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**EFFECT OF MARKET CONDUCT GUIDELINES ON GROWTH OF  
PENSION SCHEMES IN KENYA**

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**D63/61807/2013**


**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF  
THE REQUIREMENTS OF THE DEGREE OF MASTER OF SCIENCE  
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**2021**

## DECLARATION

### STUDENTS' DECLARATION

I declare that this project is my original work and has never been submitted for a degree in any other university or college for examination/academic purposes.

Signature:  .....

Date: 19/11/2021 .....

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### SUPERVISORS' DECLARATION

This research project has been submitted for examination with our approval as the student Supervisor.

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## **DEDICATION**

I wish to dedicate this research to my loving family, friends, colleagues and everyone for the unfailing support during every stage of this MSC program. Their understanding has given me enormous confidence and a positive attitude drive.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

ANOVA:	Analysis of Variance
CEO:	Chief Executive Officer
CMA:	Capital Markets Authority
CSPS:	Civil Servants Pension Scheme
GDP:	Gross Domestic Product
GLS:	Generalized Least Squares
NSE:	Nairobi securities exchange
NSSF:	National Social Security Fund
OECD:	Organisation for Economic Co-operation and Development
ORS:	Occupational Retirement Schemes
PhD:	Doctor of Philosophy
RBA:	Retirement Benefit Authority
SPSS:	Statistical Package for Social Sciences
UK:	United Kingdom
USA:	United States of America



## ABSTRACT

The operation of most pension funds and schemes in Kenya has been the subject of various debates in contemporary Kenya due to the failure to compensate pensioners when they retire or are incapacitated. There exists no recognized researches which have looked at market conduct guidelines practices being a tactic for improving pension systems' growth. Thus, this research was inspired towards bridging the knowledge gap through distinguishing if the practices for good market conduct guidelines may be applied as a tactic to enhance pension schemes' growth in Kenya's pension systems. The research with thus aimed at analysing the effect of market conduct guidelines on growth of pension schemes in Kenya. The study was guided by Stakeholders theory, Financial Intermediation Theory and Agency Cost Theory. The researcher applied the descriptive survey research design where the population targeted for the research was 30 occupational pension schemes in Kenya. This study undertook a census on the target population and secondary data was applied and was drawn from yearly reports of pension funds from 2011 to the year 2020. To analyze the gathered data, the Statistical Package for Social Sciences Version 25 and Microsoft Excel were applied. This study the study revealed that Pension Schemes in Kenya have been keen in implementing new market conduct guidelines of 2016 as proposed by the Retirement Benefit Authority as per the Legal Notice Number 192. The adoption of market conduct guidelines has significantly improved administration efficiency of the pension schemes. Through the new practices, there has been improvement performance which is shown by the positive growth in the accumulated assets. In the absence of a market of conduct guidelines, it can be dangerous in view of the principal-agent problem. Therefore, that active monitoring by on pension schemes can be value enhancing. It can therefore be concluded that the pension schemes in Kenya have put adequate risk control mechanisms to address operational risks, governance risk, internal reporting and auditing. Further, the pension schemes have internal control to ensure all persons and entities act in accordance with the law and have a sound framework for stability of pension funds. These affected positively the growth of the pension schemes in the country. The study also concludes that the Pension Schemes have adequate trustee members whose number is determined by the size of the schemes. The trustee acts on the best interests of the stakeholders. This study recommends that the management of pension schemes in Kenya should strictly comply with the new market conduct guidelines and other local and international regulations governing the management of Pension schemes. Adherence to these guidelines will greatly enhance the level of accountability and transparency, operational efficiency, internal control measures, regulatory compliance by schemes in their operations as well as improve the level of service delivery. It will also increase members' confidence in the Pension scheme as well as contribute towards improved investment returns. The RBA should enhance its regulatory capacity of the industry in order to ensure compliance among pension schemes and fund managers. An evaluation should be conducted in order to map out areas, roles and departments that should be enhanced. The pension schemes management needs to explore the alternative sources of funding for the pension schemes such as investing the members' contribution in ventures that earn higher returns. Management needs to liaise with the employers of the contributor to ensure contributions are remitted in time.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

The most important objective of a pension scheme is serving as a reliable source of retirement income (OECD, 2016). Trustees of pension schemes are primarily mandated to serve at best interest of the schemes' beneficiaries and participants. Trustees heed to this role through aiming at safeguarding and growing the pension schemes' assets in order to generate supreme benefits to the participants of the scheme as well as their beneficiaries (Rosethorn, 2019). Market conduct guidelines as shown in appendix I are set to ensure that good governance is maintained among sponsors, trustees and service providers in the pension sector and to improve service delivery to members who are the consumers of retirement benefits products and services (Hess & Impavido, 2016). This entails the establishment of appropriate structures that set out the objectives, policies, rules, practices and processes through which the scheme is managed. It also includes monitoring and evaluation of scheme performance. In Kenya the legal framework for such governance is provided generally under the Constitution of Kenya but more specifically under the Retirement Benefits Act Cap. 197, the Retirement Benefits Regulations and other laws relating to retirement benefits, employment and trusteeship (Miring'u, 2016).

This study will be anchored on three theories. These theories will include stakeholder's theory as proposed by Freeman (1985), The Financial Intermediation Theory proposed by Gurley and Shaw (1960) and lastly Agency Cost Theory by Jensen & Meckling (1976). Stakeholder theory looks at the relationship between an organization and others in its internal and external environment. It also looks at how these connections influence how the business conducts its activities. The financial intermediation theory is based on the theory of informational asymmetry and the agency theory, in principle, states that institutions exist to reduce information and transaction costs that arise from an information asymmetry between borrowers and lenders (Yermo, 2015).

Market conduct guidelines are a fundamental prerequisite for any country that hopes to safeguard its population after the retirement age. In developing countries such as Kenya, market for individual pension schemes is at development stage (RBA, 2018). This signifies, the growth of



individual pension is considerably low in the developing nations and thus requires thorough studying as it grows. Members handling these finances require high transparency levels, which over time has been identified as lacking across the public pension schemes (RBA News, 2018). Surely, membership in those schemes has given the members financial benefits over dependence on just the typical national pension that, because of prices indexation instead of average incomes, has constantly declined in their value (Taylor, 2016).

### **1.1.1 Market Conduct Guidelines**

Market conduct guidelines are guidelines that provide the minimum standards of conduct and sound governance practices expected of a scheme (Gifford, 2014). The boards of trustees and, by delegated powers, the administrators and trust secretaries where appointed, are responsible for ensuring compliance with this guideline. Governance of pension scheme requires values and ethical principles, which requires a certain standard of behavior by the board of trustees and other stakeholders in the scheme (RBA Market Conduct Guideline, 2017).

According to Ezra, (2018), the generally accepted practices includes, voluntary commencement of a scheme by a sponsor; fiduciary responsibility of all trustees; equity in treatment of members of a scheme; non-discrimination of members in relation to age, race, nationality, ethnicity, gender, staff rank, disability, religion, political affiliations or any other form of discrimination, in the management of the affairs of a scheme; participation in the governance of a scheme by sponsors and members as laid down in the Act and Regulations; and prudent management of scheme expenses (Almeida, 2016).

### **1.1.2 Growth of Pension Schemes**

Pension systems serve a key part towards increasing the rate of savings across an economy as well as transferring the idle finances into a financial system and therefore offers efficient resources. Keeping into consideration that local savings or the ratio of gross domestic product (GDP) is a key pointer for a country's sustainable economic growth, in nations classified as developing where there is a quite low rate of savings, the essence of a private pension system tends to be rising even more. Pension fund assets in nations have attained a sizeable GDP percentage (Ramasamy & Yeung, 2017).

Under all OECD countries management, United States possessed a big number of the assets, having assets of about \$ 14.6 trillion during the year 2017. Other nations with big systems of a pension fund comprise of United Kingdom whose assets were of \$ 4.3 trillion during the year 2016 and having an 11 per cent share of the OECD pension money market; Japan, having \$ 1.4 trillion (6.7 per cent), Australia having \$ 1.4 trillion (6.3 per cent); Netherlands having \$ 1.3 trillion (5.8 per cent); Canada having \$ 1.2 trillion (5.5 per cent); Switzerland having \$ 0.7 trillion (3.4 per cent). In the test of the OECD states remaining, overall assets of a pension fund in the year 2017 were approximately valued at \$ 3.8 trillion of OECD-area totals (OECD, 2018).

The growth of Pension Fund Assets improved tremendously during the last decade. The constituents of that growth which happened in the previous decade is key in illuminating the system's future. The chief growth constituents in that case include variables such as the number of players, shares to those players or participants, returns from the fund, fund operating costs, cuts on funding and improper management that impacts on the collected savings amount indirectly or directly, rates of interest, and the countries' inflation (Jacobsson & Jacobsson, 2017). According to Allerdice and Farrar (2016), pension funds are popular investment vehicles among investors. In this study, growth will be measured in terms of increase in the asset base of Retirement Benefits Schemes and increased returns on the investments.

### **1.1.3 Market Conduct Guidelines on Growth of Pension Schemes**

The growth of pension schemes has been influenced by several factors. As per the previous studies done on management of pension funds there are several aspects which affect the growth of pension schemes. These include fund ethics regulation, operational efficiency, market conduct guidelines, strategy for investment and overall regulation. Over the time, regulation has continued to be a huge influential aspect in the pension sector management. Yermo and Tinga (2017) posited that licensing alludes to a procedure through which those in authority gives consent to an entity that wants to deal in pensions the right to function and be advantaged as far as specific treatment for tax is concerned. It entails an array of actions, including compliance assessment with certain requirements, before giving consent to function or giving the tax privileges, or might be the compliance status with requirements as such. Regulations render the financial systems stable which give a conducive atmosphere for effective allocation of resources



which then facilitates economic development. In addition, experience portrays that where left alone, the financial systems tend to be susceptible to contagion and instability (Dan, 2017)

Even though the guidelines for market conduct have received increased attention within the previous years, there has not been a shift of focus to credibility as far as pension schemes are concerned as well as governance of the pension fund as key pension funds' determinants (Besley & Prat, 2015; Carmichael & Palacios, 2013; Ambatchsheer, 2011). In the empirical models, governance of a pension fund is determined by using board constitution and financial proficiency of the trustee's variables, management practices of a plan on the basis of expense ratios, and also decisions regarding if funds pursue services outsourcing (Bikker & Dreu, 2019). In addition, Mitchell and Yang (2015) indicate that a pension fund's market practices factors may as well comprise of the board constitution which refers to a fraction of the retired and active trustees. How the pension fund is governed is as well measured by the sponsor of the pension fund, whether a private or a public enterprise or a financial organization for a personal retirement fund (Bikker & Dreu, 2019). An additional aspect which impacts on a pension scheme's growth includes operational efficiency (Canadian Treasury Board, 2014).

Empirical studies (Roe, 2016; Merton & Bodie, 2015; Clark 2017) register a relationship between trustees of a pension fund maintaining ethical conduct and accomplishment of long-haul objectives laid out in the trust deed. Clark (2017) posits that ethical conduct is supposed to make sure that the pension funds are diligently managed, laws governing the pension are adhered to and every dispute handled impartially and communication given explicitly to every interested party.

#### **1.1.4 Pension Industry in Kenya**

This industry was established after the country obtained independence in the year 1963. The 1st pension fund body established after independence was the National Social Security Fund (NSSF), which was formed in the year 1965 (RBA, 2016). Before these reforms, the system of a pension fund offered benefits on retirement of an employee on reaching the compulsory age of retirement which is 55 (RBA, 2016). This was a fixed guarantee as an employee's full basic salary in the course of their life or a widow's since the law didn't capture a case in which a wife

of the widow as the law did not envisage a situation where the wife would give support to the husband. The Pensions Act and the NSSF Act embodied this law (Cap 189).

Kenya's system of the pension has constantly undergone supervision through the independent Retirement Benefits Authority (RBA) from the year 2000. The body exercises oversight on the 1997 RBA Act which led to the structure, protection and regulation of the pension fund sector. Kenya's structure of the pension fund entails the administrator of the fund, trustees' board, auditor, fund manager, custodian, members and the sponsor. RBA still works towards developing the sector and recommend to the government on reforms regarding to pension policies. Kenya's system of the pension fund encompasses 4 elements which includes; Individual Retirement Schemes, Occupational Retirement Schemes (ORS), Civil Servants Pension Scheme (CSPS) and NSSF. In total, the structure is approximated to support 15 per cent of the workers and as having total assets of 18 per cent of GDP (Kakwani, 2016).

For Kenya, Pension Fund Assets computed in percentage of the GDP was at 13.4 per cent in comparison to markets that are quite developed say, USA being at an 84.1per cent and UK being at 105.3 per cent. For the previous decades, the nation has witnessed initiatives related to education and reforms by RBA focused on educating persons on the essence of making a saving for purposes of retirement. The sector has reported supreme growth arising from the great performances and contribution from members resulting to growth of the assets being managed up-to Kshs 1,166.6 billion in the year2018, from an amount of Kshs 287.7 billion ten years ago, contributing to a 14.3per cent compound yearly rate of growth over the previous ten years.

## **1.2 Research Problem**

The operation of most pension funds and schemes in Kenya has been the subject of various debates in contemporary Kenya due to the failure to compensate pensioners when they retire or are incapacitated (Miring'u, 2016). Such challenges include: poor administration and investments of pension funds, lack of transparency and accountability, employer's failure to remit contributions per month, embezzlement of system assets by trustees, trustees' negligence resulting to losses of the system funds and improper investments on the system assets. others complaints relate to unresponsiveness, discourtesy, inefficiency, delay, refusal to pay, discrimination and abuse of power in the processing of retirement benefits (Ahmad, 2013).



In some instances, pension schemes have collapsed due to maladministration, poor investment decisions, insolvency, and this has had the effect of denying members their retirement benefits hence not securing their social security which is the very basis of the establishment and operation of pension schemes in Kenya (Njuguna, 2017). Whereas the RBA creates offences relating to scheme operations, the penalties provided are very lenient to deter their commission. Recovery of lost funds can also be done via asset recovery process or liquidation. However, these processes take a long time and the delay will jeopardize the petitioner in need of their benefits.

Whereas some of the problems can be solved by improving efficiency, the law does not provide a clear remedy in cases of insolvency. The law thus needs to provide for recourse to contributors and beneficiaries of pension funds by guaranteeing the receipt of their life savings where pension schemes collapse (Rono, 2017). In the previous decade, different researchers have identified a positive link between market conduct guidelines practices and market value of the company and its performance (Clark & Urwin, 2017; Clapman, 2017). Conversely, the impacts of the market conduct guidelines practices on the growth of pension funds have not gotten much focus in empirical studies (Kowalewski, 2018).

Locally study done on pension schemes have focused on growth of pension schemes and have failed to show the contribution of market conduct guidelines practices on growth or failure of the pension schemes. For instance, Muli (2015) conducted a research on problems that insurance companies encounter in pension funds management across Kenya. The study just outlines the hardships and does not cover the aspects affecting pension systems' growth across Kenya. Conversely, Makori (2016) conducted a research on management of asset liability amongst distinct benefits of the pension systems. An additional research related to that was conducted by Macharia (2018) addressing strategies on management of risk and earnings by the pension funds across Kenya. The studies mainly focused on strategies put by pension schemes to minimize risks and maximize the returns. Gicharu (2018) conducted a research on practices of corporate governance and financial performance of a company in Kenyan pension systems.

There exists no recognized researches which have looked at market conduct guidelines practices being a tactic for improving pension systems' growth. Thus, this research was inspired towards bridging the knowledge gap through distinguishing if the practices for good market conduct guidelines may be applied as a tactic to enhance pension schemes' growth in Kenya's pension

systems. The research with thus aimed at answering the study question; what are the effect of market conduct guidelines on growth of pension schemes in Kenya?

### **1.3 Objective of the Study**

To assess the effect of market conduct guidelines on growth of pension schemes in Kenya.

### **1.4 Value of the Study**

This research will be of significance to different stakeholders as described below:

**Financial Markets Stakeholders;** The research will be of significance to these stakeholders who comprise of the regulators of financial markets like the Capital Markets Authority (CMA), issuers of fund raising securities, Nairobi securities exchange (NSE), intermediaries for financial services and investors. Incorporation of market conduct guidelines practices might enhance growth of the pension funds and might give the needed sources of finances to bond and stock markets and augment the accessibility of long-haul funds, thus improve competition as well as inducing financial innovation.

**Retirement Benefits Authority;** the results may give information regarding the impacts of firming up the market conduct guidelines practices on pension funds' growth. As a regulator, RBA may employ this results in making changes to the regulations and policies that would improve pension funds' practices across Kenya.

**Pension Fund Trustees and Administrators:** Administrators and trustees in a pension fund might gain from the research since they can use the results in identifying practices of market conduct guidelines which might have an effect on a pension fund's growth and particularly the efficiency of administration as well as investment incomes from the pension funds. It may aid them in adopting the appropriate and the relevant practices of market conduct guidelines that augment efficacy of processes and operations of pension funds as well as enhance improve investment tactics.

The study's report will be bridging the research gap on impact of practices on market conduct guidelines on the pension fund assets growth across Kenya as well add onto the documented references for further studies on the topic and topics related to the same.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The literature review's purpose includes setting the subject for the study in a comprehensive context by investigating the appropriate literature. This chapter gives a discussion on the review of literature related to the study's subject as the different authors, analysts, scholars and researchers have presented. Also, there has been theories developed for purposes of underpinning this research as well as a conceptual framework for showing the association between variables under study.

#### **2.2 Theoretical Review**

There are several theories concerning market conduct guidelines and growth of pension schemes. This study considered three theories that were relevant to the topic. They included: Stakeholders theory, Financial Intermediation Theory and Agency Cost Theory.

##### **2.2.1 The Stakeholder Theory**

Freeman (1985) championed this theory. The theory observes the link between a company and the others within its interior and exterior environment. As well it gives a look at the manner in which these relationships affect the manner in which businesses carries out their operations. This theory describes a stakeholder being a group or individual who can impact or be impacted on by a company from the business' interior or exterior. Examples comprise of the nearby community, government, clients, workers, suppliers, shareholders, and non-profit groups amongst others. Freeman (1985), maintains that the major concept of this theory is that companies or institutions that effectively manage their relations are going to survive for a long time and have better performances as compared to organizations which do not.

The political philosopher Blattberg (2014) has critiqued Stakeholder Theory for assuming that the interests of the various stakeholders can be, at best, compromised or balanced against each other (Blattberg, 2014). Blattberg (2014) argues that this is a product of its emphasis on negotiation as the chief mode of dialogue for dealing with conflicts between stakeholder interests. He recommends conversation instead and this leads him to defend what he calls a 'patriotic' conception of the corporation as an alternative to that associated with stakeholder

theory. According to Mansell (2013), by applying the political concept of a 'social contract' to the corporation, stakeholder theory undermines the principles on which a market economy is based.

In contrast, Lee (2015) argued that within the stakeholder theory there is no difference between the social and the economic goals of a firm (Lee, 2015). In reference to studies of Hillman and Keim (2010) and Mitchell (2012), it is quite clear that the stakeholder perspective is the core conceptual approach within business and society (Porter, 2008). This theory therefore supports the fully implementation of market conduct guidelines by postulating that based on the instrumental viewpoint that favors a firm's focus on improving economic growth arguing that the economic success is the key objective for pension this may be achieved through cost reduction and ethical management.

### **2.2.2 Financial Intermediation Theory**

Gurley and Shaw (1960) advanced this theory in the 60's. The theory is grounded on the agency and informational asymmetry theories. Generally, this theory posit that organizations live to cut down the costs of transactions and information arising from asymmetry of information between lenders and the borrowers. On a financial perspective, the term financial intermediary alludes to a firm, an institution or a person who carries out intermediation between 2 units or many and amongst them are pension schemes (Allen & Santomero, 2018).

One critique theory is that it centers on the banks, operations like issuance of a loan and taking of deposits describe the financial intermediary role. The extension of this theory to activities of a pension scheme by Davis (2019) deems pension systems as forms of official investor, which engage in pooling, saving and investing the money that sponsors and beneficiaries are contribute towards catering for pensions' entitlements of the beneficiaries in the yet to come days. Thus, the role of a financial intermediary is satisfied through pension funds by investing of collected money in different financial assets like real estate, foreign instruments, government bonds, deposits, corporate debt, corporate equities, and real estate.

As financial investors, pension funds could offer several advantages including improved risk trade-off of, better return as a result of diversification and reduced costs of transaction following the large volumes of trade (Robu & Sandu, 2018). Characteristics such as costs of transaction and asymmetric information in the real-world market enable pension funds to benefit from fixed



costs of assets evaluation, technological advances and decreasing average trading costs. Thus the theory of financial intermediation will contribute to the study by providing an understanding to the role of market conduct guidelines of Pension schemes growth in Kenya.

### **2.2.3 Agency Cost Theory**

Jensen & Meckling (1976) describe an agency relationship to be an agreement from where an individual or many individuals (principals) appoint another individual (agent) for purposes of performing a service on behalf of them. That entails delegation to an agent the authority to make decisions. Agents match up to their managers, while the principals match to their shareholders from the perspective of a firm. Costs of agency come from an assumption where the 2 players, the principals and the agents have varying interests. Costs of monitoring are funded by the shareholders, principals, towards limiting the activities of an agent. Agents pay the bonding expense to the managers for purposes of guaranteeing that the interests of the principal won't be hurt as a result of their actions and decisions. Residual loss comes from divergence of the agents' decisions from those decisions which would make the most of the principal's wellbeing. Hence, the cost of agency is the total cost of monitoring, bonding, and residual loss (Jensen & Meckling, 1976).

The agency relationship leads to the information asymmetry problem due to the fact that managers can access information more than shareholders (Jensen & Meckling, 1976). Following market conduct guidelines is one means of mitigating the agency problem, where managers follows the guidelines to the letter reducing the agency costs and also to convince the external users that managers are acting in an optimal way. Regulations are another means of mitigating the agency problem as they require managers to fully adhere to the best practices as illustrated in the market conduct guidelines. The absence of fully adhering market conduct guidelines is explained by the conflict that exists between the interests of managers and shareholders.

### **2.3 Determinants of Pension Scheme Growth**

According to Owino (2017), growth of pension scheme is a useful element in determining net income, and is also instrumental in assessing the financial risk of the organization. pension schemes growth can be assessed by evaluating the increase in income streams. The main source

of funding for pension schemes is the contributions received. Blome (2018) stated that other source of income for pensions include the net returns made from investment of contributions. The increase in income coupled with reduction in administrative costs will lead to an increase in the fund value of a scheme. Schemes whose growth is healthy will generally be able to safeguard and grow members' funds; hence such schemes will be in a position to meet their financial liabilities to members who retire. There are number of determinants of pension scheme growth which are discussed as follows;

### **2.3.1 Pension Scheme Size**

Literature identifies a positive link between the size of a fund and growth of a pension system (Mahon & Donohoe 2016; Ahmad 2019; Bikker & Dreu, 2019). Research by Gallagher and Martin (2015) have shown when a pension fund is bigger, then growth is better. Pension funds are supposed to function at the ideal scale; not very small or very big (Caswell, 2016). Mahon and Donohoe (2016) posits that sizeable economies of scale are present in the administration of pension systems. They propose that pension systems that are smaller bear excess costs of operating per member because a big number of their costs tend to be fixed.

### **2.3.2 Density of Contribution**

This alludes to pension funds obtained from contributors and is quite a key growth determinant. Where a there are a big number of contributors to a fund who have the capacity to channel huge volume of funds to the system, then there's going to be sufficient funds for investment and that is going to aid the fund earn greater incomes. The opposite has a possibility of happening as well in case the contribution amounts received are not sufficiently large to allow the fund enter in a substantial asset investment (Bodie, 2019). The standard contribution amount in the course of the year is to be employed as the measure. A person should be alive, of eighteen years of age and above and not a retiree for the month to be deemed a potential contribution month. The contributions density is amongst the broadly used performance indicator of contributions. It determines the fraction of months which an employee made a contribution in the potential months he would have contributed during a particular age bracket. Normally, analysts focus on the contributions density given that one is not retired (Robalino & David, 2015).



### **2.3.3 Administration Cost**

Various scholars agree that pension costs can significantly erode retirement assets (Bateman & Mitchell, 2014; Bikker & De Dreu, 2019; UK Pensions Commission, 2015). Although the pension scheme costs may determine the development of scheme assets throughout the year, the short term impact is not the critical factor. However, Bateman and Mitchell (2014) argue that the cumulative effect of annual costs during the lifetime of a scheme on the final fund value is the critical factor that determines the development of a scheme. There are different ways of levying Pension scheme costs. These various methods of levying reflect the pattern of pension scheme cost structures in other parts of the world as revealed by a research conducted on pension scheme costs in thirteen countries, (Whitehouse, 2010).

Moreover, high costs of pension investment affect the beneficiaries' wealth significantly because they reduce the net rates of return on investments and, therefore, increase the costs of providing pensions. The current financial crisis and the increase of the elderly population have created significant challenges globally. Consequently, politicians and the public increasingly demand transparency and efficiency in the operation of pension funds. Although investment costs have a significant influence on the performance of pension funds, empirical studies on cost structures of pension schemes are few. The absence of such studies can be attributed to the lack of detailed, unbiased and comparable data on investment costs. A majority of the studies on the subject have concluded that the link between costs and size of pension funds is negative.

### **2.3.4 Pension Schemes Membership**

Kenya's retirement benefits segment is composed of NSSF, the civil service scheme, occupational schemes, and personal pension schemes. These schemes have a total workforce coverage rate of about 15%. Of this percentage, 10% (800,000 members) belong to the NSSF, 3% in the civil service scheme, 1.5% occupational schemes and 0.5% in the individual retirement benefit schemes. The number of actively contributing members is increasing over the years. Similarly, occupational schemes have been growing and assets have reached the current market value of around 33 billion.

However, this is not the situation in all African countries. For example, of Botswana's 790,000 workforce, round 300,000 happen to be in private formal employment while 84 per cent of them

don't have an occupational pension coverage. In addition, about 33 per cent of public sector employees are not under the coverage. Moreover, there's less proof of complementary saving in personal products towards filling this gap. In Africa, South Africa is the country with the largest members of pension funds with over 1.2 million active members and about 360 pensioners and beneficiaries. However, just like most pension funds, South Africa pension fund is challenged with reduced cash flow and a decline in active membership. This decline in active scheme membership can have a substantial impact on cash flows and investment strategies because the annual contributions may fail to cater for pension benefits.

### **2.3.5 Risk Management**

Key responsibility of the board of directors of a pension fund is approving and regularly reviewing the overall strategy of the pension fund (Ezra, 2018). This involves understanding the risks run; setting acceptable levels of risk; measuring, monitoring and controlling these risks; and ensuring that an adequate and effective internal control system is in place. A process for identifying risks needs to be established, with robust risk management systems being capable of quickly identifying, measuring, describing and controlling risks faced (Ambachtsheer, 2011). Investment risk can be measured and assessed how it can be managed risk factors. The investment risks associated repeatedly investment performance. Risk can be reduced and can be avoided, especially when measured assessment of the investment. So every investment carries some degree of investment risk (Ahmad, 2013).

### **2.3.6 Information Technology Adoption**

New technologies are also relevant to pension providers' internal processes, including product design, transaction processing, risk management and compliance (Gifford, 2014). The improvements in efficiency that technology allows can also translate into lower costs both for pension providers and for members. Technological innovation in mobile money transfer services, which is changing the way financial and pension services/products are distributed, plays a pivotal role in the Kenyan economy. Overall, digital technologies are likely to enhance the quality and effectiveness of interactions between pension providers and their members. Smart communications can take advantage of behavioural insights; for example, by using push



notifications to nudge people into checking their balances or increasing contributions (Hess & Impavido, 2016).

## **2.4 Empirical Review**

Wang and Xiao (2016) assessed the link between the market conduct guidelines and financial distress risk in the Chinese transitional economy context. They employed a sample of ninety-six firms that were undergoing financial distress and ninety-six healthy firms. They observed that big state ownership, shareholder ownership and fraction of independent directors tend to be negatively linked with distress probability. In addition, managerial costs of an agency are seriously harmful to the financial position of a firm. As well, the outcomes show that the size of a board, chief executive duality, managerial ownership and balanced ownership don't have a significant impact on the default probability.

In his study of 47 companies on the NSE, Manyuru (2018) found out that most of the companies quoted at the NSE practised high level market guidelines. The results further revealed that generally there is a correlation between performance and market guidelines. The strength of correlation however varied depending on the market segment considered and the performance measure used. Manyuru then recommended that the Kenya government and other stakeholders in companies should demand high levels of market guidelines application as a way of enhancing performance in the long run and safeguarding the shareholder' interests. This study however focused on investing companies which in this case can be said to be the clients whereas the present study is focused on the pension schemes.

Otieno (2018) investigated how corporate governance impacts on how Kenyan Commercial banks perform financially. Based on the results, they identified that indeed corporate governance holds a key role in the stability of the bank, its performance as well as the capacity of the bank in providing liquidity under challenging market situations. Based on the outcomes, corporate governance aspects explain 22.4 per cent of the banks' financial performance, obtained from the value of adjusted R-square in the regression test.

Kikete (2016) studied the effect of regulatory control changes on the financial performance of pension schemes in Kenya. This study aimed to find out what has been the effect of the

regulatory control changes passed since 2008 to 2013 on the financial performance of pension schemes. The study used cross sectional survey design. The population for this study was the 1216 pension schemes registered and a sample of 10 pension schemes was selected. Secondary data was collected from the industry reports and analysis was performed using ratio analysis and paired sample t-tests using MS Spreadsheets and SPSS. The results for the tests for significance of the differences in performance of the firms after the introduction of the regulatory changes show that there is a significant difference in the performance of the schemes. It also found that reducing the benefits processing period, regulating the fees charged by the service providers, and allowing access of 50% of the employer's portion have influenced the financial performance of individual pension schemes across Kenya.

Munyao (2018) studied how operational application of market conduct guidelines impacts on how Kenyan Forex Bureaus' perform financially. The research findings recommend that recognized practices on market conduct in Nairobi's forex bureaus, entails the presence of board of directors which as well involve independent board members, BOD composition and availability of internal controls. Additionally, the research has identified the weaknesses and impacts of practices of market conduct in Nairobi's forex bureaus. The impacts comprise enhanced profitability, reduced entrepreneurial risk and investment returns whereas weaknesses comprise inconsistent external audits, insufficiency of rewards for the staff and available internal controls.

## **2.5 Summary of the Review and Research Gaps**

The review of the empirical literature has identified a number of studies both locally and globally done on the effects of market conduct guidelines practices on the growth of organisation. From the foregoing, it is clear that growth of firms in the financial market has been pointed as being as a result of various factors. The review has shown that good market conduct guidelines practices contribute significantly to the success of pension schemes in both private and public sector. The challenge has been to institutionalize reforms and introduce best market conduct guidelines practices that will guarantee effective management and ultimately promote the growth of pension schemes in Kenya. However, many pension schemes are grossly mismanaged while others are under-financed hence not able to meet their financial obligation (RBA, 2016).



Both theoretical and empirical literature reviews have provided clear indication regarding the effects of market conduct guidelines practices on the growth of firms in different industries. The studies reviewed on market conduct guidelines practices have yielded mixed results due to lack of standardization, country focus, and choice of market conduct guidelines practices mechanism, data sources as well as the statistical methodology. Further, studies on pension schemes in Kenya have focused on increasing the membership, efficiency of the funds and institutionalization of reforms but have failed to address issues of market conduct guidelines practices and their effect on the growth. This possess a knowledge gap which this study seeks to fill.

## 2.6 Conceptual Framework

The conceptual framework below shows the relationship between the study variables. Growth of Pension Schemes is the dependent variable which is influenced member’s presentation, code of conduct, risk management, information technology adoption and administration cost. The study also has one control variables which is pension scheme membership.

### Independent Variables

- Members presentation
- Code of conduct
- Risk management
- Information technology adoption
- Administration cost

### Dependent Variable

**Growth of Pension Schemes**  
Assets Growth

Control Variable  
-Pension Scheme membership

**Figure 2.1: Conceptual Model**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter outlines the research methodology applied to give solutions to the questions under research. This entailed the research design, population, the sample used, collection of data and analysis of the study's data.

#### **3.2 Research Design**

Research design is the strategy within which the research is normally carried out. It is made up of the schematic plan for collecting, measuring and analyzing data with the aim of yielding maximum information in the most efficient way (Kothari, 2004; Oso & Onen, 2009). To conduct this research, the researcher applied the descriptive survey research design. Cooper and Schindler (2009) postulates that a descriptive survey research is fashioned towards establishing how a variable influences the other which gives a picture of causation.

#### **3.3 Study Population**

Kombo and Tromp (2014) define a study population as a set of elements, individuals, services households that are well defined and are under study. The population should be homogenous and studies that use population are more representative as each member of the population can be chosen to be part of the sample used. Target population defines the specific population under study (Kothari, 2014). There are 1246 registered retirement benefit schemes in Kenya. The population targeted for the research was 30 occupational pension schemes in Kenya (Retirement Benefit Authority, 2020) (see Appendix 1).

#### **3.4 Sample Design**

Occupational pension schemes were used in this study for consistency and similarly because majority of analysts have noticed the hardship of identifying and gathering trustees' cooperation for attitudinal studies leave side the study's determined scope (Bunt, 2018). This study undertook a census on the target population in order to determine the effects of market conduct guidelines practices on growth of pension schemes in Kenya.



### **3.5 Data Collection**

Before data collection commences, individual permission for access to the respondents was sought from the relevant authorities. The study used data collection sheet to collect secondary data. Research assistants were trained for purposes of data collection. Secondary data was applied and was drawn from certain yearly reports of pension funds and accounts for a ten-year duration from the year 2011 to the year 2020.

The fund managers, scheme administrators and trustees are usually the custodian of copies of the financial statements and it's a requirement by the RBA act for the registered schemes to file the annual accounts as returns. For this study's purpose, the financial statements were obtained from RBA's website and registered schemes for reasons to do with validity. In order for this data to stay sufficiently illustrative, the research reviewed secondary data for a 10 years' period relying upon its availability and access.

### **3.6 Data Analysis**

Oso and Onen (2009) state that data analysis as the process that consists of separating data into constituent parts and examining it to distinguish its elements separately and in relation to the whole. Mugenda and Mugenda (2003) further define it as the process of creating order, structure and meaning from information or data collected for the study. To analyze the gathered data, the Statistical Package for Social Sciences (SPSS) Version 25. And Microsoft Excel was applied.

Microsoft Excel aided in data classification for purposes of facilitating comparison. Then, it was converted to percentages in order to range between zero and one. Regression analysis was applied in determining the relationship existing between the variables of the study. The analysis was at 0.05 level of significance. Every of the report outcome was generated through the descriptive statistics in tables displaying ratios and percentages.

#### **3.6.1 Analytical model**

Beyond the descriptive statistics, a regression model was applied in indicating and calculating the connection between the dependent variable (growth of pension schemes) and the independent variables (market conduct guidelines).

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where:

Y = Growth measured by asset base growth

X<sub>1</sub>= Members representation (measured by number of members in the board of trustee)

X<sub>2</sub>= Code of conduct (measured by development and revision of code of conduct)

X<sub>3</sub>= Risk management (measured by pension fund risk score)

X<sub>4</sub>= Information technology adoption (Information technology budget)

X<sub>5</sub>=Administration cost (measured by the annual administration cost)

$\alpha$  = Constant term expressing factors that the model did not define apart from the market conduct guidelines above. e = Error term

### 3.6.2 Operationalization of Study Variable

Variable	Measurements
<b>Dependent Variable</b>	
Growth	Asset base growth
<b>Independent Variable</b>	
Members presentation	Measured by number of members in the board of trustee
Code of conduct	Measured by development and revision of code of conduct
Risk management	Measured by pension fund risk score
Information technology adoption	Information technology budget
Administration cost	Measured by the annual administration cost
<b>Control Variable</b>	
Pension scheme size	Measured by the membership size

### 3.6.3 Diagnostic Tests

Model specification tests was conducted to make sure of the suitability of the data for the primary assumptions of classical linear regression model.

#### 3.6.3.1 Multicollinearity

Multicollinearity measure if there is a close connection between the independent variables. For that condition, the assessment to be used is the variance inflation factor (VIF) for purposes of establishing whether multicollinearity exist. The researcher tested multicollinearity using

Variance Inflation Factor (VIF). A VIF for all the independent variables less than 3 ( $VIF \leq 3$ ) indicate no multicollinearity while a VIF of more than 10 ( $VIF \geq 10$ ) indicates a problem of Multicollinearity. Violation of the assumption increases the standard errors. Multicollinearity decreases the estimate coefficient's accuracy which declines regression model's statistical capacity or power.

### **3.6.3.2 Normality test**

For the purposes of confirming that the data gathered is normal, a normality test was carried. The normality of data was tested using the Kolmogorov-Smirnov test and the Shapiro-Wilk test. If the probability is greater than 0.05, then the data is normally distributed (Saunders & Thornhill, 2012). There are several consequences linked with abuse of the assumption of normality, since it doesn't result to inefficiency or bias in the models of regression. It's solely significant for computation of the  $p$  values for testing significance, but that is solely considered where the size of the sample is quite small.

### **3.6.3.3 Heteroscedasticity**

Heteroscedasticity test was applied for testing the error term consistency across observations. The Breusch-Pagan/Cook-Weisberg test was used in the study where the null hypothesis of the test is that error terms have a constant variance (should be Homoscedastic). Anytime where an assumption is violated, there exists a chance of distrusting the outcomes of the statistics. This impact happens since heteroscedasticity tends to increase the coefficient estimates' variance though the procedure of OLS fails to identify the increase.

### **3.6.3.4 Linearity**

Linearity means that the two variables have straight line relationship. In Statistic P-P plot assess how closely two data sets agree, which plots two cumulative distribution functions against each other, P-P plots are used widely to evaluate the skewness of a distribution.



## CHAPTER FOUR

### DATA ANALYSIS AND PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

In this chapter, the focus is on the presentation of data and interpretation of the findings. It presents the analysis of the data ending with the regression analysis results. The data is presented and the analyzed and compared with other similar studies done on the subject matter of this study.

#### 4.2 Descriptive Analysis

This section presents the descriptive data for the 30 occupational pension schemes in Kenya with 300 data points. The study was carried on a period of 10 years and that is from 2011 to 2020.

**Table 4.1 Descriptive Statistics**

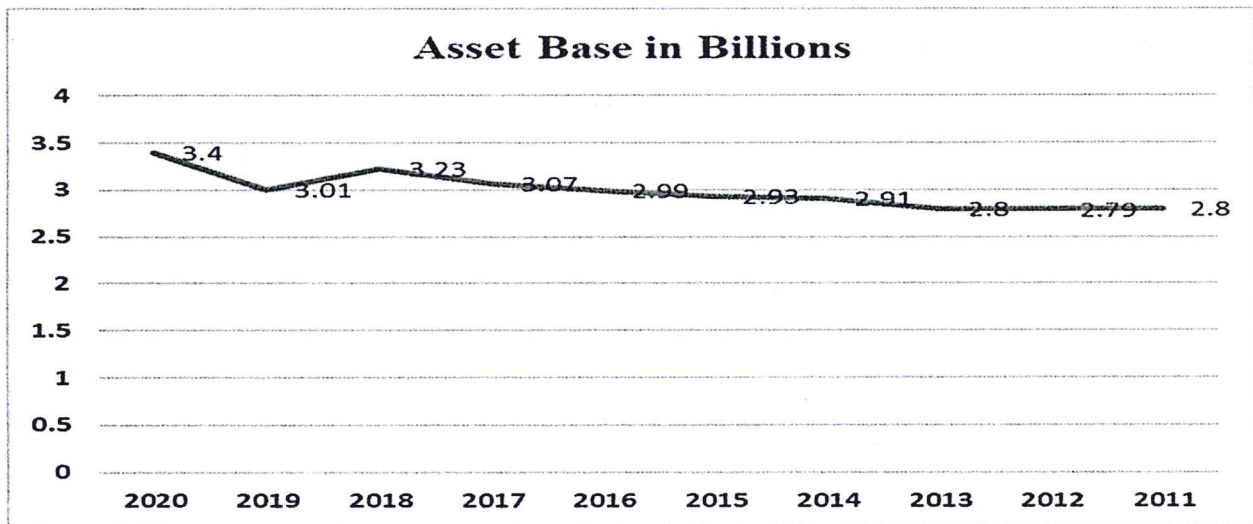
Variables	N	Min	Max	Mean	Std. Deviation
Growth of pension schemes	300	914,234,654	3,402,815,642	2,158,525,148	210,708, 976
Number in the board of trustee	300	3	10	6	2.3
Code of conduct	300	2	4	3	0.25
Risk Management	300	0.13	0.43	0	0.11
Information technology adoption	300	13,491,365	16,684,373	15,087,869	1,108,227
Administration cost	300	264,816,949	307,365,769	286,091,359	14,888,307
Pension scheme size	300	107,980	115,285	111,633	2950

As shown in the Table 4.1 above, the growth of the 30 pension schemes which as measured in terms of Asset base ranged between Ksh 914,234,654 and 3,402,815,642. An indication that the pension schemes had accumulated a substantial amount of assets for the last ten years. Further the study established that the number board of trustees ranged between 3 to 10 members and this in most cases determined by the size of the pension scheme. The larger the pension scheme, the huge the number of board of trustee. Risk management was measured by the pension fund risk

score and ranged between 0.13 to 0.43. Further the Information technology budgets ranged between Ksh 13,491,365 to 16,684,373 while the annual administration cost ranged between Ksh 264,816,949 to 307,365,769. The study control variable which was the pension scheme size measured by membership size ranged between 107,980 and 115,285.

#### 4.2.1 Growth of Pension Schemes

The asset base being the dependent variable measured in terms of assets growth was projected on a line graph as illustrated below;



**Figure 4.2 Assets Base**

From Figure 4.2 above, the pension firms have been accumulating assets moderately for the last 10 years. The only slight decline noted was in 2019 and this can be attributed to the Covid 19 Pandemic. The moderate growth can be attributed to the mass education drives on the importance of retirement savings by the Retirement Benefits Authority and the industry players. Financial technology has also played a huge role by making it easier for Kenyans to join and contribute to pension schemes, and improving the communication between the schemes and members. These results agree with theoretical expectation as put forth by the Stakeholder Theory as discussed by Freeman et al. (2004) who suggested that the performance of a pension organization is determined by the nature and needs of stakeholders. In Kenyan pension schemes the principle stakeholders are people saving for retirement and the more they are involved, the more the contributions and growth in assets base as the end result.



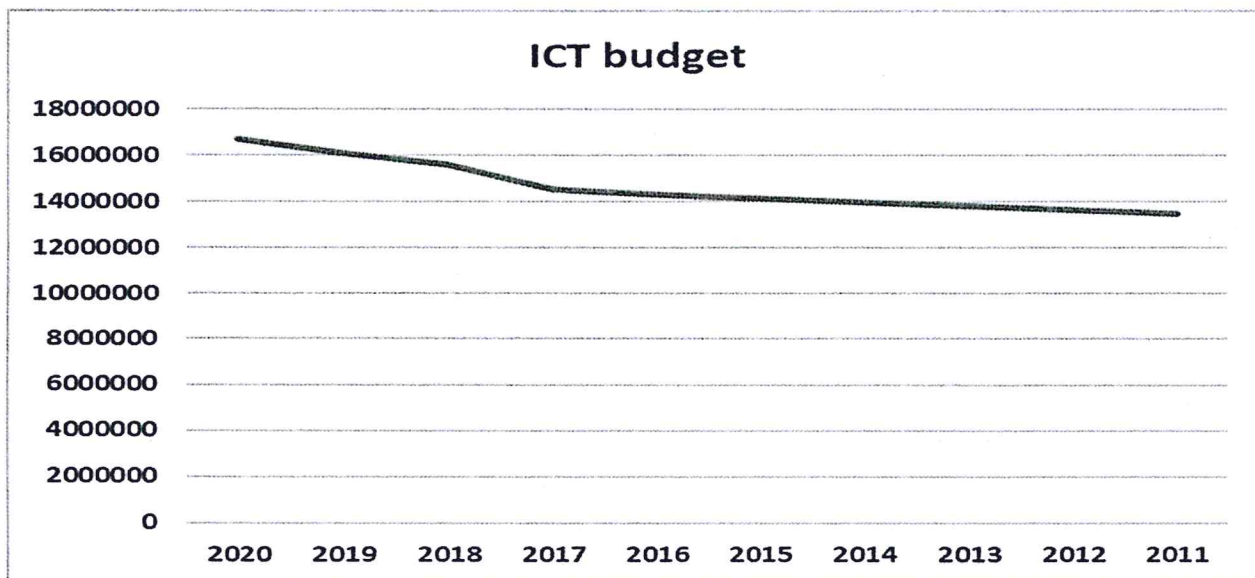
Members presentation was also investigated in this study and was measured by the number of members in the board of trustee. From the data collected the number of board members was determined by the size of the pension Scheme. Pension schemes such as NSSF which is the largest in the Country had 10 members. The small pension schemes had at least three members. In most of the Pension Schemes, the number of members was usually an odd number for purposes of decision making. According to Njuguna and Arnolds (2018) member's presentation, fund governance, leadership and regulations do influence growth of pension schemes to a very huge extent.

On the development and revision of code of conduct, the study established that most of the pension schemes either developed on revised their code of conducts at different intervals. The only common observation was in 2016 where all the pension schemes adopted the Market conduct developed by the Retirement Benefits Authority as per the Retirement Benefits Act Cap. 197. The guideline was set to ensure that good governance was maintained among sponsors, trustees and service providers in the pension sector and to improve service delivery to members who are the consumers of retirement benefits products and services. The adoption of these guidelines as shown from the data collected has enhanced growth of the Pension schemes. These findings agree with those of Tonks (2017) who found out that adherence to the identified fund regulations improved fund performance. When guidelines are followed to the letter, value of the pension fund will increase over time due to contributions and the investment returns on the fund.

On risk management, the risk score ranged between 0.13 to 0.43 pension fund risk score. This is an indication that majority of the pension schemes had a risk score below 0.5 an indication that they did not expose their members to high risk investments. According to Kakes (2016) high risks expose pension funds to greater losses in the event of failure of the markets invested. Pension funds are therefore called upon to set strategies that enable them to achieve returns while carefully considering the risks that they expose members to.

#### **4.2.2 Information Technology Adoption**

Information technology adoption was also investigated. The figure below shows how the pension schemes have been allocating budgets for information and technology adoption.



**Figure 4.3 ICT Budget**

As shown on the Figure 4.3 above, the growth on ICT budget is also growing moderately but with a slighter increase from 2017. This growth can be associated to the vibrant telecommunication industry in Kenya which has come up with innovative ways of doing business. People can enquire information from their pension schemes at their places of comfort and do their contributions through mobile money and internet banking. Availability of reliable internet service providers and efficient internet to a larger extent have influenced technology adoption by pension Schemes.

The Administration costs as measured by the annual administration cost has also been on the rise as the membership grows. This is an area that the pension schemes need to come up with strategies in which will reduce the operational costs. The growth in membership has also registered a positive growth. We can therefore conclude that investments growth in Kenya is pension fund responsive. This therefore implies that growth in pension savings would be a catalyst for economic growth and development via savings that leads to growth in the investment. Given that pension scheme is a crucial component of financial sector, therefore, its contribution to growth in investments underscore the importance of the sector in promoting investments.



### 4.3 Diagnostic Tests

Model specification tests were conducted to make sure of the suitability of the data for the primary assumptions of classical linear regression model.

#### 4.3.1 Test for Normality

The Shapiro Wilk and Kolmogorov tests were used to assess for normality of the data. Table 4.2 show the results

**Table 4.2 Test for Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Number in the board of trustee	.180	299	.35	.847	299	.527
Code of conduct	.113	299	.57	.949	299	.663
Risk Management	.092	299	.23	.969	299	.369
Information technology adoption	.183	299	.19	.833	299	.213
Administration cost	.179	299	.15	.754	299	.432
Pension scheme size	.162	299	.25	.784	299	.651

a. Lilliefors Significance Correction

To test for normality, the Kolmogorov-Smirnov and Shapiro-Wilk tests were used. The null hypothesis was that data is not normal. The critical p-value for this test is 0.05 hence if the recorded p-value is more than the critical value then the researcher would have to reject the null hypothesis. In this research, both tests returned p-values greater than the critical point as evident in Table 4.2 above. As such, the null hypothesis was rejected because the data used in the study is normally distributed making it suitable to for tests like the Pearson's correlation, analysis of variance and regression analysis.

#### 4.3.2 Testing for Multicollinearity

In instances where the predictors have a perfect linear relationship, it is hard to come up with a unique regression model. Collinearity means that variables have almost perfect linear combinations. In case the variables used are more than two then this is referred to as multicollinearity. Sometimes though the two words are used interchangeably. Multicollinearity is often deduced by very high R squared values and lack of significance on any of the independent variables or very few independent variables are significant. Additionally, when the



VIF and tolerance values are more than 10 and more than 0.2 respectively then multicollinearity is likely to be present. The researcher calculates the tolerance value by dividing 1 by VIF and the t static value is obtained by dividing the coefficient by the standard error. The values of the t statistic and p are always opposite.

**Table 4.3 Testing for Multicollinearity**

<b>Variable</b>	<b>VIF</b>	<b>1/VIF</b>
Number in the board of trustee	1.68	0.596159
Code of conduct	1.58	0.63468
Risk Management	1.56	0.640479
Information technology adoption	1.51	0.6623
Administration cost	1.56	0.6410
Pension scheme size	1.55	0.6452
<b>Mean VIF</b>	<b>1.57</b>	

The researcher tested for multicollinearity using the VIF to show the extent to which the variance was inflated. According to the results, the VIF values mean was at 1.57 which came close to 1 showing that the variables variance was inflated minimally since this value was less than 10 which further indicates that there was no multicollinearity in the data as pointed out by (Field, 2009). Therefore, from the VIF values all the variables have no multicollinearity problems. Variables can become significance if the multicollinearity problem is done away with. Multicollinearity can be eliminated by changing the variables, increasing the size of the sample and removal of variables although this should only be done as the last resort since the removed variable might be essential in explaining the dependent variable (Field, 2009).

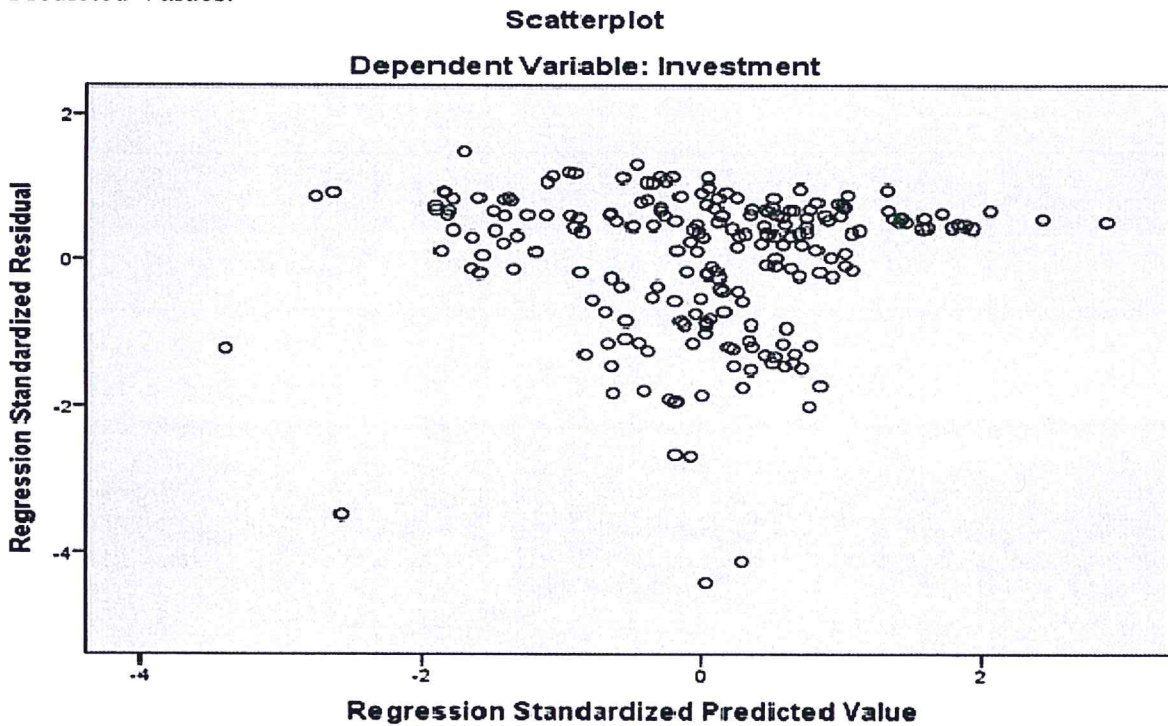
**Table 4.4 Heteroskedasticity Test**

	<b>LM</b>	<b>Sig</b>
Breusch–Pagan	.936	.678

Heteroscedasticity test used to test the consistency of the error term across the observations. The test was conducted using the white test. The condition was corrected by applying corrected standard errors. From the findings, the Breusch–Pagan p-value was more than 0.05 suggesting that we cannot reject the null hypothesis that the residuals are homoscedastic. The Lagrange multiplier (LM) value was close to 0.95 meaning that the regression has not violated the assumption of homoscedasticity. Hence, we presume that heteroscedasticity is not present in the data used in the study.

### 4.3.3 Linearity

The diagram below shows the plot of Regression Standardized Residuals against Regression Predicted Values.



**Figure 4.4 Linearity**

Figure 4.4 shows the plot of Regression Standardized Residuals against Regression Predicted Values. Visual inspection shows that the unstandardized residuals spread evenly about the zero-mark horizontal level on the y-axis without any visible increasing pattern. The absence of an extreme outlying residual also indicated that the observed values were close to the predicted values of the linear regression. This is evidence of linearity of the initial observed values because their plot does not differ much from the linear predicted plot.

#### 4.4 Correlation

Correlation		Y	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>6</sub>
Growth of Pension of Schemes	Pearson	1						
	Correlation							
	Sig. (2-tailed)							
Number in the board of trustee	N	300						
	Pearson	.657**	1					
	Correlation							
Code of conduct	Sig. (2-tailed)	0.000						
	N	300	300					
	Pearson	.617	.461	1				
Risk Management	Correlation							
	Sig. (2-tailed)	0.000	0.180					
	N	300	300	300				
Information technology adoption	Pearson	-0.590	-0.285	-0.070	1			
	Correlation							
	Sig. (2-tailed)	0.000	0.125	0.147				
Administration cost	N	300	300	300	300			
	Pearson	0.625	0.412	0.318	0.114	1		
	Correlation							
Pension scheme size	Sig. (2-tailed)	0.00	0.212	0.151	0.09			
	N	300	300	300	300	300		
	Pearson	-0.696**	-0.433**	-0.150*	-0.109	-0.099	1	
Administration cost	Correlation							
	Sig. (2-tailed)	0.000	0.000	0.042	0.582			
	N	300	300	300	300	300	300	
Pension scheme size	Pearson	.558**	.399**	0.481	0.295	0.194	.232**	1
	Correlation							
	Sig. (2-tailed)	0.000	0.000	0.160	0.108	0.132	0.000	
Pension scheme size	N	300	300	300	300	300	300	300

As shown from the correlation Table 4.4 above, Growth of Pension of Schemes had strong positive relationship with the number in the board of trustee as indicated by a coefficient of 0.657. Other variables with a strong positive correlation with growth of pension schemes included code of conduct (0.617), information technology adoption (0.625) and pension scheme size (0.558). Those with a negative correlation with growth of pension schemes included risk management (-0.590) and administration cost (-0.696). All the variables had a significance level less than 5% an indication that all variables were significant.



## 4.5 Regression Analysis

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences (SPSS V 25.0) to code, enter and compute the measurements of the multiple regressions. The model summary is presented in the Table 4.5 below.

**Table 4.5 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.842 <sup>a</sup>	.608	.592	.46250

The study used coefficient of determination to evaluate the model fit. The adjusted  $R^2$ , also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables. The model had an average adjusted coefficient of determination ( $R^2$ ) of 0. 592 and which implied that 59.2% of the variations on growth on pension schemes is explained by the independent variables understudy (Number in the board of trustee, Code of conduct, Risk Management, Information Technology Adoption, Administration Cost and Pension scheme size).

The study further tested the significance of the model by use of ANOVA technique. The findings are tabulated in Table 4.6 below.

**Table 4.6 Summary of One-Way ANOVA results**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	56.838	6	9.473	44.266	.000 <sup>b</sup>
1 Residual	62.702	293	0.214		
<b>Total</b>	<b>119.54</b>	<b>299</b>			

Critical value = 2.13

From the ANOVA statics, the study established the regression model had a significance level of 0.000% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value ( $44.266 > p$ ) an indication that number in the board of trustee, code of conduct, risk management, information technology adoption, administration cost and pension

scheme size all have a significant effect on growth of pension scheme in Kenya. The significance value was less than 0.05 indicating that the model was significant.

In addition, the study used the coefficient table to determine the study model. The findings are presented in the Table 4.7 below

**Table 4.7 Table of Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.525	0.293		5.204	0.00
Number in the board of trustee	0.229	0.064	0.021	3.578	0.01
Code of conduct	0.477	0.109	0.199	4.376	0.00
Risk Management	-0.499	0.166	-0.232	3.006	0.02
Information technology adoption	0.507	0.171	0.268	2.964	0.00
Administration cost	-0.764	0.234	-0.432	3.264	0.00
Pension scheme size	0.812	0.156	0.33	5.205	0.00

As per the SPSS generated output as presented in table above, the equation ( $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \epsilon$ ) becomes:

$$Y = 1.525 + 0.229X_1 + 0.477X_2 - 0.499X_3 + 0.507X_4 - 0.764X_5 + 0.812X_6$$

From the regression model obtained above, a unit change in number of board of trustees while holding other factors constant would positively change growth of pension scheme by a factor of 0.229. Results show that a unit change in code of conduct while holding the other factors constant would positively change growth of pension scheme by a factor of 0.477. Results show that a unit change in risk management while holding the other factors constant would negatively change growth of pension scheme by a factor by a factor of 0.499. A unit change in information technology adoption while holding the other factors constant would positively change growth of pension scheme by a factor by a factor of 0.507. A unit change in administration cost while holding the other factors constant would negatively change growth of pension scheme by a factor by a factor of 0.764.

Finally, test regression results show that unit change in pension scheme size while holding the other factors constant would enhance growth of pension schemes by a factor by a factor of 0.

812. According to Clark and Urwin (2019), proper utilization of market conduct guidelines should lead to improvement in pension fund efficiency since it results in optimal allocation of resources, absence of conflicts of interest and accountability on leading to pension schemes growth.



## **CHAPTER FIVE**

### **SUMMARY CONCLUSION AND RECOMMENDATION**

#### **5.1 Introduction**

From the analysis and data collected, the following summary, conclusion, recommendations and recommendations for further studies were made.

#### **5.2 Summary of the Findings**

As revealed from the, growth of the 30 Pension Schemes which was measured in terms of asset base ranged between Ksh 914,234,654 and 3,402,815,642. An indication that the pension schemes had accumulated a substantial amount of assets for the last ten years. The moderate growth can be attributed to the mass education drives on the importance of retirement savings by the Retirement Benefits Authority and the industry players. Financial technology has also played a huge role by making it easier for Kenyans to join and contribute to pension schemes, and improving the communication between the schemes and members. These results agree with theoretical expectation as put forth by the Stakeholder Theory as discussed by Freeman et al. (2004) who suggested that the performance of a pension organization is determined by the nature and needs of stakeholders. In Kenyan pension schemes the principle stakeholders are people saving for retirement and the more they are involved, the more the contributions and growth in assets base as the end result.

On the development and revision of code of conduct, the study established that most of the pension schemes either developed on revised their code of conducts at different intervals. The only common observation was in 2016 where all the pension schemes adopted the Market conduct developed by the Retirement Benefits Authority as per the Retirement Benefits Act Cap. 197. The guideline was set to ensure that good governance was maintained among sponsors, trustees and service providers in the pension sector and to improve service delivery to members who are the consumers of retirement benefits products and services. The adoption of these guidelines as shown from the data collected has enhanced growth of the Pension schemes. These findings agree with those of Tonks (2017) who found out that adherence to the identified fund

regulations improved fund performance. When guidelines are followed to the letter, value of the pension fund will increase over time due to contributions and the investment returns on the fund.

The study further revealed that number of board members was determined by the size of the pension Scheme. Pension schemes such as NSSF which is the largest in the Country had 10 members. The small pension schemes had at least three members. In most of the Pension Schemes, the number of members was usually an odd number for purposes of decision making. According to Njuguna and Arnolds (2018) member's presentation, fund governance, leadership and regulations do influence growth of pension schemes to a very huge extent.

On risk management, the risk score ranged between 0.13 to 0.43 pension fund risk score. This is an indication that majority of the pension schemes had a risk score below 0.5 an indication that they did not expose their members to high risk investments. According to Kakes (2016) high risks expose pension funds to greater losses in the event of failure of the markets invested. Pension funds are therefore called upon to set strategies that enable them to achieve returns while carefully considering the risks that they expose members to.

Pension schemes have been allocating budgets for information and technology adoption. The growth on ICT budget is also growing moderately but with a slighter increase from 2017. This growth can be associated to the vibrant telecommunication industry in Kenya which has come up with innovative ways of doing business. People can enquire information from their pension schemes at their places of comfort and do their contributions through mobile money and internet banking. Availability of reliable internet service providers and efficient internet to a larger extent have influenced technology adoption by pension Schemes.

The Administration costs as measured by the annual administration cost has also been on the rise as the membership grows. This is an area that the pension schemes need to come up with strategies in which will reduce the operational costs. The growth in membership has also registered a positive growth. We can therefore conclude that investments growth in Kenya is pension fund responsive. This therefore implies that growth in pension savings would be a catalyst for economic growth and development via savings that leads to growth in the investment. Given that pension scheme is a crucial component of financial sector, therefore, its



contribution to growth in investments underscore the importance of the sector in promoting investments.

On the correlation of the study variables, Growth of Pension of Schemes had strong positive relationship with the number in the board of trustee as indicated by a coefficient of 0.657. Other variables with a strong positive correlation with growth of pension schemes included code of conduct (0.617), information technology adoption (0.625) and pension scheme size (0.558). Those with a negative correlation with growth of pension schemes included risk management (-0.590) and administration cost (-0.696). All the variables had a significance level less than 5% an indication that all variables were significant.

From the study, an adjusted coefficient of determination ( $R^2$ ) of 0.592 was established implying that 59.2% of the variations on growth on pension schemes was explained by the independent variables under study. The significance value was less than 0.05 indicating that the model was significant. Further, the following regression line was established;  $Y = 1.525 + 0.229X_1 + 0.477X_2 - 0.499X_3 + 0.507X_4 - 0.764X_5 + 0.812X_6$

### **5.3 Conclusion**

This study therefore concludes that Pension Schemes in Kenya have been keen in implementing new market conduct guidelines of 2016 as proposed by the Retirement Benefit Authority as per the Legal Notice Number 192. The adoption of market conduct guidelines has significantly improved administration efficiency of the pension schemes. Through the new practices, there has been improvement performance which is shown by the positive growth in the accumulated assets. In the absence of a market of conduct guidelines, it can be dangerous in view of the principal-agent problem. Therefore, that active monitoring by on pension schemes can be value enhancing.

It can therefore be concluded that the pension schemes in Kenya have put adequate risk control mechanisms to address operational risks, governance risk, internal reporting and auditing. Further, the pension schemes have internal control to ensure all persons and entities act in accordance with the law and have a sound framework for stability of pension funds. These affected positively the growth of the pension schemes in the country. The study also concludes



that the Pension Schemes have adequate trustee members whose number is determined by the size of the schemes. The trustee acts on the best interests of the stakeholders.

The findings reveal that there is strong association between information, communication and technology and growth of pension schemes. This study concludes that ICT has reduced the time taken used by members or staff to travel for office activities. Members can now use ICT infrastructure to make contribution and make requests pertaining to their needs. Consequently, this allows members or staff to be productive in their daily activities increasing the pension schemes growth

Based on the results of the new market guidelines, there is now a better appreciation on the part of policymakers of the potential of a well-developed pension system to contribute to economic growth and development of the country's capital markets and reform of the pension system is acknowledged as one of the key policy measures to achieving the country's Vision 2030. There has been less of an appreciation of the potential of the pension system to alleviate poverty and achieve income redistribution, although the RBA has been at the forefront of championing a state financed universal basic pension. Introducing a social pension would provide an important safety net in old age and alleviate old age poverty and fiscal conditions permitting, this ought to be an important part of the policy options for widening coverage.

#### **5.4 Recommendations**

This study recommends that the management of pension schemes in Kenya should strictly comply with the new market conduct guidelines and other local and international regulations governing the management of Pension schemes. Adherence to these guidelines will greatly enhance the level of accountability and transparency, operational efficiency, internal control measures, regulatory compliance by schemes in their operations as well as improve the level of service delivery.

It will also increase members' confidence in the Pension scheme as well as contribute towards improved investment returns. The RBA should enhance its regulatory capacity of the industry in order to ensure compliance among pension schemes and fund managers. An evaluation should be conducted in order to map out areas, roles and departments that should be enhanced.

Specifically, the authority needs to strengthen its compliance and enforcement function in order to ensure that it appropriately deals with emerging present and future regulatory challenges. The RBA also needs to move away from proactive supervision of schemes toward a more risk based supervision approach. The primary areas of risk once a scheme is properly set up in compliance with the law are: financial loss of funds; violation of member protection regulations; inefficiencies that increase costs or reduce returns to member's; and poor quality of service to members or beneficiaries Investment regulations should be reviewed to enhance growth of the sector.

The pension schemes management needs to explore the alternative sources of funding for the pension schemes such as investing the members' contribution in ventures that earn higher returns. Management needs to liaise with the employers of the contributor to ensure contributions are remitted in time. This is important since delays may affect the overall planning of the pension schemes and may lead to inaccuracies in payment of benefits. There is need to put the contributions of pensioners to more productive investments other than just keeping the funds safely for the pensioners. The irresponsiveness of returns to pension contribution could indicate that the funds do not contribute to income generation. Policies should be put in place to allow investment of pension funds to generate higher returns

On operational cost, there is merit in considering whether the revenue collection authority, the Kenya Revenue Authority may be used as a collection agent by the pension schemes for the purpose of collecting mandatory contributions on its behalf in order to reduce administration costs through economies of scale, improve compliance levels and benefit from more accurate data particularly earning data especially if contribution levels are increased.

On membership, there is need to increase the current level of mandatory contributions may also be justified on the grounds of protecting workers from their own myopic behaviour and failure to save for their old age and protecting society from the moral hazard of those who do not provide for their old age because they anticipate that society will take care of them.

### **5.5 Suggestions for Further Research**

This study focused on the effect of market conduct guidelines on growth of pension schemes in Kenya. Future studies can be extended to cover market guidelines of other corporate institutions and companies to assess if similar factors apply to these organisations. Also given that Kenya is a key player in the East African community the study can be expanded to cover other pension schemes within the East African community in order to provide result that will be useful in that context. A study can be done to cover all the pension schemes in East Africa. Such a study would be used as a referential manuscript when coming up with strategic plans to professionalize the management of pension schemes in a manner to improve their performance.

Pension schemes are a large generator of savings in a country relative upon the number of people in the formal employment. These funds are to be used in income generating activities for the benefit of the pensioners and other stakeholders. A research can be done to establish how pension funds are managed in Kenya that leads to poor connection with returns.



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## APPENDICES

### Appendix I: Retirement Benefit Authority Market Conduct Guideline

#### RE: GUIDELINE ON GOOD GOVERNANCE PRACTICES IN THE MANAGEMENT OF RETIREMENT BENEFITS SCHEMES

The Authority introduced market conduct regulation in the retirement benefits sector with effect from 1 July 2016. The purpose of market conduct regulation is to ensure that good governance is maintained among sponsors, trustees and service providers in the sector and to improve service delivery to members who are the consumers of retirement benefits products and services.

Conduct regulation comes in the backdrop of a changing business environment that has resulted in adjustment in management practices among trustees and service providers. This has brought about good practices that the Authority seeks to encourage as well as some negative ones that require deterrence. Towards this end, the Authority has embarked on the development of market conduct guidelines, including this Guideline, for use as tools to enhance governance in the sector.

This Guideline on Good Governance Practices in the Management of Retirement Benefits Schemes (hereinafter referred to as “schemes” and “scheme” for singular reference) sets out the relationships between the various stakeholders of a scheme with particular emphasis on sponsors, members, trustees and service providers. Service providers are also required to abide by governance principles stipulated by other financial regulators or professional bodies that regulate/guide them.

The Governance of a scheme means the establishment of appropriate structures that set out the objectives, policies, rules, practices and processes through which the scheme is managed. It also includes monitoring and evaluation of scheme performance. The legal framework for such governance is provided generally under the Constitution of Kenya but more specifically under the Retirement Benefits Act Cap. 197 (referred to herein as “the Act”), the Retirement Benefits Regulations (referred to herein as “Regulations”) and other laws relating to retirement benefits, employment and trusteeship.

Beneficial owners of the assets of a scheme are members and sometimes sponsors of the scheme while legal ownership is bestowed on scheme trustees through an Act of Parliament, Regulations or a scheme trust deed and rules. These legal instruments allow for delegation of trustees’ functions and duties to service providers.

The Act sets out the constitution and composition of the Boards of Trustees of various schemes, and has extensive provisions on how scheme trustees delegate their duties and functions to service providers, while retaining their responsibilities. These provisions are then supplemented with best international practices on good governance of schemes. Appreciating the unique

structure of a scheme is critical to the proper governance, which has been made possible through extensive stakeholder and professional consultation to develop this Guideline.

The main objective of this Guideline is to ensure that members of schemes, sponsors, trustees, service providers to a scheme and other stakeholders clearly understand their rights, roles, duties and obligations within the confines of the law and good practices.

The Guideline adopts a “Disclose, Apply or Explain” approach that is principle-based rather than rule-based, and recognizes that a satisfactory explanation for any non-compliance may be acceptable in certain circumstances, determined by the Authority. A scheme is therefore expected to apply the Guideline in its entirety but is allowed to explain any instances where it has not applied it as stipulated.

It is expected that the observance of this Guideline and principles of governance contained herein will greatly enhance the level of accountability and transparency, operational efficiency, internal control measures and regulatory compliance by schemes in their operations.

The Authority will be ready to provide any other guidance in case of further queries.



## **Appendix II: Occupational Pension Scheme in Kenya as at 31st December 2020**

### **DEFINED BENEFITS SCHEMES**

1. Alexander Forbes Financial Services
2. Aon Kenya Insurance Brokers
3. Apollo Life Assurance
4. British-American Insurance Company
5. CFC Life Assurance 6. Chancery Wright Insurance Brokers
7. Eagle Africa Insurance Brokers
8. Kenindia Assurance Company
9. Kingsland Court Benefits Services
10. LAPTRUST Administration Services
11. Liaison Financial Services
12. Liberty Pension Services
13. Madison Insurance Company Kenya
14. Mercantile Insurance Company
15. Octagon Pension Services
16. Pacific Insurance Brokers
17. Pan Africa Life Assurance
18. Roberts Insurance Brokers
19. Sapon Insurance Brokers
20. Sedgwick Kenya Insurance Brokers
21. TelPosta Pension Scheme

### **DEFINED CONTRIBUTIONS SCHEMES**

21. National Social Security Fund
22. Pyrethrum Board of Kenya Staff Retirement Benefits Scheme
23. Credit Traders Staff Retirement Benefits Scheme
24. ICEA Trustee Services
25. Kenya Reinsurance Corporation Staff Pension Scheme

26. Kenya Ports Authority Pension Scheme

27. Kenya Tea Development Authority Staff Provident Fund

28. The Kenya National Library Service Board Staff Retirement Benefits Scheme

29. University of Nairobi Pension Scheme

30. Moi University Pension Scheme

**APPENDIX III: DATA**

Membership	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Alexander Forbes Financial Services (Now Zamara)	0	102,216	93,016	84,645	77,027	70,094	63,786	58,045	52,821	48,067
Aon Kenya Insurance Brokers	26,341	23,970	21,813	19,850	18,063	16,438	14,958	13,612	12,387	11,272
Apollo Life Assurance	16,309	14,841	13,505	12,290	11,184	10,177	9,261	8,428	7,669	6,979
British-American Insurance Company	85,326	7,695	7,149	6,363	5,663	5,040	4,485	3,992	3,553	3,162
CFC Life Assurance Chancery Wright Insurance Brokers	62,511	62,198	61,887	61,578	61,270	60,964	60,659	60,356	60,054	59,754
Eagle Africa Insurance Brokers	25,103	24,977	24,853	24,728	24,605	24,482	24,359	24,237	24,116	23,996
Kenindia Assurance Company	6,305	6,273	6,242	6,211	6,180	6,149	6,118	6,088	6,057	6,027
Kingsland Court Benefits Services	32,015	31,855	31,696	31,537	31,379	31,223	31,066	30,911	30,757	30,603
LAPTRUST Administration Services	26,305	23,245	20,074	20,936	19,100	17,425	15,897	14,503	13,231	12,070
Liaison Financial Services	8,692	8,640	8,588	8,536	8,485	8,434	8,384	8,333	8,283	8,234
Liberty Pension Services	15,326	15,234	15,143	15,052	14,961	14,872	14,782	14,694	14,606	14,518
Madison Insurance Company Kenya	29,137	28,962	28,788	28,616	28,444	28,273	28,104	27,935	27,767	27,601
Mercantile Insurance Company	8,329	8,279	8,229	8,180	8,131	8,082	8,034	7,985	7,938	7,890
Octagon Pension Services	96,215	95,638	95,064	94,494	93,927	93,363	92,803	92,246	91,693	91,142
Pacific Insurance Brokers	9,102	9,047	8,993	8,939	8,886	8,832	8,779	8,727	8,674	8,622
Pan Africa Life Assurance	12,522	12,447	12,372	12,298	12,224	12,151	12,078	12,005	11,933	11,862
Roberts Insurance Brokers	1,255	1,247	1,240	1,233	1,225	1,218	1,210	1,203	1,196	1,189
Sapon Insurance Brokers	2,618	2,602	2,587	2,571	2,556	2,540	2,525	2,510	2,495	2,480
Sedgwick Kenya Insurance Brokers	9,520	9,463	9,406	9,350	9,294	9,238	9,182	9,127	9,073	9,018
TelPosta Pension Scheme	7,403	7,359	7,314	7,271	7,227	7,184	7,140	7,098	7,055	7,013
National Social Security Fund	2,916,668	2,899,168	2,881,773	2,864,482	2,847,295	2,830,212	2,813,230	2,796,351	2,779,573	2,762,895
Pyrethrum Board of Kenya Staff Retirement Benefits Scheme	2,511	2,496	2,481	2,466	2,451	2,437	2,422	2,407	2,393	2,379
Credit Traders Staff Retirement Benefits Scheme	1,257	1,249	1,242	1,235	1,227	1,220	1,212	1,205	1,198	1,191



ICEA Trustee Services	36,521	36,302	36,084	35,868	35,652	35,438	35,226	35,014	34,804	34,596
Kenya Reinsurance Corporation Staff Pension Scheme	2,153	2,140	2,127	2,114	2,102	2,089	2,077	2,064	2,052	2,039
Kenya Ports Authority Pension Scheme	8,655	8,603	8,551	8,500	8,449	8,398	8,348	8,298	8,248	8,199
Kenya Tea Development Authority Staff Provident Fund	5,058	5,028	4,997	4,968	4,938	4,908	4,879	4,849	4,820	4,791
The Kenya National Library Service Board Staff Retirement Benefits Scheme	158	157	156	155	154	153	152	151	151	150
University of Nairobi Pension Scheme	3,004	3,012	2,968	2,950	2,933	2,915	2,897	2,880	2,863	2,846
Moi University Pension Scheme	2,245	2,232	2,218	2,205	2,192	2,178	2,165	2,152	2,139	2,127
<b>Asset base</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Alexander Forbes Financial Services (Now Zamara)	148,345,000	146,416,515	144,513,100	142,634,430	140,780,182	138,950,040	137,143,690	135,360,822	133,601,131	131,864,316
Aon Kenya Insurance Brokers	16,332,225,000	16,119,906,075	15,910,347,296	15,703,512,781	15,499,367,115	15,297,875,343	15,099,002,963	14,902,715,925	14,708,980,618	14,517,763,870
Apollo Life Assurance	8,005,558,060	7,901,485,805	7,798,766,490	7,697,382,525	7,597,316,553	7,498,551,437	7,401,070,269	7,304,856,355	7,209,893,223	7,116,164,611
British-American Insurance Company	5,510,410,518	5,438,775,181	5,368,071,104	5,298,286,180	5,229,408,459	5,161,426,149	5,094,327,609	5,028,101,350	4,962,736,033	4,898,220,464
CFC Life Assurance Chancery Wright Insurance Brokers	26,435,422	25,906,714	25,569,926	25,237,517	24,909,430	24,585,607	24,265,994	23,950,536	23,639,179	23,331,870
Eagle Africa Insurance Brokers	218,345,675	215,507,181	212,705,588	209,940,415	207,211,190	204,517,444	201,858,718	199,234,554	196,644,505	194,088,126
Kenindia Assurance Company	519,450,000	512,697,150	506,032,087	499,453,670	492,960,772	486,552,282	480,227,103	473,984,150	467,822,356	461,740,666
Kingsland Court Benefits Services	36,345,000	35,872,515	35,406,172	34,945,892	34,491,595	34,043,205	33,600,643	33,163,883	32,732,705	32,307,180
LAPTRUST Administration Services	3,123,000,000	3,082,401,000	3,042,329,787	3,002,779,500	2,963,743,366	2,925,214,703	2,887,186,911	2,849,653,482	2,812,607,986	2,776,044,082
Liaison Financial Services	189,300,000	186,839,100	184,410,192	182,012,859	179,646,692	177,311,285	175,006,238	172,731,157	170,485,652	168,269,339
Liberty Pension Services	115,320,580	113,821,412	112,341,734	110,881,292	109,439,835	108,017,117	106,612,894	105,226,927	103,858,977	102,508,810
Madison Insurance Company Kenya	1,045,765,000	1,032,170,055	1,018,751,844	1,005,508,070	992,436,655	979,534,791	966,800,839	954,232,428	941,827,407	929,583,650
Mercantile Insurance Company	1,049,765,333	1,036,118,384	1,022,648,845	1,009,354,410	996,232,802	983,281,776	970,499,113	957,882,624	945,430,150	933,139,558
Octagon Pension Services	187,679,000	185,239,173	182,831,064	180,454,260	178,108,355	175,792,946	173,507,638	171,252,038	169,025,762	166,828,427
Pacific Insurance Brokers	110,540,000	109,102,980	107,684,641	106,284,741	104,903,039	103,539,300	102,193,289	100,864,776	99,553,538	98,259,333

Pan Africa Life Assurance	278,765,456	275,141,505	271,564,666	268,034,325	264,549,879	261,110,730	257,716,291	254,365,979	251,059,221	247,795,451
Roberts Insurance Brokers	28,908,222	28,532,415	28,161,494	27,795,394	27,434,054	27,077,411	26,725,405	26,377,975	26,035,061	25,696,605
Sapon Insurance Brokers	10,900,765	10,759,055	10,619,187	10,481,138	10,344,883	10,210,400	10,077,664	9,946,655	9,817,348	9,689,723
Sedgewick Kenya Insurance Brokers	62,765,345	61,949,396	61,144,053	60,349,181	59,564,641	58,790,301	58,026,027	57,271,689	56,527,157	55,792,304
TelPosta Pension Scheme	914,587,432	902,697,795	890,962,724	879,380,209	867,948,266	856,664,938	845,528,294	834,536,426	823,687,453	812,979,516
National Social Security Fund	45,594,805,803	43,423,624,574	42,572,180,955	37,402,563,712	37,028,538,075	36,547,167,080	36,072,053,908	35,603,117,207	35,140,276,683	34,683,453,086
Pyrethrum Board of Kenya Staff Retirement Benefits Scheme	894,568,788	891,885,082	889,209,426	886,541,798	883,882,173	881,230,526	878,586,835	875,951,074	873,323,221	870,703,251
Credit Traders Staff Retirement Benefits Scheme	543,348,654	541,718,608	540,093,452	538,473,172	536,857,752	535,247,179	533,641,438	532,040,513	530,444,392	528,853,059
ICEA Trustee Services	837,896,000	835,382,312	832,876,165	830,377,537	827,886,404	825,402,745	822,926,537	820,457,577	817,996,384	815,542,394
Kenya Reinsurance Corporation Staff Pension Scheme	953,765,000	950,903,705	948,050,994	945,206,841	942,371,220	939,544,107	936,725,474	933,915,298	931,113,552	928,320,211
Kenya Ports Authority Pension Scheme	9,500,875,000	9,472,372,375	9,443,955,258	9,415,623,392	9,387,376,522	9,359,214,392	9,331,136,749	9,303,143,339	9,275,233,909	9,247,408,207
Kenya Tea Development Authority Staff Provident Fund	162,485,200	161,997,744	161,511,751	161,027,216	160,544,134	160,062,502	159,582,314	159,103,567	158,626,257	158,150,378
The Kenya National Library Service Board Staff Retirement Benefits Scheme	8,980,000	8,953,060	8,926,201	8,899,422	8,872,724	8,846,106	8,819,567	8,793,109	8,766,729	8,740,429
University of Nairobi Pension Scheme	18,761,586,000	17,659,899	16,882,863	16,832,215	16,781,718	16,731,373	16,681,179	16,631,135	16,581,242	16,531,498
Moi University Pension Scheme	5,673,333,000	5,236,486,359	4,833,276,909	4,461,114,587	4,117,608,764	3,800,552,889	3,507,910,317	3,237,801,222	2,988,490,528	2,758,376,758
<b>Members in the board of trustee</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Alexander Forbes Financial Services (Now Zamara)	3	3	3	3	3	3	3	3	3	3
Aon Kenya Insurance Brokers	3	3	3	3	3	3	3	3	3	3
Apollo Life Assurance	3	3	3	3	3	3	3	3	3	3
British-American Insurance Company	3	3	3	3	3	3	3	3	3	3
CFC Life Assurance Chancery Wright Insurance Brokers	5	5	5	5	5	5	5	5	5	5
Eagle Africa Insurance Brokers	3	3	3	3	3	3	3	3	3	3
Kenindia Assurance Company	5	5	5	5	5	5	5	5	5	5



Kingsland Court Benefits Services	5	4	4	4	4	4	4	4	4	4	4	4	4	4
LAPTRUST Administration Services	9	10	10	8	8	8	8	8	8	8	8	8	8	8
Liaison Financial Services	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Liberty Pension Services	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Madison Insurance Company Kenya	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Mercantile Insurance Company	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Octagon Pension Services	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Pacific Insurance Brokers	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Pan Africa Life Assurance	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Roberts Insurance Brokers	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Sapon Insurance Brokers	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Sedgwick Kenya Insurance Brokers	3	3	3	3	3	3	3	3	3	3	3	3	3	3
TelPosta Pension Scheme	3	3	3	3	3	3	3	3	3	3	3	3	3	3
National Social Security Fund	10	11	12	13	14	15	16	17	18	19				
Pyrethrum Board of Kenya Staff Retirement Benefits Scheme	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Credit Traders Staff Retirement Benefits Scheme	5	5	5	5	5	5	5	5	5	5	5	5	5	5
ICEA Trustee Services	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Kenya Reinsurance Corporation Staff Pension Scheme	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Kenya Ports Authority Pension Scheme	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Kenya Tea Development Authority Staff Provident Fund	5	5	5	5	5	5	5	5	5	5	5	5	5	5
The Kenya National Library Service Board Staff Retirement Benefits Scheme	3	3	3	3	3	3	3	3	3	3	3	3	3	3
University of Nairobi Pension Scheme	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Moi University Pension Scheme	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Development and revision of code of conduct	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011				
Alexander Forbes Financial Services (Now Zamara)	1	0	0	1	1	0	0	0	0	1	0	0	0	1
Aon Kenya Insurance Brokers	1	1	0	0	1	0	1	0	0	1	0	0	0	0





University of Nairobi Pension Scheme	0	0	0	1	0	1	0	0	1	0	0	1	0	0	1	0	0
Moi University Pension Scheme	0	0	1	1	0	1	0	0	1	0	0	0	1	0	0	1	0
Pension fund risk score	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011							
Alexander Forbes Financial Services (Now Zamara)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Aon Kenya Insurance Brokers	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Apollo Life Assurance	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
British-American Insurance Company	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
CFC Life Assurance Chancery Wright Insurance Brokers	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Eagle Africa Insurance Brokers	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Kenindia Assurance Company	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Kingsland Court Benefits Services	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
LAPTRUST Administration Services	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Liaison Financial Services	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Liberty Pension Services	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Madison Insurance Company Kenya	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Mercantile Insurance Company	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Octagon Pension Services	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Pacific Insurance Brokers	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Pan Africa Life Assurance	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Roberts Insurance Brokers	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Sapon Insurance Brokers	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Sedgwick Kenya Insurance Brokers	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
TelPosta Pension Scheme	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
National Social Security Fund	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Pyrethrum Board of Kenya Staff Retirement Benefits Scheme	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Credit Traders Staff Retirement Benefits Scheme	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31



ICEA Trustee Services	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	
Kenya Reinsurance Corporation Staff Pension Scheme	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Kenya Ports Authority Pension Scheme	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Kenya Tea Development Authority Staff Provident Fund	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
The Kenya National Library Service Board Staff Retirement Benefits Scheme	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
University of Nairobi Pension Scheme	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Moi University Pension Scheme	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
<b>Information Technology Budget</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>										
Alexander Forbes Financial Services (Now Zamara)	741,725	732,083	722,566	713,172	703,901	694,750	685,718	676,804	668,006	659,322										
Aon Kenya Insurance Brokers	81,661,125	80,599,530	79,551,736	78,517,564	77,496,836	76,489,377	75,495,015	74,513,580	73,544,903	72,588,819										
Apollo Life Assurance	40,027,790	39,507,429	38,993,883	38,486,913	37,986,583	37,492,757	37,005,351	36,524,282	36,049,466	35,580,823										
British-American Insurance Company	27,552,053	27,193,876	26,840,356	26,491,431	26,147,042	25,807,131	25,471,638	25,140,507	24,813,680	24,491,102										
CFC Life Assurance Chancery Wright Insurance Brokers	132,177	129,534	127,850	126,188	124,547	122,928	121,330	119,753	118,196	116,659										
Eagle Africa Insurance Brokers	1,091,728	1,077,536	1,063,528	1,049,702	1,036,056	1,022,587	1,009,294	996,173	983,223	970,441										
Kenindia Assurance Company	2,597,250	2,563,486	2,530,160	2,497,268	2,464,804	2,432,761	2,401,136	2,369,921	2,339,112	2,308,703										
Kingsland Court Benefits Services	181,725	179,363	177,031	174,729	172,458	170,216	168,003	165,819	163,664	161,536										
LAPTRUST Administration Services	15,615,000	15,412,005	15,211,649	15,013,897	14,818,717	14,626,074	14,435,935	14,248,267	14,063,040	13,880,220										
Liaison Financial Services	946,500	934,196	922,051	910,064	898,233	886,556	875,031	863,656	852,428	841,347										
Liberty Pension Services	576,603	569,107	561,709	554,406	547,199	540,086	533,064	526,135	519,295	512,544										
Madison Insurance Company Kenya	5,228,825	5,160,850	5,093,759	5,027,540	4,962,182	4,897,674	4,834,004	4,771,162	4,709,137	4,647,918										
Mercantile Insurance Company	5,248,827	5,180,592	5,113,244	5,046,772	4,981,164	4,916,409	4,852,496	4,789,413	4,727,151	4,665,698										
Octagon Pension Services	938,395	926,196	914,155	902,271	890,542	878,965	867,538	856,260	845,129	834,142										
Pacific Insurance Brokers	552,700	545,515	538,423	531,424	524,515	517,696	510,966	504,324	497,768	491,297										
Pan Africa Life Assurance	1,393,827	1,375,708	1,357,823	1,340,172	1,322,749	1,305,554	1,288,581	1,271,830	1,255,296	1,238,977										
Roberts Insurance Brokers	144,541	142,662	140,807	138,977	137,170	135,387	133,627	131,890	130,175	128,483										



Sapon Insurance Brokers	54,504	53,795	53,096	52,406	51,724	51,052	50,388	49,733	49,087	48,449
Sedgwick Kenya Insurance Brokers	313,827	309,747	305,720	301,746	297,823	293,952	290,130	286,358	282,636	278,962
TelPosta Pension Scheme	4,572,937	4,513,489	4,454,814	4,396,901	4,339,741	4,283,325	4,227,641	4,172,682	4,118,437	4,064,898
National Social Security Fund	219,289,304	217,118,123	212,860,905	187,012,819	185,142,690	182,735,835	180,360,270	178,015,586	175,701,383	173,417,265
Pyrethrum Board of Kenya Staff Retirement Benefits Scheme	4,472,844	4,459,425	4,446,047	4,432,709	4,419,411	4,406,153	4,392,934	4,379,755	4,366,616	4,353,516
Credit Traders Staff Retirement Benefits Scheme	2,716,743	2,708,593	2,700,467	2,692,366	2,684,289	2,676,236	2,668,207	2,660,203	2,652,222	2,644,265
ICEA Trustee Services	4,189,480	4,176,912	4,164,381	4,151,888	4,139,432	4,127,014	4,114,633	4,102,289	4,089,982	4,077,712
Kenya Reinsurance Corporation Staff Pension Scheme	4,768,825	4,754,519	4,740,255	4,726,034	4,711,856	4,697,721	4,683,627	4,669,576	4,655,568	4,641,601
Kenya Ports Authority Pension Scheme	47,504,375	47,361,862	47,219,776	47,078,117	46,936,883	46,796,072	46,655,684	46,515,717	46,376,170	46,237,041
Kenya Tea Development Authority Staff Provident Fund	812,426	809,989	807,559	805,136	802,721	800,313	797,912	795,518	793,131	790,752
The Kenya National Library Service Board Staff Retirement Benefits Scheme	44,900	44,765	44,631	44,497	44,364	44,231	44,098	43,966	43,834	43,702
University of Nairobi Pension Scheme	21,726,000	9,776,700	4,399,515	1,979,782	890,902	400,906	180,408	81,183	36,533	16,440
Moi University Pension Scheme	5,434,222	4,945,142	2,225,314	1,001,391	450,626	202,782	91,252	41,063	18,478	8,315
	500,531,178	483,262,726	468,283,160	436,198,282	430,127,161	424,452,497	419,245,911	414,283,404	409,463,744	404,740,950
<b>Annual Administration Cost</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Alexander Forbes Financial Services (Now Zamara)	1,483,450	1,464,165	1,445,131	1,426,344	1,407,802	1,389,500	1,371,437	1,353,608	1,336,011	1,318,643
Aon Kenya Insurance Brokers	163,322,250	161,199,061	159,103,473	157,035,128	154,993,671	152,978,753	150,990,030	149,027,159	147,089,806	145,177,639
Apollo Life Assurance	80,055,581	79,014,858	77,987,665	76,973,825	75,973,166	74,985,514	74,010,703	73,048,564	72,098,993	71,161,646
British-American Insurance Company	55,104,105	54,387,752	53,680,711	52,982,862	52,294,085	51,614,261	50,943,276	50,281,014	49,627,360	48,982,205
CFC Life Assurance Chancery Wright Insurance Brokers	264,354	259,067	255,699	252,375	249,094	245,856	242,660	239,505	236,392	233,319
Eagle Africa Insurance Brokers	2,183,457	2,155,072	2,127,056	2,099,404	2,072,112	2,045,174	2,018,587	1,992,346	1,966,445	1,940,881
Kenindia Assurance Company	5,194,500	5,126,972	5,060,321	4,994,537	4,929,608	4,865,523	4,802,271	4,739,842	4,678,224	4,617,407
Kingsland Court Benefits Services	363,450	358,725	354,062	349,459	344,916	340,432	336,006	331,638	327,327	323,072
LAPTRUST Administration Services	1,812,024	1,393,865	1,327,490	1,115,867	1,076,812	1,039,123	1,002,754	967,658	933,790	901,107

Liaison Financial Services	1,893,000	1,868,391	1,844,102	1,820,129	1,796,467	1,773,113	1,750,062	1,727,312	1,704,857	1,682,693
Liberty Pension Services	1,153,206	1,138,214	1,123,417	1,108,813	1,094,398	1,080,171	1,066,129	1,052,269	1,038,590	1,025,088
Madison Insurance Company Kenya	10,457,650	10,321,701	10,187,518	10,055,081	9,924,365	9,795,348	9,668,008	9,542,324	9,418,274	9,295,837
Mercantile Insurance Company	10,497,653	10,361,184	10,226,488	10,093,544	9,962,328	9,832,818	9,704,991	9,578,826	9,454,302	9,331,396
Octagon Pension Services	1,876,790	1,852,392	1,828,311	1,804,543	1,781,084	1,757,929	1,735,076	1,712,520	1,690,258	1,668,284
Pacific Insurance Brokers	1,105,400	1,091,030	1,076,846	1,062,847	1,049,030	1,035,393	1,021,933	1,008,648	995,535	982,593
Pan Africa Life Assurance	2,787,655	2,751,415	2,715,647	2,680,343	2,645,499	2,611,107	2,577,163	2,543,660	2,510,592	2,477,955
Roberts Insurance Brokers	289,082	285,324	281,615	277,954	274,341	270,774	267,254	263,780	260,351	256,966
Sapon Insurance Brokers	109,008	107,591	106,192	104,811	103,449	102,104	100,777	99,467	98,173	96,897
Sedgwick Kenya Insurance Brokers	627,653	619,494	611,441	603,492	595,646	587,903	580,260	572,717	565,272	557,923
TelPosta Pension Scheme	9,145,874	9,026,978	8,909,627	8,793,802	8,679,483	8,566,649	8,455,283	8,345,364	8,236,875	8,129,795
National Social Security Fund	8,471,237,648	8,387,364,008	8,304,320,800	8,131,109,000	7,984,749,038	7,841,023,555	7,699,885,131	7,561,287,199	7,425,184,029	7,291,530,717
Pyrethrum Board of Kenya Staff Retirement Benefits Scheme	8,945,688	8,918,851	8,892,094	8,865,418	8,838,822	8,812,305	8,785,868	8,759,511	8,733,232	8,707,033
Credit Traders Staff Retirement Benefits Scheme	5,433,487	5,417,186	5,400,935	5,384,732	5,368,578	5,352,472	5,336,414	5,320,405	5,304,444	5,288,531
ICEA Trustee Services	8,378,960	8,353,823	8,328,762	8,303,775	8,278,864	8,254,027	8,229,265	8,204,578	8,179,964	8,155,424
Kenya Reinsurance Corporation Staff Pension Scheme	9,537,650	9,509,037	9,480,510	9,452,068	9,423,712	9,395,441	9,367,255	9,339,153	9,311,136	9,283,202
Kenya Ports Authority Pension Scheme	95,008,750	94,723,724	94,439,553	94,156,234	93,873,765	93,592,144	93,311,367	93,031,433	92,752,339	92,474,082
Kenya Tea Development Authority Staff Provident Fund	1,624,852	1,619,977	1,615,118	1,610,272	1,605,441	1,600,625	1,595,823	1,591,036	1,586,263	1,581,504
The Kenya National Library Service Board Staff Retirement Benefits Scheme	986,567	976,701	966,934	957,265	947,692	938,215	928,833	919,545	910,349	901,246
University of Nairobi Pension Scheme	213,360,000	213,112,000	209,915,320	206,766,590	203,665,091	200,610,115	197,600,963	194,636,949	191,717,395	188,841,634
Moi University Pension Scheme	56,733,330	52,364,864	48,332,769	44,611,146	41,176,088	38,005,529	35,079,103	32,378,012	29,884,905	27,583,768



## Appendix iv: Plagiarism Report

### EFFECT OF MARKET CONDUCT GUIDELINES PRACTICES ON GROWTH OF PENSION SCHEMES IN KENYA

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