# EFFECT OF FINANCIAL PRODUCT INNOVATION ON CASHFLOW POSITION OF INSURANCE COMPANIES IN KENYA

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# **DECLARATION**

This project is my original work and has not been submitted for the award of a degree in any other university.

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# **DEDICATION**

All of my loved ones back home are the inspiration behind my project. I really appreciate all the help you have given me thus far.

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# LIST OF ABBREVIATIONS AND ACRONYMS

AKI Association of Kenya Insurers

ATM Automated Teller Machines

EBIT Earnings Before Interest and Tax

ICT Information Communication Technology

IRA Insurance Regulatory Authority

MOB Mobile Banking

POS Point of Sale

NIM Net Interest Margin

ROA Return on Assets

ROE Return on Equity

SACCOs Savings and Credit Co-operative Societies

VIF Variance Inflation Factors

#### **ABSTRACT**

The study examined how financial product innovation affects Kenyan insurance companies' cash flow. This was a descriptive cross-sectional survey. This study targeted all AKI-registered insurance firms as of December 2022. They numbered 53. This study used primary and secondary data. The finance managers, who knew each insurance line's financial products, provided firsthand data on financial product innovation. We collected primary data using a standardized questionnaire. The corrected R2 of .404 showed that insurance companies' financial product innovation caused 40.4% operating cash flow changes. The study found that 59.6% of factors affecting insurance firms' operating cash flows were not examined. Insurance firms in Kenya saw considerable increases in operating cash flows from financial product innovation. Size, gross premiums, and leverage did not statistically affect Kenyan insurance firms' operating cash flows. Since the p-value is smaller than 0.05, financial product innovation affects insurance firms' operating cash flows, according to the research objectives. Thus, insurance company financial product innovation caused operating cash flow variations. Current research did not examine 59.6% of factors affecting insurance firms' operating cash flows. Financial product innovation also improves Kenyan insurance firms' operating cash flows. However, size, gross premiums, and leverage did not statistically affect Kenyan insurance firms' operating cash flows. Insurance firms' operating cash flows decreased as gross premiums and leverage increased. The study found that insurance businesses moderately adopted financial product innovation for general and life insurance. Additionally, insurance providers innovated health and corporate insurance products on average. According to the report, insurance companies should personalize their products to consumers' Insurance companies should conduct market research to assess insurance needs and gaps since financial product innovation affects operational cash flows.

### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background to the Study

The term "financial product innovation" describes how new financial instruments are introduced into markets and financial institutions with the help of developing technologies. Tahir, Shah, Arif, Ahmad, Aziz, and Ullah (2018) define product innovation as a variety of new financial services and products, such as exchange-traded funds, hedge funds, retail structured products, foreign currency mortgages, securitized assets, and weather derivatives. Through financial and operational efficiency, product financial innovation provides financial institutions with a creative and economical way to achieve and monitor financial goals (Nkem & Akujinma, 2017). Financial product innovation therefore involves forming new products or the improvement of existing ones. This helps in improving financial performance through competitive advantage and reduced financial risks (Agustia et al., 2022).

Three theories served as the foundation for the study: Gurley and Shaw's Theory of Financial Intermediation (1960); Akerlof, Spense, and Stiglitz's Information Asymmetry Theory (1970); and Silber's Constraint Financial Innovation Theory (1983). The primary theory that forms the basis of the study is the Theory of Intermediation. According to the notion, financial intermediation is taking deposits from the general public and turning them into investment assets which are productive in the long run (Ekong, & Okon, 2016). The emphasis on intermediation is the need to channel finances from economic excess units to economic deficit unit through financial institutions (Onwe, & Adeleye, 2018). Information asymmetry is seen to be at the bottom of all fund's mobilization strategies since lack of information about the key stakeholders would expose the

financial institutions to risks. The primary goal of adopting financial innovation in a company is to strengthen its financial position, according to the constraint financial innovation theory.

The number of complex financial products that can successfully satisfy the needs of consumers has increased as a result of advancements in finance services, especially in the insurance sector in Kenya. Insurance companies in Kenya have therefore adopted financial innovation practices in the recent past to improve survival in the highly competitive industry through sustainable financial performance. After raising money, they start making portfolio investments in quoted common shares, government securities, investment property, and other financial instruments. The Insurance Regulatory Authority (IRA), 2023 states that the total investments made under the long-term insurance industry for the year ending June 2022 were KES 550.91 billion, an increase of 11.6% over the KES 493.78 billion realized for the year ending second quarter of 2021. The treasury bills and bonds, however, remained attractive for insurance companies making up 79.3% (KES 436.85 billion) of the overall long-term investments.

#### 1.1.1 Financial Product Innovation

Financial product innovation is described by Tahir et al. (2018) as the use of new technology to introduce new financial products into financial markets and intuitions. It is thus a crucial contributing component that promotes increased population inclusion in formal financial market activity. Financial product innovation is seen as one of the main pillars of the financial sector's development and has grown to be a significant causal component in the emergence of economic activity, according to Qamruzzaman and Jianguo (2017). This is because innovations have the power to boost productivity, capital

accumulation, savings, and economic growth. Financial product innovation, according to Ndwiga and Maina (2018), is the engineering of financial products to reduce costs and risks while offering improved financial services to participants in the financial system. It has thus encouraged financial intermediation and inclusion, which has led to the emergence of new players in the financial system and the establishment of new opportunities for system participants, resulting in a distinct competitive position and higher performance (Wanjiru, Kabata, & Wambugu, 2022).

The creation of new financial goods is referred to as financial product innovation, according to Cherotich, Sang, Shisia, and Mutung'u (2015). Securitized assets, derivatives, weather derivatives, foreign currency mortgages, hedge funds, exchange-traded funds, private equity, and retail structured products are a few instances of new financial products. According to Chen and Bellaviti (2020), innovations in financial products also include mobile payment systems. By lowering the barrier of entry for linking to a formal financial system, these technologies help to improve financial inclusion. The diversification of financial products and services is an important aspect of financial product innovation because it contributes to the development of businesses that are focused on the needs of their customers. The general insurance, life insurance, health insurance, and corporate insurance innovations are examples of how the insurance industry is embracing innovation in the realm of financial products. The quantity of new financial products created during the course of the five-year study period (2018–2022) used as a proxy for financial product innovation.

#### 1.1.2 Cash flow Position

According to Akinloye (2013), cash flow is the quantity of cash or cash-equivalent that a company receives or gives out in the form of payments to creditors as well as receipts

from customers. It is used to assess a company's liquidity condition since it provides a snapshot of the amount of cash coming into the organization, where it is coming from, and how much is leaving. According to Akpan (2017), one of the most critical reasons, limiting a firm's investment is the availability of funding. Whether organizations can get the finances required to conduct lucrative investments is thus a crucial concern for growth, and such funds could be generated externally or internally. External funds could potentially be generated through equity or debt financing (Ali & Jalal 2013). Operating, investing, and financing cash flows are the three types of cash flows. According to Gregory (2005), cash flow from operating activities indicates financial inflows and outflows caused by revenues and expenses. These activities generate cash inflows through cash sales and cash collections on trade receivables. Cash outflows include payments made in cash for dividends, taxes, interest, inventory, and operating costs (Gombola & Ketz, 2016).

Through investment operations, cash flow is produced via the acquisition and sale of long-term assets (Ekeocha, Ekeocha, Malaolu, & Oduh, 2017). According to Cinca, Molinero, and Larraz (2015), cash inflows are associated with the sale of long-term assets like buildings, while cash outflows are associated with the acquisition of long-term assets. Because cash is regularly invested in productive assets, the relevance of investing cash flows is that future investments influence growth and survival. Lastly, Taillard (2012) characterizes financing activities as the process of raising money to finance a company's start-up, expansion, core operations, or any other need that arises. One could leverage external or internal funding. Retained earnings provide internal finance, but equity and debt provide external financing. The selling of firm shares to investors gives cash, whereas loans and bond sales provide debt financing (Subramanyam, & Wild,

2014). Accordingly, capital inflows and outflows from financing operations may be impacted by an organization's financial strategy (Tian, Han, & Zhang, 2015). The study focused on operational cash flow because they demonstrate success in operations and working capital management.

#### 1.1.3 Financial Product Innovation and Cash flow Position

This include the creation of new financial products that help to open up new markets by bringing in new goods (Akani & Obiosa, 2020). Chelangat and Namusonge (2018) suggest that financial innovation can be used to aid in the mobilization and accumulation of sufficient funds for investment objectives, hence augmenting economic growth. Financial product innovation is also widely recognized as a crucial element in the advancement of the financial sector and has become a prominent catalyst for the growth of economic activities. This phenomena can be explained by innovations' ability to increase savings, promote capital accumulation, and raise productivity levels, all of which contribute to economic growth (Domeher, Konadu-Yiadom, & Aawaar, 2022). Gichungu and Oloko (2015) found that, over the years 2009-2013, there was a substantial and favorable relationship between financial innovation and the financial performance of banks in the banking sector. Furthermore, financial product and financial process innovation are important aspects of financial innovation that positively affect a bank's financial performance, according to Rai and Gupta (2022). The underlying premise is that insurance companies, when equipped with sufficient financial resources, can effectively support their operations, and generate surplus capital for investment purposes. Additionally, financial innovation boosts profitability in the banking industry, especially for commercial banks (Kolodiziev, Chmutova, & Biliaieva, 2016). The two variables are positively associated.

### 1.1.4 Insurance Companies in Kenya

Kenya has the greatest penetration rate of insurance products and services in East Africa, at 2.3%; Tanzania and Uganda have the lowest penetration rates, at 0.5% and 0.8%, respectively. There has been a steady growth through increased penetration of insurance programs and products. This, however, was manifested at different rates, due to different market changes. The Insurance Regulations 2020 directly impacts the industry by giving clear guidelines on the use of and sale of insurance products and services (IRA, 2022). Adoption of information communication technology (ICT) has in the recent past improved mobilization efforts, by facilitating business practices and helping in the mobilization of funds and enhanced growth of the insurance industry.

As per the Vision 2030 and Agenda Four model of economic development, insurance businesses have made a noteworthy contribution to improving resource mobilization, ensuring financial stability, and fostering direct and indirect capital investments. In recent years, the industry's investment asset base has grown at a faster rate. From Kshs 709.05 billion in 2019 to Kshs 765.93 billion in 2020, the industry's assets grew by 8.0%. The majority of the investments made by insurance companies—85.7% of all investments—are held in assets. Investments increased by 10.5% between 2019 and 2020, from Kshs 594.03 billion to KES 656.46 billion (IRA, 2021). Insurance firms have raised money and invested it in a variety of products, including investments, pensions, group life, group credit, annuities, and permanent health. The assets comprised of investments (85.7%), current assets (11.7%), fixed assets (1.5%) and intangible assets (1.1%). The performance analysis therefore explains the role and how insurance companies perform by mobilizing funds effectively.

#### 1.2 Research Problem

Innovation in financial products not only makes existing goods and services more affordable and accessible but also, over the course of time, raises the bar for the overall quality of those goods and services. According to Kalume and Makau (2020), these factors lead to a decrease in payment costs, a quicker turnaround time for determining whether fraud has occurred, a way to pool funds, controls over risk and uncertainty management, agency cost management, and increased liquidity. Innovation in financial products is not only essential to the transition to the digital economy but also the most crucial driving force. This is because globalization and global competitiveness necessitate innovation. The concept of financial product innovations relate to product inventions and innovative management practices that, when implemented by companies, lead to higher overall levels of profits (Ouma, 2018). In order for businesses to maintain their assets and achieve a sustainable level of cash flow performance, they need to be able to adapt to the reality that they operate in, which is that the competitive environment is always shifting, and they need to be able to adjust their products and services on an ongoing basis.

Insurance companies have recently placed a strong emphasis on investment performance. The overall income from investments in 2021 was Kshs 70.31 billion, representing a 38.2% increase over the Kshs 50.86 billion realized in 2020. The highest-earning investments were those made over a longer period of time, totaling Kshs 52.72 billion, accounting for 75% of overall earnings from industrial investments. Furthermore, at the conclusion of the second quarter of 2022, the general insurance business achieved investment income of Kshs 150.62 billion, a 4.1% rise from 2021 (IRA, 2022). In terms of portfolio investments, insurance companies focused mostly on government bonds,

treasury bills, and term deposits, which made for the majority of the overall investment portfolio. It is worth noting, however, that long-term insurance firms' investment income declined 37.0% to Kshs 16.6 billion in the first half of 2022, from Kshs 26.3 billion in the first half of 2021. As a result, the yield on investment for insurance companies fell by 1.9% points to 2.8%, from 4.7%. To maintain financial performance, most insurance companies have begun to construct an efficient investment portfolio in order to secure funds accumulation over a long period through financial innovation. The insurance market in Kenya has seen remarkable expansion in recent years, and in order to remain competitive, insurance companies must develop creative products that will attract customers.

Innovation in financial products as a substitute distribution method has expanded the pool of people utilizing insurance services, boosted financial inclusion, and improved financial performance (Finaccess, 2016). It has also resulted in change because customers can now obtain prompt, easy, economical, and effective services. Therefore, financial innovation is essential to enhancing insurance businesses' financial standing, particularly their profitability and ability to grow sustainably. Without a question, preserving the financial stability of insurance businesses in the current environment is crucial, as this industry serves as the primary source of long-term investments for the nation's financial system. Insurance businesses should focus on minimizing cash outflow and preserving steady positive cash flow in order to preserve their market position (Knyazeva, Yuzvovich, Smorodina, Fomenko, & Katochikov, 2016).

The significance of financial product innovation and the financial success of financial institutions has been the subject of numerous studies. Most studies however have concentrated on the concept of financial innovation whose scope include process

innovation. Contextually, most studies focus on commercial banks, resulting in a contextual gap as well. According to Kalume and Makau (2020), the development of new financial products has a positive impact on SACCO revenue and other financial metrics. Tahir et al. (2018) state that financial innovations reduce transaction costs and allow users to access all banking services. Ndwiga and Maina (2018) assert that there is a correlation between financial innovation and financial performance; yet, only process innovation demonstrated a significant correlation with financial performance, whereas product innovation did not demonstrate any discernible relationship. Otieno and Oluoch (2021) found in another study that innovation has a significant effect on the financial performance of commercial banks that are listed in Kenya. Nekesa and Olweny (2018) assert that organizational, procedural, and product improvements have a substantial impact on the financial performance of deposit-taking Savings and Credit Cooperative Societies (SACCOs). Finally, in the case of insurance businesses, Muriungi and Jagongo (2021) employed financial inclusion as the independent variable, focusing on financial innovation as a means of achieving financial inclusion. They concluded that financial inclusion through insurance accessibility, insurance usage, and insurance technology improves the financial performance of Nairobi stock exchange-listed insurance companies.

The studies reviewed indicate a conceptual and contextual gap, since they focus on commercial banks and SACCOs based on financial innovation. Contextually, financial product innovation activities by insurance companies are significantly different from those of other institutions offering financial services like commercial banks, micro finance institutions and SACCOs. Kirwa and N'geno's (2019) study proved that insurance companies' financial performance was always positively correlated with their

level of innovation. However, because the previous study used an explanatory research methodology while the current study concentrated on a descriptive cross-sectional design, it showed a conceptual and methodological discrepancy. In addition, rather than focusing on cash flow, the study examined financial performance. Based on this premise, the present study aims to address the following research question: "What impact does financial product innovation have on the cash flow position of insurance companies in Kenya?"

#### 1.3 Research Objective

To determine the effect of financial product innovation on the cash flow position of insurance companies in Kenya.

#### 1.4 Value of the Study

Significant support for theory, practice, and policymaking is provided by the study. With an emphasis on insurance businesses and their financial performance, the findings are expected to provide scholars with a theoretical foundation for comprehending important concerns in financial innovation among financial institutions. The goal is to ensure that there is an understanding of how insurance companies can mobilize funds, through financial innovation and eventually improve financial performance. This would invite numerous research in the less researched area of financial innovation in the insurance industry.

In actuality, the study would help insurance company management and employees create creative solutions that would improve financial transactions and, ultimately, financial performance. The study created insights that would enable formulation of approaches focusing on people who are not included in insurance cover. This would therefore

enhance the need for insurance inclusion to improve financial innovation. The research would also help insurance companies to formulate a good mix of financial innovation and put in place an appropriate method of dealing with managing deposits. The study also gives managers of insurance company's food for thought in considering the practical trade-offs in digitizing the funds mobilization process.

Finally, the research findings would be of great help in the development of policies for changing intervention measures regarding risks related to financial innovation. This study would also help in the formulation of risk management policy to help define guidelines that can be used in controlling financial innovation process. The study equally encourages policymakers to develop guidelines for adoption of different financial innovation approaches, in such a way that customer data integrity is not at risk, and financial risk exposures are effectively managed.

## **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

The theoretical underpinning supporting the ideas of financial innovation and financial performance is analyzed in this section. It also outlines a review of literature work done in the past regarding the related concepts and an in-depth review of determinants of financial performance based on the variables under study. Finally, the section presents a conceptual framework that explains how the variables studied are related and finally the existing gaps.

#### 2.2 Theoretical Review

An extensive analysis of the hypotheses supporting the study is included in this section. Three ideas serve as the foundation for this research: Gurley and Shaw's Theory of Financial Intermediation (1960); Akerlof, Spense, and Stiglitz's Information Asymmetry Theory (1970); and Silber's Constraint Financial Innovation Theory (1983). The fundamental theory is the Theory of Intermediation. The following is a study of the theories:

# **2.2.1 Theory of Financial Intermediation**

It was advanced by Gurley and Shaw (1960) and later by Leland and Pyle (1977). It states that financial intermediation involves mobilization of finances by taking deposits and transforming them into money available as loans and investments that earns returns to the owners (Ekong, & Okon, 2016). The process of mobilizing funds therefore involves transformation of savings into viable investments, by having the funds channeled from those who save, to those who participate in investments. This process involves taking money from the public and transforming them into investments through

loans and direct investments (Chinwe, 2021). Insurance companies are financial intermediaries, in that they mobilize funds in form of premiums for savings on behalf of fund owners (Onwe, Adeleye, & Okorie, 2019).

Financial intermediation promotes the ease with which people can access insurance-based financial products and services (Qin & Zhou, 2019). The implication is the need for a financial system that would encourage insurance companies to financially intermediate in an efficient manner. Financial innovation improves the capacity of insurance companies to convert savings received primarily from households and firms into investment in real estate, financial assets and other sectors, insurance companies and further, it helps them to significantly play the financial intermediation role efficiently (Mehmood, Hunjra & Chani, 2019). The theory is therefore relevant on the fact that insurance companies play financial intermediation role, through effective financial innovation that facilitates creation of assets for owners of funds through mobilization (Ekong, & Okon, 2016). The theory however faces criticism hinged on several current developments in finance. The reality is that application of Information Communication Technology (ICT) and related aspects would lead to reduced cost of transaction and information asymmetry that makes the process meaningless.

#### **2.2.2 Information Asymmetry Theory**

Akerlof, Spense and Stiglitz (1970) put the theory forward. Information asymmetry means some parties to the transaction have better information than others. This situation exists where financial transactions such as borrowing of loans and investment transaction takes place (Alao, 2018). The theory states that information asymmetry may lead to violation of the borrowing contract, whereby some information is hidden, as well as many underlying risks not being disclosed by either party. Information asymmetry is

therefore seen to be at the bottom of financial innovation activities, that facilitate fund mobilization and other transactions. This is because lack of information about the key stakeholders and existing products and processes would expose insurance firms to risks. Shettima (2019) assert that due to the problem of information asymmetry, the information flow in the insurance market becomes incomplete and this obstructs operational efficiency of the market.

In its relevance, the theory relates to how financial innovation help to bridge the information gap within the insurance sector and its relationship with investment companies and individuals paying premiums. This is because, in an environment of information imbalance, the financial transactions may not benefit both parties on an equal basis and may affect the quality of the investments and financial transactions (Owuor, 2015). Further, the implication is that investors spend a lot of time and money for acquiring more information. This means that insurance markets must provide the additional information needed by investors to reduce the information asymmetry and increase market efficiency, thereby attracting the investors' confidence (Roshana, & Abdib, 2020). The theory is criticized on the basis that it reduces trust, leading to increased uncertainty, which drives trade friction, through information friction (Susan, & Natu, 2022). The information frictions affect how investors perceive a given market, and this affects trading activities.

#### 2.2.3 Constraint Theory of Innovation

William Silber introduced the hypothesis in 1975. According to the hypothesis, the main driver of innovation in financial institutions is their desire to maximize profits. However, these companies' ability to innovate was limited by both internal and external forces, especially concerns about regulation. The premise is that a firm's profitability can be

impacted by variables like laws and fierce industry competition. Silber (1975) asserts that limitations diminished the firm's efficiency and guaranteed managerial stability. As a result, financial institutions need to find a means to overcome these limits by consistently implementing innovations in order to achieve their profit maximization objective. Thus, financial institutions' innovation is frequently a logical reaction to unfavorable industry rivalry, with the goal of lessening the financial impact of the limitations they encounter. According to Mohan (2016), financial institutions are seen as utility maximizers subject to a number of constraints, some of which are set by government regulation and the rest of which are determined by the firm or the market.

The theory applies to the current study because its aim was ascertaining how financial product innovation affected the cash flow foundation of Kenyan insurance businesses. In actuality, there would be certain limitations for the insurance companies during the procedure. According to Mention and Torkelli (2014), financial innovations have special characteristics that need to be taken into account while developing, overseeing, and putting into practice innovation methods and strategies in a sustainable manner. Over time, the cost of adherence decreased as a result of creative activity that relaxed a particular limitation (Obay, 2014). One of the main criticisms leveled against this theory is that it falls short of providing a thorough explanation for the phenomena of innovation in the financial services industry as a byproduct of liberal finance.

#### 2.3 Determinants of Cash Flows

Most of the business entities prepare cash flow statement to use for financial management as internal information source at the previous years (Ahmed, & Jahangir Ali, 2011). The purpose of a cash flow statement is to generate data that may be used as a foundation for budgeting and to evaluate the timing, magnitude, and predictability of

future cash flows in order to better forecast future certainty. The main goal of the cash flow statement is to give details about the cash inflows and outflows from various sources for a business. The determinants are as discussed below:

#### 2.3.1 Financial Product Innovation

Innovation in financial products is turning out to be the best way to tap into the potential of underserved retail insurance markets. In actuality, these markets are emerging as the next frontier since they were previously unexplored. The only way to guarantee that the retail market is fully utilized is for insurance companies to turn to financial innovation in order to realize this potential (Kirwa & N'geno, 2019). The financial sector is the core of an economy because these technologies allow individuals and companies to save, invest, and mitigate risk. These technologies have significant ramifications for institutions. Financial product innovation would therefore reduce the cost of access to insurance services and improved operational efficiency.

Insurance companies are under increasing pressure to mobilize financial resources in a more flexible, proactive, and inventive manner due to a highly competitive environment. This can be achieved through financial product innovation (Deloitte, 2020). They must take the initiative and devise more creative strategies for financial resource mobilization via financial innovation. According to Wanjiru, Kabata, and Wambugu (2022), in an effort to boost performance, more funds ought to be set aside for innovation. Kirwa and N'geno (2019) discovered in another study that innovation has a noteworthy and advantageous impact on the financial performance.

#### 2.3.2 Size of the Insurance Company

Almashhadani and Almashhadani, (2022) posit that size of a company reflects asset size, revenues generated, and equity level of a firm. It implies that companies can be grouped as either small or large, depending on the asset base or revenues generated. Fujianti and Satria (2020) indicate that the size of the firm directly correlates with how organizations perform financially, by achieving and sustaining economies of scale. It is based on the belief that large firms have chances of realizing efficiency and better performance, compared to smaller firms. The implication is that large firms are likely to have more opportunities to invest and could acquire large capital, comparatively. Regarding cash flows, the size of the insurers and how they perform financially are directly related. This explains the assertion that large insurance firms enjoy higher profitability as compared to smaller ones (Morara, & Sibindi, 2021).

The large asset base equally enables large-sized firms mobilize larger funds and hence generate more cash, with higher capacity to bear more risks. They also can spread their operational expenses over a larger revenue, hence improved financial sustainability (Mazviona, Dube, & Sakahuhwa, 2017). Ortynski (2016)'s study, which looked at a subset of Pakistani insurance businesses' performance from 2006 to 2013, established a positive relationship between firm size and profitability. Firm size is an internal component of a business since it dictates the extent of its economic activity and the potential economies of scale that it may experience. Therefore, larger companies produce higher returns on assets, which results in higher positive cash flows (Pathirawasam and Adriana, 2013). Because of this, businesses should be big enough to be able to make more money and compete on the international market (Saidu, 2017).

#### 2.3.3 Premiums

This is the amount of money paid by individuals or businesses for insurance cover, as a consideration. Insurance companies depend on the premiums to raise money for their investments (Shaaban & Wahome, 2018). Growth in premiums is therefore a measurement of how people have acquired insurance products, and hence the penetration of insurance-related products and services. The effect on financial performance is based on the argument that more premiums would mean increased available money for investment and further funds mobilization. Growth in premiums mean improved ability to mobilize funds and sustain operational excellence (Akotey, Sackey, Amoah & Manso, 2013).

Several studies have attempted to establish how premiums affect financial performance of insurance companies, including cash flow. Kramaric, Miletic and Pavic, (2017) established the significance of high premiums on influencing how insurance firms perform financially in terms of ROE and ROA. Further, Shawar and Siddiqui (2019) also established the significance of premiums in influencing how insurance firms perform financially. The studies by Shaaban and Wahome (2018); Ortyński (2016) and Markonah, Sudiro and Rahayu, (2019) established that growth in premiums significantly affect how the insurance companies perform financially, through increased funds mobilization and subsequently economies of scale.

#### 2.3.4 Leverage Levels

The degree to which a business needs loans to support its operations as opposed to using owners' funds is known as financial leverage (Ezechukwu & Amahalu, 2017). A company that uses a higher percentage of borrowed funds as compared to its own funds is said to be highly leveraged or geared. The assumption is that better returns would be

generated using the borrowed funds, to cover up the borrowing costs and leave the organization with profits. Generally, the return on investment is higher when the borrowed funds are put to good use. It can also however be argued that increased use of loans increases interest expenses that would lead to a reduction in earnings per share (Hayes. 2021). The concern for most organizations is to achieve and sustain a suitable capital structure that maximizes financial performance (Muigai, 2016).

The risk of high gearing is bankruptcy, arising from inability to make repayments, making it difficult to raise new funds through debts. High gearing therefore can positively affect how firms perform financially, since the use of debts makes management teams more careful in making financial decisions, including investments (Hailegebreal, 2016). The study by Alomari and Azzam (2017) established that gearing negatively affects the extent to which firms make profits. However, the research by Berhe, Kaur, and Berteji (2016) and Hammami (2016) noted that gearing might not have a major impact on a firm's performance. Mazviona, Dube and Sakahuhwa (2017) however assert that gearing has a positive effect on how firms perform.

# 2.4 Empirical Review

The research work reviewed gives insight regarding how financial product innovation affects cash flows. The effect of corporate innovation on the financial performance of insurance companies in Kenya was examined by Kirwa and N'geno (2019). The research was guided by stakeholder theory and balanced score card theory. 5273 employees from 49 Insurance Regulatory Authority-member Kenyan insurance companies made up the study population. 372 employees made up the sample size that was produced using Yamane's algorithm. Data for this study were gathered via a survey questionnaire. Pretesting the instruments ensured the reliability of data collection, and the instrument's

level of reliability was statistically measured using Cronbach's alpha. The performance of insurance firms is significantly and favorably impacted by innovation, according to multiple regression models and Pearson correlation analysis. Insurance firms have historically enjoyed greater financial success as a result of firm innovation.

Wanjiru, Kabata, and Wambugu (2022) looked at the connection between performance in Kenyan insurance companies and innovation orientation in a different study. In particular, the study examined how Kenyan insurance companies performed in terms of gross premium and market share in relation to product, process, and market innovation. The study combined descriptive and causal research methods with a framework to look at the connections between the three types of innovations. 406 heads of pertinent departments from the 53 registered insurance companies and 5 reinsurance companies made up the target audience. Information was obtained using a semi-structured questionnaire, with 197 participants in total. The results show that Kenyan insurance companies' gross premium and market share are positively and significantly impacted by innovation in their products, processes, and markets. In this investigation, the relationship between IV and DV was somewhat moderated by the regulatory framework. The results show that in order to improve performance, innovation should receive greater funding. According to the report, businesses should concentrate on breaking into new market niches so as to enhance the adoption of insurance.

Tahir et al. (2018) conducted an examination in their study to determine how the innovative payment methods used in Pakistan affected the ER. The State Bank of Pakistan provided the data used in this analysis, which covered the years 2007 through 2016. A unit root test was used to resolve the issue of non-stationarity related to unsynchronized panel data prior to the use of multiple regression models. The study's

conclusions showed a statistically significant positive association between employee engagement and online purchases made on the Web or the Internet. The results concerning Point of Sale (POS), Mobile Banking (MOB), and ATM were not found to be statistically significant, according to the statistical analysis. Additionally, the Granger impact appraisal showed that while new items had a major impact on transaction value, they did not have a key effect on ER. Therefore, the findings were positive.

An evaluation of the effects of process and product innovation on the financial performance of Kenyan commercial banks listed was conducted by Ndwiga and Maina (2018). Participants' online questionnaires were disseminated using Qualtrics Survey Software, which was used to collect the data. The study's conclusions show that financial performance and financial innovation are positively correlated. But process innovation clearly shows a significant relationship with financial performance but not so for product innovation.

In a different study, Nekesa and Olweny (2018) examined the impact of financial innovation on the financial performance of SACCOs in Kajiado County that accept deposits. An understanding of financial innovation and its impact on financial success can be gained from prior study. The researcher points forth the advantages and disadvantages of the literature. But the information that emerged guided this investigation in filling up the identified scholarly gaps. Forty workers from the deposit-taking SACCOs in Kajiado County made up the research sample. Stratified sampling was chosen for this purpose. Prior to being presented in graphs and tables, primary data was gathered, analyzed, and classified both statistically and qualitatively. A part from questionnaires, annual reports, libraries, and SACCO databases were examples of

secondary data sources. The data was examined using SPSS. It was found that organizational, process, and product improvements have a big impact on how profitable deposit-taking SACCOs in Kajiado County are.

Otieno and Oluoch (2021) looked into the effect of innovation on the financial performance of Kenyan listed banks in a different study. Five of the eleven listed banks on the Nairobi Securities Exchange were the target demographic; these banks were selected with ease. Among them were Equity, KCB, National Bank, Cooperative, and Barclays. Using stratified random sampling, 94 respondents, who were branch managers from different banks, participated in the survey. The research employed a combination of primary and secondary data. Statistics utilized were both descriptive and inferential. It was suggested that banks employ innovation to increase growth, competition, productivity, and profits after the results showed that the association existed.

#### 2.5 Summary of Literature Review and Research Gap

The evaluation of research work reveals conceptual, methodological, and contextual deficiencies. Conceptual gaps exist when the concepts discussed in the reviewed literature are different from the concepts studied. Most studies concentrate on the context of commercial banks, resulting in a contextual gap. Studies by Tahir et al. (2018); Ndwiga and Maina (2018) and Otieno and Oluoch (2021) were contextualized within commercial banks, while Concerning Nekesa and Olweny (2018) focused on Savings and Credit Co-operative Societies (SACCOs). Contextually, financial innovation activities by insurance companies are significantly different from those of other institutions offering financial services like commercial banks, micro finance institutions and SACCOs.

Conceptual gaps were indicated by Muriungi and Jagongo (2021) who employed financial inclusion as the independent variable, focusing on financial innovation as a means of achieving financial inclusion. Further, the studies focus on financial performance and not cash flows. Methodological gaps are depicted by studies that have adopted a research design different from the current research. The study by Kirwa and N'geno (2019) depicted a methodological gap, since it employed explanatory research design, unlike the current study which focused on descriptive cross-sectional design.

#### 2.6 Conceptual Framework

The research explored how financial product innovation affect how insurance firms in Kenya perform on a cash flow basis. Financial product innovation was the independent variable, measured using the nature of financial products innovated within the product lines. Cash flow performance was proxied using operating cash flows. The control variable includes premiums, leverage levels and the size of the insurance company. The parameters are related as in Figure 2.1.

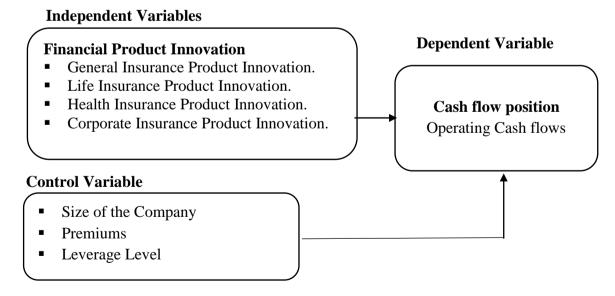


Figure 2.1: Conceptual Framework

## **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This section contains design that was employed, the respondents who were targeted, and the information sources that were consulted for the study. Finally, the methodology for data gathering and analysis is explained.

### 3.2 Research Design

A descriptive cross-sectional survey design was used for this investigation. This is the instantaneous gathering of data from numerous people. The variables are observed without influencing them (Hunziker, & Blankenagel, 2021). The aim is to describe how the variables relate without focusing on a specific case and its particulars. The design establishes the linkage of the variables studied within circumstances.

Descriptive studies involve collecting information to help in verifying speculated connection and generation of outcomes to the questions of research (Mugenda & Mugenda, 2003). The design therefore seek to establish how financial innovation affect how insurance firms perform in Kenya financially. It involved collecting data on the financial performance of insurance firms for five years, then computing averages for purposes of data analysis. Data on financial innovation was collected at once.

## 3.3 Population of the Study

All insurance companies registered with AKI as of December 2022 (Appendix II) were the focus of this study. They are fifty-three (53) in number. The justification is that AKI is the recognized body that offers advisory and capacity building for the industry players. AKI therefore publishes reports on the performance of the industry and the specific

firms, making it easy to access data on financial performance. Due to the small number, all the firms were targeted and therefore this is a census study.

#### 3.5 Data Collection

Both firsthand and published data were used in this investigation. The corresponding finance managers provided first-hand information about financial product innovation. It is assumed that the finance managers are informed about the financial offerings for every insurance category. Therefore, one respondent from each of the insurance companies was explicitly targeted in this study. 53 people in all were the respondents as a result. They gave their inputs via questionnaires. While financial product innovation is covered in Part B, demographic data about the businesses is covered in Part A. Questionnaires were distributed using a "drop and pick later" method. The survey can be found in Appendix I. From publicly available financial reports, secondary data was taken from the available information to be included in the annual report for the five years (2018–2022). Operating cash flows were the main topic of the secondary data. Appendix III's data collection form was used to collect secondary data.

#### 3.6 Diagnostic Tests

These assessments aid in comprehending the characteristics of the data and the degree to which it can be utilized in the research. It evaluates if the data have the qualities required for use. They consist of:

#### 3.6.1 Normality Test

This involves assessing the nature of data, as it is a requirement in parametric tests. Regression analysis therefore requires the type of the data to be employed, according to statistics. It verifies whether the data follow a normal distribution (Das & Imon, 2016). Regression analysis requires data to be distributed normally. The Shapiro-Wilk Test was

used to check for normalcy. A statistical significance of less than 0.05 in this test would indicate that the data may be abnormal.

## 3.6.2 Multicollinearity Test

When there is a strong correlation between the IV, both among themselves and with the DV, this is known as multicollinearity. This may create statistical insignificance of the parameters studied when they are expected to be significant. This can also lead to skewedness in the study outcomes (Shrestha, 2020). Variance Inflation Factors (VIF) were used in this investigation to assess it. There is a recommendation that VIF should be no more than a value of 10. The lower VIF values of the parameters indicate no collinearity issues.

## 3.6.3 Heteroscedasticity Test

The assumptions is the variance of the error term and the independence of the parameters from one another should remain constant. The lack of it would indicate a heteroscedasticity issue. In a linear regression, the assumption of homoscedasticity means same variance and is central to linear regression models. The data should therefore be homoscedastic (Yang, Tu, & Chen, 2019). This study used Koenker test, whereby values above 0.05 are acceptable.

## 3.6.4 Linearity Test

Linearity means that the average measurement of the parameters falls within a straight line. It is adopted in testing the linear correlation between the measured and explanatory parameters, about the linear regression models (Chiesa, Manohar, & Shinkar, 2020). The objective is to assess whether the parameters under study are linear or non-linear, with values below 0.05 considered to be accepted.

## 3.7 Data Analysis

To ensure that the data was complete, it was first cleaned and evaluated. Coding was then be done to make the data ready to be entered into the software for data analysis. The determination of extent of adoption of financial innovation was then done using averages and measures of variations. The study subsequently utilized multiple regression analysis to ascertain the combined impact of financial innovation and moderating variables on the financial performance of insurance firms in Kenya. In this study, the following regression models were used:

 $Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$ 

Where:

Y = Operating Cash flows

a = Constant

 $\beta_1$  = Coefficient of Explanatory variables

 $\beta_2$  = Coefficient of Control Variable

 $X_1$  = Financial Product Innovation

 $X_2$  = Size of the Firm

 $X_3 = Premiums$ 

 $X_4$  = Leverage Level

 $\varepsilon = \text{Error term}.$ 

## 3.7.1 Operationalization of Study Variables

This assists in the reduction of complexity of studied parameters, through easily quantified sub-variables. This would help to determine how the parameters under study are related. The operationalization is given in the Table 3.1:

**Table 3.1: Operationalization of Study Variables** 

Variable	Sub Variables	Indicators	Source
Independent Variable	Financial Product Innovation	<ul> <li>Number of new:</li> <li>✓ General Insurance Product Innovation.</li> <li>✓ Life Insurance Product Innovation.</li> <li>✓ Health Insurance Product Innovation.</li> <li>✓ Corporate Insurance Product Innovation.</li> </ul>	Dangelico and Pujari (2017)
Dependent Variable	Cash flow position	Operating Cash flows	Wangombe and Kibati (2019)
Control Variables	Size of the Firm	Total Assets	Lee (2002)
	Premiums	Gross Premiums	Sujud, & Hashem (2017).
	Leverage Level	Gearing Ratio	Cherotich, Sang, Shisia, & Mutung'u (2015).

**Source:** Researcher (2023)

## 3.6.2 Test of Significance

In order to assess the importance of the variables and the suitability of the regression model based on the F-test result, this study used t-tests. The researcher also computed Pearson correlation coefficient (R) and adjusted  $R^2$ . The percentage changes in financial performance in response to changes in the funds mobilization tactics used were established with the aid of modified R2, while the Pearson correlation coefficient was utilized to determine the positivity or negativity of the correlations produced. The t-test was used to determine the significance of each parameter under study, and the F-test helped determine whether the regression model was adequate. R2,  $\beta$ , and the Pearson correlation coefficient were applied equally. The research utilized a significance level of 5%.

## **CHAPTER FOUR**

## DATA ANALYSIS, FINDINGS AND DISCUSSION

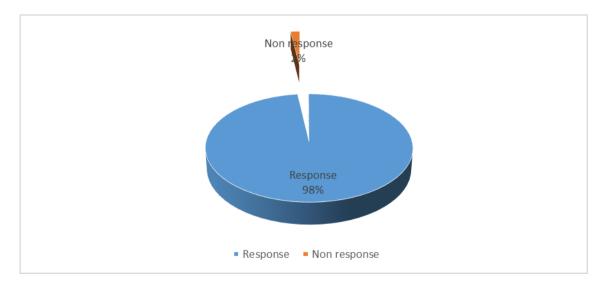
#### 4.1 Introduction

Here is a thorough analysis of the facts, including the findings that were discovered, the interpretations that were developed from those findings, and the eventual conclusion that was reached. In addition to this, it involves determining if the data that was acquired could be relied upon and whether or not they were accurate. In addition to that, it incorporates the findings of any diagnostic examinations that were carried out. In addition, descriptive statistics were carried concerning extent of adoption of financial product innovation among Insurance firms in Kenya. Last but not least, it shows the outcomes of the regression and correlation tests performed on the variables.

## **4.2 Response Rates**

The study requested responses from 53 people based on the questionnaires that were handed out to the companies to gather primary data. The response rate is displayed as follows in Figure 4.1:

Figure 4.1: Response Rate



52 responses were received representing 98% of the expected responses. Data from one company was deliberately not collected because, it did not have complete corresponding secondary data. According to Ericson et al. (2023), survey responses of 70% or more are required for results to be deemed generalizable. As a result, the response rate might be used to assess the validity and consistency of the study's conclusions.

## 4.3 Demographics

As shown in Figure 4.2, the respondents were instructed to check the appropriate segment to mark employee in numbers the insurance company:

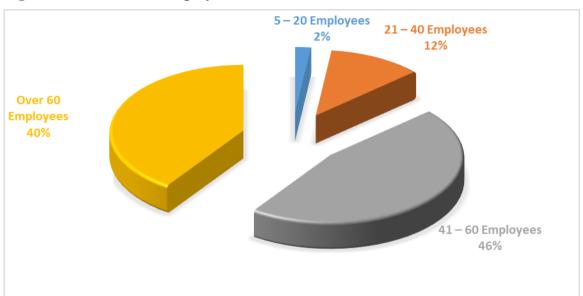


Figure 4.2: Number of Employees

**Source:** Research Data (2023)

Accordingly, the majority of insurance companies employed between 41 and 60 people, with 40 percent of those companies having more than 60 employees. 12% of the insurance firms had between 21-40 employees while only 2% had between 5-20 employees.

## 4.4 Extent of Adoption of Financial Product Innovation

Using the following scale, the respondents were asked to rate how much they agreed with the insurance companies' adoption of innovative financial products: *1 represents an extremely little amount, 2 a small amount, 3 a moderate amount, 4 a large amount, and 5 a very large amount.* The practices included general insurance financial products, life insurance financial products, corporate insurance products and health insurance financial products. The analysis is as given below:

#### **4.4.1 General Insurance Financial Products**

The extent of adoption of general insurance financial products was as given in Table 4.1: On average, the insurance firms adopted general insurance financial products to a moderately M= 3.8962 (SD=.95386).

**Table 4.1: General Insurance Financial Products** 

			Std.		
Sub Variables	Statistic	Mean	Deviation	Skewness	Kurtosis
Regular introduction of marine					
insurance products to enhance	52	3.8654	.97073	791	.409
financial performance.					
Introduction of more property					
insurance policies and classes in an	52	3.8077	1.01050	545	199
effort to improve financial	32	3.8077	1.01030	343	199
performance.					
To improve our financial					
performance, new classes of	52	3.8654	.95031	719	.430
student accident coverage are	32	3.8034	.93031	/19	.430
being introduced.					
New auto insurance plans have					
been created by our organization	52	4.1346	.90811	765	281
to improve financial results.					
Terrorism and political violence					
insurance policies are being	52	3.8077	.92965	665	.477
developed to improve financial	32	3.8077	.92903	003	.4//
performance.					
Valid N (Listwise)	52	3.8962	.95386	697	.167

The data is negatively skewed, while the positive kurtosis indicates heavier tails and a more peaked distribution of the data. The findings indicate that the most adopted product among the insurance companies was new motor vehicle insurance policies, followed by marine insurance products and new classes of student accident covers, each having a mean of M=4.1346; SD=.90811, M=3.8654; SD=.97073 and M=3.8654; SD=.95031. Other general insurance financial products included new classes and policies of property insurance and political violence and terrorism insurance policies, each with a mean, M=3.8077; SD=1.01050 and M=3.8077; SD=.92965 respectively.

#### 4.4.2 Life Insurance Financial Products

From Table 4.2, insurance companies undertook product innovation with respect to life insurance financial products. Life insurance financial products were adopted to a moderately M=3.9077; SD=.93962. The data was negatively skewed, with the negative kurtosis suggesting lighter tails and a flatter distribution, given by skewness of -.6058 and kurtosis of -.1994.

**Table 4.2: Life Insurance Financial Products** 

			Std.		
Sub Variables	Statistic	Mean	Deviation	<b>Skewness</b>	Kurtosis
Whole life insurance plans may be changed to improve financial results.	52	3.7692	.96234	610	.162
To improve the financial performance, new endowment policies are implemented.	52	4.0577	.89472	629	387
creation of new social security insurance programs to improve financial results	52	3.8846	.89997	437	513
creation of fresh joint life insurance plans with the goal of enhancing financial outcomes.	52	3.9038	.93431	553	463
To improve financial performance, a new periodic money repayment policy will be introduced.	52	3.9231	1.00676	800	.204
Valid N (Listwise)	52	3.9077	.93962	6058	1994

The outcomes depict that the most adopted life insurance product was new endowment policies, followed by new periodic money payback policy and then new joint life insurance products, each having a mean of M=4.0577; SD=.89472, M=3.9231; SD=1.00676 and M=3.9038; SD=.93431 respectively. The other adopted policies included new social security insurance schemes and modification of whole life insurance policies with a mean of M=3.8846; SD=.89997 and M=3.7692; SD=.96234 respectively.

## **4.4.3** Corporate Insurance Product Innovation

The extent to which the insurance firms practiced corporate insurance product innovation was as given in Table 4.3. It indicates that on average the insurance firms practices such innovation practices to a large extent given by M=4.0385; SD=.84793.

**Table 4.3: Corporate Insurance Product Innovation** 

Sub Variables	Statistic	Mean	Std. Deviation	Skewness	Kurtosis
We make investments in professional indemnity to improve our company's financial performance.	52	4.1154	.80814	680	.097
To improve financial success, our company has recently invested in new insurance plans for machinery breakdown.	52	4.0769	.96703	-1.106	1.088
To improve financial success, our organization offers insurance covers for items in transit.	52	3.9231	.85969	426	416
To improve financial performance, our organization has implemented new work injury insurance coverage.	52	4.0000	.81650	450	306
To improve financial success, our organization has invested in new consequential all risk insurance policies.	52	4.0769	.78830	389	572
Valid N (Listwise)	52	4.0385	.84793	610	022

Table 4.3 indicate that the insurance firms largely invested in professional indemnity, followed by investment in new machinery breakdown insurance policies and then investment in new consequential all risk insurance policies, each having a mean of M=4.1154; SD=.80814, M=4.0769; SD=.96703 and M=4.0769; SD=.78830 respectively. The other products included new work injury insurance policies and goods in transit insurance policies, each having a mean of M=4.0000; SD=.81650 and M=3.9231; SD=.85969 consecutively.

#### **4.4.4 Health Insurance Financial Products**

The adoption of health insurance financial products is as indicated in Table 4.4. The findings establish that on average, the products were adopted greatly with a mean of M=4.0308; SD=.82750. The data was negatively skewed, while the negative kurtosis suggested lighter tails and a flatter distribution of the data.

**Table 4.4: Health Insurance Financial Products** 

			Std.		
Sub Variables	Statistic	Mean	Deviation	Skewness	Kurtosis
In order to improve financial performance and serve new client segments, our organization has launched additional inpatient coverage.	52	4.2308	.73071	705	.343
To improve financial performance, we have invested in new outpatient insurance plans for 58 people.	52	4.0385	.81557	523	202
Our business now provides affordable insurance to improve financial results.	52	4.1538	.82568	733	.018
Our business provides high- and medium-cost insurance to improve bottom line results.	52	3.9423	.87253	438	486
To improve financial performance, new maternity covers have been established.	52	3.7885	.89303	249	667
Valid N (Listwise)	52	4.0308	.82750	530	199

Table 4.4 depict that the insurance firms introduced new inpatient covers to cater for new customer segments to a greater extent, followed by offers of low cost covers and investment in new outpatient insurance covers, each with a mean of M=4.2308; SD=.73071, M=4.1538; SD=.82568 and M=4.0385; SD=.81557 consequetively. The other innovation activities included high and medium cost covers and introduction of new maternity covers given by M=3.9423; SD=.87253 and M=3.7885; SD=.89303.

## **4.5 Descriptive Statistics**

In the study value of the variables were measured in millions (Kshs). Table 4.5 indicate the result of descriptive statistics. It shows that operating cash flows, financial product innovation, leverage level, size of the firm and gross premiums had the means of M=614.0715 (SD=605.10515); M=3.3740 (SD=1.20414); M=2.7427 (SD=5.44982); M=14.0704 (SD=2.80181) and M=14.6131 (SD=1.02186) respectively. Total assets had the highest mean because the total asset were higher per year as compared to the other variables, with significant differences between highest and lowest values, leading to the larger SD.

**Table 4.5: Descriptive Statistics** 

	Statistic	Mean	Std. Deviation	Skewness	Kurtosis
Operating Cash Flow	52	614.0715	605.10515	1.776	4.098
Financial Product Innovation	52	3.3740	1.20414	604	956
Leverage Level	52	2.7427	5.44982	3.830	15.747
Size of the Firm	52	14.0704	2.80181	-2.056	3.207
Gross Premiums	52	14.6131	1.02186	398	.009
Valid N	52				

**Source:** Research Data (2023)

Table 4.5 additionally displays the skewness and kurtosis of the variables being examined. The operating cash flows and leverage levels exhibited positive skewness,

with a value larger than 0.5. This indicates that the distribution was skewed towards the right, with data points concentrated on the left side and longer tails on the right side of the distribution. The distributions of the financial product innovation, firm size, and gross premiums were skewed to the left, as indicated by a negative skewness of less than -0.5. This indicates that the distribution's longer tails were found on the left side, while the data points were concentrated on the right. In contrast to a normal distribution, a distribution with a positive kurtosis suggests heavier tails. Conversely, a distribution with a negative kurtosis suggests lighter tails.

## **4.6 Diagnostics Tests**

These tests were carried out in order to better understand the nature of the data and how much of it could be used in the study. They assisted in determining whether the data had the necessary properties to be used in regression analysis. The results are outlined in more detail below:

## 4.6.1 Reliability Analysis

In order to evaluate a model's reliability, one must compute the percentage of output variance that may be attributed to factors other than measurement errors or data, such as respondents' misunderstanding of the purpose of the question-statements used. It has to do with how much consistent conditions are used to get the results. The reliability and consistency of the measurement data that was gathered are validated by further investigation. Therefore, it is essential to conduct a reliability study in order to guarantee the accuracy of the data that was collected.

Cronbach's alpha numbers from 0 to 1 were used to make the decision in this study. It is best for this test to have a spread between 0.5 and 0.8. It therefore showed that all of the variables in Table 4.6 had alpha > 0.5, hence reliable.

**Table 4.6: Reliability Test** 

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.140	.671	4

**Source:** Research Data (2023)

## 4.6.2 Validity Test

This ensures accuracy in the materials employed during the investigation. Throughout the questionnaire development process, data was assessed and insights from domain experts were deliberated upon and incorporated. The study also evaluated the sufficiency of the sampling, using Kaiser-Meyer-Olkin test must have a value greater than 0.5. All the components included in the survey had KMO values that surpassed the minimal threshold of 0.5, as indicated in Table 4.7.

Table 4.7: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of	.675	
Bartlett's Test of Sphericity	Approx. Chi-Square	84.816
	df	10
	Sig.	.000

**Source:** Research Data (2023)

## **4.6.3 Normality Test**

Regression analysis requires data to be distributed normally. The Shapiro-Wilk Test was used to check for normalcy. Less than 0.05 in the test's statistics indicated that the results may be anomalous. A portion of the data was not regularly distributed, as Table 4.6 shows.

**Table 4.8: Normality Test** 

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Operating cash flow	.155	52	.003	.834	52	.000
Financial Product Innovation	.180	52	.000	.896	52	.000
Leverage Level	.350	52	.000	.479	52	.000
Size of the firm	.284	52	.000	.671	52	.000
Gross premiums	.079	52	.200*	.977	52	.393

<sup>\*.</sup> This represents the genuine significance's lower bound.

## **4.6.4** Multicollinearity Test

When there is a significant correlation between the IV under investigation and the DV, this is referred to as multicollinearity. This may result in statistical insignificance of the parameters under study, even when they are expected to be significant and a distortion of the study outcomes. The multicollinearity of the investigation was assessed using Variance Inflation Factors (VIF). It is advised that the VIF not rise above a value of 10. Table 4.6 confirms the absence of multicollinearity. There are no collinearity issues when the parameters have lower VIF values.

**Table 4.9: Multicollinearity Test** 

		Collinearity	Statistics
Mo	del	Tolerance	VIF
1	(Constant)		
	Financial Product Innovation	.356	2.805
	Size of the firm	.366	2.730
	Gross premiums	.882	1.134
	Leverage Level	.889	1.125

a. Dependent Variable: Operating cash flow

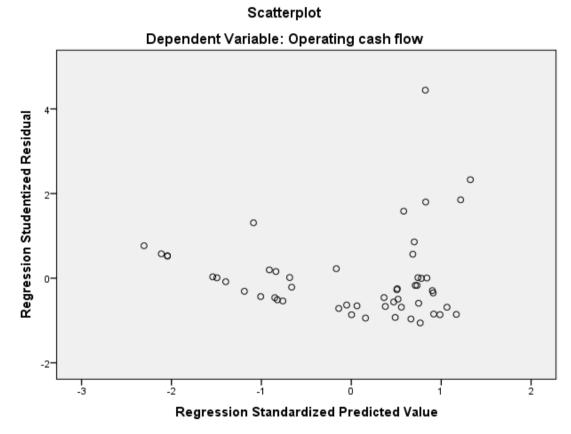
## **4.6.5** Heteroscedasticity Test

It is important to maintain the assumptions of parameter independence and constant error term variance. If there is an absence, it indicates the presence of heteroscedasticity. Homoscedasticity is a fundamental assumption in linear regression models, indicating

a. Correction of Lilliefors Significance

that the variance remains constant across all levels of the predictor variable. Consequently, it is necessary for the data to exhibit homoscedasticity. Figure 4.3 indicate that the spots are dispersed and do not appear to create a distinct unique pattern, hence there was no evidence of heteroscedasticity.

Figure 4.3: Heteroscedasticity Test



Source: Research Data (2023)

## 4.6.6 Linearity Test

It refers to the property where the average measurement of the parameters is confined to a straight line. It is utilized to examine the linear correlation between the measured and explanatory parameters in connection to linear regression models. The aim is to evaluate if the parameters being examined exhibit linearity or non-linearity, with values below 0.05 being deemed acceptable, as shown in Table 4.7:

**Table 4.10: Linearity Test** 

			F	Sig.
Operating cash flow *	Between	(Combined)	1.523	.146
Financial Product	Groups	Linearity	27.469	.000
Innovation		Deviation from Linearity	.442	.976
	Within Grou			
	Total			

Source: Research Data (2023)

#### **4.7 Pearson Correlation Coefficient**

Correlation entails assessing the relationship, link, or association between two variables to ascertain whether they exhibit a positive or negative correlation. If changes in one variable have an effect on the other, it is said that the two variables are interconnected. Correlation coefficients were utilized to illustrate the magnitude of this association or connection, and they quantify the extent to which two variables are interconnected or correlated.

Table 4.11 provides an overview of the correlation analysis's findings. Given by r=.655, p=.000, the results show a very substantial and positive association between operating cash flow and financial product innovation. However, as indicated by r=.560 and p=.000, the firm's size showed a somewhat significant and positive link with operating cash flow. Leverage level had a positive, though insignificant correlation with operating cash flow, while gross premiums had a low negative and insignificant correlation with operating cash flow, each given by r=.117; p=.408 and r=-.230; p=.101 respectively.

**Table 4.11: Correlation Matrix** 

		Operating cash flow	Financial Product Innovation	Leverage Level	Size	Gross premiums
Operating Cash Flow	Pearson Correlation	1	.655**	.117	.560**	230
	Sig. (2-tailed) N		.000 52	.408 52	.000 52	.101 52
Financial Product	Pearson Correlation		1	.163	.794**	163
Innovation	Sig. (2-tailed) N			.249 52	.000 52	.249 52
Leverage Level	Pearson Correlation			1	.111	313*
	Sig. (2-tailed) N				.432 52	.024 52
Size of the Firm	Pearson Correlation				1	072
	Sig. (2-tailed) N					.612 52
Gross Premiums	Pearson Correlation Sig. (2-tailed)					1
	N					

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

## 4.8 Regression Analysis

Researchers looked at how Kenyan insurance companies' cash flow situation was affected by new financial products. The model summary, ANOVA, and regression coefficients, as described below, served as the foundation for the analysis:

## **4.8.1 Model Summary**

Table 4.12 indicate an adjusted R<sup>2</sup> of .404, indicate that 40.4% variations in operating cash flow position were because of financial product innovation by the insurance companies. It follows that a sizable group of variables, including 59.6% of the determinants influencing operating cash flows of insurance companies, were not examined in the present study. The large standard error of estimation of 466.96848 show that the model best fit the data, which indicates effective model's applicability.

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

**Table 4.12: Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.672a	.451	.404	466.96848

a. Predictors: (Constant), Leverage Level, Size of the firm, Gross premiums,

Financial Product Innovation

b. Dependent Variable: Operating cash flow

## 4.8.2 Analysis of Variance

It follows that a sizable group of variables, including 59.6% of the determinants influencing operating cash flows of insurance companies, were not examined in the present study. It implies that variations in predictor variables reliably and significantly cause variations in operating cash flows of insurance firms in Kenya.

**Table 4.13: Analysis of Variance** 

		Sum of		Mean		
Model		Squares	df	Square	$\mathbf{F}$	Sig.
1	Regression	8424965.301	4	2106241.325	9.659	.000 <sup>b</sup>
	Residual	10248799.166	47	218059.557		
	Total	18673764.466	51			

a. Dependent Variable: Operating cash flow

Financial Product Innovation

## 4.8.3 Regression Coefficients

The variables under investigation's regression coefficients are provided in Table 4.14. The beta of 562.120 shows the regression intercept, indicating that the total of operating cash flows takes the value of 562.120 if variations caused by financial product innovation is zero. The slope's positive value suggests that financial product innovation has a favorable impact on Kenyan insurance companies' operating cash flow. A beta value of 268.337; p=.005 indicates that financial product innovation significantly improved the operating cash flows of insurance companies in Kenya. It implied that

b. Predictors: (Constant), Leverage Level, Size of the firm, Gross premiums,

operating cash flows varies with 268.337, when there is a unit variation in financial product innovation.

Given that their p> 0.05, the results also show that the firm's size, gross premiums, and degree of debt had no statistically significant impact on the operating cash flows of insurance companies in Kenya. The firms' leverage levels and gross premiums had negative beta values of -3.193 and -84.574, respectively. It follows that a decline in the operating cash flows of the insurance companies was linked to a rise in gross premiums and leverage levels.

**Table 4.14: Regression Coefficients** 

			ndardized fficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	562.120	1063.378		.529	.600
	Financial Product Innovation	268.337	90.949	.534	2.950	.005
	Size of the firm	27.804	38.561	.129	.721	.474
	Gross premiums	-84.574	68.149	143	-1.241	.221
	Leverage Level	-3.193	12.726	029	251	.803

a. Dependent Variable: Operating cash flow

The regression model to be used can therefore be summarized as follows:

 $Y = 562.120 + 268.337X_1 + 27.804X_2 - 84.574X_3 - 3.193X_4 + \varepsilon$ ; Where Y = operating cash flows, X<sub>1</sub>= Financial product innovations, X<sub>2</sub>= Size of the firm, X<sub>3</sub> = Gross premiums, and X<sub>4</sub> = Leverage levels.

## 4.9 Discussion of Findings

The purpose of the study was to check financial product innovation impact on Kenyan insurance companies' cash flow situation. The insurance companies' financial product innovation was responsible for 40.4% of the fluctuations in operational cash flow position, according to the modified R2 of 404. It was concluded that a large group of

variables, including 59.6% of those affecting the operating cash flows of insurance companies, had not been examined in the current study. The model best fit the data, as seen by the huge standard error of estimation of 466.96848; this suggests the applicability of the effective model. The results aligned with the research conducted by Ndwiga and Maina (2018), which revealed a positive association between the 2 constructs. b

Given that the p figure is smaller than 0.05, financial product innovation consequently has a considerable impact on the operating cash flows of insurance companies. The F-statistic of 9.659 also shows that there is less dissimilarity between sample means than there is within-sample dissimilarity. It suggests that changes in predictor variables substantially and consistently influence changes in the operating cash flows of Kenyan insurance companies. The regression coefficients indicate the beta of 562.120 showing that the total of operating cash flows takes the value of 562.120 if variations caused by financial product innovation is zero. The slope's positive value suggests that financial product innovation positively impacts the operating cash flow of insurance companies operating in Kenya. A beta value of 268.337; p=.005 indicates that financial product innovation significantly improved the operating cash flows of insurance companies in Kenya. It implied that operating cash flows varies with 268.337, when there is a unit variation in financial product innovation.

Given that their p> 0.05, the results also showed that the firm's size, gross premiums, and degree of debt had no statistically significant impact on the operating cash flows of insurance companies in Kenya. The firms' leverage levels and gross premiums had negative beta values of -3.193 and -84.574, respectively. It follows that a decline in the

operating cash flows of the insurance companies was linked to a rise in gross premiums and leverage levels.

The study's findings regarding the degree of adoption of innovative financial products revealed that, on average, insurance firms embraced general insurance financial products to a modest degree, with M= 3.8962 (SD=.95386). The most adopted product among the insurance companies was the new motor vehicle insurance policies, followed by marine insurance products and new classes of student accident covers, each M=4.1346; SD=.90811, M=3.8654; SD=.97073 and M=3.8654; SD=.95031. Other general insurance financial products included new classes and policies of property insurance and political violence and terrorism insurance policies, M=3.8077; SD=1.01050 and M=3.8077; SD=.92965 accordingly. It was also established that life insurance financial products were adopted moderately M=3.9077; SD=.93962. The most adopted life insurance product was new endowment policies, followed by new periodic money payback policy and then new joint life insurance products, each having a mean of M=4.0577; SD=.89472, M=3.9231; SD=1.00676 and M=3.9038; SD=.93431 accordingly. The other adopted policies included new social security insurance schemes and modification of whole life insurance policies (M=3.8846; SD=.89997 and M=3.7692; SD=.96234) accordingly.

Further, on average the insurance firms practices such innovation practices to a large extent given by M=4.0385; SD=.84793. The findings were that the insurance firms largely invested in professional indemnity, followed by investment in new machinery breakdown insurance policies and then investment in new consequential all risk insurance policies, each having a mean of M=4.1154; SD=.80814, M=4.0769; SD=.96703 and M=4.0769; SD=.78830 respectively. The other products included new

work injury insurance policies and goods in transit insurance policies, each having a mean of M=4.0000; SD=.81650 and M=3.9231; SD=.85969 accordingly. Finally, the study on average adopted health insurance financial products greatly with a mean of M=4.0308; SD=.82750. The insurance firms introduced new inpatient covers to cater for new customer segments to a greater extent, followed by offers of low cost covers and investment in new outpatient insurance covers, each with a mean of M=4.2308; SD=.73071, M=4.1538; SD=.82568 and M=4.0385; SD=.81557 accordingly. The other innovation activities included high and medium cost covers and introduction of new maternity covers given by M=3.9423; SD=.87253 and M=3.7885; SD=.89303.

## **CHAPTER FIVE**

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

Enlisted here are combined outcomes and what assertions were made. It also outlines the difficulties encountered during the research process.

## **5.2 Summary of Findings**

Purposefully, the investigation was to ascertain how financial product innovation affected Kenyan insurance companies' cash flow situation. The insurance companies' financial product innovation was responsible for 40.4% of the fluctuations in operational cash flow position, according to the modified R2 of.404. The results showed that a sizable group of factors, including 59.6% of those influencing operating cash flows of insurance companies, were not examined in the present study. Given that the p-< 0.05, financial product innovation consequently has a considerable impact on the operating cash flows of insurance companies. The F-statistic of 9.659 also shows that changes in the predictor variables substantially and consistently influence changes in the operating cash flows of Kenyan insurance companies.

The regression coefficients indicates the beta of 562.120 showing that the total of operating cash flows takes the value of 562.120 if variations caused by financial product innovation is zero. The slope's positive value suggests that financial product innovation positively impacts the operating cash flow of insurance companies operating in Kenya. A beta value of 268.337; p=.005 indicates that financial product innovation significantly improved the operating cash flows of insurance companies in Kenya. It implied that operating cash flows varies with 268.337, when there is a unit variation in financial product innovation. Given that their p> 0.05, the outcomes also

showed that the firm's size, gross premiums, and degree of debt had no statistically significant impact on the operating cash flows of insurance companies in Kenya. The firms' leverage levels and gross premiums had negative beta values of -3.193 and -84.574, consecutively. It follows that a decline in the operating cash flows of the insurance companies was linked to a rise in gross premiums and leverage levels.

The study's findings regarding the degree of adoption of innovative financial products revealed that, on average, insurance firms embraced general insurance financial products to a modest degree, M=3.8962 (SD=.95386). Accordingly, life insurance financial products were adopted moderately M=3.9077; SD=.93962. The most adopted life insurance product was new endowment policies, followed by new periodic money payback policy and then new joint life insurance products, each having a mean of M=4.0577; SD=.89472, M=3.9231; SD=1.00676 and M=3.9038; SD=.93431 subsequently. Further, on average the insurance firms practiced life insurance product innovation practices to a large extent given by M=4.0385; SD=.84793. The findings were that the insurance firms largely invested in professional indemnity, followed by investment in new machinery breakdown insurance policies and then investment in new consequential all risk insurance policies, each having a mean of M=4.1154; SD=.80814, M=4.0769; SD=.96703 and M=4.0769; SD=.78830 subsequently. Finally, the study on average adopted health insurance financial products greatly with a mean of M=4.0308; SD=.82750.

#### **5.3** Conclusion of the Study

The conclusion drawn is that financial product innovation had a major impact on the operating cash flows of insurance companies based on its research objectives. It was determined that financial product innovation significantly improves the operating cash

flows of Kenyan insurance companies. However, there was no statistically significant impact of the firm's size, gross premiums, or amount of leverage on the operating cash flows of Kenyan insurance companies. It was also determined that a decline in the operating cash flows of the insurance companies was linked to an increase in gross premiums and leverage levels. The study came to the conclusion that insurance businesses generally embraced general and life insurance financial products to a moderate amount when it came to the extent of adoption of financial product innovation. Additionally, the insurance companies often employed corporate and health insurance product innovation strategies to a considerable degree.

## **5.4 Recommendations of the Study**

The conclusions recommend that providing insurance to improve their products by customizing insurance plans to more closely match the unique needs of their clients. Insurance businesses should do market research to evaluate the insurance requirements and deficiencies, as financial product innovation has a substantial impact on operational cash flows. Another suggestion is for insurance companies to encourage innovation in affordable premium offerings that specifically cater to low-income individuals, with the aim of improving performance and boosting insurance penetration rates in Kenya. In addition, insurance companies should use the most effective strategies used by African countries with the greatest rates of insurance coverage, such as South Africa and Morocco. This would guarantee that the enterprises actively participate in innovation that enhances performance and fulfills client requirements.

Additionally, insurance entities should enhance their efforts in the development of innovative health policies. Although this analysis suggests that this element has a

minimal effect on financial success, recent events like the COVID-19 epidemic highlight the significance of health insurance. Insurance businesses should develop innovative financial products in order to improve their performance and attract new customers. Regulatory agencies like IRA should aim to reduce barriers that impede financial innovation in the insurance market of Kenya. The IRA should bring about a radical transformation in the Kenyan insurance sector by raising awareness among customers, hence increasing market penetration and enhancing the industry's performance.

## **5.5** Limitations of the Study

A few problems that came up along the road made the study's conduct process more difficult. The research project required a laborious and time-consuming procedure to quickly gather data from a large number of respondents. This was accomplished by utilizing primary and secondary sources of information to compile the information. The researcher depended extensively on the support of a big number of research assistants in order to acquire the data that was required.

Furthermore, this study employed questionnaires to gather information on the degree of uptake of innovative financial products, a concept that is subject to competition. Because they believed the material to be extremely private and sensitive, some of the respondents were hesitant to divulge it. The reasons for their reluctance were varied. In an effort to find a solution to the issue, the questions were revised to make them substantially simpler and more open to interpretation, as well as the conviction that the data was only meant for academia only.

## **5.6 Suggestions for Further Study**

It is advised that more investigation be done in other institutions, including the hotel industries, to ascertain the degree to which the introduction of novel financial products affects financial performance, as this study was not exhaustive. In addition, the research found that there are other factors that account for 59.6% of the total influence that operating cash flows have on insurance companies, but those components were omitted from this study. These additional aspects could be investigated in further studies.

To find out if the results of this study apply to different kinds of situations, it is necessary to repeat the findings using the same variables in other studies. It is also possible to conduct a second study on the same research question using alternative metrics, such as return on assets test financial performance, to see if the results concur or conflict with the previous conclusions.

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## **APPENDIX I: QUESTIONNAIRE**

Date/	/2022									
A. DEM	OGRAPHIC INFORMATION									
1. Name of the Insurance Company										
2. What	2. What is the number of employees in the company (Select by ticking in the box)									
a. 5	- 20 Employees [ ]									
b. 2	1 – 40 Employees [ ]									
c. 42	1-60 Employees [ ]									
d. O	ver 60 Employees [ ]									
B. EXT	ENT OF ADOPTION OF FINANCIAL PROD	UCT	INN	OVA	TION	1				
Please in	dicate the level of your agreement with the exte	nt to	whic	h the	insur	ance				
	es have adopted financial product innovation, usin									
•	small extent; $2 = \text{Small extent}$ ; $3 = \text{Moderate ex}$	_			extent	and				
-	very large extent	,		C						
General	Insurance Financial Products	1	ı	1	1	1				
		1	2	3	4	5				
1.	Our company regularly introduces marine									
	insurance products to enhance financial									
	performance.									
2.	Our company has introduced new classes and									
	policies of property insurance to boost									
	financial performance.									
3.	We have introduced new classes of student									
	accident covers to enhance our financial									
	performance.									
4.	Our company has developed new motor									
	vehicle insurance policies to enhance financial									
	performance.									
5.	Our company has developed political violence									
	and terrorism insurance policies to cover boost									
	financial performance.									
Life Insu	rance Financial Products									
		1	2	3	4	5				
1.	Our company modifies whole life insurance									
	policies to boost financial performance.									
2.	New endowment policies are used to enhance									
	financial performance									
3.	Our company has developed new social									

	security insurance schemes to enhance financial performance			
4.	Our company has developed new joint life insurance products to foster financial performance.			
5.	Our company has introduced new periodic money payback policy policies to enhance financial performance.			

## **Corporate Insurance Product Innovations**

		1	2	3	4	5
1.	Our organization invests in professional					
	indemnity to enhance financial performance.					
2.	Our company has in recent years invested in					
	new machinery breakdown insurance policies					
	to enhance financial performance.					
3.	Our company provides goods in transit					
	insurance policies to enhance financial					
	performance.					
4.	Our company has introduced new work injury					
	insurance policies to enhance financial					
	performance					
5.	Our company has invested in new					
	consequential all risk insurance policies to					
	enhance financial performance.					

## **Health Insurance Financial Products**

		1	2	3	4	5
1.	Our company has introduced new inpatient					
	covers to cater for new customer segments and					
	enhance financial performance.					
2.	We have invested in new outpatient insurance					
	covers to 58 enhance financial performance.					
3.	Our company now offers low cost covers to					
	enhance financial performance.					
4.	Our company offers high and medium cost					
	covers to enhance financial performance.					
5.	We have introduced new maternity covers to					
	enhance financial performance.					

# APPENDIX II: SUMMARY OF RAW DATA

Insurance	Operating	Financial Product	Leverage of the	Size of	Gross
Company	cash flow	Innovation	Firm	the firm	Premiums
1.	9.49	1.8	0.19	11.42	15.54
2.	220.57	3.4	1.71	14.77	14.93
3.	444.74	4.2	1.74	15.68	14.03
4.	60.68	2.4	0.2	13.2	14.93
5.	62.23	2.6	0.02	13.24	16.07
6.	602.99	4.6	0.94	15.64	14.59
7.	342.81	2.4	0.24	14.82	15.89
8.	342.81	2.8	0.09	14.85	16.46
9.	645.24	2.8	1.88	15.76	14.13
10.	719.31	2	0.18	15.67	16.12
11.	467.04	4.1	0.15	15.66	15.67
12.	598.11	4	1.53	15.51	14.56
13.	0.29	1	0.01	6.74	14.88
14.	737.07	4.8	1.75	15.79	14.56
15.	327.96	2	2.07	15.42	15.13
16.	699.64	4.4	0.17	15.63	16.01
17.	10.91	1.4	1.91	12.82	15.19
18.	18.19	1.6	3.48	12.49	13.26
19.	920.66	4.6	1.4	15.94	15.59
20.	554.88	4.1	1.12	15.05	15.53
21.	0	1	0.08	6.88	15.91
22.	703.56	4.8	1.64	15.64	13.98
23.	255.9	3.2	-2	14.01	13.2
24.	709.54	4.2	1.4	15.84	15.39
25.	834.84	4.6	1.29	15.91	15.63
26.	956.97	4.8	0.58	16.15	15.83
27.	50.38	2.2	2.4	13.51	14.68
28.	389.04	3.85	2.8	15.2	14.11
29.	453.74	3.8	19.45	14.97	12.97
30.	649.52	4.15	30.78	15.3	13.82
31.	632.73	4.25	0.88	14.97	12.83
32.	230.34	3.2	0.64	14.24	14.8
33.	341.77	3.6	3.08	14.85	15.32
34.	303.03	3.2	9.98	14.58	14.47
35.	827.37	4.7	1.13	15.71	14.98
36.	549.61	3.8	1.61	14.69	13.85
37.	857.84	3.75	4.32	15.13	11.64
38.	1572.15	3.95	3.1	15.74	14.15
39.	0.05	1.2	1.88	5.47	14.76
40.	2.2	1.4	1.85	9.17	14.15
41.	1286.97	4	1.37	15.54	13.65

Insurance Company	Operating cash flow	Financial Product Innovation	Leverage of the Firm	Size of the firm	Gross Premiums
42.	248.63	2.4	0.43	13.89	14.67
43.	928.68	4	1.34	15.21	13.13
44.	0.1	1.2	3.32	6.08	14.97
45.	1761.5	4.6	1.51	15.85	15.12
46.	1148.74	4	3.37	15.42	13.69
47.	2963.33	4.2	0.55	16.37	13.98
48.	1939.9	4.8	18.22	15.95	13.84
49.	2189.66	4.8	1.08	16.07	13.33
50.	829.22	4.8	1.51	15.1	16.12
51.	528.39	4	0.61	14.65	14.07
52.	0.4	2	1.64	7.47	13.77

## APPENDIX III: LIST OF INSURANCE COMPANIES

- 1. AAR Insurance Kenya Ltd.
- 2. ABSA Life Assurance Kenya Ltd.
- 3. Africa Merchant Assurance Co Ltd.
- 4. AIG Kenya Insurance Company Ltd.
- 5. APA Insurance Ltd.
- 6. APA Life Insurance Ltd.
- 7. Britam General Insurance Company (K) Ltd.
- 8. Britam Life Assurance Insurance Co (K) Ltd.
- 9. Capex Life Assurance Company Ltd.
- 10. CIC General Insurance Ltd.
- 11. CIC Life Assurance Ltd.
- 12. Corporate Insurance Company Ltd.
- 13. Direct line Assurance Company Ltd.
- 14. Equity Life Assurance (K) Ltd.
- 15. Fidelity Shield Insurance Company Ltd.
- 16. First Assurance Company Ltd.
- 17. GA Insurance Ltd.
- 18. Geminia Insurance Company Ltd.
- 19. Geminia Life Insurance Company Ltd.
- 20. Heritage Insurance Company Kenya Ltd.
- 21. ICEA Lion General Insurance Company Ltd.
- 22. ICEA Lion Life Assurance Company Ltd.
- 23. Intra Africa Assurance Company Ltd.
- 24. Invesco Assurance Company Ltd.
- 25. Jubilee Allianz General Insurance Co Ltd.
- 26. Jubilee Health Insurance Ltd.
- 27. Jubilee Life Insurance Company Kenya Ltd.
- 28. Kenindia Assurance Company Ltd.
- 29. Kenya Orient Insurance Ltd.
- 30. Kenya Orient Life Assurance Ltd.
- 31. Kenyan Alliance Insurance Company Ltd.
- 32. Kuscco Mutual Life Assurance Co Ltd.
- 33. Liberty Life Assurance Kenya Ltd.
- 34. Madison General Insurance Kenya Ltd.
- 35. Madison Life Insurance Kenya Ltd.
- 36. Mayfair Insurance Company Ltd.
- 37. Metropolitan Cannon General Insurance Ltd.
- 38. Metropolitan Cannon Life Assurance Ltd.
- 39. Mua Insurance Co Ltd.
- 40. Occidental Insurance Company Ltd.
- 41. Pacis Insurance Company Ltd.

- 42. Pioneer General Insurance Company Ltd.
- 43. Pioneer Life Assurance Company Ltd.
- 44. Prudential Assurance Kenya Ltd.
- 45. Sanlam General Insurance Company Ltd.
- 46. Sanlam Life Insurance Ltd.
- 47. Takaful Insurance of Africa Ltd.
- 48. Tausi Assurance Company Ltd.
- 49. The Monarch Insurance Company Ltd.
- 50. Trident Insurance Company Ltd.
- 51. Old Mutual General Insurance Company.
- 52. Old Mutual Life Assurance Company Ltd.
- 53. Xplico Insurance Company Ltd.

**Source:** AKI (2022)