2017

Determinants of quality of financial reporting among semi -autonomous government agencies in Kenya

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Masters of Commerce

2017

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Submitted in partial fulfillment for the requirements for the Degree of Master of Commerce at Strathmore University

School of Management and Commerce
Strathmore University
Nairobi, Kenya

JUNE 2017

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

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07/06/2017

Approval

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ACKNOWLEDGEMENT

My first gratitude goes to God Almighty for granting me life, good health and the wisdom to complete this thesis. I am equally grateful to my thesis supervisor, Dr. David Wang'ombe, for his valuable guidance and timely advice throughout the thesis period.

I would like also to thank my classmates whose unwavering support enabled me to successfully complete the thesis process. I am especially thankful to Fredrick Otieno Owino, Kevin Omondi and Atlanta Kufwafwa for their constructive critique and cherished support towards this process of thesis development.

ABSTRACT

The study was conducted to establish the quality of financial reporting before and after the adoption of International public sector accounting standards (IPSAS- accrual) among semi-autonomous government agencies in Kenya, and to establish the influence of specific Semi-Autonomous Government agencies (SAGAs) characteristics on such quality. The specific SAGAs characteristics includes size of SAGAs, leverage, liquidity, audit committee size, profitability, and age of SAGAs. The research was conducted through pre-adoption (2011 to 2013) and post adoption (2014 to 2015) period. Data was analyzed using paired sample T-Test, descriptive statistics and stepwise regression analysis. The findings indicated that financial reporting quality improved after adoption of IPSAS. The regression results showed that the size of SAGAs as measured by log of assets, age of SAGAs, and liquidity are associated at statistically significant level to financial reporting quality. The implication of this study is that policy makers should stipulate strict adherence to IPSAS standards by practitioners so as to achieve quality of financial reporting. They should also recommend that larger units of SAGAs are broken down to smaller administrative units so that they can easily be administered to increase efficiency of administration. Implication by practitioners is to pay much attention on liquidity ratio since it has a positive association to financial reporting quality. They should also find ways to enable younger semi-autonomous government agencies establish systems in place to achieve financial reporting quality. There is a need for academic scholars to extend this research by examining other characteristics among SAGAs that may have influence on the quality of financial reporting. This study act as the foundation for future research by providing empirical evidence on financial reporting quality and its association to specific characteristics among SAGAs in Kenya. The study was limited to government Parastatals that apply IPSAS accrual method of accounting (SAGAs). This may make it difficult to generalize the findings to entire public sector. The study also included 3 years before adoption of IPSAS and two years post adoption. Three years before adoption and three years after adoption would have been more appropriate to study financial reporting quality. The study recommends future research to consider incorporating all public sector entities in the study of financial reporting quality as well as adding other variables that may influence quality reporting.

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LIST OF ABBREVIATIONS

AASB	Australia Accounting Standard Board
FASB	Financial Accounting Standards Boards
FMIS	Financial Management Information Systems
GFSM	Government Finance Statistics Manual
GOK	Government of Kenya
IASB	International Accounting Standard Board
IFAC	International Federation of Accountants
IFRS	International Financial Reporting Standards
IIA	Institute of Internal Audit
IMF	International Monetary Fund
IPSAS	International Public Sector Accounting Standards
IPSASB	International Public Sector Accounting Standards Board
NICE	Nijmegen Centre for Economics
PSC	Public Sector Committee
RPG	Recommended Practice Guidelines
SAGA	Semi-autonomous Government Agencies

DEFINITION OF TERMS

Semi-autonomous government agencies are public entities that deliver public programs, goods or services but operate independently of government and often have their own sources of revenue in addition to direct public funding (Institute of Internal Auditors, 2014).

Quality of financial reporting is the degree to which financial reports exhibit fundamental and enhancing qualitative attributes of financial information (IPSASB, 2014).

International Public Sector Accounting Standards (IPSAS) refers to set of accounting standards issued by the IPSAS Board for use by public sector entities around the globe in preparation of financial statements (IPSASB, 2014).

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Financial reporting quality is of great importance to the society at large because of its impact on economic decisions (Tasios & Bekiaris, 2012). Financial reporting quality is particularly important in the public sector where citizens are taxed to fund public services. Government Financial reporting refers to the process of collecting, classifying, summarizing and reporting accounting information that relates to government activities so as to allow transparency and accountability of elected leaders by citizens thereby providing background for people to have informed judgment on government performance and accountability assessment (Bastani, Abolhalaj, Jelodar, & Ramezanian, 2012). The methods of preparing accounts in the public sector under International public sector accounting standards can roughly be divided into cash-based and accrual-based methods. Cash-based accounting reports revenues and expenditures that have been received or paid, respectively, during a period (Champoux, 2006). Accrual accounting reports revenues and expenditures as they are incurred, whether money is received or paid. It provides a better view of the government's financial performance and the cost of government activities (Flynn, Moretti, & Cavanagh, 2016).

A number of studies have considered the benefits of accrual accounting in relation to financial reporting quality (Flynn et al., 2016; Hoque, 2008; IFAC, 2012; IMF, 2016; Stefanescu & Turlea, 2011; Timoshenko & Adhikari, 2009). The benefits include transparency and accountability that leads to financial reporting quality to meet stakeholders' expectations. However, the usefulness of accrual accounting in the public sector in relation to financial reporting quality has been questioned by a number of researchers (Abeysinghe & Samanthi, 2016; Carlin, 2003; Christensen, 2002). Some researchers posits that adoption of accrual accounting and financial reporting may in fact be undermining the quality of certain key decisions such as better resource allocations and overall performance.

Kenya has made various attempts to promote sound financial reporting. Initiatives such as Financial Reporting (FiRe) Awards have been made by Public sector accounting standard Board of Kenya (PSASB-K), Capital Market Authority (CMA), Nairobi Securities Exchange (NSE), and the Institute of Certified Public Accountants of Kenya (ICPAK). The FiRe Awards were launched

in 2001 to enhance the credibility of financial statements and ensure they comply with all provisions of IFRSs and any requirements that are specific to a particular entity. In 2015, PSASB-K, made it mandatory for public sector to participate in the annual fire award. In addition, In July 2014, the Public sector accounting standards Board adopted International Public Sector Accounting Standards (IPSAS) cash basis of accounting as the financial reporting framework for National Government (Ministries, Departments and Agencies) and County Governments. Board also adopted IPSAS accrual for Semi-autonomous government agencies (SAGAs) and IFRS for commercial state corporations.

The first government-wide consolidated financial statements prepared under this new requirement of International Public Sector Accounting Standards (IPSAS) was in financial year 2013/14. IPSAS refers to set of accounting standards issued by the IPSAS Board for use by public sector entities around the globe in preparation of financial statements. IPSAS Board is under the auspices of the International Federation of Accountants. The IFAC is an International organization for the accountancy profession. It was founded in 1977 and is domiciled in New York (Loft, Humphrey, & Turley, 2006). The IFAC established the Public Sector Committee (PSC) in 1986 as a standing technical committee. The PSC initially focused on preparing and publishing studies and research reports on International public sector accounting. In 2004, the PSC was renamed to IPSASB with a role of not only setting the standards but also taking care of general purpose financial reports (Loft et al., 2006). GPFRs refers to financial statements prepared for general users who are not able to demand financial statement that suits their needs (Barton, 2005). IPSAS have become recognized at a global level as a benchmark for evaluating government performance (Toudas, Poutos, & Balios, 2013).

Despite the adoption of a single set of accounting standards across the globe, significant differences in accounting quality across individual corporations exists because organizations face differences in institutional incentives, market forces, as well as business constraints (Isidro & Raonic, 2012). Research have shown that a number of specific firm attributes are associated with financial reporting quality (Ahmed, 2012; Isidro & Raonic, 2012; Olowokure, Tanko, & Nyor, 2015; Wallace, Naser, & Mora, 1994). These firm attributes include ownership concentration, analyst scrutiny, effective auditing, external financial needs, firm size, leverage, ownership dispersion, firm age, profit margin, return on equity, return on asset, liquidity, industry type, auditor type, listing status, and audit firm size among other factors.

However, inconsistent findings have also been observed among these characteristics on their influence on financial reporting quality. The inconsistencies could be explained by the absence of a universal measure of quality in financial reporting, differences of stage of economic development where studies took place etc. Firm characteristics that have been identified with such inconsistencies and could be relevant in the public sector include corporate size, leverage, age of the firm, liquidity, profitability and audit committee size (Jensen, 2000; McFie, 2006, Olowokure et al., 2015; Wang'ombe, 2013; Waweru & Riro, 2013).

The usage of accrual accounting is becoming common in the public sector across the globe. Despite the importance of accrual accounting in evaluating government performance, little research has been done on its consequences to financial reporting quality (Guthrie, 1998; Pollanen & Loiselle-Lapointe, 2012). The public sector constitutes institutions or organizations that implement public policy through the provision of services and the redistribution of income and wealth, with the support of revenue generated through taxation (Kara, 2012; Institute of Internal Auditors, 2014). With the adoption of IPSAS in Kenya, Semi-autonomous government agencies (SAGAs) are required to prepare their accounts using IPSAS accrual basis. Semi-Autonomous government agencies are public entities that deliver public programs, goods or services but operate independently of government and often have their own sources of revenue in addition to direct public funding (Institute of Internal Auditors, 2014). These agencies are particularly important in the realization of all vision 2030 projects in Kenya (GOK, 2007).

The Kenya vision 2030 is a long- term development blue print for the country. It aims at transforming Kenya into " a newly industrializing, middle income country providing a high quality of life to all its citizens in a clean and secure environment (GOK, 2007). As a result of devolving responsibility to these agencies, there is a need to demonstrate that they are meeting stakeholders' needs. With the adoption of IPSAS, stakeholders would be interested to know whether the financial reporting quality objectives of the IPSAS implementation is being achieved.

The principal purpose of financial reporting is to provide high quality accounting information concerning economic units, primarily financial in nature, useful for decision making (IPSASB, 2014). Accrual accounting has been promoted to achieve financial reporting quality in those countries that have adopted it. For instance, both in New Zealand and Australia, it is reported that accrual accounting have been able to provide useful information for government financial management (Christensen, 2002). A report by International Monetary Fund on Kenya Fiscal Transparency Evaluation of 2016, noted that the planned introduction of IPSAS accrual would greatly increase financial reporting quality by achieving accountability and transparency as required by Public Finance Management Act (PFM) of 2012. It further noted that the proposed accounting standards and financial statement formats that was being introduced across the government would bring consistency and reliability to annual accounts once the new requirements have been established. Measure of quality financial reporting has been done using a variety of proxies such as accrual models, value relevance model, financial statement restatement, and accounting fraud, economic and financial ratios as well as using the fundamental and enhancing qualitative characteristics of financial information.

1.2 Problem statement

The objective of the IPSASB is to serve the public interest by setting high-quality public sector accounting standards(IPSASB, 2014). Application of International Public Sector Accounting Standards (Accrual basis) is encouraged for its capacity to provide information for enhanced fiscal transparency and accountability (Abeysinghe & Samanthi, 2016; Flynn et al., 2016; Ştefănescu, 2011) . The adoption was expected to enhance accountability and transparency.

The quality of financial reporting in the public sector is important because it protects the citizen as well as investors in government bonds whose taxes and investments are used to finance public sector projects (IPSASB, 2014). Some researchers have questioned the benefits that are associated with IPSAS (accrual) basis of accounting in producing sound financial reporting. The argument is that adoption is done to achieve legitimacy and to give in to pressure from powerful organizations such as World Bank and International Monetary Fund (Abeysinghe & Samanthi, 2016; Bunea-Bontas & Petre, 2009; Christensen, 2002; Stefanescu &Turlea, 2011). Contrary to these arguments, other researchers have observed benefits of quality financial reporting associated with accrual accounting (Flynn et al., 2016; Hoque, 2008; Timoshenko & Adhikari, 2009). Therefore, controversies exist on the true benefits of IPSAS accrual adoption in relation to financial reporting quality. Financial reporting quality differs across individual corporations because of differences in market forces, institutional incentives and business constraints (Isidro & Raonic, 2012). Prior studies show a number of factors that affect the financial reporting quality (Ahmed, 2012; Isidro & Raonic, 2012; Olowokure, Tanko, & Nyor, 2015; Opanyi, 2016 ; Wallace et al., 1994). Among these factors are the management motivation, specific firm characteristics and quality of accounting standards. Conflicting findings have however been observed among these specific firm characteristics on their influence to financial reporting quality. Firm characteristics that have been identified with such inconsistencies include corporate size, leverage, age of the corporation, liquidity, profitability and audit committee size (Ahmed, 2012; Isidro & Raonic, 2012; Olowokure, Tanko, & Nyor, 2015; Wallace et al., 1994).

Even though there is need for government transparency and accountability, there is limited research on the impact of adoption of International Public Sector Accounting Standards in Public Sector in Kenya (Opanyi, 2016). Knowledge on the specific firm characteristics that influence the financial reporting quality in semi-autonomous government agencies in Kenya may assist the

policy makers and other stakeholders to initiate necessary reforms in a bid to enhance high quality financial reporting, Isidro and Raonic (2012). Taking into account these controversies and the knowledge gap on the impact of adoption of IPSAS (accrual basis) on financial reporting quality, the study seeks to verify empirically, through a quantitative and qualitative research, the acclaimed benefit of accrual accounting on the financial reporting quality and its association with specific corporate characteristics among semi-autonomous government agencies (SAGAs) before and after adoption of IPSAS accrual basis of accounting in Kenya.

1.3 Research Objectives

1.3.1 General objective

To establish the quality of financial reporting before and after adoption of IPSAS and its association to specific semi-autonomous government agencies' characteristics in Kenya.

1.3.2 Specific objectives

1. To establish the differences in the quality of financial reporting of SAGAs before and after adoption of IPSAS.
2. To examine the influence of SAGAs characteristics on the quality of financial reporting in Kenya.

1.3.3 Research questions

1. What are the differences in the quality of financial reporting of SAGAs before and after adoption of IPSAS in Kenya?
2. What are the influence of SAGAs characteristics on quality of financial reporting in Kenya?

1.4 The scope for the study

The scope of the study was Semi-autonomous government agencies in Kenya. Due to their nature of operations, these entities are users of IPSAS accrual basis of accounting. The study period was three years pre-adoption of IPSAS and two years post- adoption of IPSAS. Pre-adoption period was represented by the years 2011-2013 and post adoption was represented by the years 2014-2015.

1.5 Significance of study

1.5.1 Policy makers

The study will be of benefit to policy-makers in assessing whether the IPSAS adoption has effectively achieved its objective of improving the financial reporting quality in the public sector (SAGAs) (IFAC, 2012). In addition, policy-makers may find it necessary in improving financial reporting quality among SAGA in the event that the financial reporting quality outcome is below expectation (Isidro & Raonic, 2012). Opanyi (2016) noted that there is limited research on the effect of IPSAS in Kenya. Therefore, this shows that there is a gap in knowledge that policy makers ought to know in order to initiate necessary reforms.

1.5.2 Academic scholars

Academic scholars would also benefit from the study as it would provide a foundation to understanding financial reporting quality by the public sector in Kenya (SAGAs). In addition, the academician will be in a position to make a significant impact to the society by engaging the policy makers in addressing IPSAS implementation reality.

1.5.3 Practitioners

The practitioners will evaluate themselves to establish whether they have lived up to the expectation of IPSAS objective. It will also provide a basis of necessary reforms in the public sector financial reporting by availing the information of the status of affairs in SAGAs on financial reporting quality.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature synthesizes the principles and concepts that have been explored and brought out by various authors in existing literature on financial reporting quality and the debate about the benefits of introduction of IPSAS accrual accounting in the public sector in relation to financial reporting quality. The literature is reviewed under the following subheadings: Quality of financial reporting and its determinants in the public sector, theories explaining public sector financial reporting, quality of financial reporting in the public sector, measurement of financial reporting quality in the private and public sector, overview of previous research on accrual accounting in private and public sector, financial reporting in the public sector in Kenya, the determinants of financial reporting quality and hypothesis development and research gap.

2.2 Quality of financial reporting and its determinants in the public sector

Concerns have been raised about the quality of financial reporting in the public sector in Kenya. A report by (IMF, 2016) noted that there were a lot of deficiency in the financial reporting in the public sector in Kenya. The reports noted that timeliness of reporting financial results varies from entity to entity, integrity weaknesses in financial reporting, and unverifiable financial information. To curb this deficiency, the government introduced a number of institutional measures to enhance the quality of financial reporting in the public sector. Among the measures introduced were the adoption of International Public Sector Accounting Standards (IPSAS). However, the adoption of IPSAS across the globe does not guarantee quality of financial reporting across all organizations. Significant differences in accounting quality exists across individual corporations because organizations face differences in institutional incentives, market forces, corporate characteristics, as well as business constraints (Isidro & Raonic, 2012; Opanyi, 2016; Wallace et al., 1994). The association of specific firm characteristics and quality of financial reporting have dominated research interests in the private sector in prior literature (Isidro & Raonic, 2012; Li & Wang, 2010; Wallace et al., 1994). Isidro and Raonic (2012) affirmed that firm specific characteristics exhibit a stronger association with financial reporting quality. It would be important to find out the applicability on their influence on quality of financial reporting among SAGAs. Inconsistent findings on the association of specific firm characteristics and quality of financial reporting have

been observed in previous studies (Isidro & Raonic, 2012; Li & Wang, 2010; Wallace et al., 1994). These inconsistencies could be explained by differences in theories used, the methods applied in studying the variables, timing of the study as well as place of study.

2.3 Theories explaining public sector financial reporting

This section outlines rational public choice theory, agency theory, institutional theory and stakeholders' theory. These theories have been chosen on the basis that previous researchers on quality public financial reporting have adopted them and the researcher wanted to establish their applicability and how well they fit in this research.

2.3.1 Rational public choice theory

This theory asserts that political appointees will not work towards a common good, therefore, New Public Management practices such as adoption of IPSAS accrual accounting can be used to control tendencies of self-interest (Barton, 2005; Crew & Rowley, 1988; Pina & Torres, 2003). This theory can be used to explain the introduction of accrual based accounting in the public sector as part of the reforms. Previous researches on the adoption of accrual accounting have been associated to Public Choice (Flynn et al., 2016; Hoque, 2008; IMF, 2016). In this study, the theory was useful as it helped establish the financial reporting quality in the public sector as part of reforms brought about by the adoption of IPSAS (accrual basis) of accounting in Kenya.

2.3.2 Agency Theory

Jensen et al. (1976) advanced agency theory. It is a relationship in which one or more persons, the principal(s), engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent (Jensen et al., 1976). In the public sector, the principal is the citizen and the agent is the manager of a state owned institution (SAGA). The information asymmetry may cause negative repercussions on the principal because agent may not always act to maximize principal's welfare but its own prosperity.

Agency theory has been used by scholars in accounting research to monitor and link managerial action with principals (citizens) (Amagoh, 2009; Malmir, Shirvani, Rashidpour, & Soltani, 2014; McFie, 2006). Some researchers have pointed out that agency theory can be used to show that a positive association between size of the firm and quality financial reporting can be expected,

Malmir et al. (2014). Managers are expected to utilize the resources in their control to act in a manner that enhances citizens' welfare by ensuring financial reporting quality. In this study, agency theory was useful as it informed the association of specific corporate (SAGAs) characteristics and financial reporting quality. The limitation of this theory is that when there is objective consistency between the principal and agent, theory is quiet. Just when there is objective incongruence between the two is theory.

2.3.3 Institutional Theory

Institutional arguments were formulated by John Meyer, and colleagues such as Brian Rowan in 1977 and Richard Scolt in 1983 and by Lynne Zucker in 1977 (Meyer & Rowan, 1977). The theory argues that formal organizational structures reflected not only technical demands and resource dependencies, but also shaped by institutional force (Palthe, 2014). The core idea is that organizational structures and practices are either reflections or responses to rules, beliefs and conventions built into the wider environment. Standardized items, administrations, procedures, approaches and programs work as capable myths and numerous associations embrace them ritualistically but conformity to institutionalized rules often conflicts sharply with efficiency (Meyer & Rowan, 1977).

Institutional theory has been used in the prior research to explain the adoption of IPSAS in some countries (Adhikari & Mellemvik, 2010 ; Christiaens, Vanhee, Manes-Rossi, Aversano, & van Cauwenberge, 2015; Nagalinagm, Mangala, & Kumudinie, 2015; Stan & Sven, 2000). These studies assumed that pressure is exerted by external forces on the organizations to conform with a set of expectations to gain legitimacy so as to secure access to vital resources and long- term survival. A clear example of how institutional theory is applied by organizations was documented by Wang'ombe (2012). In his study on "High Quality Corporate Environmental Reporting: The Conceptual Anatomy, Multi-theoretical Basis, Presence and Drivers Among Large Companies in Kenya", it was established that motivation behind the quality of corporate environmental reporting at Kenya Commercial Bank and Magadi Soda Company were partly as a result of pressure to legitimize their operations. Similarly, the Kenya government may have introduced accrual accounting and reporting to meet external requirements and to provide an impression of rationality and efficiency, seeking legitimacy, but will not use the system to improve internal performance and by extension, financial reporting quality. Institutional theory has been used in this study to

establish if the adoption of IPSAS to the public sector has made significant improvement to financial reporting quality among semi-autonomous government agencies.

2.3.4 Stakeholder's theory

Stakeholders' theory has its origin from Freeman (1984) as cited by (Fontaine, 2006). Freeman defined a stakeholder as "any group or individual who can affect or is affected by the achievement of the organization's objectives". Freeman conceptualized his idea of stakeholders theory in his book titled "Strategic Management: A stakeholder Approach" in 1984. Since then, many economists or sociologists have made their contribution but not always sharing Freeman concept of stakeholders (Fontaine, 2006). Lack of congruence on the definition of stakeholders can be viewed as a serious drawback of stakeholders' theory. Fontaine (2006) notes that there are more than 75 definition of stakeholders. Nevertheless, there is agreement about certain propositions which every author agrees (Fontaine, 2006). The firm has stakeholders which have requests, every stakeholders do not have the same influence, principal function of managing stakeholder is to take into account and arbitrate stakeholders' requests even when there are contradictory.

A study by Wang'ombe (2012), " High Quality Corporate Environmental Reporting: The conceptual Anatomy, Multi-theoretical basis, presence and Drivers Among Large Companies in Kenya", established that companies' response to environmental reporting ware motivated by the needs of the society. The institutions' participants contended that organizations needs to do things that are beneficial to the society. Similarly, the government and other key stakeholders responsible for oversight authority on public sector accounting standards are expected to introduce accounting reforms that addresses the concerns of all the stakeholders group. Stakeholders of general purpose government financial reporting include taxpayers, voters, donors, lenders, creditors, employees and contractors. In this study, stakeholder theory was used to establish the financial reporting quality among semi-autonomous government agencies in Kenya.

2.4 Quality of financial reporting in the public sector

Financial reporting within the context of public sector is a process of collecting, classifying, summarizing and reporting accounting information that relates to government activities so as to allow citizen participation and holding elected officials accountable (Bastani et al., 2012). It provides background for people to have informed judgment on government performance and accountability assessment (Bastani et al., 2012). Financial reporting quality can be defined as the faithfulness of the accounting information communicated by the financial reporting process (Jonas & Blanchet, 2000). He contend that financial reporting is not only a final output ; the quality of the process depend on each of its parts , including disclosure of the corporate's transaction, information about selection and application of accounting policies and knowledge of the judgment made. The international public sector accounting standards (IPSAS) is the global accounting standards recommended for government accounting across the globe. It divides accounting in the public sector into two broad categories; cash basis and accrual basis of accounting. Cash-based accounting reports revenues and expenditures that have been received or paid, respectively, during a period, Champoux (2006). Bunea-Bontas and Petre (2009) and Champoux (2006) defines accrual accounting as a methodology under which transactions are recognized as the underlying economic events occur, regardless of timing. According to Flynn et al. (2016), Hoque (2008) and Stefanescu and Turlea (2011), accrual accounting is the best accounting method for holding the governments accountable and transparent especially due to rising international debt. Australia and New Zealand were among the pioneers in the development of International public sector Accounting Standards (IPSASs) (Christensen, 2002; Guthrie, 1998; Pollanen & Loiselle-Lapointe, 2012).

Financial reports should have certain characteristics in order to achieve quality reporting. Both IASB and IPSASB are in agreement that high quality is achieved by adhering to objective and the qualitative characteristics of financial information (IASB, 2008,2010; IPSASB, 2014). Several studies have established that financial reporting quality can be achieved by adhering to fundamental and enhancing qualitative attributes of financial information. For instance, a study by Bukenya (2014), Jonas and Blanchet (2000) and Nkundabanyanga et al. (2013) established that reliability, relevance, accuracy, timeliness, and understandability are true measures of perceived quality of accounting information. Qualitative characteristics of financial information are those characteristics that makes accounting information meaningful (IASB, 2008, 2010; IPSASB, 2014).

Fundamentals and enhancing qualitative attributes of financial information based on IPSASB (2014) are as discussed below.

2.4.1 Relevance

According to the AASB Framework (ICAA, 2008) as cited by Esther, Elaine and Sue (2010), information is relevance if it has a predictive and confirmatory capacity. To be useful, accounting information must be relevant to the decision making needs of its users. Information is said to be relevant if it can influences the economic decision of its user (IPSASB, 2014; Jonas & Blanchet, 2000). Relevance can be measured by forward looking statements, presence of non- financial information, use of fair value instead of historical information, and the level of provision of feedback to the users. It has been operationalized in the previous researches in terms of predictive and confirmatory value, (Braam, & Boelens, 2009; Jonas & Blanchet, 2000; McDaniel, Martin, & Maines, 2002; Van Beest, 2009) . To assess an entity on quality of its financial reporting, a category rating scale that requires a subject to respond to a stimulus within a specified number of categories may be used e.g. 1 through 5 with 1 representing the lowest possible score and 5 the highest (Eisenberg, 1988; Van Beest et al., 2009). Relevance on its own cannot be used to evaluate the financial reporting quality, it should be used together with other enhancing qualitative attributes of accounting information (Van Beest et al., 2009).

2.4.2 Faithful Representation or Reliability

Faithful representation or reliability of financial information means that information should not be biased and it should be neutral. Issuers of financial information should ensure that useful and important information is not omitted and is disclosed in attempt to satisfy users' decision making needs (Cheung, Evans, & Wright, 2010; IPSASB, 2014). Reliability may be operationalized in terms of neutrality, completeness, freedom from material error, verifiability, unqualified audit report and corporate governance statement (Jonas & Blanchet, 2000; Van Beest et al., 2009). A number of researchers affirms that unqualified audit report is a pre-requisite for financial reporting quality. (Gaeremynck & Willekens, 2003; Kim, Simunic, Stein, & Yi, 2004; Van Beest, Braam, & Boelens, 2009) A category rating scaling that requires a subject to respond to a stimulus within a specified number of categories e.g. 1 through 5 may be used to assess entity on how reliable accounting information is (Jonas & Blanchet, 2000). Faithful representation on its own cannot be

used to evaluate the financial reporting quality, it should be used together with other enhancing qualitative attributes of accounting information (Van Beest et al., 2009).

2.4.3 Comparability

Accounting Information of an organization gains its usefulness if it can be compared with similar accounting information about other organization and with similar accounting information of its self for some other period or some other point in time (IPSASB, 2014). The significance of accounting information, depends to a great extent on the user's ability to relate it to some bench mark (Norwalk, 2008). Comparability is usually measured using six items; accounting policies, notes to revisions in accounting estimates and judgments, adjustment of previous accounting figures, comparison of the results of current accounting period with previous accounting periods, the extent to which the information in the annual financial report is comparable to information provided by other organization within the sector and presence of financial index numbers and ratios in the annual report (Jonas & Blanchet, 2000; Van Beest et al., 2009). To assess an entity on comparability of its accounting information, a category rating scale that requires a subject to respond to a stimulus within a specified number of categories may be used.

2.4.4 Understandability

Accounting information is understandable if its users can comprehend the conveyed information. For example, explanations of accounting information and commentary on service delivery and other achievements during a period and expectations for future periods should be in simple language, and presented in understandable manner by its users. Understandability is enhanced when information is classified, characterized, and presented clearly and concisely (IPSASB, 2014). It is usually measured by how annual report is organized, disclosure of accounting information in the notes to the account, presentation of tables and graphs, absence of technical vocabularies and the inclusion of a glossary of difficult words (Jonas & Blanchet, 2000; Van Beest et al., 2009). To assess an entity on understandability of its accounting information, a category rating scale that requires a subject to respond to a stimulus within a specified number of categories may be used.

2.4.5 Timeliness

The IPSASB recognizes that for accounting information to have value to its users, it should be communicated on a timely manner otherwise its usefulness for decision making reduces. Timeliness is measured by the number of days taken by the Auditor General to sign the financial statements after financial year (Jonas & Blanchet 2000; Van Beest et al., 2009). According to section 13 of Kenya Public Audit 2003, the management of state corporation (SAGAs) is supposed to submit their accounts within three months after the end of financial year to which the accounts relate. Financial year for Kenya State Corporation runs from 1st July in a year to the 30th of June in the next year. Section 14 of the Act provides that Auditor-General shall examine and audit the accounts submitted by a state corporation, express an opinion and certify the result of the examinations and audit.

2.5 Measurement of financial reporting quality in the private and public sector

Divergent views have been expressed about how best to measure financial reporting quality (Dechow, Ge, & Schrand, 2010). Similarly, consent as to what constitute financial reporting quality is lacking. For instance, Blue Ribbon Commission (BRC, 1999) and Sarbanes-Oxley Act, (United States, 2002) requires auditors to come up with a way that is acceptable to measure "financial reporting quality". To measure the financial reporting quality, various measurement methods have been used in prior literature. These methods include accrual models and value relevance models. These methods focus on earning quality. There is assumption that managers use discretionary accruals where the manager can exert some control to manage earnings (Healy & Wahlen,1999). Earnings management is assumed to reduce the financial reporting quality and its decision usefulness (Dechow et al., 2010). One advantage of using discretionary accrual is that it can easily be calculated using information from the annual report. Also, when using regression model, it is possible to examine the influence of entity characteristics and the extent of earnings management (Dechow et al., 2010; Healy & Wahlen, 1999). The main difficulty however with this method is how to distinguish between discretionary and non-discretionary accrual (Healy & Wahlen, 1999). Accrual models therefore do not provide direct and comprehensive measure of financial reporting quality information and its dimensions of decision usefulness.

Value relevance model measures the financial reporting quality by focusing on the associations between accounting figures and stock-market reactions (Barth, Landsman,& Lang, 2008). When

accounting information changes to changes in market value of the firm, it is assumed that earnings information provides relevant and reliable information. However, stock prices might not represent the market value of the firm completely accurate (Nichols & Wahlen, 2004). Economic and financial ratios have also been used to assess financial reporting quality (García Jara, Cuadrado Ebrero, & Eslava Zapata, 2011). The limitation of economic and financial ratios in assessing financial reporting quality is that it does not take into consideration the non-ratio information. All these methods that have been discussed focuses on specific information disclosed in the financial statements. A measurement tool of financial reporting quality should include all the information in the annual report, including both financial and non-financial information (Van Beest et al., 2009). As a result of limitations identified above and to fulfill a request by both IASB and FASB to make qualitative characteristics of financial information operationally measurable, Van Beest et al. (2009) developed a comprehensive tool to measure financial reporting quality using the fundamental and enhancing characteristics of accounting information as defined in "An improved Conceptual Framework for Financial Reporting" of the FASB and the IASB (2008). This tool has been used in the prior studies to assess financial reporting quality (Opanyi, 2016; Tasios & Bekiaris, 2012; Yurisandi & Puspitasari, 2015). However, like other models, this approach has some limitations relating to validity and reliability. Consistent with the definition of financial reporting quality of decision usefulness (IASB 2010), its validity should be established by comparing it with the decision usefulness of financial reporting as perceived by other stakeholders such as financial statements preparers, users or lenders.

The framework proposed by Van Beest et al. (2009) bear a lot of similarities with the framework that was proposed by Jonas and Blanchet (2000). The proposed framework by Jonas and Blanchet (2000) was drawn from the work of various committees and organizations; Kirk Committee, FASB conceptual framework and Jenkins Committee Recommendation. Model developed by Jonas and Blanchet (2000) have been used by other researchers such as Lee, Strong, Kahn, & Wang (2002), McDaniel, Martin, and Maines (2002), Van Beest et al.,(2009). In conclusion, Jonas and Blanchet (2000) and Van Beest et al.,(2009) suggested a framework that measure financial reporting quality using a number of components including relevance, reliability, comparability, understandability, consistency, clarity and timeliness. The researcher adopted this model developed by Van Beest et al. (2009) to measure financial reporting quality among semi-autonomous government agencies in Kenya. This was informed by two reasons: One, is that many of the IPSASs currently on issue are

based on International Financial Reporting Standards Boards (IASB), to the degree that the requirements of those IFRSs are applicable to the public sector. The current IPSASs draw on relevant concepts and definitions in the IASB's "Framework for preparation and presentation of financial statements" with modifications where necessary to address public sector circumstances (Cohen & Karatzimas, 2015). A comprehensive list detailing the extent of similarities between IPSAS and IFRS is attached in appendix 5. Secondly, the proposed model has been used in the prior literature to measure quality of financial reporting in the public sector (Opanyi, 2016).

2.6 Overview of previous research on accrual accounting in private and public sector

The literature on accrual accounting has been discussed under global perspective, regional perspective and local perspective.

2.6.1 Global perspective of accrual accounting both in private and public sector

The impact of accrual accounting has been questioned by the previous research. For instance, Guthrie (1998) in his study on "Application of accrual accounting in the Australian Public Sector-rhetoric or reality?" argued that there have been few voices of dissent and little evidence about the impact of introducing accrual accounting reform to the public sector. A study by Timoshenko and Adhikari (2009) to find out how the move from customary bookkeeping to accumulation bookkeeping announced by the Russian state influenced bookkeeping practices of One state funded college. The findings was that it resulted in more rhetoric than reality. It has been observed that no country in the less developing country context reports success of the change to accrual accounting. The involvement of professional accounting bodies in these countries in issuing Public Sector Accounting Standards does not help in realizing the intended objectives (Abeysinghe & Samanthi, 2016). The author concluded that the introduction of accrual accounting in Sri Lanka does not work because it does not address the political interest dominating over public sector organizations.

Contrary to the above arguments, other researchers have associated accrual basis of accounting as relevant and promotes transparency in reporting. For instance, empirical observation in Belgian and Flemish by Johan, Christiaens and Rommel (2008) shows full cost of government output can be known only through accrual accounting. Similarly, a study carried out in Iran by Mehrolhassani, Khayatzadeh-Mahani and Emami (2014) to analyze how movement from cash-accounting to

accrual- accounting in the health sector affected accounting practices. The study concluded that there were advantages in accrual-based accounting in the public sector which largely depends on how the system is implemented in the sector. In a more related research in private sector, Pazarskis, Alexandrakis, Notopoulos and Kydros(2011) carried a study to examine the possible impacts of adoption of IFRS at Greek firms of the Information Technology (IT) sector. These firms were required to prepare their financial statements according to the International Financial Reporting Standards-IFRS from January 2005 (The first year of IFRS official adoption on firm's financial statements). The period of analysis was from 2002. Findings showed that IFRS adoption had no statistical change in the first year. In contrary, in examining the data for the sample firm over a three year period before and after the IFRS adoption, the result revealed that two (EBIT margin and gearing) out of twenty accounting ratios had a statistically significant change and a positive impact due to the IFRS adoption. This means that global financial reporting improves quality of reporting. Similarly, Barth (2008) examined whether the adoption of International Financial Accounting Standards (IFRS) leads to accounting quality improvements in Egypt as a code-law country. In particular, the study examined earnings management, the construct often used to assess accounting quality. The study compared earnings management practices for Egyptian listed companies before (2000-2006) and after (2007-2009) the adoption of IFRS. The study revealed that accounting quality as measured by earnings management decreased in post-adoption compared to pre-adoption period. This means that global financial reporting improves quality of reporting.

2.6.2 Regional perspective of accrual accounting, both in private and public sector

A study by Bukenya (2014**)** aimed at establishing the relationship between the quality of accounting information and financial performance of the public sector in Uganda noted that even though accounting information is provided as required by the Government Financial and Accounting Regulations, there was still a wide spread of reported misuse of resources and poor accountability. On the contrary, improvement of quality financial reporting has been observed in Nigeria. A study by Nkwagu, Okoye and Nkwagu (2016) revealed that IPSAS adoption improved credibility of financial statements and also enhances comparability of financial information in the public sector.

2.6.3 Local perspective of accrual accounting, both in private and public sector

In Kenya, Hamisi (2012) sought to establish factors affecting the implementation of IPSAS . The findings indicated that lack of international financial support and lack of adoption of Information Technology were some of the factors affecting IPSAS adoption. On the other hand, Opanyi (2016) carried out a study to find out the effects of IPSAS adoption in public sector (ministries) on the financial reporting quality. The findings indicated that there was slight improvement on the quality of financial reports in public sector in Kenya.

2.7 Financial Reporting in the Public Sector in Kenya

In Kenya, the financial reporting for the public sector is governed by the reporting requirements of the constitution of Kenya 2010 (Chapter 12), Public Finance Management Act 2012, State Corporation Act, Companies Act and any other relevant legislation. The legislation provides for keeping of financial records and auditing of all governments and other public entities as well as securing efficient and transparent fiscal management (Kenya, 2010). Various attempts have been made to promote sound financial reporting with the aim of improving quality of reporting. Initiatives such as fire awards have been made by Capital Market Authority (CMA), Public sector accounting standard Board of Kenya (PSASB-K), the Institute of Certified Public Accountants of Kenya (ICPAK and Nairobi Securities Exchange (NSE). The award was launched in 2001 to enhance the credibility of financial statements and ensure they comply with all provisions of IFRSs and any requirements that are specific to a particular entity. In July 2014, the Public sector accounting standards Board adopted IPSAS cash basis of accounting as the financial reporting framework for National Government (Ministries, Departments and Agencies) and County Governments. Board also adopted IPSAS accrual for Semi-autonomous government agencies and IFRS for commercial state corporations. In 2015, the IPSAS Board made it mandatory for public sector to participate in the annual FiRe Awards.

Before the adoption of IPSAS in Kenya, government financial reporting and accounting was primarily based on the mandated scope as stipulated in the Government Financial Regulations and procedures backed legally by the Exchequer and Audit Act. In addition, there were none uniformity in the use of standards, some government state corporation used IFRS while others were not using it, a situation making it difficult to compare performance among government entities. The government prepared appropriation accounts detailing the receipts and issues of public monies

from the Exchequer by each line ministry and department. Basically, the government used entirely cash basis of accounting (World Bank, 2001). The public sectors of developing countries had to rely on acts, decrees and other legal documents (Oulasvirta, 2010).

2.8 The determinants of financial reporting quality and hypothesis development

Quality of financial reporting are influenced by quality of accounting standards, company characteristics and political and legal system of the country (Soderstrom & Sun, 2007). Isidro and Raonic (2012) affirmed that firm specific characteristics exhibit a stronger association with financial reporting quality. This argument is in line with other researchers who asserts that organizations have more control on specific firm characteristics than other factors that determine financial reporting quality (Huang, Rose-Green, & Lee, 2012; Soderstrom & Sun, 2007, Waweru & Riro, 2013). It would therefore, be of interest to find out the extent to which these specific firm characteristics are applicable to the public sector entities (SAGAs) in influencing financial reporting quality. The six corporate characteristics that could be applicable and relevant to the public sector and which have inconsistent findings were discussed as follows:

2.8.1 Corporate size

The size of the firm affect financial reporting quality (Dechow et al., 2010). Some researchers have pointed out that agency theory and signaling theory can be used to show that a positive association between size and quality reporting can be expected (Malmir et al., 2014). Size of the firm has been measured in the previous research total assets (Saheed, 2013). Other measures of firm size are total sales and market capitalization (Wallace et al., 1994; Wang'ombe, 2013). A large firm is likely to have strong internal control and well-built accounting information systems which together are supposed to guarantee (Chalaki, Didar, & Riahinezhad, 2012). Large firms have the capacity to put in place a well-built accounting information system for tactical, strategic and operational purposes(Saheed, 2013). A well-built accounting information strong internal control prevent ability to manipulate earnings and minimizes errors and mistakes (Dechow & Ge, 2006).

Prior studies have found positive relationship between firm size and extent of accounting financial reporting quality (Karim et al., 2013;Wallace et al., 1994). However, other researchers did not find significant relationship between firm size and financial reporting quality (Jensen, 2000; McFie, 2006, Olowokure et al., 2015; Wang'ombe, 2012; Waweru & Riro, 2013). Differences in the

research findings could be explained by differences in the level of economic development and institutional settings where the studies were conducted. For instance, a study of McFie (2006), research was conducted among the listed companies in Kenya Nairobi Security Exchange, while that of Wang'ombe (2012), was conducted among large firms in Kenya. In Nigeria, Olowokure et al. (2015) conducted a study on deposit money banks. Therefore, the following hypothesis is proposed:

H_1: There is a positive significant relationship between the size and the financial reporting quality among SAGAs in Kenya.

2.8.2 Leverage

Leverage is the proportion of debt financing in the capital structure of a firm. It has been measured by the ratio of long term debt-to-fixed asset, or the ratio of total liabilities to total assets. Firms with proportionally higher debt in their capital structure are prone to higher agency cost. Waweru and Riro (2013) argues that firms that are highly geared are more likely to engage in earnings management than firms that are not highly geared. Therefore, positive relationship between disclosure level and leverage have been observed in some research (Hassan & Bello, 2013; Malone, Fries , 1993). A significant positive relationship was found by Waweru and Riro (2013) between leverage and earnings management (proxy for financial reporting quality). On the other hand, McFie (2006), Olowokure et al. (2015), and Wallace et al. (1994) found negative insignificant relationship between leverage and financial reporting quality. Differences in findings could be explained by differences in period and timing of study and stages of economic development where studies were done. From the studies above, the following hypothesis is proposed:

H_2: There is a negative significant relationship between the leverage and the financial reporting quality among SAGAs in Kenya.

2.8.3 Age of the firm

Age of the firm is defined as the years since incorporation. The age of the firm may have an impact to its financial reporting quality (Huang et al., 2012). Firms which have been around over the years can have the ability to achieve financial reporting quality. They will be reluctant to engage in activities that can undermine the quality of their financial report. The internal control system of a firm is believed to become better as years passes by and a well-structured internal control should

result into financial reporting quality (Huang et al., 2012; Olowokure et al., 2015). Contrary to the above findings, Akhtaruddin (2005) and McFie (2006) found insignificant relationship between the age of the firm and corporate mandatory disclosure. In addition, Barton and Waymire (2004) found that younger companies have higher reporting quality on US market in 1929. On the basis of the discussions of Huang et al. (2012) and Olowokure et al. (2015), the following hypothesis is developed:

H_3: There is a positive significant relationship between the age and financial reporting quality among SAGAs in Kenya.

2.8.4 Liquidity

Liquidity is defined as the ability of a firm to meet its obligations and commitment in the short term. Highly liquid firms may desire to make their level of liquidity known through disclosure in their annual reports and those suffering from liquidity might be induced to amplify their disclosure to mitigate fears and notify shareholders that management knows the problem. Mixed results have been identified by previous researchers on the relationship between liquidity and financial reporting quality. While some authors found positive significant relationship between financial reporting quality and liquidity (Amr, 2016; Andrew 2015; Bardos 2011). Wallace et al. (1994) observed a significant negative relationship between liquidity and corporate disclosure. Mixed results could be explained by differences in the level of economic development where the studies were conducted.

H_4: There is a positive significant relationship between the liquidity and the financial reporting quality among SAGAs in Kenya.

2.8.5 Audit committee size

Audit committee size refers to the number of directors appointed to be members in the audit committee. The size of an audit committee may have effects on its effectiveness and ultimately on the financial reporting quality. The Audit committees combined code guidance (Smith & others, 2003) and Sarbanes-Oxley Act (SOX 2002) recommends that audit committees consist of a minimum of three directors. A large audit committee is expected to enhance the effectiveness of the committee and ultimately the financial reporting quality of the firm. Felo, Krishnamurthy and Solieri (2003) found some evidence of a positive relationship between the size of the audit committee and financial reporting quality. A negative significant relationship between the size of

audit committee and financial reporting quality was also found by Yang and Krishnan (2005). However, Davidson and Robinson (2003) found no significant relationship between audit committee size and financial reporting quality. The relationship between audit committee size and financial reporting is important given the requirement by the Kenyan Government that each public entity should have audit committee members according to executive order no 1/2016. Hence, this study expect that the larger the size of audit committee members, the higher the financial reporting quality. Therefore, the following hypothesis is proposed:

H_5: There is a positive significant relationship between the size of audit committee and the financial reporting quality among SAGAs in Kenya.

2. 9 Control variable

A control variable is one that is not of interest to the researcher but is related to the dependent variable (Kothari, Kumar, & Uusitalo, 2014). In this study control variable was SAGA profitability. It has been chosen on the basis that prior studies have shown that profitability is associated to financial reporting quality. Secondly, SAGA might make profit on their activities but they are not profit oriented entities but service delivery. Therefore, the influence of profitability on quality of financial reporting need to be controlled.

2.9.1 Corporate profitability

This refers to corporate ability to generate profit from its operation. Corporate profitability has been found to have an influence on financial reporting quality (Chiaraah & Nkegbe, 2014; Hamidzadeh, 2015). Profitability has a variety of proxies for its measurement such as Earning per share, Return on assets, and Return on equity as well as profit margin. In this study, it was measured by the ROA. This measure was found to be appropriate given the nature of information disclosed in the annual financial reports for semi-autonomous government agencies. It is calculated as the ratio of net income/loss divided by total assets (Tuvadaratragool, 2013). Agency theory proposes that administrators of bigger productive organizations may wish to unveil more financial data to get individual favorable circumstances like pay or continuation of their administration (Inchausti, 1997). Similarly, managers of state owned corporations (SAGA) may wish to enhance financial reporting quality in their respective entities to obtain personal advantages similar to those managers in private sectors.

Significant relationship have been observed between profitability as measured by ROA and the extent of disclosure in the previous research (Hossain, 2012; Inchausti, 1997, Wallace et al., 1994). On the contrary, other researchers have found no relationship between profitability and financial reporting quality (Tasios & Bekiaris, 2012; Waweru & Riro, 2013). Differences in research findings could be explained by differences of measure employed in calculating profitability. On the basis of Hamidzadeh (2015), Inchausti (1997) and Tuvadaratragool (2013), the following hypothesis was developed:

H_6: There is a positive significant relationship between profitability and financial reporting quality among SAGAs in Kenya.

2.10 Research gap

The literature review showed that accrual accounting is very useful for proper functioning of public sector accounting systems, however, there has been few studies of its consequences in relation to financial reporting quality (Guthrie, 1998; Pollanen & Loiselle-Lapointe, 2012). In Kenya, research on the impact of adoption of International Public Sector Accounting Standards is equally limited (Opanyi, 2016). He asserts that only accrual-basis IPSAS accomplishes full transparency, accountability, and provides the information needed for decision making and recommend a future research to be done on the effects of IPSAS accrual on financial reporting quality. The gap in knowledge about the impact of adoption of IPSAS accrual basis of accounting on financial reporting quality and its association to financial reporting quality among SAGA in Kenya was the motivation of this research. In addition, while numerous research efforts have been made in financial reporting quality using different qualitative characteristics of financial information, research that combines all qualitative characteristics in the assessment of financial reporting quality is limited (Tasios & Bekiaris, 2012). This study combined all qualitative characteristics of financial information to assess financial reporting quality in the public sector (SAGAs).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter focuses on the description of the research methods that were used in carrying out the study. It describes philosophical assumptions, research design, study population and selection procedure, data collection methods, financial reporting quality index, pilot study, data analysis, robustness test of reliability and validity of the model, reliability and Validity of research and finally ethical considerations.

3.2 Philosophical assumptions

A research paradigm or philosophy is "the set of common beliefs and agreements shared between scientists about how problems should be understood and addressed" (Greener, 2008). Various categories of research philosophies are discussed below:

Positivists believe that there is a single reality, which can be measured and known, and therefore they are more likely to use quantitative methods to measure this reality. It posits that there are laws that govern the world that needs to be tested or verified and refined so that we can understand the world (Creswell, 2013; Holden & Lynch, 2004). Constructivists believe that there is no single reality or trust and therefore reality needs to be interpreted to get those multiple realities (Creswell, 2013; Holden & Lynch, 2004). Advocacy is inquiry completed with others rather than on or to others. It engages the participants as active collaborators in their inquiries (Creswell, 2013; Holden & Lynch, 2004). Pragmatism is not dedicated to any one arrangement of philosophy and reality. It applies to mixed methods research in that inquirers draw liberally from both quantitative and qualitative assumptions when they engage in their research. The pragmatists take the view that reality is what works to provide a solution to a problem (Creswell, 2013). Research paradigms can be characterized through ontology, epistemology and methodology (Greener, 2008).

Ontology is the study of being (Mack, 2010). Ontological assumption is concerned with what constitute reality. In this study, both objective and subjective reality were considered. Objective reality takes the view that reality exist outside the social entities. In other words, it argues that social phenomena and their meanings have an existence that is independent of social actors (Greener, 2008). Objective reality shall be extracted from the annual financial reports of SAGAs.

On the other hand, subjectivism sees that social phenomena is made from discernments and subsequent activities of those social actors concerned with their existence (Creswell, 2013). Therefore, subjective reality shall be extracted from the mindset of the actors through questionnaire distributed to the respondents.

Epistemology is concerned with the nature and forms of knowledge (Mack, 2010). Epistemological assumption are concerned with how knowledge can be created, acquired and communicated, in other words, what it means to know. In this study, the knowledge was composed of authoritarian knowledge from annual reports, logical knowledge from questionnaires, and empirical knowledge from previous research papers (Greener, 2008). This study therefore, uses both positivism and constructivism because the subject matter of financial reporting quality has both quantitative and qualitative characteristics.

3.3 Research design

The study used longitudinal and descriptive research design. Longitudinal research design is a type of design that allow the researcher to observe a particular phenomenon over a period of time (Creswell, 2013). The study adopted longitudinal design to help study the trend of financial reporting quality over a period of time. Descriptive research describes the characteristics of study population (Creswell, 2013). Descriptive research design helped to provide unmistakable comprehension of financial reporting quality and specific characteristics among SAGAs.

3.4 Study population and selection procedure

Semi-Autonomous Government Agencies formed the population of this study. The researcher was not able to find a database of semi-autonomous government agencies in Kenya since no comprehensive register of public sector institutional units is maintained (IMF, 2016). However, Kenya National Audit Office website provided useful insight. Tentative list was created based on the information from KNAO website as at February 2017 where audited government reports are posted. The total number of Semi-Autonomous Government agencies based on the created list by the researcher using IPSAS (accrual) in Kenya was approximately 103. The population frame for the study is attached in appendix 4. At the end of February 2017, there were 103 state corporations (SAGAs) using IPSAS accrual basis of accounting. Out of these, 50 corporation were selected for the study with complete data for total assets, leverage, and liquidity, age of SAGAs, audit

committee size and profitability for the years 2011-2015. Twenty seven SAGAs were excluded from study since they were formed between 2012 and 2016; hence outside the period of study. Further, 26 SAGAs were excluded as the required financial and audit committee size data were not available. Semi-autonomous government agencies fall into the following categories specified in Table 3.1 below.

Table 3.1: Population distribution

Sector	Number of SAGAs	% of the total
Energy infrastructure and information technology	8	16%
Environmental protection and water resources	2	4%
Public administration and International relation	11	22%
Social Protection, culture and recreation	5	10%
Health sector	6	12%
General economic and commercial affairs	7	14%
Agriculture, fisheries and food Authority	6	12%
Education sector	1	2%
Governance, justice law and order sector	4	8%
Total	**50**	**100**

Source: Researcher (2017)

3.5 Data Collection Methods

The data collected comprised both primary and secondary data. Primary data used the questionnaire to triangulate the information obtained from the annual financial reports. The questionnaire to assess financial reporting quality was based on the framework proposed by Jonas and Blanchet (2000). This was distributed to auditors, accountants and finance officers of the selected SAGAs. The advantage of using this method was its capacity to reach and accumulate reactions from a generally substantial number of individuals in scattered and remote areas. The major disadvantage encountered was forgetfulness of the respondents to fill the questionnaire. The researcher responded to this problem by sending research assistant for a follow up and a promise of confidentiality.

The research questionnaire was distributed to the potential respondents by e-mail, as an online questionnaire and by face-to-face by hand. The researcher used a combination of these methods to avoid biasness from any single source of data, Creswell (2013) and Olsen (2004). Secondary data

was obtained from the audited annual financial reports of SAGAs by going through each audited financial reports and recording the data of interest onto excel worksheet. There are a number of ways a company can communicate its financial information, such as interim reporting, press releases, letters, etc.; however, the annual report is still considered the major medium disclosing information (Akhtaruddin, 2005; Marston & Shrives, 1991).

3.6 Financial reporting quality Index

The researcher used 27 item index, a modification from the earlier version proposed by Van Beest et al. (2009) to suit public sector to score in each category from the SAGAs audited annual financial reports. The index was based on the fundamental and enhancing qualitative attributes of financial information of relevance, reliability, comparability, understandability, and timeliness as outlined by IPSASB (2014). Once all the items were scored both by the researcher, independent expert and two other graduate assistants who were both CPA finalists, differences arising from scores were discussed and harmonized to a single score. The scores were then sampled by the research supervisor to arrive at the quality index used for analysis. The financial reporting index was computed as actual mean of all the 27 items against the mean score which each SAGAs was expected to earn. The index was divided into a 5-point Likert scale, where a value of 1 meant very little extent, 2=little extent, 3=Neutral, 4=Large extent, 5=Very large extent.

3.7 Pilot study

Pilot testing of research instrument is done to establish the content validity of scores on a research instrument and to improve questions, format and scales, Creswell (2013). The process is done with a view to removing possible problems with the questions. Kothari, Kumar and Uusitalo (2014) explained that pretest is done on a research instrument to ensure that a respondent's understanding of each question is in accordance with the intention of researcher. In this study, the pilot questionnaires were issued to three accountants with significance expertise in the area of public sector accounting, auditing and finance. The feedback obtained was incorporated in the revised questionnaire. This approach is consistent with the approach taken by previous researchers (Tasios & Bekiaris, 2012)

3.8 Data Analysis

To answer research question one; "What are the differences in the quality of financial reporting of SAGAs before and after adoption of IPSAS in Kenya?" qualitative data was checked for completeness and were scored based on quality index constructed. A paired sample test and descriptive statistics was later computed (mean, median and standard deviation) to answer the research question.

To answer second research question; "What are the influence of SAGAs characteristics on quality of financial reporting in Kenya?" quantitative data collected from audited annual financial reports were checked for completeness, thereafter the researcher operationalized, measured and recorded identified specific SAGAs characteristics variables and were subsequently regressed against dependent variable using SPSS software (version 17).

3.8.1 Operationalization of variables

Operationalization of the variables is the process of explaining the meaning and measurement of study variables used in the research (Kothari et al., 2014). The process is done so that readers are aware of the meaning assigned to the variables as they could have different meanings in different disciplines.

The measurement of dependent variable was as follows:

$Quality\ of\ financial\ reporting\ = f(\mathrm{RLST} + \mathrm{FRST} + \mathrm{UNST} + \mathrm{CMST} + \mathrm{TMKT})$

Where $RL_{ST=}$Relevance characteristics mean scores for SAGA S in year t

FR_{ST}=Faithful characteristics mean scores for SAGA S in year t

UN_{ST}=Understandability characteristics mean scores for SAGA S in year t

$CM_{ST=}$Comparability characteristics mean scores for SAGA S in year t

$TM_{ST=}$Timeliness characteristics mean scores for SAGA S in year t

The measurement of independent variables was as follows:

$size\ of\ SAGA\ = \log of\ total\ assets$

$Leverage\ =\ ratio\ of\ total\ liabilities\ to\ total\ assets$

$Age\ of\ SAGA\ =\ \log of\ SAGA\ age$

$liquidity\ =\ ratio$ of current asset/current liabilities

$Audit\ commitee\ size\ =\ \ number\ of\ audit\ commitee\ members$

3.8.2 Control variable

$$Profitability = \frac{net\ income(loss)}{Total\ assets}$$

The analysis of effect of profitability (control variable) was done using stepwise regression model. All the insignificant variables were eliminated until only significant variables were left in the model. The effect of control variable was examined by running the regression without the control variable and again with control variable to examine the effect it had on overall model. The two regression models used in the study were as follows:

When profitability was not included;

$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + \varepsilon$……..1st model

When profitability was included;

$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + \beta 6X6 + \varepsilon$……2nd model

Where, Y=Financial reporting quality, $\beta 0$= Constant, $\times 1 = \log of\ assets$,$\times 2 = Leverage$, $\times 3 = \log of\ SAGA\ age$,$\times 4 = liquidity\ ratio$,$\times 5 = Audit\ commitee\ size$,$X6 = Profitability$, ε =Error term

Table 3.2: Variable definition

Variable type	Measure	Definition	Source
Dependent variable			
QUALITY OF FINANCIAL REPORTING	Fundamental and enhancing qualitative attributes of accounting information	Measured as the average mean score per year per SAGA (McDaniel, Martin and Maines 2002; Opanyi 2016; Tasios and Bekiaris 2012; Van Beest et al 2009; Yurisandi and Puspitasari 2015)	SAGA audited annual reports
Independent Variable type	**Measure**	**Definition**	**Source**
TOTAL ASSETS	Total assets	The natural log of total assets (Wallace et al., 1994; Saheed 2013; Waweru and Riro 2013).	SAGA audited annual reports
LEV	Leverage	Ratio of total liabilities to total assets (Olowokure et al., 2015; Wallace et al., 1994; Waweru and Riro 2013).	SAGA audited annual reports
AGE OF SAGA	Age of SAGA	Years since incorporation (Akhtaruddin,2005;Mcfie 2006; Olowokure et al.,2015)	SAGA audited annual reports
LQDTY	Liquidity	Ratio of current assets to current liabilities **(**Andrew 2015;Amr, 2016; Bardos 2011)	SAGA audited annual reports
ACS	Audit committee size	Number of audit committee members (Yang and Krishnan ,2005; Davidson and Robinson, 2003)	SAGA audited annual reports
PROFITABILITY	ROA	It was treated as a control variable. Measured by the ratio of net surplus (loss) to total assets (Hossain, 2012; Inchausti, 1997, Wallace et al., 1994)	SAGA audited annual reports

Source: Secondary data

3.9 Test of Reliability and Validity of the model

Tests for multi-collinearity, heteroscedasticity, normality of residuals, and serial correlation was conducted in order to improve the validity of all statistical inferences for this study (Brooks, 2014; Gujarati & Porter, 1999). Multi-collinearity exists when two independent variables are perfectly correlated with each other. The variable inflation factor (VIF) exceeding 10 is an indication of harmful multi-collinearity (Gujarati & Porter, 1999). It is suggested that if multi-collinearity exists, then potential remedy to the problem would be to ignore it if the model is adequate, drop one of the collinear variables, transform the highly correlated variable into a ratio and include the ratio and not individual variable (Brooks, 2014). The researcher would transform the variable into ratios if the problem is found to exist. This is because, dropping the variable or ignoring the problem might reduce the precision of the estimated coefficient. Pearson Correlation matrix was used to further confirm absence of multi-collinearity.

Serial autocorrelation is a situation where errors are correlated with one another (Brooks, 2014; Gujarati & Porter, 1999). If the problem is present and ignored, the coefficient derived from the estimate will be inefficient. It is suggested that if the form and cause of autocorrelation is known, then, Generalized Least Square procedure may be used to deal with the problem (Brooks, 2014). The researcher will use log transformation of variables or GLS if the problem is found to exist. Durbin Watson value can be used to test for its presence. A result of between 1.5 and 2.5 implies that there is no serial correlation.

The classical normal linear regression model assumes that the error term ($\mu_{i)}$ is distributed normally with constant mean, variance and covariance. The reason for the assumption is to the effect that the influence of omitted variables or neglected variables is small and at best random hence posing no threat to the coefficient estimate (Brooks, 2014; Gujarati & Porter, 1999). The violation of the assumption can imply that inferences made about the coefficients estimates could be wrong. Bera-Jarque test is used to test for normality. A normal distribution is not skewed, should have a bell shape and Bera-Jarque statistic should be insignificant; $p>0.05$ If the problem is found to exist, composite exponential regression would be used. If the problem still exist after the use of composite exponential regression, it may be ignored provided the data is asymptotically large, (Brooks, 2014).

Heteroscedasticity is a situation where errors do not have constant variance. The presence of heteroscedasticity may cause high standard errors, hence indication of spurious relationship inference (Brooks, 2014; Gujarati & Porter, 1999). If the problem is found to exist, log transformation of variable or GLS method would be used to transform the data. Detection of heteroscedasticity will be performed using Lagrange Multiplier (LM) test. The test is performed using calculated R^2 from the auxiliary regression and multiplied by the number of observations, T. $TR^2 \sim X^2(m)$, where *m* is the number of independent variables. If the X^2 test statistics is greater than corresponding value from the statistical table, then fail to reject null hypothesis of homoscedasticity.

3.10 Reliability and Validity of research

To address both internal validity and face validity of the research, questionnaire was adopted from Jonas and Blanchet (2000) and Van Beest et al. (2009) with modification to suit the public sector where the study was carried out. Internal validity refers to the extent to which the research design and data it yields allow the researcher to draw accurate conclusion. Face validity is a form approval from a person with experience within the field of study. External validity refers to the ability to draw generalization about the research findings to entire population (Saunders, Lewis, & Thornhill, 2008). The researcher achieved this by examining 50 SAGAs representing 100% of the population of study. The approach of adopting data collection instrument with modification to suit the research study has been used in prior literature by a number of researchers (McFie, 2006; Opanyi, 2016; Tasios & Bekiaris, 2012; Yurisandi & Puspitasari, 2015). The process was further enhanced by having trained research assistant to administer questionnaire. Reliability was achieved in scoring the quality index by comparing the result of the scores of the researcher with the scores of two graduate assistants, and independent expert. The results were then harmonized and sampled by research supervisor to give the final index used for the analysis. The questionnaire designed to collect the opinion of managers was further subjected to Cronbach's Alpha test of reliability and validity.

3.11 Ethical consideration

The conduct of this research was guided by Strathmore University's code of ethics. Permission to carry out the research was obtained from the University. The privacy of the participants was maintained. It was voluntary and participants were free to complete or partially complete the process at their discretion. Respondents were given details about the particulars of the research study. Data gathered remained confidential and only used for the research to answer the research objectives

CHAPTER FOUR

PRESENTATION OF RESEARCH FINDINGS AND RESULTS

4.1 Introduction

The study sought to establish the quality of financial reporting and its association to specific characteristics of semi-autonomous government agencies in Kenya. This chapter presents the results of the analyses of data collected from the audited annual reports of semi-autonomous government agencies and questionnaires. Data from the audited annual reports were obtained from the Kenya National Audit Office website and from the individual organizations. Questionnaire were issued to either organization's account's manager, internal audit manager or finance manager. The findings have been presented under the following sections: response rate, pilot study results, demographic characteristics, descriptive statistics, regression analysis, financial reporting quality as per the quality index, the association between financial reporting quality and semi-autonomous government agencies' specific characteristics, the opinion of managers on financial reporting quality and specific semi-autonomous characteristics that is associated to financial reporting quality, and the comparison of results from both secondary data and questionnaire data.

4.2 Response Rate

Secondary data which was the main data source, were collected from 50 semi-autonomous government agencies for each of the five-years, resulting into 250 observations over the period 2011-2015. This was after excluding 27 SAGAs since they were formed outside the period of study (formed after 2011). Further 26 SAGAs were excluded due to missing data for some of the years. In addition to the data collected from audited annual reports, primary data were collected using questionnaires administered between February 2017 and March 2017. Out of 50 questionnaires issued, 30 were returned. This yielded response rate of 60%. Fess (1995) suggested that at least 30% of response rate was adequate for analysis. Therefore, the response rate of 100% for secondary data and 60% for questionnaire in this study ware considered adequate for the analysis. Table 4.1 below illustrates the response rate for both secondary (audited annual reports) and primary data (questionnaires) sources.

Table 4.1: Response rate

Audited Annual Reports		Questionnaire	
Number	**percent**	**Number**	**Percent**
50	100%	30	60%

Source: Researcher (2017)

4.3 Results of pilot study

In order to assess the content validity of the questionnaire in pre-tested step, the questionnaire was given to three experienced accountants in the area of public sector accounting, auditing and finance. They were asked to express their opinions about the wording, length, structure and format of the questionnaire. Analysis of the data collected during the pilot test revealed that the questionnaire was very long, and the formatting was not done well. These corrections were incorporated, and finally, the content of the questionnaire was approved by research supervisor before issuing them to the targeted population. This procedure is similar to approach taken by Bastani et al. (2012). The Cronbach's alpha was used to test the reliability of the research questionnaire. The Cronbach's alpha test the consistency of respondents' answers to all the items in a questionnaire (Kothari et al., 2014). It measures the degree to which question items are independent measure of the same concept. The higher the coefficients, the better the measurement. According to the results in table 4.2 below, the Cronbach's alpha for the overall questionnaire was 0.927 indicating good reliability.

Table 4.2: Reliability of questionaire

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.927	0.939	20

Source: Researcher (2017)

4.4 Demographic Characteristics

This section describes the general characteristics of the respondents in terms of their job title and sector.

4.4.1 Respondents' distribution per specialization

The researcher received 30 responses out of 50 questionnaires distributed to accountants, internal auditors and finance managers of semi-autonomous government agencies. The responses represents 60% of the population of study. The distribution of the respondents based on job specialization and sector representation is shown on figure 4.1.

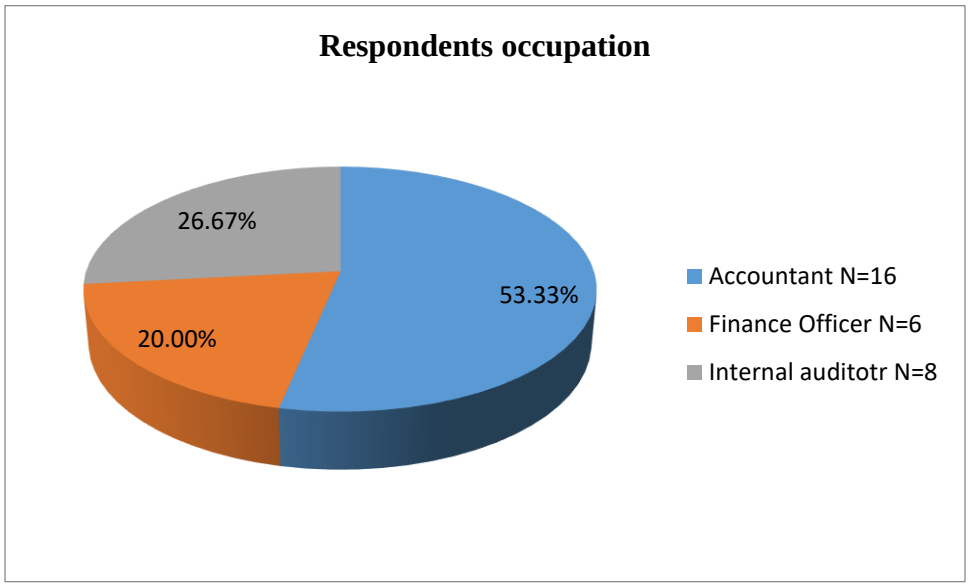

Figure 4.1: Results of the respondent's distribution per specialization

4.4.2 The specific distribution of respondents per sector

The distribution of respondents per sectors is shown on figure 4.2. It shows that 17% of respondents were from Governance, Justice Law and Order sector, 3% were from Education sector, 17% were from Agriculture, Fisheries and Food sector, 3% were from Health sector, 13% were from Social Protection, Culture and Recreation, 13% were from Public Administration, 7% were from Environment sector and 17% were from Energy Infrastructure and Information sector. The researcher therefore concluded that participants of the questionnaire were specialized and well represented to participate in the research questionnaire.

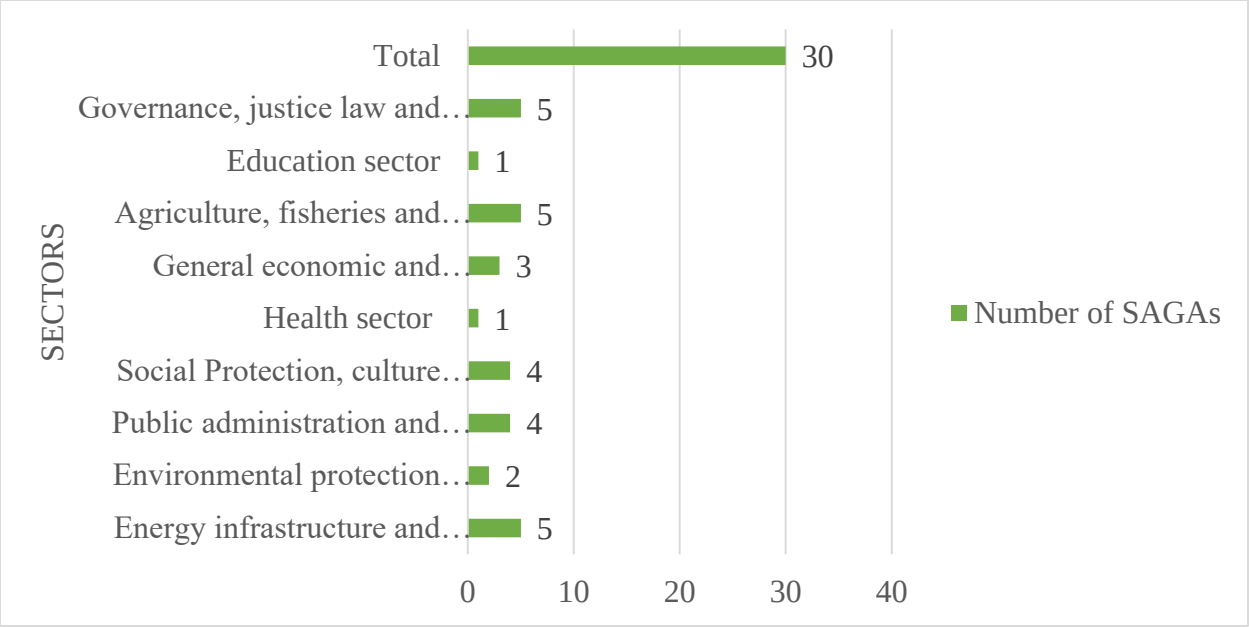

Figure 4.2: **Results of the respondent's distribution per sector**

4.5 Descriptive results

This section presents a discussion of the descriptive statistics for both dependent and independent variables.

4.5.1 Descriptive results on financial reporting quality among SAGAs in Kenya as per the quality of financial reporting index

To assess quality of financial reporting, a paired sample t- test was performed. This is in line with the approach taken by previous researchers who conducted research on examination of quality of financial reporting (Bukenya, 2014; Opanyi, 2016; Yurisandi & Puspitasari, 2015). The result showed that there was a marginal mean improvement of financial reporting quality after adoption of IPSAS in Kenya. The mean quality of financial reporting before adoption of IPSAS (accrual basis) was 2.616 and after adoption it rose to a mean of 2.785. All the qualitative elements of accounting information had improvement. Table 4.3 shows that comparability of accounting information of SAGAs improved from a mean of 2.068 before IPSAS adoption to 2.090 after the adoption. On the other hand, faithful representation of accounting information rose from a mean of 2.932 before adoption of IPSAS to 3.183 after adoption. Next, relevance improved from 2.944 to 3.022 after adoption, timeliness improved from a mean of 2.887 to 3.370 and finally

understandability had a mean improvement from 2.248 to 2.258. The overall improvement of financial reporting quality was significant with a p-value of 0.000. The mean improvement of faithful representation and timeliness were also significant with a p-value of 0.000 and 0.011 respectively. However, the mean improvement on comparability, relevance and understandability were not significant since they had p-values of 0.508, 0.161, and 0.867 respectively which were more than 0.05 level of significance. This finding is consistent with the results of Yurisandi and Puspitasari (2015) who curried a research on financial reporting quality, before and after adoption of IFRS in Indonesia. The findings are also consistent with those of Opanyi (2016) who found that there was slight improvement on the quality of financial reporting in public sector in Kenya after IPSAS cash adoption. Other researchers who found improvement in quality of financial reporting after IPSAS adoption were Mehrolhassani et al. (2014) who analyzed the development from cash-accounting to accrual- accounting in the health sector in Iran. He concluded that there were improvement in accounting information in applying accrual-based accounting in the public sector. A study by Johan Christiaens et al.(2008) in Belgian and Flemish in the public sector also showed that full cost of outputs using accrual accounting improved after IPSAS adoption.

Table 4.3: Descriptive statistics on financial reporting quality among SAGAs in Kenya as per the quality index over the period 2011-2015

Items	Period	N	Mean	Median	Std. Deviation	Skewness	Kurtosis	Minimum	Maximum	sig.	t-value
Comparability	Pre-adoption	150	2.068	2.167	0.252	-0.020	-1.030	1.667	2.67		
	Post-adoption	100	2.090	2.167	0.272	0.135	0.107	1.667	3.00	0.508	-0.662
Faithful representation	Pre-adoption	150	2.932	3.000	0.531	-0.293	-0.736	1.833	3.83		
	Post-adoption	100	3.183	3.333	0.407	-0.702	0.713	1.833	4.00	0.000	-4.225
Relevance	Pre-adoption	150	2.944	3.000	0.430	0.286	-0.117	2.111	4.00		
	Post-adoption	100	3.022	3.222	0.435	-0.276	0.459	1.889	4.00	0.161	-1.404
Timeliness	Pre-adoption	150	2.887	3.000	1.578	0.075	-1.529	1.000	5		
	Post-adoption	100	3.370	4.000	1.383	-0.484	-1.046	1.000	5.00	0.011	-2.557
Understandability	Pre-adoption	150	2.248	2.200	0.426	0.330	-0.408	1.600	3.40		
	Pre-adoption	100	2.258	2.200	0.486	0.136	-1.016	1.600	3.20	0.867	-0.175
	Pre-adoption	150	2.616	2.612	0.381	0.282	-0.783	2.016	3.61		
Overall FRQ	Post-	100	2.785	2.838	0.348	0.116	-0.033	2.129	3.61	0.000	-3.620

Note: FRQ refers to financial reporting quality, N refers to the number of observations

4.5.2 Quality of financial reporting trend trend among SAGAs in Kenya over the period 2011-2015

Figure 4.3 below shows how quality has improved since 2011 to 2015 among semi-autonomous government agencies in Kenya. This indicates that financial reporting quality started to improve from a stagnant position in year 2011 and 2012 to an upward trend between 2014 and 2015.

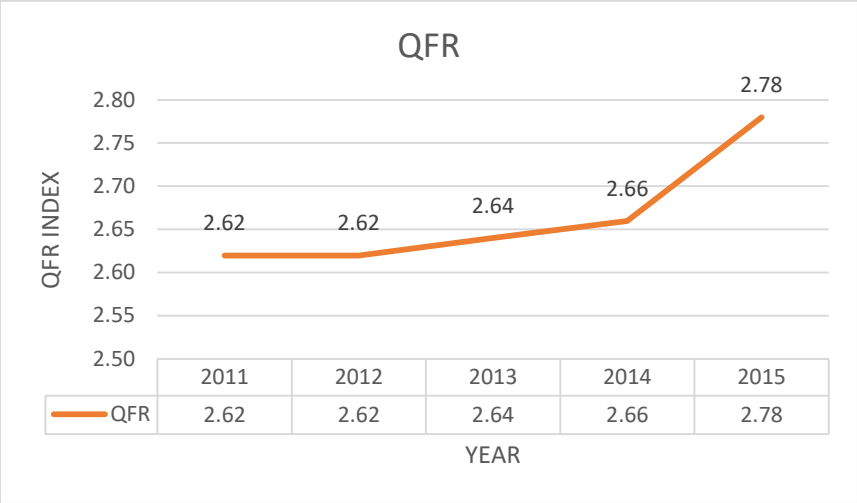

Figure 4.3: Graph of financial reporting quality trend among SAGA in Kenya over the period 2011-2015

4.5.3 Descriptive statistics of financial reporting quality among SAGAs in Kenya as observed among SAGAs managers

A constructed questionnaire based on fundamental and enhancing qualitative attributes of financial information as described by IPSASB (2014) conceptual framework for general purpose financial statement was constructed on a five point Likert Scale. The questionnaires were then mailed or distributed physically to the SAGA managers. For each item, the respondents were required to indicate the extent to which they agreed with the reporting using a scale of 1-5 where: 1 meant very little extent, 2; little extent, 3; neutral, 4; large extent and 5 very large extent. The first 18 questions of questionnaires were meant to answer research question “What are the differences in the quality of financial reporting of SAGAs before and after adoption of IPSAS in Kenya?” The questionnaire was arranged according to each qualitative characteristics so that respondents could pay attention on each characteristics. Independent samples test was used to compare the means and to determine if the changes were significant after adoption of IPSAS. From table 4.4 below, it can be observed that there were changes on means of faithful representation, comparability,

understandability, relevance, and timeliness by 0.9, 0.667, 0.583, 0.534, and 0.467 respectively. The improvement for faithful representation was significant at 0.10 level of significance since its p-value was 0.09 which is less than 0.10. The improvement for comparability was also significant since its p-value was 0.000 which is less than 0.05, the improvement of timeliness was significant since its p-value was 0.03 which is less than 0.05. On the other hand, managers felt that the accounting information after adoption of IPSAS were not understandable and were not relevant to the users. Understandability had a p-value of 0.210 which is more than 0.05, while relevance had a p-value of 0.670 which is also greater than 0.05. This means that the mean change for both understandability and relevance of accounting information after introduction of IPSAS are not significant. On overall, financial reporting quality as observed by the managers improved from a mean of 2.900 before adoption of IPSAS to 3.575 after the adoption and was significant with a p-value of 0.006 at 0.05 level of significance. The findings are consistent with those of Bukenya (2014), who carried out a research on quality of accounting information and financial performance of Uganda's public sector. The findings was that quality of accounting information improved after IPSAS adoption based on the perception of the preparers of accounting information. The findings also complement the result obtained by Tasios and Bekiaris (2012) who found improvement in financial reporting quality in Greece using the qualitative attributes of financial information.

Table 4.4: Descriptive statistics of managers' opinion on financial reporting quality for pre and post adoption of IPSAS among SAGAs in Kenya.

Items	Period	N	Mean	Median	Std. Deviation	Skewness	Kurtosis	Minimum	Maximum	Sig.	T-value
Timeliness	Pre-adoption	30	2.633	2.000	1.299	0.444	-0.963	1	5		
	Post-adoption	30	3.100	3.000	1.539	-0.057	-1.560	1	5	0.030	-2.222
Comparability	Pre-adoption	30	3.000	3.000	0.871	-0.335	-0.831	1.00	4		
	Post-adoption	30	3.667	4.000	1.028	-0.076	-1.129	2.00	5	0.000	-3.953
Faithful representation	Pre-adoption	30	2.800	3.000	0.805	0.815	0.363	2.00	5		
	Post-adoption	30	3.700	3.500	0.952	0.149	-1.133	2.00	5	0.090	-2.710
Relevance	Pre-adoption	30	3.133	3.000	0.973	-0.283	0.296	1.00	5		
	Post-adoption	30	3.667	3.000	0.884	0.416	-1.054	2.00	5	0.670	-1.865
Understandability	Pre-adoption	30	2.800	2.500	0.970	0.581	-0.716	1.50	5		
	Post-adoption	30	3.383	3.250	1.412	0.028	-1.934	1.50	5	0.210	-1.269
	Pre-adoption	30	2.900	2.750	0.767	0.475	-1.033	2.00	4.5		
Overall FRQ	Post-adoption	30	3.575	3.625	1.053	0.113	-1.529	2.00	5	0.006	-2.838

Source: Researcher (2017)

4.5.4 Descriptive statistics of managers' opinion on factors that influence financial reporting quality among SAGAs in Kenya.

The second objective of the study was to examine the influence of specific SAGAs characteristics on the quality of financial reporting in Kenya. Managers of SAGAs were requested to give opinion on related questions on the questionnaire by indicating the extent to which they agreed with specific SAGAs characteristics on their influence to financial reporting quality using a scale of 1-5 where: 1 meant very little extent, 2; little extent, 3; neutral, 4; large extent and 5 very large extent. From table 4.5, firm size, liquidity, and audit committee size had a mean of 3.030, 3.230, and 3.200 respectively. Leverage and age of the SAGAs had means of 2.80 and 2.57 respectively. This imply that on average, managers are of the opinion that firm size represented by total assets, liquidity and committee size were the main factors that could influence financial reporting quality. On the other hand, leverage and age of the SAGAs, were not considered as equally important in influencing financial reporting quality. Consistent with approach taken by Tasios and Bekiaris (2012), factors that had a mean greater than 3 were considered significant and those with means less than 3 were considered insignificant. The findings are consistent with those of Tasios and Bekiaris (2012) who sought the perception of auditors about the factors that had influence on quality of financial reporting. The results indicated that firm size had significant influence on financial reporting quality. On the other hand, leverage and age of the firm were insignificant factors according to auditors perception.

Table 4.5: Descriptive statistics on managers' opinions on factors that influence financial reporting quality among SAGAs in Kenya

Name of the variable	N	Mean	Median	Std. Deviation	Skewness	Kurtosis	Minimum	Maximum
Firm size (measured by total assets)	30	3.03	3	1.098	-0.405	-0.166	1	5
Leverage	30	2.80	3	0.997	-0.018	-0.298	1	5
Age of the SAGA (Since incorporation)	30	2.57	3	1.223	0.077	-0.725	1	5
Liquidity	30	3.23	4	1.194	-0.875	-0.188	1	5
Audit committee size	30	3.20	3	1.215	-0.658	-0.315	1	5

Source: Researcher (2017)

4.5.5 Descriptive statistics of both dependent and Independent variables

Table 4.6 below shows that on average, financial reporting quality from 2011 to 2015 was 2.658. This is an indication that financial reporting quality was still below the average. The average leverage ratio was 0.228 between 2011 and 2015, average liquidity was 48.67 between 2011 and 2015, the average audit size was 4 between 2011 and 2015, and this indicates that semi-autonomous government agencies and the average profitability was 1.170 between 2011 and 2015. This shows that there was wide variability in terms of profit. The average total assets was Ksh "millions" 5,882,386.496 between 2011 to 2015 also indicating a wide variability in term of total assets owned by various SAGAs, and the average age since incorporation was 19 years between 2011 to 2015 indicating that most of SAGAs have been around since their establishment in terms of years since incorporation.

Table 4.6: Descriptive statistics of both dependent and independent variable over the period 2011-2015

	Mean	Median	Standard Deviation	Kurtosis	Skewness	Minimum	Maximum
FRQ	2.658	2.630	0.276	0.481	0.692	2.074	3.407
Leverage	0.228	0.126	0.322	51.434	5.525	0.000	3.659
Liquidity	48.674	3.516	338.030	93.308	9.398	0.072	3951.136
Audit_size	4.048	4.000	1.439	2.878	1.538	2.000	10.000
Log of years of SAGA	1.141	1.176	0.361	-0.954	-0.201	0.301	1.771
Log of total assets	5.911	6.073	0.976	-0.681	-0.049	3.884	8.378
Profitability	1.170	0.017	7.488	51.837	5.696	-27.623	76.032
Assets in Ksh "000"	5882386.496	730081.000	22665639.644	65.187	7.618	6962.000	238586061.000
Age of SAGA	18.764	15.000	14.204	-0.119	0.883	1.000	59.000

Note: FRQ means Financial Reporting Quality

Source: Researcher (2017)

4.6 Inferential Statistics

In this section, the diagnostic tests performed prior to multiple regression analyses are presented The researcher first plotted a graph to determine a trend that could suggest violations to multiple regression assumptions. Since the total assets and age of the firm had a wide variability, they were transformed into logs. Thereafter, a further regression diagnostics were performed in relation to violations of a multiple regression model assumptions as follows:

4.6.1 Tests for multi-collinearity

Multi-collinearity exists when two independent variables are perfectly correlated with each other. The variable inflation factor (VIF) in excess of 10 should be considered an indication of harmful multi-collinearity (Gujarati & Porter, 1999). After data transformation using the natural log of assets and age of the SAGA, there was no presence of harmful multi-collinearity in the regression output. The regression results are as shown in table 4.7 where the VIF and tolerance values are within the acceptable range.

Table 4.7: Significance of variables and multi-collinearity test

Model		Unstandardized Coefficients		Standardized Coefficients[a]	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	2.634	0.015		172.105	0.000*		
	Liquidity	0.000	0.000	0.111	1.762	0.079**	1.000	1.000
	(Constant)	2.553	0.050		51.446	0.000*		
	Liquidity	0.001	0.000	0.117	1.855	0.065**	0.997	1.003
	Log of age of SAGAs	0.071	0.041	0.108	1.710	0.088**	0.997	1.003
	(Constant)	2.689	0.093		28.825	0.000*		
	Liquidity	0.001	0.000	0.116	1.856	0.065**	0.997	1.003
	Log of age of SAGAs	0.089	0.042	0.136	2.098	0.037*	0.933	1.072
	Log of total assets	-0.027	0.016	-0.111	-1.720	0.087**	0.935	1.069

a. Dependent variable: Financial reporting quality

Notes: *, ** significance of factors in explaining the association to financial reporting quality at 0.05 and 0.10 levels (two-tailed) respectively.

4.6.2 Pearson Correlation matrix Analysis

Pearson correlation matrix was further computed to confirm multi-collinearity. The study sought to establish the association of financial reporting quality with specific SAGAs characteristics. Therefore, it was more of association study than a causal relationship hence Pearson Correlation analysis was found to be suitable. According to Brooks (2014), correlation matrix of below 0.8

can be considered not a serious problem. The correlation matrix in table 4.8 shows that the highest coefficient correlation was 0.284 which was less than 0.8. This showed that correlation was not a serious problem. However, it was significant at 0.01 level of significance, implying that it may be related to financial reporting quality.

The findings show that the correlation coefficients between financial reporting quality and liquidity was positive and significant (Coefficient=0.132, p=0.037). This meant that Semi-autonomous government agencies which are highly liquid are expected to have great impact on financial reporting quality. The findings is in tandem to the findings of (Amr, 2016; Andrew 2015; Bardos, 2011) who found positive significant relationship between financial reporting quality and liquidity. The correlation between financial reporting quality and leverage shows a negative insignificant relationship (Coefficient=-0.03, p=0.637). The findings are consistent with the results obtained by McFie (2006), Olowokure et al. (2015) and Wallace et al. (1994), who found negative insignificant relationship between leverage and financial reporting quality.

The correlation between financial reporting quality and audit committee size shows negative insignificant relationship (Coefficient=-0.08, p=0.206). This findings contradict a study by Yang and Krishnan (2005) who found significant negative relationship. Similarly, the findings contradicted findings by Davidson and Robinson (2003), who found no significant relationship between audit committee size and financial reporting quality. Correlation between financial reporting quality and natural logarithm of age shows a positive insignificant relationship (Coefficient=0.109, p=0.086). The findings are consistent with those of Huang et al. (2012); Olowokure et al. (2015). Correlation between financial reporting quality and natural log of assets shows insignificant negative relationship (Coefficient=-0.044, p=0.49).The findings are consistent with those of McFie (2006), Olowokure et al. (2015) and Wang'ombe (2012).

Correlation between financial reporting quality and control variable (Profitability as measured by Return on Assets) shows positive insignificant relationship (Coefficient=0.015, p=0.814). The findings contradict the findings of Hossain (2012), Inchausti (1997) and Wallace et al.(1994).

Table 4.8: Pearson Correlation matrix

Correlations

		FRQ_index	Leverag	Liquidity	Audit_size	log _ age	log _ assets	ROA
FRQ_index	Pearson Correlation	1						
	Sig. (2-tailed)							
Leverag	Pearson Correlation	-0.03	1					
	Sig. (2-tailed)	0.637						
Liquidity	Pearson Correlation	.132*	-0.087	1				
	Sig. (2-tailed)	0.037	0.168					
Audit_size	Pearson Correlation	-0.08	-0.083	-0.086	1			
	Sig. (2-tailed)	0.206	0.189	0.173				
log _ age	Pearson Correlation	0.109	-0.045	-0.067	0.05	1		
	Sig. (2-tailed)	0.086	0.478	0.289	0.431			
log _ assets	Pearson Correlation	-0.044	-.150*	0.061	.183**	.284**	1	
	Sig. (2-tailed)	0.49	0.018	0.341	0.004	0		
ROA	Pearson Correlation	0.015	-0.013	-0.017	-0.054	0.055	-0.066	1
	Sig. (2-tailed)	0.814	0.832	0.794	0.397	0.387	0.298	

*. Correlation is significant at the 0.05 level (2-tailed).

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

4.6.3 Tests for serial autocorrelation

Serial autocorrelation is a situation where errors are correlated with one another. Durbin Watson value was used to test for its presence (Brooks, 2014; Gujarati & Porter, 1999). A result of between 1.5 and 2.5 implies that there is no serious serial autocorrelation problem. The Durbin-Watson value of 2.139 shown in table 4.9 indicates that the data has no serious problem of serial autocorrelation.

Table 4.9: Multiple regression model summary

Model[d] summary							
R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Durbin Watson
				R Square Change	F Change	Sig. F Change	
0.111a	0.012	0.008	0.236	0.012	3.106	0.079	
0.155b	0.02	0.016	0.235	0.012	2.925	0.088	
0.188c	0.036	0.024	0.234	0.012	2.957	0.087	2.139

a Predictors: (Constant), liquidity.

b Predictors: (Constant), liquidity, log age

c Predictors: (Constant), liquidity, log age, log assets

d. Dependent variable: Financial reporting quality

4.6.4 Tests for Normality

Histogram with normal curve superimposed depicting bell shaped and a p-value that is not significant can be used as a test for normality, similarly, data is said to be normally distributed if the range of its standard skewness is between -1.96 to +1.96 and its standard kurtosis is between -1.96 to +1.96 (Brooks, 2014; Gujarati & Porter, 1999). Figure 4.4 below indicates that the data is normally distributed. The Jarque-Bera statistic p-value is 0.0596 and the range of standard skewness and kurtosis are within acceptable range, indicating absence of a serious normality problem.

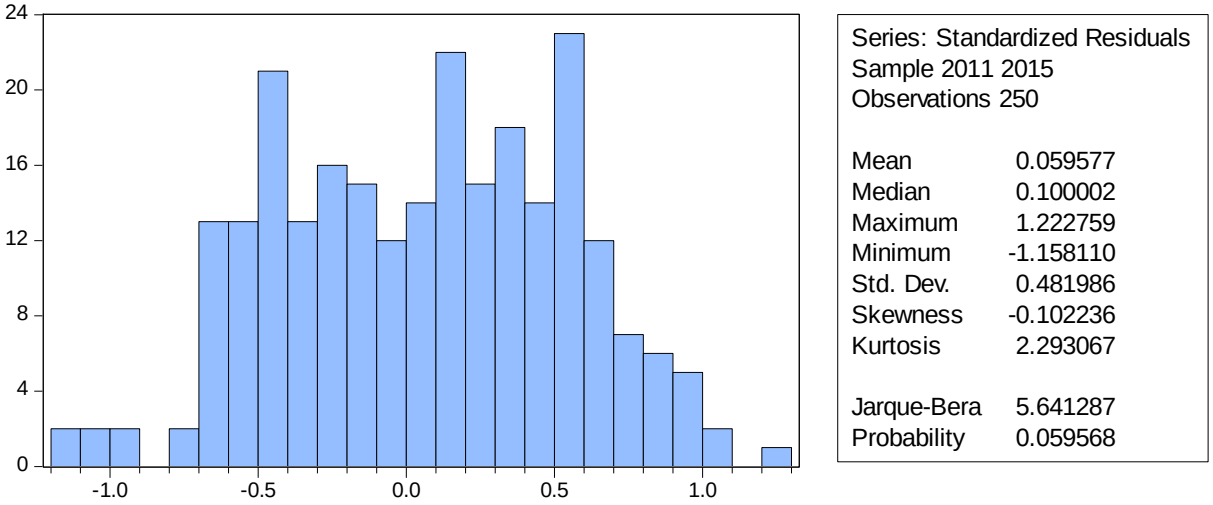

Figure 4.4: Histogram for normality test

4.6.5 Tests for heteroscedasticity

The test for heteroscedasticity is performed using Lagrange Multiplier (LM) test as follows: Calculated R^2 from the auxiliary regression is multiplied by the number of observations, T. $TR^2 \sim X^2(m)$, where *m* is the number of independent variables. If the X^2 test statistics is greater than corresponding value from the statistical table, then researcher fails to reject null hypothesis of homoscedasticity. From the calculation below, researcher failed to reject null hypothesis at 5% level of significance and concluded that there was no heteroscedasticity since TR^2 was less than $X^2(m)$**.**

Table 4.10: Test for heteroscedasticity

TR^2	**$X^2(m)$**
9	12.59

4.7 Regression results

A stepwise regression method was applied in order to test the research hypotheses and to determine the contribution of individual independent variable to the model. Agyei-Mensah (2013) notes that stepwise regression method optimizes the econometric model so that all statistically non-significant variables are eliminated from the model. Stepwise regression have been used in prior literature to establish the association of specific firm characteristics and financial reporting quality (Agyei-Mensah, 2013; Amr, 2016). The multiple regression results shown on table 4.7, 4.9, 4.11 show that liquidity, age of the firm (represented by log of age), size of the firm (represented by log of assets) are associated on a statistically significant level to financial reporting quality among SAGAs in Kenya.

The regression results displayed in table 4.9 reveal the adjusted R^2 (2.4%). It shows the percentage in the dependent variable explained by the explanatory variables jointly. It signifies 2.4 % of total variation in financial reporting quality of semi -autonomous government agencies is related to their firm size, liquidity, and age of the SAGAs. 96.4% of the variation of financial reporting quality is explained by other factors not captured by the model. According to Gujarati and Porter (1999), the researcher should pay much attention to logical or theoretical relevance of the explanatory variables to the dependent variable and their statistical significance. The implication of low R square could mean that there are other major characteristics of SAGAs that could influence financial reporting quality which are not captured in this model. The findings of low R square is in tandem with other studies that have reported low adjusted R square in the past. For instance, Isidro & Raonic (2012) found adjusted R^2 of 7.2% when he sought to find out institutional factors influencing accounting quality in firms from 26 countries. Martani and Fitriasari (2014) in his study on financial and performance transparency on the local government websites in Indonesia, found adjusted R^2 of 7.5%. In addition, Li and Wang (2010) in his study on financial reporting quality and corporate investment efficiency: Chinese experience found adjusted R^2 of 4.3%. This implies that the reason of regression analysis is not to maximize the value of R square but to draw theoretical and logical inference about explanatory variables.

4.7.1 Selection of significant variables

According to the findings in table 4.9, the most significant variables were liquidity (p-value=0.079), log of age (p-value=0.088), log of asset (p-value=0.087). The final model with significant variable can be depicted by the following equation:

$$QFR = 2.689 + 0.001\ liquidity + 0.089\log\_age - 0.027\log\_assets$$

The model with all significant variables illustrated above implies that on average, financial reporting quality is 2.689 on a scale of 1 to 5 holding the effects of natural log of assets, liquidity and natural log of age of SAGA constant. However, one unit increase of liquidity of SAGAs increases financial reporting quality by 0.001 units holding other factors affecting quality constant. One unit increase in the age of SAGAs, increases financial reporting quality by 0.089 units holding other factors affecting financial reporting quality constant. Also, one unit increase of assets of SAGAs, reduces financial reporting quality by 0.027 holding other factors affecting quality constant. The overall model is significant to explain the change of financial reporting quality in semi-autonomous government agencies since the p value corresponding to the model is 0.030 at 5% level of significance. The variables that were not significant in explaining the financial reporting quality among SAGAs were leverage, audit committee size, and profitability. The table illustrating their effect to dependent variable is attached in appendix 6.

Table 4.11 presents the analysis of the ANOVA for the regression model used. The ANOVA showed an F statistics of 3.020 which had a significance level of 0.030 which is less than 0.05. This implied that there was a joint significant of independent variables when taken together. Therefore, the model was a good fit for the variables being tested.

Table 4.11: ANOVA[d]

	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.173	1	0.173	3.106	0.079[a]
Residual	13.821	248	0.056		
Total	13.994	249			
Regression	0.335	2	0.167	3.027	0.050[b]
Residual	13.659	247	0.055		
Total	13.994	249			
Regression	0.497	3	0.166	3.020	0.030[c]
Residual	13.497	246	0.055		
Total	13.994	249			

a Predictors: (Constant), liquidity.

b Predictors: (Constant), liquidity, log age.

c Predictors: (Constant), liquidity, log age, log assets.

d Dependent variable: Financial reporting quality

4.8 Hypothesis Testing

The following hypothesis supports objective two of the study. Objective two of the study was to examine the influence of SAGAs characteristics on the quality of financial reporting in Kenya. The results of the regression analyses indicated that four alternate hypotheses were not confirmed. Using the size and significance of beta coefficients, the study established the following results on the influence of independent variables on financial reporting quality: Liquidity as measured by current ratio (liquidity, beta=0.001), age of SAGAs as measured by log of age since incorporation (log of age, beta=0.0890), size of SAGAs as measured by log of asset (log of asset, beta=-0.027), leverage as measured by ratio of total liabilities to total assets (leverage, beta=-0.089), audit committee size as measured by total number of audit committee (Audit committee size, beta=-0.051), profitability as measured by return on assets (Profitability, beta=0.098).

Table 4.12: Summary of the Hypotheses Testing

Hypothesis	Expected sign	Actual sign and beta	Status of hypothesis
There is a significant positive relationship between the size and the financial reporting quality among SAGAs in Kenya	+	B=-0.027**	not supported
There is a significant negative relationship between leverage and the financial reporting quality among SAGAs in Kenya	-	NST B=-0.089	not supported
There is a significant positive relationship between the age and financial reporting quality among SAGAs in Kenya	+	B= + 0.089*	supported
There is a significant positive relationship between the liquidity and financial reporting quality among SAGAs in Kenya	+	B=+ 0.001**	supported
There is a significant positive relationship between the size of audit committee and the financial reporting quality among SAGAs in Kenya	+	NST B=-0.051	not supported
There is a significance positive relationship between profitability and financial reporting quality among SAGAs in Kenya	+	NST B=+0.098	not supported

*, ** Significance at 0.05 and 0.10 respectively, NST-not significant

4.8.1 Hypothesis 1: Size and financial reporting quality among SAGAs in Kenya

The findings revealed that beta coefficient on the asset size of SAGAs were -0.027, t-statistics of -1.720. The p-value for log of asset was 0.087 which was less than 0.10, implying that size of SAGAs had a significant influence on the level of financial reporting quality among SAGAs in Kenya. This meant that a unit increase in the asset value resulted in a decrease in the level of financial reporting quality by 0.027 units. The alternate hypothesis that size of SAGAs has a positive relationship to financial reporting quality among SAGAs in Kenya was therefore rejected. The findings demonstrated that as the value of SAGAs assets increased, financial reporting quality decreased.

The findings were consistent with those of Jensen (2000) and Olowokure et al. (2015) and Waweru and Riro, (2013 who found that organization with large asset value have inverse relationship to financial reporting quality. The findings illustrate the importance of maintaining smaller units of SAGA in terms of resources in order to achieve financial reporting quality. It could imply that management have problems overseeing the large resource based units hence control becomes difficult. The results indicate that large semi-autonomous government agencies have inverse relationship between the assets size to financial reporting quality.

4.8.2 Hypothesis 2: Leverage and financial reporting quality among SAGAs in Kenya

The coefficient on the variable, leverage was -0.089 with a t-statistics of -1.396. The p-value for leverage was 0.164 which was greater than 0.05, implying that the leverage was not a significant determinant of financial reporting quality among SAGAs in Kenya. Therefore, alternate hypothesis that leverage (as measured by total liabilities to total asset) has significant negative association to financial reporting quality among SAGAs in Kenya is rejected. The findings were consistent with those found by McFie (2006), Olowokure et al. (2015) and Wallace et al. (1994) who found negative insignificant relationship between leverage and financial reporting quality.

4.8.3 Hypothesis 3: Age and financial reporting quality among SAGAs in Kenya

The coefficient on the variable, age was 0.089 with a t-statistics of 2.098. The p-value for age was 0.037 which was less than 0.05, implying that the age of SAGAs was a significant determinant of financial reporting quality among SAGAs in Kenya. The researcher therefore failed to reject alternate hypothesis that age of SAGAs had a positive significant influence on the financial

reporting quality among SAGAs in Kenya. The findings were consistent with those of Huang et al. (2012) and Olowokure et al. (2015), who found positive significant relationship between age of the firm and financial reporting quality. The findings could be interpreted to mean that government pays less attention to younger semi-autonomous government agencies. Policies should be put in place by practitioners on how to help younger SAGAs achieve financial reporting quality.

4.8.4 Hypothesis 4: Liquidity and financial reporting quality among SAGAs in Kenya

The coefficient on variable, liquidity was 0.001 with a t-statistics of 1.856. The p-value for liquidity was 0.065 which was less than 0.10, implying that liquidity of SAGAs had a significant positive influence on financial reporting quality among SAGAs in Kenya. It meant that a unit increase in the value of liquidity increases the level of financial reporting quality by 0.0005 units. Therefore, the researcher failed to reject alternate hypothesis that liquidity of SAGAs had a positive significant influence on financial reporting quality among SAGAs in Kenya. The findings were consistent with those of Amr (2016), Andrew (2015) and Bardos (2011) who found positive significant relationship between quality of financial information and liquidity. The result suggests that policy makers of semi-autonomous government agencies can improve financial reporting quality by implementing reforms in institutional systems that are capable of improving liquidity conditions at the SAGAs level.

4.8.5 Hypothesis 5: Audit committee size and financial reporting quality among SAGAs in Kenya

The coefficient on variable, audit committee size was -0.051 with a t-statistic of -0.790. The p-value for audit committee was 0.430 which was greater than 0.05, implying that the audit committee size was not significant at influencing the level of financial reporting quality among SAGAs in Kenya. It meant that a unit increase in the number of audit committee size reduces financial reporting quality among SAGAs by 0.051 units. The findings are consistent with those of Davidson, and Dadalt (2003) and Yang and Krishnan (2005) who found insignificant influence on audit committee size and financial reporting quality among SAGAs in Kenya. The finding is surprising given the requirement by the Kenyan Government that each public entity should have audit committee members according to executive order no 1/2016. It was expected that a positive significant relationship would be achieved. Therefore the researcher rejected alternate hypothesis that there was a positive significant relationship between audit committee size and financial

reporting quality. The implication to these findings is that policy makers should not just focus on the number of audit committee but also pay attention to other important characteristics of audit committee such as expertise and experience.

4.8.6 Hypothesis 6: Profitability (Control Variable) and financial reporting quality among SAGAs in Kenya.

Analysis of variance (ANOVA) was observed before and after introduction of profitability (control variable).Table 4.11 shows that overall significance rose from 0.020 before introduction of profitability to 0.030 after introduction of profitability. This shows that profitability has a moderating influence on the quality of financial reporting among SAGAs in Kenya. The beta coefficient of profitability was 0.098 with t-statistics of 1.570. The p-value was 0.118 which was greater than 0.05, implying that profitability as measured by return on assets was not significant in influencing financial reporting quality among SAGAs in Kenya. Therefore, alternate hypothesis that profitability has a positive significant influence on financial reporting quality was rejected. The findings contradicted studies by Hossain(2012), Inchausti(1997), and Wallace et al. (1994) who found positive significant relationship between profitability and financial reporting quality. Other researchers have also found no relationship between profitability and financial reporting quality (Tasios & Bekiaris, 2012; Waweru & Riro, 2013).

Table 4.13: Controlling the effect of profitability on financial reporting quality

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
Without control variable	Regression	0.595	2	0.297	3.993	0.020[c]
	Residual	18.396	247	0.074		
	Total	18.990	249			
With control variable	Regression	0.5	3	0.17	3.02	0.030[c]
	Residual	13.497	246	0.05		
	Total	13.994	249			

Source: Researcher (2017)

4.9 Comparison of findings from secondary data and questionnaire data

Table 4.14 below presents the results and findings of the chapter both from secondary data and questionnaire. It shows that to a larger extent, information from secondary data is confirmed by managers in the field. Differences only arose from two factors; Age of the SAGAs and audit committee size. The differences from the opinion of the researcher could be explained by the fact that most SAGAs are sometimes merged and the role of age on influencing quality of financial reporting might not be very clear to the managers. For the audit committee size, it is a new concept to SAGAs since until recently in 2016 is when there was executive order requiring the public sector entities to have audit committee. Even though the audit committee existed among SAGAs before the executive order, the formal structure detailing their mandate were not well formalized.

Table 4.14: Comparison of findings from secondary data and questionnaire data

	Results from:		
Independent variables	**Secondary data**	**questionnaire**	**inference**
Age of SAGA	Significant	Not significant	Inconsistent
Leverage	Not significant	Not significant	Consistent
Liquidity	Significant	Significant	Consistent
Audit committee size	Not significant	Significant	Inconsistent
Size of SAGA	Significant	Significant	Consistent
Dependent variable			
Financial reporting quality	Significant	Significant	Consistent

Source: Researcher (2017)

4.10 Chapter summary

The chapter presented the research findings based on the research objectives. The therefore conclusion was that financial reporting quality is low among SAGAs in Kenya as confirmed by secondary data although the managers indicated that quality of financial reporting was above average. In addition, factors that have been identified to influence financial reporting quality by both sources are liquidity, and size of the SAGAs represented by total assets. Leverage has been found not to have influence on financial reporting quality. Audit committee size and age of SAGAs gave inconclusive findings.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary discussion of findings, conclusions and recommendations in relation to the research objectives. The objective of the study were; To establish the quality of financial reporting among semi-autonomous government agencies before and after adoption of IPSAS in Kenya and to examine the influence of SAGAs characteristics on quality of financial reporting in Kenya.

5.2 Research purpose and Methodology

The first objective of establishing the quality of financial reporting among semi-autonomous government agencies before and after adoption of IPSAS in Kenya was achieved by using a 27-item index modified from proposed model by Van Beest et al. (2009). The index was based on the fundamental and enhancing qualitative attributes of financial information of relevance, reliability, comparability, understandability, and timeliness as outlined by IPSASB (2014). Once all the items were scored both by the researcher, independent expert and two other graduate assistants, differences arising from scores were discussed and harmonized to a single score. The scores were then sampled by the research supervisor to arrive at the quality index used for analysis.

Descriptive statistics such as mean, median, skewness and kurtosis was computed for pre-adoption (2011-2013) and post adoption (2014-205). The significance of mean differences of overall quality of financial reporting and qualitative characteristics for financial information for the pre and post adoption were determined by the use a paired sample t-test and Levene's Test for equality of mean (Appendix 8). The researcher also sought the opinions of managers on quality of financial reporting among semi-autonomous government agencies before and after adoption of IPSAS in Kenya. To achieve this, a constructed questionnaire based on fundamental and enhancing qualitative attributes of financial information as described by IPSASB (2014) conceptual framework for general purpose financial statement was constructed on a five point Likert Scale. The questionnaires were then mailed or distributed physically to the SAGAs managers. The significance of mean differences of overall quality of financial reporting and qualitative

characteristics for financial information for the pre and post adoption were determined by the use a paired sample t-test and Levene's Test for equality of mean (Appendix 7).

The second research objective that sought to examine the influence of SAGAs characteristics on quality of financial reporting in Kenya was achieved by obtaining data on total assets, leverage ratio, liquidity, age of SAGAs since incorporation, profitability (measured by return on assets), liquidity (measured as the ratio of current assets to current liability) and audit committee size from the audited annual financial reports of SAGAs between 2011 to 2015. Before regression analysis, log transformation was done for two variables; total assets and age of SAGAs due to wide variability of data set, in addition, data was tested for absence of violations to multiple regression assumptions. Finally, Stepwise regression model was used to determine significant variables by regressing independent variables against dependent variable using SPSS software (version 17).

5.3 Discussion of the findings

5.3.1 Financial reporting quality before and after adoption of IPSAS among SAGAs in Kenya.

The first research objective sought to establish the quality of financial reporting among Semi-Autonomous Government Agencies before and after adoption of international public sector accounting standards (IPSAS) in Kenya. To do this, a twenty seven score index based on the fundamental and enhancing qualitative attributes of financial information as outlined by IPSASB (2014) conceptual framework for general purpose financial statements was used to score from each Semi-Autonomous Government Agencies audited annual financial reports from year 2011 to 2015. The findings showed that financial reporting quality among SAGAs in Kenya was low with a mean of 2.658 over the years 2011 to 2015. However, there was improvement from average of 2.616 before the adoption of IPSAS (2011-2013) to average of 2.785 after the adoption of IPSAS (2014-2015). The improvement was equally below average with some elements such as relevance and comparability having insignificant statistical improvement. The results could suggest a confirmation of institutional theory that Kenya governments may have introduced accrual accounting and reporting to meet external requirements and to provide an impression of rationality and efficiency, seeking legitimacy, but not to use the system to improve internal performance and financial reporting quality.

The researcher also sought the opinion of managers about the quality of financial reporting among SAGAs before and after adoption of IPSAS. Questionnaire was developed with similar sets of questions as those used to construct the quality index score sheet. The questionnaires were distributed to accounts, auditors and finance managers of specified SAGAs and picked at a later date. The findings from questionnaire revealed mean improvement from 2.815 before adoption of IPSAS to 3.462 after adoption.

The results as per the financial reporting quality index and as per the managers opinions are consistent with the results obtained by Mehrolhassani, Khayatzadeh-Mahani, & Emami (2014) who analyzed the movement from cash-based to accrual-based accounting in the health sector in Iran. He concluded that there were improvements in accounting information in applying accrual-based accounting in the public sector. A study by Johan Christiaens & Rommel (2008) in Belgian and Flemish in the public sector also showed that full cost of outputs using accrual accounting improved. Similarly, Opanyi (2016) carried out a study to find out the effects of IPSAS cash basis adoption in public sector (ministries) on the financial reporting quality. The findings indicated that there was moderate effect on the quality of financial reports in public sector in Kenya.

5.3.2: Association of specific characteristics and financial reporting quality among SAGAs in Kenya.

The second research question sought to examine the association of financial reporting quality and specific characteristics of semi-autonomous government agencies in Kenya. The researcher identified six independent variables that could influence financial reporting quality among SAGAs in Kenya. The stepwise regression method was used to perform the analysis. The results identified three variables as having significant effects on financial reporting quality among SAGAs in Kenya. The first variable identified was size of SAGA measured by the total assets. These findings indicated negative relationship between financial reporting quality and SAGA size. The findings is consistent with those of Jensen (2000) and Olowokure et al. (2015). The second variable identified was the liquidity of SAGA. The regression results indicated that liquidity had positive relationship to financial reporting quality. This finding is consistent with research findings of Bardos (2011), Amr (2016) and Andrew (2015) who found a positive relationship between quality of financial information and liquidity.

Third variable that was identified was the age of the firm. Age of the firm is defined as the years since incorporation. The regression result indicated that age is a significant factor in influencing financial reporting quality among SAGAs. The result is tandem with Huang et al. (2012), who argued that older firms are likely to achieve financial reporting quality due to strong internal control built over the years. On the other hand, the regression result identified three other variable that did not have significant influence on financial reporting quality. These variables were leverage, audit committee size and profitability (control variable). Leverage was measured by the ratio of total liabilities to total assets. The regression results indicate negative insignificant relationship between leverage and financial reporting quality. The finding is consistent with those found by McFie (2006) and Olowokure et al. (2015) in their respective studies. Audit committee size was measured by number of audit committee. Regression results indicated negative insignificant relationship between audit committee size and financial reporting quality among SAGA. The findings is consistent with those of Yang and Krishnan (2005), Davidson and Dadalt (2003). The finding is surprising given the requirement by the Kenyan Government that each public entity should have audit committee members according to executive order no 1/2016. It was expected that a positive significant relationship would be achieved. Profitability was measured as the ratio of net income/loss divided by total assets (Tuvadaratragool, 2013). Regression result showed positive insignificant relationship contrary to the research findings of (Hossain, 2012; Inchausti, 1997, Wallace et al., 1994). The results from the questionnaire complements the regression results in some aspect and also reveals different viewpoints. Both sources of information are in agreement that liquidity and size of the SAGAs influences quality of financial reporting. In addition, leverage is not considered to have influence on financial reporting quality. However, age of SAGAs and audit committee size have inconclusive findings on their association to financial reporting quality among SAGAs in Kenya.

5.4 Conclusion

The purpose of the study was both to establish the financial reporting quality among semi-autonomous agencies before and after adoption of IPSAS and to examine the influence of SAGAs characteristics on quality of financial reporting in Kenya. From the discussion of results, it was observed that the overall financial reporting quality after the IPSAS adoption was but there was marginal improvement compared to the financial reporting quality before the IPSAS adoption. On the second objective, the multiple regression analysis showed that three variables, age of SAGAs (represented by years since incorporation), liquidity represented by ratio of current asset and current liability and total assets represented by log of assets were found to be significant and were statistically associated with financial reporting quality.

Out of six alternate hypotheses stated in this study, the results of regression analysis showed that hypotheses postulating a positive relationship between firm size (H_1) and financial reporting quality was rejected. Also, the predicted negative significant relationship between leverage (H_2) and financial reporting quality was rejected. The predicted positive relationship between age of the firm (H_3) and financial reporting quality was supported. The hypothesis that there was a significant positive relationship between liquidity (H_4) and financial reporting quality was supported. On the other hand, hypothesis that there was a positive relationship of size of audit committee (H_5) and financial reporting quality was rejected. Hypothesis that there was positive significant relationship between profitability (control variable) and financial reporting quality was rejected. It was therefore concluded that there was negative insignificant relationship between size of the firm and financial reporting quality, negative insignificant relationship between leverage and financial reporting quality, positive significant relationship between age of the semi-autonomous government agencies and financial reporting quality, and positive significant relationship between liquidity and financial reporting quality. However, there was negative insignificant relationship between audit committee size and financial reporting quality. Lastly, there was a positive insignificant relationship between profitability (control variable) measured by return on assets, and financial reporting quality among SAGAs in Kenya.

5.5 Recommendation for further research

The researcher recommends future research to consider incorporating all the entities in the public sector. In addition, there is a need to study more specific SAGAs characteristics that may influence quality of financial reporting.

5.6 Implication of the study

5.6.1 Policy makers

The result suggests that policy makers of semi-autonomous government agencies can improve financial reporting quality by implementing reforms in institutional systems that are capable of changing operational conditions at the corporate entity level. Policy makers can draft administrative policies to promote financial reporting quality. For instance, stipulating strict adherence to IPSAS standards by practitioners. Lastly, policy makers should break larger units of SAGA to smaller administrative units so that they can easily be administered to increase efficiency of administration. The results indicate that large semi-autonomous government agencies have inverse relationship between the assets size to financial reporting quality.

5.6.2 Practitioners

Practitioners can improve their operational efficiency by improving liquidity ratio so that the SAGA can efficiently pay their short term obligations. Management should also find ways to enable younger semi-autonomous government agencies establish systems in place to achieve financial reporting quality. The government may not be paying attention to young semi-autonomous government agencies while SAGAs that have been around for quite a while are likely to be under the scrutiny of government spotlight. The results show that older firms are the one capable of producing quality financial reporting. Lastly, practitioners should pay more attention to qualitative attributes of accounting information since they have direct impact on how quality of accounting information is perceived.

5.6.3 Academic scholars

The study has contributed to the knowledge development by establishing the quality of financial reporting among semi-autonomous government agencies in Kenya. This research helps in filling the gap on limited research in the public sector in Kenya. In addition, the study has identified specific SAGAs characteristics that are associated to quality financial reporting among in Kenya.

5.7 Limitations of the study

5.7.1 Methodology

Even though measures were taken to minimize subjectivity in scoring quality index by having more independent raters, the process could still suffer from subjectivity.

5.7.2 Scope

The study was limited to Government Parastatals that apply the IPSAS accrual method of accounting (SAGAs). This could make it impractical to generalize the findings to the entire public sector. The study also included three years before adoption of IPSAS and two years after adoption. Three years before adoption and three years after adoption would have been more appropriate to study financial reporting quality.

5.7.3 Explanatory power of the model

The low explanatory power of the model may suggest that it can only be used to draw logical and statistical inferences.

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APPENDICES

Appendix 1: Introduction letter

Strathmore UNIVERSITY

8th February 2017

TO WHOM IT MAY CONCERN

Abang'a Albert Ochien'g -049435

Mr. Abang'a Albert Ochien'g is a postgraduate student in our Master of Commerce (Mcom) programme. In partial fulfilment of the Mcom degree, students are required to carry out a research project and write a thesis on a contemporary subject within their field of specialisation. Among other activities, the project involves data collection and analysis.

Albert is requesting to gather information to be used in his research. The information he will obtain from your organization will be used for this academic purpose only and will be kept confidential. The results of the survey will be in summary form and will not disclose any individual, company name or company information in any way.

The research study is entitled **"Determinants of Quality of Financial Reporting among Semi-Autonomous Government Agencies in Kenya."**

We hope that your organization can assist by providing information to the above named student.

Yours faithfully,

Josphat Manani
MCOM Coordinator
School of Management and Commerce
Email:jmanani@strathmore.edu

Appendix 2: Financial reporting quality index

No	Quality index	Operationalization	Concept
	Relevance		
R-1	To what extent is presence of forward looking statements develop expectations and help predict the future of SAGA?	1=no forward looking information; 2=forward looking information not part of subsection; 3=part of subsection; 4=extensive predictions;	Predictive value
R-2	To what extent does the presence of non-financial information (business opportunities and risks) complement the financial information?	1= No non-financial information 2= Limited non-financial information 3=Sufficient useful non-financial information 4 = Relatively much useful non-financial information, helpful for developing expectations 5 = Very extensive non-financial	Predictive value
R-3	To what extent does the entity uses fair value (FV) instead of historical cost (HC) as a basis of measurement?	1= Only HC 2= Most HC 3= Balanced FV and HC 4= Most FV 5 = Only FV	Predictive value
R-4	To what extent is the SAGA annual report disclose information on Corporate Social Responsibility (CSR)?	1 = No information on CSR 2 = Limited information on CSR 3 = Sufficient information on CSR 4 = Very much information on CSR 5 = Very extensive information on CSR	Predictive value
R-5	To what extent is analysis concerning SAGA cash flow reported?	1= No analysis 2= Little analysis 3= Moderate analysis 4 = Very much analysis 5 = Very sufficient analysis	Predictive value
R-6	To what extent are there a disclosure of "off-balance" activities?	1= No disclosure 2= Little disclosure 3=Moderate disclosure 4= Very much disclosure 5 = Very sufficient disclosure	Predictive value

R-7	To what extent does the SAGA annual report disclose its' going concern?	1= No disclosure 2= Little disclosure 3=Moderate disclosure 4= Very much disclosure 5 = Very sufficient disclosure	Predictive value
R-8	To what extent are there a disclosure of intangible assets?	1= No disclosure 2= Little disclosure 3=Moderate disclosure 4= Very much disclosure 5 = Very sufficient disclosure	Predictive value
R-9	To what extent is there a disclosure of financial structure?	1= No disclosure 2= Little disclosure 3=Moderate disclosure 4= Very much disclosure 5 = Very sufficient disclosure	Predictive value
	Faithful Representation		
F-1	To what extent are certain assumptions and estimates supported in the annual report?	1= No valid arguments 2= Limited valid arguments 3= Sufficient valid arguments 4= Very much valid arguments 5 = Very extensive valid arguments	Verifiability
F-2	To what extent is the accounting principles based on valid arguments?	1=Changes not explained; 2=Minimum explanation;	Verifiability
F-3	Does the financial reports highlight positive as well as negative events in the discussion of the annual results?	1=Negative events only mentioned in the footnotes; 2=Emphasize on positive events; Emphasize on	Neutrality
F-4	What is the type of auditors' report is included in the SAGA annual financial report?	1 = Adverse opinion 2 = Disclaimer of opinion 3 = Qualified opinion 4 = Unqualified opinion: financial 5 = Unqualified opinion: financial internal control	Free from material error, verification, neutrality and
F-5	To what extent is there a disclosure of a follow up on Auditor General queries of the previous period?	1= No disclosure 2= Little disclosure 3=Moderate disclosure 4= Very much disclosure 5 = Very sufficient disclosure	Neutrality
F-6	To what extent are information about bonuses of the board of directors disclosed?	1= No disclosure 2= Little disclosure 3=Moderate disclosure 4= Very much disclosure 5 = Very sufficient disclosure	Neutrality

	Understandability		
U-1	To what extent is the accounting information of annual reports well organized?	1 = Very badly organized 2 = Badly organized 3 = Poor organization 4 = Good organization 5 = Better organization	Understandability
U-2	Are the information concerning SAGAs strategy and mission statement part of annual reports?	1 = No information concerning strategy 2 = Limited information concerning 3 = Sufficient information 4 = Very much information 5 = Very extensive information mission and strategy	Understandability
U-3	To what extent are graphs used to help in the understanding of financial statements?	1 =Graph not presented 2 = between 1 to 5 graphs 3 = between 6 to 10 graphs 4 = between 11 to 15 graphs 5 = more than 15 graphs	Understandability
U-4	To what extent are the financial statements contains technical terms and jargons?	1 = Very much jargon 2 = Much jargon 3 = Moderate use of jargon 4 = Limited use of jargon 5 = No/hardly any jargon	Understandability
U-5	What is the length of the glossary?	1 = No glossary 2 = Less than 1 page 3 = Approximately 1 page 4 = 1-2 pages 5 = > 2 pages	Understandability
Comparability			
C-1	Do SAGAs disclose changes in accounting policies?	1= No disclosure 2= Little disclosure 3=Moderate disclosure 4= Very much disclosure 5 = Very sufficient disclosure	Consistency
C-2	Do SAGAs disclose changes in accounting estimates?	1= No disclosure 2= Little disclosure 3=Moderate disclosure 4= Very much disclosure 5 = Very sufficient disclosure	Consistency
C-3	To what extent does the annual report of SAGA provides comparison of effects of accounting policy changes?	1 = No comparison 2 = Actual adjustments (1 year) 3 = 2 years 4 = 3 years 5 = 4 or more years	Consistency

C-4	To what extent does the SAGA provide comparison of financial information of current period with the previous periods?	1=No comparison; 2= Only with previous year;3= With 5 years; 4=4 years+ description of implications; 5=10 years+ description of	Consistency
C-5	To what extent does the accounting information in the annual reports among SAGA comparable?	1 = Not comparable 2 = Little comparable information 3=Moderate comparable information 4 = Very much comparable 5 = Very sufficient comparable information	Comparability
C-6	To what extent does the SAGA presents financial ratios and index in the annual reports?	1 =Ratios not presented 2 = between 1 to 5 ratios 3 = between 6 to 10 ratios 4 = between 11 to 15 ratios 5 = more than 15 ratios	Comparability
Timeliness			
T-1	How long did it take Auditor General to sign the annual reports after book-year end?	1=>185 days, 2=153-184 days,3=122-153 days; 4=91-121 days; 5= 1-90 days	Timeliness

Source: Modified from Van Beest et al. (2009)

Appendix 3: Research questionnaire

Dear participant,

My name is Albert Ochieng Abang'a, a Master of Commerce student at Strathmore University conducting a research on "**Determinants of quality of financial reporting among SAGAs in Kenya**" Kindly answer the following questions by ticking (√) in the appropriate box or filling the spaces provided.

The information gathered will be kept confidential and will be used strictly for the purpose of this research

SECTION A: Demographic information

This section aims to establish the general background information of the organization

1. Name of Semi-Autonomous Government Agencies (state corporation)----------
2. Kindly indicate your role in the organization:

   a). Accountant b). Internal Auditor c). Finance officer d). Other----------specify

SECTION B

The purpose of this section is to assess the financial reporting quality using the following fundamental and enhancing qualitative characteristics of financial information as observed under Semi-Autonomous Government Agency reviewed. For each of the following characteristics, indicate the extent to which you agree with the reporting using a scale of 1-5 where: 1=Very little extent, 2=little extent, 3=Neutral, 4=Large extent, 5=Very large extent

Relevance

Q1. To what extent is presence of forward looking statements develop expectations and help predict the future?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q2. Does the presence of non-financial information in term of entity business opportunities and risks complement financial information?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q3. To what extent is the reported surplus/deficit provide feedback to the users of the annual reports regarding how various events and significant transactions affected the entity?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Faithful representation

Q4. To what extent are sufficient substantiation provided regarding assumptions and estimates in the preparation of the financial statements?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q5. To what extent are accounting principles firmly followed?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q6 Does the financial reports highlight positive as well as negative events?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q7. Does the annual reports provide information on corporate governance?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q8 Are the information provided in the annual reports verifiable?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Comparability

Q9 To what extent does the notes to accounting policies explain the effect of changes?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q10. To what extent does re-statement of the financial figures in the annual reports explain the effect of the revision?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q11. To what extent does the accounting information in the annual reports comparable to the previous accounting periods?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q12. To what extent does the accounting information in the annual reports among SAGA comparable?

	1	2	3	4	5
Before introduction of IPSAS accrual					

After introduction of IPSAS accrual					

Q13.Does the analysis of financial ratios and indexes supports the comparability of annual reports?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Timeliness

Q14. Are the users of annual reports get them on timely manner?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Understandability

Q15. To what extent is the accounting information of annual reports well organized?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q 16. To what extent does the notes to financial statements understandable and clear?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q17.To what extent are pictures, tables and graphs help in the understanding of financial statements?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

Q18.To what extent are the financial statements contains technical terms and jargons?

	1	2	3	4	5
Before introduction of IPSAS accrual					
After introduction of IPSAS accrual					

SECTION C

Purpose*: The purpose of the following questions is to establish the factors that are associated with financial reporting quality within the organization.*

Question 19: What is your opinion on the following specific Semi-autonomous government agencies' characteristics on their influence on financial reporting quality? Use the scale of 1 to 5 where: 1=Very little extent, 2=little extent, 3=Neutral, 4=Large extent, 5=Very large extent

Attribute/scale	1	2	3	4	5
Firm size (measured by total assets)					
Leverage					
Age of the firm (Since incorporation)					
Liquidity					
Audit committee size					

Thank you for your participation

Appendix 4: Population frame

Anti-counterfeit Agency (ACA)	Kenya Year Book Editorial Board
Communication Authority of Kenya (CAK)	Pest control Product Board
Energy Regulatory Commission (ERC)	Phermacy and poisons Board
Export Promotion Council (EPC)	Policy Holders Compensation Fund
Kenya Agricultural Livestock Research Organization	Public Procurement Oversight Authority
Kenya Bureau of Standards (KEBS)	Retirement Benefits Authority
Kenya Civil Aviation Authority (KCAA)	State corporations Appeal Tribunal
Kenya Forest Research Institute (KEFRI)	The Kenya National Highways Authority (KeNHA)
Kenya Maritime Authority	The Registration of Certified Public Secretaries Board
Kenya Medical Research Institute	Madia Council of Kenya
Kenya Medical Supplies Agency	National Campaign against Drug Abuse Authority (NACADA)
Kenya National Bureau of Statistics (KNBS)	National Communications Secretariat
Kenya National Library Service (KNLS)	National Council for Law Reporting
Kenya Urban Roads Authority (KURA)	National Irrigation Board
Moi Teaching and Referral Hospital	National Museums of Kenya
National Crime Research Centre	National Quality control laboratory
Numerical Machining Complex (NMC)	Nursing Council of Kenya
Privatization Commission	Kenyatta National Hospital
Rural Electrification Authority (REA)	Kenya Films Classification Board KFCB)
Sacco Society Regulatory Authority (SASRA).	Kenya National Examination Council (KNEC)
Agricultural Development Corporation	Kenya National Trading Corporation
Capital Markets Authority	Kenya Ordnance Factories corporation
Export Processing Zones Authority (EPZA)	Kenya Plant Health Inspectorate Service
Insurance Regulatory Authority	Kenya Veterinary Board
KASNEB	Kenya Year Book Editorial Board (KYEB)
Kenya Accreditation Services	

Appendix 5: IPSAS with IFRS comparison

IPSAS:	BASIS		IPSAS:	BASIS
1	IAS 1		30	IFRS 7
2	IAS 7		31	IAS 38
3	IAS 8		32	N/A
4	IAS 21		33	N/A
5	IAS 23		34	IAS 27
6	IAS 27		35	IFRS 10
7	IAS 28		36	IFRS 11
8	IAS 31		37	IAS 28
9	IAS 18		38	IFRS 12
10	IAS 29			
11	IAS 11			
12	IAS 2			
13	IAS 17			
14	IAS 10			
15	IAS 32			
16	IAS 40			
17	IAS 16			
18	IAS 14			
19	IAS 37			
20	IAS 24			
21	IAS 36			
22	N/A			
23	N/A			
24	N/A			
25	IAS 19			
26	IAS 36			
27	IAS 41			
28	IAS 32			
29	IAS 39			

Source:(Heiling & Germany, 2016)

Appendix 6: Insignificant variables

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	log_asset	-0.077[a]	-1.218	0.224	-0.077	1.000	1.000	1.000
	Leverage	-0.087[a]	-1.375	0.170	-0.087	.986	1.014	0.986
	Log_age	0.108[a]	1.710	0.088	0.108	.997	1.003	0.997
	Audit committee size	-0.064[a]	-1.006	0.315	-0.064	.997	1.003	0.997
	Profitability	0.107[a]	1.705	0.090	0.108	1.000	1.000	1.000
2	log_asset	-0.111[b]	-1.720	0.087	-0.109	.935	1.069	0.933
	Leverage	-0.077[b]	-1.205	0.229	-0.077	.976	1.025	0.976
	Audit committee size	-0.069[b]	-1.098	0.273	-0.070	.995	1.005	0.995
	Profitability	0.104[b]	1.657	0.099	0.105	.999	1.001	0.996
3	Leverage	-0.089[c]	-1.396	0.164	-0.089	.965	1.036	0.925
	Audit committee size	-0.051[c]	-0.790	0.430	-0.050	.959	1.043	0.902
	Profitability	0.098[c]	1.570	0.118	0.100	.996	1.004	0.931

Source: Researcher (2017)

Appendix 7: Independent sample test for questionnaire

Independent Samples Test

		Levene's Test for		t-test for Equality of Means						
									95% Confidence	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
relevance	Equal variances assumed	.230	.633	-2.222	58	.030	-.53333	.24005	-1.01385	-.05282
	Equal variances not assumed			-2.222	57.473	.030	-.53333	.24005	-1.01394	-.05273
faithful_1	Equal variances assumed	2.715	.105	-3.953	58	.000	-.90000	.22768	-1.35575	-.44425
	Equal variances not assumed			-3.953	56.439	.000	-.90000	.22768	-1.35602	-.44398
comparability	Equal variances assumed	2.749	.103	-2.710	58	.009	-.66667	.24604	-1.15917	-.17416
	Equal variances not assumed			-2.710	56.471	.009	-.66667	.24604	-1.15946	-.17388
understandability	Equal variances assumed	23.910	.000	-1.865	58	.067	-.58333	.31283	-1.20954	.04287
	Equal variances not assumed			-1.865	51.388	.068	-.58333	.31283	-1.21126	.04459
Timeliness	Equal variances assumed	2.407	.126	-1.269	58	.210	-.467	.368	-1.203	.269
	Equal variances not assumed			-1.269	56.413	.210	-.467	.368	-1.203	.270
QFR	Equal variances assumed	7.591	.008	-2.838	58	.006	-.67500	.23785	-1.15111	-.19889
	Equal variances not assumed			-2.838	53.029	.006	-.67500	.23785	-1.15206	-.19794

Source: Researcher (2017)

Appendix 8: Independent sample test for quality index

Independent Samples Test

		Equality of Variances		t-test for Equality of Means						
									Interval of the	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Relevance	Equal variances assumed	.092	.762	-1.407	248	.161	-.07852	.05579	-.18840	.03136
	Equal variances not assumed			-1.404	210.646	.162	-.07852	.05592	-.18875	.03171
Faithful representation	Equal variances assumed	16.618	.000	-4.009	248	.000	-.25111	.06263	-.37447	-.12776
	Equal variances not assumed			-4.225	243.214	.000	-.25111	.05943	-.36818	-.13405
Understandability	Equal variances assumed	5.284	.022	-.172	248	.864	-.01000	.05824	-.12472	.10472
	Equal variances not assumed			-.167	192.933	.867	-.01000	.05979	-.12792	.10792
Comparability	Equal variances assumed	.002	.966	-.662	248	.508	-.02222	.03355	-.08831	.04386
	Equal variances not assumed			-.652	201.131	.515	-.02222	.03406	-.08939	.04494
Timeliness	Equal variances assumed	4.621	.033	-2.491	248	.013	-.483	.194	-.866	-.101
	Equal variances not assumed			-2.557	230.228	.011	-.483	.189	-.856	-.111
QFR	Equal variances assumed	6.581	.011	-3.556	248	.000	-.16904	.04753	-.26265	-.07542
	Equal variances not assumed			-3.620	224.714	.000	-.16904	.04670	-.26105	-.07702

Source: Researcher (2017)