONNAIRE TO SOLICIT FOR INFORMATION

My name is Cosmas Tiriboyi a final year student at the Midlands State University, doing a Bachelor of Commerce in Accounting Honours Degree.

In partial fulfilment of the programme we are required to carry out a research project. The title of my project is: **The impact of fraud and corruption on the effectiveness of customs duties collection: A case study of ZIMRA.**

All information obtained will be treated with strict privacy and confidentiality and will be used for academic purposes only. Anonymity shall be maintained at all levels. Please assist by answering the questions below.

Your cooperation is greatly appreciated.

Yours faithfully

Cosmas Tiriboyi

Registration number R114141M



Company Stamp

APPENDIX B: Questionnaire

Instructions

1. Do not write your name on the questionnaire.
2. Show your response by ticking in the respective box provided.

Questions

1. Your department.....
2. For how long have you been working at ZIMRA?
Less than 1yr () 1 – 5 years () 5-10years () more than 10 years ()
3. What is the highest professional qualification do you have?
Certificate () Diploma () Degree () Masters ()
4. The following are the causes of fraud and corruption at ZIMRA

	Strongly Agree	Agree	Uncertain	Strongly Disagree	Disagree
Inadequate controls					
Poor hiring practices					
Lackof accountability					
Lack of training					
Poor ethical values					
Discretionary interface					
Low wages of staff and limited job satisfaction					

5. The following fraud risks leads to material misstatement of revenue

	Strongly Agree	Agree	Uncertain	Strongly Disagree	Disagree
Side agreements					
Roundtrip transactions					
Bill and holds					
Altering shipping documentation					
Upfront fees					
Holding accounting periods open					

6. The following are the anti corruption strategies in place at ZIMRA

	Strongly Agree	Agree	Uncertain	Strongly Disagree	Disagree
Anti corruption framework policy					
The use of incentives to discourage corruption					
Strategies to detect and combat graft					
Training, information and communication					
Education and awareness					

7. The following anti corruption strategies are effective

	Strongly Agree	Agree	Uncertain	Strongly Disagree	Disagree
Monitoring and punishment					
Information technology and communication					
Incentives					

Appendix C: Research interview guide

1. Do you think that inadequate controls can be held responsible from the fraud and corruption that took place in ZIMRA from 2009 to 2014?
2. What are the other causes of fraud and corruption that can be held responsible in this customs and taxes environment?
3. Do you think it is of paramount importance for the authority to uphold and establish an anti-fraud framework policy?
4. The internal audit, use of incentives, strategies to prevent and detect combat graft and training, information and technology are some of the anti-corruption strategies that were developed to solve the problems associated with fraud and corruption on the effectiveness of revenue collection. From the above strategies which measures do you think will be the best practice to solve your current problem?
5. Do you think there is a relationship between (fraud and corruption) and revenue collection and what do you think is the relationship?
6. Any other suggestions you can add to the above questions?

Thank you for your cooperation

Company Stamp



APPENDIX D: Regression estimation results

UNIT ROOT TEST FOR REVENUE (RE)

Null Hypothesis: D(RE,2) has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=0)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.216516	0.0001
Test critical values:		
1% level	-3.886751	
5% level	-3.052169	
10% level	-2.666593	

*MacKinnon (1996) one-sided p-values.
 Warning: Probabilities and critical values calculated for 20 observations
 and may not be accurate for a sample size of 17

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(RE,3)
 Method: Least Squares
 Date: 04/21/15 Time: 19:17
 Sample (adjusted): 4 20
 Included observations: 17 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RE(-1),2)	-1.288852	0.207327	-6.216516	0.0000
C	-0.091565	0.112658	-0.812766	0.4291
R-squared	0.720384	Mean dependent var		0.089671
Adjusted R-squared	0.701743	S.D. dependent var		0.821561
S.E. of regression	0.448678	Akaike info criterion		1.345110
Sum squared resid	3.019684	Schwarz criterion		1.443135
Log likelihood	-9.433436	Hannan-Quinn criter.		1.354854
F-statistic	38.64507	Durbin-Watson stat		2.126764
Prob(F-statistic)	0.000017			

UNIT ROOT TEST FOR CORRUPTION INDEX (COR)

Null Hypothesis: D(COR) has a unit root
 Exogenous: None
 Lag Length: 0 (Automatic - based on SIC, maxlag=0)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.922954	0.0001
Test critical values:		
1% level	-2.699769	
5% level	-1.961409	
10% level	-1.606610	

*MacKinnon (1996) one-sided p-values.

Warning: Probabilities and critical values calculated for 20 observations
 and may not be accurate for a sample size of 18

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(COR,2)
 Method: Least Squares
 Date: 04/21/15 Time: 19:20
 Sample (adjusted): 3 20
 Included observations: 18 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(COR(-1))	-1.176350	0.238952	-4.922954	0.0001
R-squared	0.587707	Mean dependent var		0.061111
Adjusted R-squared	0.587707	S.D. dependent var		7.767060
S.E. of regression	4.987235	Akaike info criterion		6.105593
Sum squared resid	422.8328	Schwarz criterion		6.155058
Log likelihood	-53.95034	Hannan-Quinn criter.		6.112414
Durbin-Watson stat	2.026381			

UNIT ROOT TEST FOR FRAUD INDEX (F01)

Null Hypothesis: FI01 has a unit root
 Exogenous: None
 Lag Length: 0 (Automatic - based on SIC, maxlag=0)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	3.242241	0.9990
Test critical values:		
1% level	-2.692358	
5% level	-1.960171	
10% level	-1.607051	

*MacKinnon (1996) one-sided p-values.

Warning: Probabilities and critical values calculated for 20 observations
 and may not be accurate for a sample size of 19

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(FI01)
 Method: Least Squares

Date: 04/21/15 Time: 19:22
 Sample (adjusted): 2 20
 Included observations: 19 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FI01(-1)	0.100844	0.031103	3.242241	0.0045
R-squared	0.025703	Mean dependent var		1.347053
Adjusted R-squared	0.025703	S.D. dependent var		1.877620
S.E. of regression	1.853333	Akaike info criterion		4.123045
Sum squared resid	61.82720	Schwarz criterion		4.172752
Log likelihood	-38.16892	Hannan-Quinn criter.		4.131457
Durbin-Watson stat	1.788734			

UNIT ROOT TEST FOR THE RESIDUAL (E)

Null Hypothesis: E has a unit root
 Exogenous: None
 Lag Length: 0 (Automatic - based on SIC, maxlag=0)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.282877	0.0025
Test critical values:		
1% level	-2.692358	
5% level	-1.960171	
10% level	-1.607051	

*MacKinnon (1996) one-sided p-values.
 Warning: Probabilities and critical values calculated for 20 observations
 and may not be accurate for a sample size of 19

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(E)
 Method: Least Squares
 Date: 04/21/15 Time: 19:28
 Sample (adjusted): 2 20
 Included observations: 19 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
E(-1)	-0.450966	0.137369	-3.282877	0.0041
R-squared	0.356693	Mean dependent var		0.172239
Adjusted R-squared	0.356693	S.D. dependent var		1.048583
S.E. of regression	0.841031	Akaike info criterion		2.542820
Sum squared resid	12.73200	Schwarz criterion		2.592527
Log likelihood	-23.15679	Hannan-Quinn criter.		2.551233
Durbin-Watson stat	1.567102			

REGRESSION ESTIMATION RESULTS

Dependent Variable: RE
 Method: Least Squares
 Date: 04/21/15 Time: 19:37
 Sample: 1 20
 Included observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FI01	-0.233849	0.055540	-4.210470	0.0006
COR	0.127399	0.052402	2.431191	0.0264
C	7.192444	1.471651	4.887330	0.0001
R-squared	0.510780	Mean dependent var		8.460180
Adjusted R-squared	0.453224	S.D. dependent var		2.012840
S.E. of regression	1.488380	Akaike info criterion		3.770735
Sum squared resid	37.65968	Schwarz criterion		3.920095
Log likelihood	-34.70735	Hannan-Quinn criter.		3.799891
F-statistic	8.874580	Durbin-Watson stat		0.540502
Prob(F-statistic)	0.002295			

Estimation Command:

=====
 LS RE FI01 COR C

Estimation Equation:

=====
 RE = C(1)*FI01 + C(2)*COR + C(3)

Substituted Coefficients:

=====
 RE = -0.23384864006*FI01 + 0.127398955019*COR + 7.19244400995