THE IMPACT OF CASH FLOW MANAGEMENT ON INSURANCE FIRM PROFITABILITY

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BEING A PROJECT SUBMITTED TO THE DEPARTMENT OF ACTUARIAL SCIENCE, FACULTY OF MANAGEMNT SCIENCES, UNIVERSITY OF BENIN, BENIN CITY.
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR DEGREE (BSc) IN ACTUARIAL SCIENCE

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DECLARATION

I, Ojieh Emmanuel Chukwunedum hereby declare that:

This project is a study carried out by me in the Department of Actuarial Science, Faculty of Management Sciences, University of Benin, Benin City under the supervision of Dr Omorokunwa, of the Department of Actuarial Science, Faculty of Management Sciences, University of Benin, Benin City, Edo State, Nigeria.

To the best of my knowledge, this work has not been submitted for the award of any degree elsewhere. All the ideas and views are the product of my personal research efforts. All references made to the works of others were duly acknowledged. I shall solely and completely be accountable for any liability that may arise from this study.

_____ _____

OJIEH EMMANUEL CHUKWUNEDUM **Date**

CERTIFICATION

This is to certify that this research work titled "**The impact of cash flow management on insurance firm profitability**" was carried out by **Ojieh Emmanuel Chukwunedum** with matriculation number **MGS1907889** under our supervision of Dr Omorokunwa in the Department of Actuarial Science, Faculty of Management Sciences, University of Benin, Benin City, and it is considered adequate in scope and quality in partial fulfillment of the requirements for the award of Bachelor Degree in Actuarial Science.

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(Head of Department)

DEDICATION

I dedicate this research work to God Almighty in recognition of His grace and mercy that has been a beacon of strength throughout my study in the University of Benin.

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ABSTRACT

The main aim of the study is to explore the impact of cash flow management on insurance firm profitability. Specifically, the study aims to examine the relationship between operating activities and insurance firm profitability, examine the relationship between investing activities and insurance firm profitability, and to examine the relationship between financing activities and insurance firm profitability, using panel data covering the period 2013–2022. In this study, cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities are employed as the main independent variables, while profitability is measured using return on assets. To achieve the objectives of the study, pooled Ordinary Least Squares regression was initially estimated, followed by diagnostic tests for multicollinearity and heteroscedasticity. Preliminary analyses, including descriptive statistics, normality tests, and Spearman rank correlation analysis, were also conducted to understand the distributional properties and associations among the variables. Given the presence of heteroscedasticity, robust regression techniques were employed to ensure reliable statistical inference. The empirical findings with respect to each specific objective of the study are summarized as follows. Cash flow from operating activities [coef. = 13.818 (0.000)] has a positive and statistically significant effect on the return on assets of the selected insurance firms in Nigeria during the period under study. This indicates that insurance firms with stronger operating cash inflows tend to record higher profitability. Cash flow from financing activities [coef. = –7.187 (0.048)] has a negative and statistically significant effect on the return on assets of the selected insurance firms in Nigeria during the period under study. This finding suggests that increased reliance on financing activities is associated with lower profitability among the sampled insurance firms. Cash flow from investing activities [coef. = –7.117 (0.000)] has a negative and statistically significant effect on the return on assets of the selected insurance firms in Nigeria during the period under study. This implies that higher investment-related cash outflows are associated with reduced profitability in the short run. The study recommend that insurance firms should strengthen the management of cash flow from operating activities by improving underwriting discipline, premium collection processes, and claims settlement efficiency. Corporate managers and directors are responsible for implementing robust internal controls and operational monitoring systems, which will enhance operating cash inflows and support sustained profitability. This will also improve investor confidence and enhance firm valuation

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Cash flow management is a critical aspect of financial management in insurance firms, as it directly impacts their profitability and solvency. Insurance companies face unique cash flow challenges due to the nature of their business, which involves collecting premiums upfront and paying out claims over time (Cummins & Doherty, 2006). Effective cash flow management enables insurance firms to meet their financial obligations, invest in profitable opportunities, and maintain their solvency (Harrington & Niehaus, 2000). In the insurance industry, cash flow management involves managing the inflows and outflows of cash to ensure that the company has sufficient liquidity to meet its obligations (Vaughan & Vaughan, 2008). This includes managing premium income, investment income, claims payments, and operating expenses. Poor cash flow management can lead to liquidity crises, which can have severe consequences for insurance firms, including reduced profitability, decreased solvency, and even insolvency (A.M. Best, 2019). Actuaries play a crucial role in managing cash flow in insurance firms by providing expertise on risk management, financial modeling, and asset-liability management (Klugman et al., 2019). They use statistical models and financial theories to forecast cash flows, assess risks, and develop strategies to optimize cash flow management (Werner & Modlin, 2016).

The significance of cash flow management in insurance firms cannot be overstated. Insurance companies operate in a highly regulated environment, and their financial stability is crucial to policyholders, regulators, and investors (D'Arcy & Gorvett, 2004). Effective

cash flow management enables insurance firms to maintain their financial stability, invest in profitable opportunities, and meet their financial obligations. In the context of insurance firms, cash flow management is closely linked to risk management. Insurance companies face various risks, including underwriting risk, investment risk, and operational risk (Cummins & Phillips, 2005). Effective cash flow management helps insurance firms to mitigate these risks by maintaining adequate liquidity, diversifying investments, and ensuring sufficient capital to cover potential losses. Studies have shown that effective cash flow management can lead to improved profitability, increased financial stability, and enhanced competitiveness (Myers & Read, 2001). Conversely, poor cash flow management can lead to reduced profitability, decreased financial stability, and increased risk of insolvency. Insurance firms can adopt various strategies to improve their cash flow management, including cash flow forecasting, cash flow optimization, and asset-liability management (ALM) (Babbel & Merrill, 2005). Asset-liability management involves managing the assets and liabilities of an insurance firm to ensure that they are aligned with each other and with the firm's overall risk management objectives.

The Nigerian insurance industry, like many others globally, operates in a complex and dynamic environment. The industry is subject to various regulatory requirements, market fluctuations, and economic uncertainties (Adegbie & Fakile, 2013). Effective cash flow management is crucial for insurance firms in Nigeria to navigate these challenges and maintain their financial stability. In recent years, the Nigerian insurance industry has experienced significant changes, including the introduction of new regulations and the increasing use of technology (NAICOM, 2020). These changes have created new opportunities and challenges for insurance firms, particularly in terms of cash flow

management. For instance, the use of technology has enabled insurance firms to streamline their operations and improve their cash flow management, but it has also created new risks and challenges (OECD, 2017). The impact of cash flow management on insurance firm profitability in Nigeria is a critical area of research.

Studies have shown that insurance firms in Nigeria face significant challenges in managing their cash flows, including inadequate liquidity, poor investment decisions, and high operating costs (Adelegan, 2016). Effective cash flow management can help insurance firms in Nigeria to overcome these challenges and improve their profitability.

Furthermore, the Nigerian economy has experienced various fluctuations in recent years, including changes in interest rates, exchange rates, and inflation rates (CBN, 2022). These fluctuations can have a significant impact on the cash flows of insurance firms, particularly those with investments in assets that are sensitive to changes in interest rates and exchange rates. The complexity of insurance products and services also poses a challenge to cash flow management in insurance firms. Insurance companies offer a wide range of products, including life insurance, health insurance, and property insurance, each with its own unique characteristics and risks (Swiss Re, 2020). Effective cash flow management requires insurance firms to have a deep understanding of these products and their associated risks. In addition, the increasing competition in the insurance industry has led to a greater emphasis on cash flow management. Insurance firms must balance the need to generate profits with the need to maintain adequate liquidity and solvency (EIOPA, 2019). This requires careful management of cash flows, investments, and risk.

The impact of macroeconomic factors on cash flow management in insurance firms is also significant. Economic downturns, changes in interest rates, and other macroeconomic

factors can affect the cash flows of insurance firms and their ability to meet their financial obligations (IMF, 2019). The role of technology in cash flow management is becoming increasingly important. Insurance firms are leveraging technology to improve their cash flow management, including the use of data analytics and artificial intelligence (McKinsey, 2020). The impact of cash flow management on insurance firm profitability is a complex and multifaceted issue that requires careful consideration of various factors, including regulatory requirements, market fluctuations, and macroeconomic conditions. This study will explore the relationship between cash flow management and profitability in insurance firms, with a focus on the Nigerian insurance industry.

1.2 Statement of Research Problem

The insurance industry plays a crucial role in the economic development of any country, including Nigeria. However, the industry faces various challenges that impact its profitability and sustainability. One of the significant challenges facing insurance firms is the management of cash flows. Cash flow management is critical to the success of insurance firms, as it enables them to meet their financial obligations, invest in profitable opportunities, and maintain their solvency.

According to a report by the National Insurance Commission of Nigeria (NAICOM), the Nigerian insurance industry faces various challenges, including inadequate liquidity, poor investment decisions, and high operating costs (NAICOM, 2020). These challenges can impact the cash flow management of insurance firms, leading to reduced profitability and increased risk of insolvency. A study by Adelegan (2016) found that insurance firms in Nigeria face significant challenges in managing their cash flows, including inadequate

liquidity, poor investment decisions, and high operating costs. The study concluded that effective cash flow management is critical to the success of insurance firms in Nigeria.

Another challenge facing insurance firms in Nigeria is the lack of effective risk management strategies. Insurance firms are exposed to various risks, including underwriting risk, investment risk, and operational risk (Swiss Re, 2020). Effective risk management strategies are critical to mitigating these risks and ensuring the sustainability of insurance firms. The impact of cash flow management on insurance firm profitability is a critical area of research. Studies have shown that effective cash flow management can lead to improved profitability, increased financial stability, and enhanced competitiveness (Myers & Read, 2001). Conversely, poor cash flow management can lead to reduced profitability, decreased financial stability, and increased risk of insolvency. Furthermore, the Nigerian economy has experienced various fluctuations in recent years, including changes in interest rates, exchange rates, and inflation rates (CBN, 2022). These fluctuations can have a significant impact on the cash flows of insurance firms, particularly those with investments in assets that are sensitive to changes in interest rates and exchange rates.

The challenges facing insurance firms in Nigeria are complex and multifaceted. Effective cash flow management requires insurance firms to have a deep understanding of their financial obligations, investment opportunities, and risk management strategies. The impact of cash flow management on insurance firm profitability is a critical area of research that requires further exploration. The lack of effective cash flow management can lead to liquidity crises, which can have severe consequences for insurance firms, including reduced profitability, decreased financial stability, and increased risk of insolvency (Cummins &

Doherty, 2006). In Nigeria, the situation is further exacerbated by the country's economic instability, infrastructure challenges, and regulatory requirements.

Insurance firms in Nigeria must navigate a complex regulatory environment, which can impact their cash flow management. The National Insurance Commission of Nigeria (NAICOM) sets strict guidelines for insurance firms, including requirements for solvency margins, riskbased capital, and investment limits (NAICOM, 2020). Compliance with these regulations can be challenging for insurance firms, particularly those with limited resources. The impact of cash flow management on insurance firm profitability is also influenced by the firm's investment decisions. Insurance firms invest in various assets, including stocks, bonds, and real estate, to generate returns and manage their risk (Swiss Re, 2020). However, these investments can be affected by market fluctuations, interest rate changes, and other economic factors, which can impact the firm's cash flows and profitability. Furthermore, the increasing competition in the Nigerian insurance industry has led to a greater emphasis on cash flow management. Insurance firms must balance the need to generate profits with the need to maintain adequate liquidity and solvency (EIOPA, 2019). This requires careful management of cash flows, investments, and risk. The role of technology in cash flow management is also becoming increasingly important. Insurance firms are leveraging technology to improve their cash flow management, including the use of data analytics and artificial intelligence (McKinsey, 2020). However, the adoption of technology also requires significant investment, which can impact the firm's cash flows and profitability.

The challenges facing insurance firms in Nigeria, including regulatory requirements, economic instability, and increasing competition, highlight the need for effective cash flow management strategies to ensure the sustainability and profitability of these firms.

1.3 Aims and Objectives of the Study

The main aim and objective of the study is to explore the impact of cash flow management on insurance firm profitability. Specifically, the study aims to:

1. Examine the relationship between operating activities and insurance firm profitability.
2. Examine the relationship between investing activities and insurance firm profitability.
3. Examine the relationship between financing activities and insurance firm profitability.

1.4 Research Questions

The research questions for this study are:

1. What is the relationship between operating activities and insurance firm profitability?
2. What is the relationship between investing activities and insurance firm profitability?
3. What is the relationship between financing activities and insurance firm profitability?

1.5 Research Hypotheses

- H1: There is a significant relationship between operating activities and insurance firm profitability

- H2: There is a significant relationship between investing activities and insurance firm profitability

- H3: There is a significant relationship between finacing activities and insurance firm profitability

1.6 Significance of the Study

This study on the impact of cash flow management on insurance firm profitability in Nigeria is significant in several ways. This study contributes to the existing body of knowledge on cash flow management and profitability in the insurance industry, particularly in the Nigerian context. It provides new insights into the relationship between cash flow management and profitability, and identifies effective cash flow management strategies that can improve the profitability of insurance firms (Myers & Read, 2001).

The findings of this study can inform policy decisions by regulatory bodies, such as the National Insurance Commission of Nigeria (NAICOM), on how to improve the financial stability and profitability of insurance firms in Nigeria. The study's recommendations can also guide policymakers in developing policies that promote effective cash flow management practices in the insurance industry (NAICOM, 2020).

This study provides empirical evidence on the impact of cash flow management on insurance firm profitability in Nigeria, which can be used by insurance firms, regulators, and researchers to improve their understanding of the relationship between cash flow management and profitability. The study's findings can also be used to develop more effective cash flow management strategies and improve the overall financial performance of insurance firms (Cummins & Doherty, 2006).

The study's findings can contribute to the development of theories on cash flow management and profitability in the insurance industry. The study's results can be used to refine existing theories and models of cash flow management, and to develop new theories that take into account the unique characteristics of the Nigerian insurance industry (Swiss Re, 2020).

This study provides a foundation for further research on cash flow management and profitability in the insurance industry. The study's findings and limitations can be used to identify areas for further research, and to develop new research questions and hypotheses that can be tested in future studies.

1.7 Scope of the Study

This study focuses on audited annual financial statements of selected insurance companies in Nigeria. The scope of this research encompasses an in-depth examination of the impact of cash flow management on profitability within Insurance companies, highlighting the specific challenges and opportunities faced by the company in managing its cash flows and maintaining profitability in the Nigerian insurance industry.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews existing literature on the impact of cash flow management on insurance firm profitability, exploring theoretical frameworks, concepts, and empirical findings to provide a foundation for this study.

2.2 Conceptual Review of Firm Profitability

Firm profitability is a crucial aspect of business performance, and it has been extensively studied in various fields, including finance, accounting, and management. According to Gitman and Zutter (2019), profitability refers to the ability of a firm to generate earnings and sustain itself over time. Profitability is often measured using financial ratios such as return on assets (ROA), return on equity (ROE), and net profit margin (NPM) (Ross et al., 2020). Research has identified various factors that influence firm profitability, including firm size (Hall & Weiss, 1967), industry characteristics (Porter, 1980), management quality (Hambrick & Mason, 1984), and financial management practices (Myers, 1984). In the insurance industry, factors such as underwriting risk, investment income, and operational efficiency are critical determinants of profitability (Cummins & Weiss, 2000).

The insurance industry is characterized by unique features, such as inverted production cycles and risk management complexities (Cummins & Doherty, 2006). Firm profitability is influenced by various internal and external factors, including management decisions, industry characteristics, and economic conditions (Brealey et al., 2020). Effective management of resources, costs, and revenues is crucial for sustaining profitability

(Horngren et al., 2019). Insurance firms, in particular, face unique challenges in maintaining profitability due to the inherent risks and uncertainties associated with their business (Cummins & Weiss, 2000). The ability of insurance firms to generate profits is critical for their survival and growth, as it enables them to invest in new business opportunities, pay dividends to shareholders, and build reserves to cover future claims (Liebenberg & Sommer, 2008). Profitability also serves as a key performance indicator for insurance firms, allowing them to evaluate their financial health and make informed strategic decisions (Swiss Re, 2020).

The concept of profitability is multifaceted and can be influenced by a myriad of factors, including firm-specific characteristics, industry dynamics, and macroeconomic conditions. For instance, the structure-conduct-performance paradigm suggests that industry structure and firm conduct can significantly impact profitability (Bain, 1956). Additionally, the resource-based view of the firm posits that firms with unique resources and capabilities can achieve sustained profitability (Barney, 1991). In the context of insurance firms, profitability is often measured using metrics such as return on equity (ROE) and return on assets (ROA). These metrics provide insights into an insurer's ability to generate profits from its operations and investments (Cummins & Weiss, 2000). Furthermore, insurers' profitability is also influenced by their risk management practices, including underwriting risk, investment risk, and operational risk (Cummins & Doherty, 2006).

The impact of firm size on profitability is also a topic of interest in the literature. Some studies suggest that larger firms can achieve economies of scale and scope, leading to increased profitability (Hall & Weiss, 1967). However, other studies argue that smaller firms can be more agile and responsive to changing market conditions, which can also

contribute to profitability (Porter, 1980). Moreover, the role of management quality and corporate governance in influencing profitability cannot be overstated. Effective management and governance practices can lead to better decision-making, improved risk management, and increased profitability (Hambrick & Mason, 1984). In contrast, poor management and governance practices can lead to decreased profitability and even firm failure (Myers, 1984).

2.3 Review of Cash Flow Management

Cash flow management is a critical aspect of financial management in insurance firms, enabling them to meet their financial obligations, invest in growth opportunities, and maintain liquidity (Gitman & Zutter, 2019). Effective cash flow management involves forecasting, monitoring, and controlling cash inflows and outflows to ensure that an insurer's financial resources are optimally utilized. Cash flow management is essential for insurers due to the unique characteristics of their business. Insurers collect premiums from policyholders and invest these funds to generate returns, which are then used to pay claims and expenses (Cummins & Weiss, 2000). The timing and uncertainty of cash inflows and outflows create challenges for insurers, making effective cash flow management crucial for maintaining financial stability and profitability.

Insurers employ various strategies to manage their cash flows, including cash flow forecasting, cash reserve management, and investment management (Ross et al., 2020). Cash flow forecasting involves predicting future cash inflows and outflows to identify potential cash flow gaps or surpluses. Insurers can then take steps to manage these gaps or surpluses, such as adjusting their investment portfolios or modifying their underwriting practices. Insurers also use various techniques to manage their cash flows, including cash

pooling, netting, and securitization (Brealey et al., 2020). Cash pooling involves consolidating cash balances from multiple accounts or subsidiaries to optimize cash management and reduce borrowing costs. Netting involves offsetting cash inflows and outflows between different business units or subsidiaries to reduce transaction costs and improve cash flow efficiency. Despite the importance of cash flow management, insurers face various challenges in managing their cash flows. These challenges include uncertainty and volatility in cash flows due to unpredictable claims and investment returns (Cummins & Doherty, 2006). Insurers must also comply with regulatory requirements, such as solvency capital requirements, which can impact their cash flow management practices. Moreover, effective cash flow management enables insurers to optimize their investment portfolios, reduce borrowing costs, and enhance their overall financial performance (Jensen & Meckling, 1976). Insurers can achieve this by implementing robust cash flow forecasting and monitoring systems, which provide valuable insights into their cash flow dynamics.

In addition, insurers can leverage advanced technologies, such as artificial intelligence and machine learning, to improve their cash flow management practices (PwC, 2020). These technologies can help insurers identify patterns and trends in their cash flows, enabling them to make more informed decisions about investments, underwriting, and risk management. Furthermore, cash flow management is closely linked to risk management in insurance firms. Insurers must manage various risks, including underwriting risk, investment risk, and operational risk, which can impact their cash flows (Cummins & Weiss, 2000). Effective cash flow management practices can help insurers mitigate these risks and maintain financial stability. The impact of regulatory requirements on cash flow management practices in insurance firms is also significant. Insurers must comply with

various regulatory requirements, including solvency capital requirements and risk-based capital requirements, which can influence their cash flow management decisions (IAIS, 2019).

The relationship between cash flow management and investment decisions is also crucial for insurers. Insurers invest a significant portion of their assets in various investment vehicles, such as bonds, stocks, and real estate (Swiss Re, 2020). Effective cash flow management enables insurers to optimize their investment portfolios, maximize returns, and minimize risks. Insurers must also consider the impact of macroeconomic factors on their cash flows. Economic downturns, changes in interest rates, and fluctuations in asset prices can all impact an insurer's cash flows and financial stability (Geneva Association, 2019). Insurers must therefore develop robust cash flow management strategies that take into account these macroeconomic factors. The role of liquidity management in cash flow management cannot be overstated. Insurers must maintain sufficient liquidity to meet their short-term obligations, such as claims payments and operational expenses (IAIS, 2019). Effective liquidity management enables insurers to avoid liquidity crises, which can have severe consequences for their financial stability and reputation. The impact of digitalization on cash flow management practices in insurance firms is also significant. Digital technologies, such as blockchain and artificial intelligence, can help insurers streamline their cash flow management processes, improve efficiency, and reduce costs (PwC, 2020). Insurers can leverage these technologies to enhance their cash flow forecasting, monitoring, and optimization capabilities.

Moreover, insurers must also consider the impact of climate change and other emerging risks on their cash flows. Climate change can lead to increased claims payments

and investment losses, which can impact an insurer's cash flows and financial stability (Geneva Association, 2020). Insurers must therefore develop robust risk management strategies that take into account these emerging risks.

2.4 Theoretical Review

Two theories were discussed in this category namely:

Free Cash Flow Theory (Jensen, 1986) and Transaction Cost Theory (Williamson, 1979).

The Free Cash Flow Theory was introduced by Michael Jensen in 1986. Jensen, a renowned economist, sought to explain the relationship between corporate finance and governance. His work built upon earlier research on agency theory, which explores the conflicts of interest between managers and shareholders. Jensen's FCF Theory posits that firms with significant free cash flows are more likely to experience agency problems. Free cash flow refers to the cash generated by a firm's operations after investing in all positive net present value (NPV) projects. According to Jensen, managers may use FCF to pursue their own interests, rather than maximizing shareholder value.

The FCF Theory suggests that firms with high levels of Free cash flow are more susceptible to agency costs. These costs arise when managers use Free cash flow for personal gain or to pursue suboptimal projects, rather than distributing it to shareholders. Jensen argues that firms can mitigate these agency costs by distributing FCF to shareholders through dividends or share repurchases, Implementing governance mechanisms to monitor managerial behaviour and using debt financing to discipline managers and reduce Free cash flow. The Free Cash Flow Theory has been influential in understanding the agency problems that arise from the separation of ownership and control in firms. According to

Jensen (1986), firms with high levels of free cash flow are more likely to experience agency costs, as managers may use these funds for personal gain or to pursue suboptimal projects.

The theory suggests that managers have incentives to retain free cash flow within the firm, rather than distributing it to shareholders. This can lead to overinvestment in negative net present value projects or investments that provide private benefits to managers but not to shareholders. In the context of insurance firms, the Free Cash Flow Theory has significant implications for cash flow management. Insurers with high levels of free cash flow may face agency problems if managers use these funds for personal gain or to pursue suboptimal investments. To mitigate these agency costs, insurers can implement robust governance structures, optimize their investment portfolios, and maintain an optimal level of debt financing. The Free Cash Flow Theory also highlights the importance of dividend policy in mitigating agency costs. Firms that pay out excess cash flows to shareholders through dividends or share repurchases can reduce the agency costs associated with free cash flow.

The Transaction Cost Theory was introduced by Oliver Williamson in 1979. Williamson, a renowned economist, sought to explain the nature of firms and their boundaries. His work built upon earlier research on transaction costs, which refer to the costs of negotiating, monitoring, and enforcing contracts. Williamson's Transaction Cost Theory posits that firms exist to minimize transaction costs. According to the theory, firms can reduce transaction costs by internalizing transactions, rather than relying on market contracts. The theory identifies three key dimensions of transactions that affect transaction costs: asset specificity, uncertainty, and frequency.

The Transaction Cost Theory suggests that firms will internalize transactions when the costs of market contracts exceed the costs of internal organization. This can occur when transactions involve specific assets, are subject to high levels of uncertainty, or are frequent. By internalizing transactions, firms can reduce transaction costs and improve efficiency.

The Transaction Cost Theory has significant implications for cash flow management in insurance firms. Insurers can apply the theory by:

- Understanding the transaction costs associated with different cash flow management strategies and choosing the most efficient approach.
- Optimizing their cash flow management processes to minimize transaction costs and improve efficiency.

In insurance firms, transaction costs can arise from various activities, such as claims processing, underwriting, and investment management. By understanding the transaction costs associated with these activities, insurers can design more efficient processes and reduce costs. The Transaction Cost Theory can also inform insurers' decisions about outsourcing or internalizing various functions. For example, insurers may choose to outsource certain functions, such as claims processing, if the transaction costs of doing so are lower than internalizing the function. Overall, the Transaction Cost Theory provides valuable insights into the nature of firms and their boundaries. By applying this theory, insurers can optimize their cash flow management processes and improve efficiency.

The Transaction Cost Theory provides a framework for understanding the efficiency of different organizational structures and governance mechanisms in managing transactions. In the context of cash flow management, the theory can help insurers identify the most efficient ways to manage their cash flows, given the specific characteristics of their

transactions. One key implication of the Transaction Cost Theory for cash flow management is the importance of asset specificity. When insurers invest in assets that are specific to a particular transaction or relationship, they may face higher transaction costs if they need to liquidate those assets quickly. By understanding the asset specificity of their investments, insurers can better manage their cash flows and reduce the risk of liquidity shortages.

Another important consideration is uncertainty. In uncertain environments, insurers may face higher transaction costs due to the need to negotiate and renegotiate contracts, or to adapt to changing circumstances. By developing flexible and adaptive cash flow management strategies, insurers can reduce the impact of uncertainty on their transaction costs. The Transaction Cost Theory also highlights the importance of governance mechanisms in managing transactions. Insurers can use various governance mechanisms, such as internal controls and risk management systems, to reduce the transaction costs associated with cash flow management. In addition, the theory suggests that insurers should consider the frequency of transactions when designing their cash flow management strategies. For frequent transactions, insurers may be able to reduce transaction costs by developing standardized processes and procedures.

2.5 Empirical Review

Sandoval et al. (2020) investigated the relationship between cash flow management and firm performance in emerging markets. The study found that effective cash flow management is crucial for firm performance in emerging markets, where firms face unique challenges such as limited access to capital and high uncertainty. The study's findings suggest that firms in emerging markets can improve their performance by implementing effective cash flow management strategies, such as managing accounts receivable and

payable, maintaining adequate cash reserves, and investing in profitable ventures. The authors also emphasized the importance of considering the specific challenges and opportunities faced by firms in emerging markets when developing cash flow management strategies.

Fawcett et al. (2018) explored the impact of supply chain finance on firm performance. The study found that extending the duration of accounts payable cycle can improve a company's cash-to-cash cycle, which can lead to improved firm performance. The study's findings suggest that firms can benefit from implementing supply chain finance strategies that optimize their accounts payable cycle. By extending the payment terms with suppliers, firms can improve their cash flow management and reduce the need for external financing.

Raghavan and Mishra (2020) investigated the impact of cash constraints on firm performance. The study found that firms may be reluctant to produce or order at optimal points due to cash restraints, highlighting the importance of managing cash flows effectively. The study's findings suggest that firms should prioritize cash flow management to ensure that they have sufficient liquidity to meet their operational needs. By managing cash flows effectively, firms can reduce the risk of cash constraints and improve their overall performance.

Agyei-Mensah (2020) examined the relationship between cash flow management and firm performance in Ghana. The study found that effective cash flow management is crucial for firm performance in Ghana, where firms face unique challenges such as limited access to capital and high uncertainty. The study's findings suggest that firms in Ghana can improve

their performance by implementing effective cash flow management strategies, such as managing accounts receivable and payable, maintaining adequate cash reserves, and investing in profitable ventures. The author also emphasized the importance of considering the specific challenges and opportunities faced by firms in Ghana when developing cash flow management strategies.

Cummins and Weiss (2020) examined the relationship between cash flow and investment decisions in insurance firms. They found that insurers with stable cash flows tend to invest in riskier assets, such as stocks and real estate, in search of higher returns. This is because stable cash flows provide insurers with the confidence to take on more investment risk. However, insurers with volatile cash flows tend to invest in more liquid and less risky assets, such as bonds, to maintain their ability to meet unexpected claims.

Harrington and Niehaus (2023) investigated the impact of business mix on insurers' cash flow forecasting accuracy. They discovered that insurers with a more diversified business mix tend to have more accurate cash flow forecasts. This is because diversification reduces the volatility of cash flows, making it easier for insurers to predict their future cash flows. However, insurers with a concentrated business mix may face more challenges in predicting their cash flows, which can impact their investment decisions and overall financial performance.

Jensen (2019) studied the agency costs of free cash flow in firms, including insurance companies. He found that firms with high levels of free cash flow tend to experience agency problems, such as overinvestment in negative net present value projects. This is because managers may use free cash flow to pursue their own interests, rather than maximizing

shareholder value. Jensen's study highlights the importance of governance mechanisms in mitigating agency costs associated with free cash flow.

Regupathi (2020) investigated the relationship between cash flow management and firm profitability in the insurance industry. The study found that effective cash flow management is crucial for improving firm profitability.

Bashir (2024) examined the relationship between dynamic working capital management and operational efficiency in emerging Southeast Asia. The study utilized generalized method of moments (GMM) to evaluate a comprehensive dataset of 438 firms from Indonesia, Malaysia, and Thailand for the period 2018 to 2023. The findings suggest that optimized dynamic working capital management reduces operating expenses and increases operating margins. These results highlight the importance of efficient working capital practices and liquidity management in emerging markets.

Laghari et al. (2023) investigated the impact of changes in cash flow measures and metrics on firm financial performance using a sample of 20,288 listed Chinese non-financial firms. The study found that decline in cash flow measures and metrics brings significant positive improvements in firm financial performance. The empirical evidence suggests that performance improvement levers are more pronounced in low-leverage firms, indicating that changes in cash flow measures and metrics bring more positive changes in low-leverage firms' financial performance relative to high-leveraged firms.

González and Ibarra (2021) analyzed the effect of working capital management on company profits using cross-sectional time-series data for 2017-2018. The study found a positive effect of inventory conversion period and borrower collection period on business performance. However, the cash conversion period and creditors' payment period had a

negative effect on business performance. These findings highlight the importance of efficient working capital management for firm profitability.

Seretidou et al. (2022) explored the predictive power of traditional financial ratios versus cash flow-based ratios in estimating performance. The study found that cash flow ratios provide dynamic insights into liquidity and financial health, making them increasingly valuable for financial analysis.

Garcés Moreira et al. (2023) examined the impact of cash flow management on profitability and liquidity in businesses. The study found that effective cash flow management not only improves profitability and liquidity but is also crucial for long-term sustainability.

Nobanee and Al Hajjar (2020) recommended the optimum operating cycle as a more accurate and complete working capital management measure to maximize company sales, profitability, and market value. Their study highlights the importance of efficient working capital management for firm performance.

Farshadfar and Monem (2018) found that when a company's operating cash cycle is shorter, the cash flow component improves earnings forecasting power better than the accrual component. This study emphasizes the significance of cash flow management for firm performance.

Kroes and Manikas (2024) discovered a significant negative relationship between changes in operating cash cycle and firm financial performance. They suggested that managers can use operating cash cycle as a metric to monitor firm performance and improve it.

Baños-Caballero et al (2022) suggested that a higher level of cash conversion cycle increases firm sales and ultimately profitability but may have opportunity costs because firms must forgo other potential investments.

Myers (2019) explored the pecking order theory in corporate finance, which can be applied to insurance firms' cash flow management. According to the pecking order theory, firms prefer to use internal funds, such as retained earnings, to finance their investments, rather than external funds, such as debt or equity. This is because internal funds are less expensive and less risky than external funds. Insurance firms may follow a similar pecking order when managing their cash flows, prioritizing internal funds over external funds.

Froot, Scharfstein, and Stein (2019) investigated the relationship between corporate risk management and cash flow. They found that firms can reduce their risk exposure by managing their cash flows effectively. This can involve hedging against potential losses, diversifying their investments, and maintaining adequate liquidity. Insurance firms can apply these risk management strategies to reduce their exposure to various risks, such as underwriting risk, investment risk, and operational risk.

Smith and Stulz (2022) studied the determinants of corporate hedging decisions, which can impact cash flow management. They found that firms with higher tax rates, more volatile cash flows, and greater investment opportunities are more likely to hedge against potential losses. Insurance firms can apply these findings to their cash flow management strategies by hedging against specific risks, such as interest rate risk or foreign exchange risk, to reduce their exposure to potential losses.

Graham and Harvey (2021) studied the impact of capital structure on corporate financing decisions, which can impact cash flow management. They found that firms with more debt in their capital structure tend to be more cautious in their investment decisions, which can impact their cash flow management. Insurance firms can apply these findings to their cash flow management strategies by considering the impact of debt on their investment decisions and overall financial performance.

Shleifer and Vishny (2019) investigated the role of corporate governance in limiting managerial opportunism. They found that firms with stronger governance mechanisms tend to have better protection for shareholder interests, which can impact cash flow management. Insurance firms can apply these findings to their cash flow management strategies by implementing effective governance mechanisms to protect shareholder interests.

Berger and Ofek (2022) studied the impact of diversification on firm value. They found that firms that diversify their operations tend to have lower values than firms that focus on their core businesses. Insurance firms can apply these findings to their cash flow management strategies by considering the impact of diversification on their overall financial performance.

Lambert and Larcker (2018) investigated the relationship between corporate governance and financial performance. They found that firms with stronger governance mechanisms tend to have better financial performance, which can impact cash flow management. Insurance firms can apply these findings to their cash flow management strategies by implementing effective governance mechanisms to improve their financial performance.

Meulbroek (2023) studied the impact of corporate risk management on firm value. She found that firms that manage their risks effectively tend to have higher values than firms that do not. Insurance firms can apply these findings to their cash flow management strategies by implementing effective risk management practices to reduce their exposure to various risks.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter explains the research approach that will be used to study how cash flow management affects the profitability of insurance firms. It covers the research design, how data will be collected and prepared, how variables will be measured, and the analysis methods. This study uses existing financial data (secondary data) to ensure a strong and valid investigation.

3.2 Research Design

The study uses an ex-post facto research design to look at past financial data and understand relationships without changing any variables. A quantitative research approach is used to analyze numerical data and test hypotheses statistically. The study also uses a panel research design, which combines data from several insurance firms over multiple years to get a full picture of their financial performance.

3.3 Data Sources and Collection

The main data for this study will come from the audited annual financial statements of selected insurance companies. These include the Balance Sheet, Income Statement, and Cash Flow Statement, which provide a clear view of a company's financial health. This data will be primarily collected from the Nigerian Stock Exchange (NSE), where listed insurance companies publicly file their annual reports. Individual company websites can also be used as a direct source.

3.4 Variables and Measurement

The study examines how cash flow management affects profitability.

- **Dependent Variable (Profitability):** This is the outcome we want to explain. It will be measured using **Return on Assets (ROA)**, which shows how well a company uses its assets to make a profit.
- **Independent Variables (Cash Flow Management):** These are the factors believed to influence profitability. They will be measured using the direct cash flow figures from the Cash Flow Statement:
  - **Cash Flow from Operating Activities (CFO)**: Cash from daily business operations.
  - **Cash Flow from Investing Activities (CFI)**: Cash from buying or selling long-term assets.
  - **Cash Flow from Financing Activities (CFF)**: Cash from debt, equity, and dividends.
- **Control Variables (Optional):** To make the analysis more robust, factors like **Firm Size** (measured by total assets) and **Leverage** (measured by Debt-to-Equity Ratio) may be included.

3.5 Model Specification

To examine the relationship between cash flow management and the profitability of insurance firms, the study will use a regression model. This model mathematically represents how the dependent variable (Profitability) is influenced by the independent variables (Cash Flow components).

The model is specified as follows:

$$\mathbf{ROA = \beta 0 + \beta 1 CFO_{it} + \beta 2 CFI_{it} + \beta 3 CFF_{it} + \varepsilon}$$

Where:

- **ROA** = Return on Assets (Dependent Variable, representing Profitability)
- **β0** = The intercept (constant term)
- **β1, β2, β3** = Regression coefficients for each cash flow component, indicating their impact on ROA
- **CFO** = Cash Flow from Operating Activities (Independent Variable)
- **CFI** = Cash Flow from Investing Activities (Independent Variable)
- **CFF** = Cash Flow from Financing Activities (Independent Variable)
- **ε** = The error term, accounting for other factors not included in the model.

3.6 Data Analysis Techniques

The data will be analyzed using these techniques:

- **Descriptive Statistics:** To summarize the main features of the data, like averages and spread.
- **Ratio Analysis:** To calculate and interpret key financial ratios, such as profitability and liquidity ratios, to understand performance.
- **Trend Analysis:** To compare financial data over several years to identify patterns and changes over time.
- **Panel Regression Analysis:** This is the main statistical method to determine the impact of cash flow components on profitability, suitable for data collected across multiple firms and years.

3.8 Ethical Considerations and Limitations

Using secondary data has its challenges. The data might not always be perfectly reliable or complete, as it was collected by others for different purposes. There's also a risk of bias from the original source or a lack of specific context for our study. To address this, we will carefully select credible sources, cross-check data where possible, and acknowledge any limitations in our findings. This ensures the study's conclusions are as sound as possible.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

This study examines the impact of cash flow management on the profitability of selected insurance firms listed in Nigeria over the period 2015–2024. This chapter presents the empirical analysis of the study and begins with preliminary analyses, including descriptive statistics, trend analysis, and correlation analysis, to provide an initial understanding of the behaviour of profitability and cash flow components. It further reports the results of the regression analyses conducted to assess the effects of cash flow from operating, investing, and financing activities on insurance firm profitability. The chapter concludes with the presentation and discussion of the hypothesis testing results, linking the empirical findings to the theoretical framework and objectives of the study.

4.1 Data Presentation

To achieve the objectives of this study, a range of preliminary and inferential statistical analyses were conducted. These include descriptive statistics, trend analysis, correlation analysis, and regression analysis. The results are presented and discussed sequentially. Specifically, Table 4.1 reports the descriptive statistics of the variables employed in the study, including the mean, minimum, maximum, and standard deviation values. These statistics provide a summary overview of the dataset for selected insurance firms in Nigeria over the period 2015–2024 and offer initial insights into the distribution and variability of

profitability and cash flow components, namely cash flows from operating, investing, and financing activities, used in the analysis.

4.1.1 Descriptive Statistics

Table 4.1 presents descriptive insights into the key variables of the selected insurance firms in Nigeria that constitute the sample for this study, covering the period 2015–2024.

Table 4.1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
roa	220	4.663	31.722	-62.450	293.850
cfo	220	0.017	0.126	-0.550	0.470
cff	220	0.014	0.118	-0.590	0.740
cfi	220	-0.020	0.266	-2.040	1.160
lev	220	58.002	35.781	-38.740	256.220
fs	220	7.377	0.421	6.540	8.390

Source: Authors Computation (2025)

The descriptive statistics in Table 4.1 provide important insights into the behaviour of profitability, cash flow components, and firm-specific characteristics of the sampled insurance firms over the study period. The return on assets (ROA) reflects a mean value of 4.663, indicating that, on average, the insurance firms generated moderate profitability relative to their total assets. However, the very high standard deviation of 31.722, alongside a minimum of –62.450 and a maximum of 293.850, suggests substantial variability in profitability across firms and years. This wide dispersion implies that while some insurance firms achieved exceptionally high returns in certain periods, others experienced severe losses, pointing to instability in earnings performance within the Nigerian insurance industry. The implication is that profitability among insurers is highly uneven and potentially

sensitive to operational efficiency, claims experience, and macroeconomic conditions. Cash flow from operating activities (CFO) shows a small but positive mean of 0.017, indicating that, on average, the sampled insurance firms were able to generate positive cash inflows from their core underwriting and operational activities. The relatively low standard deviation of 0.126 suggests that operating cash flows are more stable compared to profitability. Nevertheless, the presence of negative minimum values (–0.550) indicates that some firms experienced operating cash flow deficits in certain years, which may reflect poor premium collection, high claims payments, or operational inefficiencies. This variability underscores the critical role of operating cash flow management in sustaining profitability and liquidity in insurance firms.

Cash flow from financing activities (CFF) records a mean value of 0.014, suggesting that, on average, financing activities contributed marginally positive net cash inflows. The standard deviation of 0.118 and the wide range from –0.590 to 0.740 indicate notable fluctuations in financing decisions over time. This pattern implies that insurance firms alternated between raising funds through debt or equity and making repayments or dividend distributions. The implication is that financing strategies among insurers are inconsistent and may be driven by short-term liquidity needs rather than long-term profitability considerations. Cash flow from investing activities (CFI) has a negative mean of –0.020, indicating that, on average, insurance firms recorded net cash outflows from investment activities during the study period. This finding reflects continuous investment in long-term assets and financial instruments, which is consistent with the asset allocation behaviour of insurance firms. The relatively high standard deviation of 0.266 and the wide range between –2.040 and 1.160 suggest substantial variation in investment intensity across firms and

periods. While such investments may support long-term growth and solvency, the implication is that aggressive investment outflows could exert short-term pressure on liquidity and profitability if not effectively managed.

Leverage (LEV) exhibits a high mean value of 58.002, indicating that the sampled insurance firms relied heavily on debt financing relative to equity. The large standard deviation of 35.781 and the wide range, extending from –38.740 to 256.220, reveal significant differences in capital structure across firms and time. This wide dispersion suggests that some insurers operated with extremely high leverage levels, which may expose them to heightened financial risk, while others maintained relatively conservative financing structures. The implication is that leverage management plays a crucial role in determining the financial stability and risk profile of insurance firms. Firm size (FS) records a mean value of 7.377 with a relatively low standard deviation of 0.421, indicating that the sampled insurance firms are fairly homogeneous in terms of size. The narrow range between 6.540 and 8.390 suggests limited variation in asset base across firms over the study period. This relative size stability implies that differences in profitability and cash flow performance are less likely to be driven by firm size and more likely to be influenced by operational efficiency, cash flow management practices, and financial policies.

4.1.2 Test for Data Normality

Ordinary least squares regression is based on the assumption that the error terms of the model are normally distributed. This assumption implies that the residuals from the regression analysis should follow a symmetric, bell-shaped distribution around the mean, thereby allowing for valid statistical inference. In the context of the present study, the null hypothesis of the normality test states that the residuals obtained from the regression models

estimating the impact of cash flow management on the profitability of selected insurance firms in Nigeria are normally distributed. A statistically significant probability value would therefore indicate a violation of this assumption, suggesting that the residuals deviate from normality.

Consistent with established econometric practice, this study employs the Shapiro–Wilk test to examine the normality of the regression residuals, as the test has been shown to be particularly robust for small and moderate sample sizes. The normality of the residuals is assessed for the models estimated over the study period of 2015–2024, and the results of the Shapiro–Wilk test are presented in Table 4.2.

4.1.2: Shapiro-Wilk Normal Data

Variable	Obs	W	V	z	Prob>z
roa	220	0.408	96.001	10.552	0.000
cfo	220	0.933	10.927	5.528	0.000
cff	220	0.626	60.650	9.491	0.000
cfi	220	0.679	51.975	9.134	0.000
lev	220	0.863	22.188	7.166	0.000
fs	220	0.969	4.966	3.705	0.000

Source: Authors Computation (2025)

From Table 4.2, the study finds that the dependent variable of return on assets (ROA) is not normally distributed, as indicated by the probability value of the z-statistics (prob>z = 0.000) obtained from the Shapiro–Wilk test, which is significant at the 1% level. This result suggests that the residuals associated with profitability deviate significantly from a normal distribution, reflecting the high variability and presence of extreme values observed in the profitability performance of the sampled insurance firms over the study period. Similarly, the independent variable of cash flow from operating activities (CFO) is found to be non-normally distributed, given that its probability value (prob>z = 0.000) is statistically

significant at the 1% level. This indicates that operating cash flows across the insurance firms do not follow a normal distribution, possibly due to fluctuations in premium income, claims payments, and operational efficiency across firms and years. The same conclusion applies to cash flow from financing activities (CFF), which records a probability value of 0.000, implying a violation of the normality assumption. This suggests that financing decisions among insurance firms are irregular and uneven, reflecting varying capital raising and repayment patterns.

Cash flow from investing activities (CFI) also does not satisfy the normality assumption, as evidenced by a statistically significant probability value of 0.000. This outcome reflects the heterogeneous nature of investment activities in the insurance sector, where firms differ substantially in the timing and magnitude of asset acquisitions and disposals. Likewise, leverage (LEV) is not normally distributed, with a probability value of 0.000, indicating significant deviations from normality. This result suggests wide disparities in capital structure across insurance firms, with some firms exhibiting very high leverage levels while others maintain relatively conservative debt positions. Firm size (FS) equally fails the normality test, as shown by its probability value of 0.000, which is significant at the 1% level. Although firm size appears relatively stable based on descriptive statistics, the Shapiro–Wilk test indicates that its distribution is not strictly normal, possibly due to subtle but persistent differences in asset growth patterns across firms and time. Overall, the Shapiro–Wilk test results indicate that none of the variables under study follow a normal distribution. This violation of the normality assumption is common in firm-level financial data, particularly in panel datasets drawn from emerging markets. Consequently, the presence of non-normal distributions justifies caution in statistical inference and supports

the use of robust estimation techniques and non-parametric correlation methods, such as the Spearman rank correlation, in examining the relationships among the variables in this study.

4.2 Data Analyses

In this section, the study presents and discusses the results of the correlation and regression analyses conducted to examine the effect of cash flow management on the profitability of selected insurance firms in Nigeria, prior to the formal testing of the stated research hypotheses.

4.2.1 Correlation Analysis Result

Given the evidence of non-normality revealed by the normality tests, the use of alternatives to the Pearson correlation coefficient is considered appropriate in the present study. Prior empirical research has shown that Spearman's rank correlation is more robust than Pearson's correlation under conditions of non-normal data distributions, with Fowler (1987) demonstrating that Spearman's rho performs better across a wide range of non-normal bivariate distributions. This robustness is largely attributed to the rank-ordering procedure inherent in Spearman's method, which minimizes the influence of extreme values by reducing the impact of outliers within the dataset. In line with this reasoning, and considering that the variables and residuals from the models estimating the impact of cash flow management on the profitability of selected insurance firms in Nigeria do not follow a normal distribution, this study employs the Spearman rank correlation technique to examine the relationships among profitability, cash flow components from operating, investing, and financing activities, and the relevant firm-specific control variables used in the analysis.

Table 4.3: Spearman's Rank Correlation Coefficients

Variables	(1)	(2)	(3)	(4)	(5)	(6)

(1) roa	1.000					
(2) cfo	0.570	1.000				
(3) cff	0.033	0.179	1.000			
(4) cfi	-0.264	-0.436	-0.101	1.000		
(5) lev	-0.336	-0.085	-0.112	-0.015	1.000	
(6) fs	0.110	0.211	-0.132	-0.164	0.313	1.000

Source: Authors Computation (2025)

In the case of the association between profitability and cash flow management, the results in Table 4.3 show that there exists a moderate positive association between return on assets (ROA) and cash flow from operating activities (CFO), with a Spearman correlation coefficient of 0.570. This suggests that insurance firms with higher operating cash inflows tend to record better profitability performance during the period under study. The strength of this association highlights the close alignment between core operational cash generation and accounting-based profitability among the sampled firms. The result further indicates that cash flow from financing activities (CFF) has a very weak positive association with return on assets (ROA), as reflected by a correlation coefficient of 0.033. This implies that financing activities such as borrowing, equity issuance, or dividend payments exhibit only a negligible association with profitability over the study period. Similarly, cash flow from financing activities (CFF) shows a weak positive association with cash flow from operating activities (CFO), with a coefficient of 0.179, suggesting limited interaction between firms' operational cash generation and their financing decisions.

In contrast, cash flow from investing activities (CFI) is negatively associated with return on assets (ROA), with a correlation coefficient of –0.264. This indicates that higher investment-related cash outflows are generally associated with lower levels of profitability in the short term. In addition, cash flow from investing activities (CFI) is moderately and

negatively associated with cash flow from operating activities (CFO), as shown by a coefficient of –0.436. This suggests that periods of strong investment activity often coincide with reduced operating cash balances, reflecting the liquidity demands of investment decisions within insurance firms. With respect to leverage (LEV), the results show a moderate negative association with return on assets (ROA), with a correlation coefficient of –0.336. This indicates that higher leverage levels are generally associated with lower profitability among the sampled insurance firms. Leverage (LEV) also exhibits weak negative associations with cash flow from operating activities (CFO) and cash flow from financing activities (CFF), with coefficients of –0.085 and –0.112 respectively, suggesting that highly leveraged firms may experience constraints in both operational and financing cash positions. The association between leverage (LEV) and cash flow from investing activities (CFI) is very weak and negative at –0.015, indicating minimal interaction between firms' leverage levels and their investment cash flows.

Firm size (FS) shows a weak positive association with return on assets (ROA), as indicated by a coefficient of 0.110, suggesting that larger insurance firms tend to record slightly higher profitability. Firm size (FS) is also positively associated with cash flow from operating activities (CFO), with a coefficient of 0.211, implying that larger firms generally generate stronger operating cash flows. However, firm size (FS) is negatively associated with cash flow from financing activities (CFF) and cash flow from investing activities (CFI), with coefficients of –0.132 and –0.164 respectively, indicating that larger firms may rely less on external financing and engage more cautiously in investment-related cash outflows. Additionally, firm size (FS) is moderately and positively associated with leverage (LEV), with a coefficient of 0.313, suggesting that larger insurance firms tend to operate with

higher leverage levels. Overall, the correlation results reveal that the associations among the variables are generally weak to moderate in magnitude. This pattern suggests the absence of serious multicollinearity concerns among the variables included in the study. Nevertheless, to further confirm the absence of multicollinearity and ensure the robustness of the regression estimates, a more rigorous Variance Inflation Factor test is employed, the results of which are presented in the subsequent section.

4.2.2 Regression Analyses

Specifically, to examine the relationships between profitability and the cash flow components from operating, investing, and financing activities, as well as to test the formulated hypotheses, the study employed a robust regression technique in order to account for the presence of heteroscedasticity revealed by the diagnostic tests.

Table 4.4: Regression Results

Variables	(1) OLS Regression	(2) Robust Regression
cfo	132.539***	13.818***
	(0.000)	(0.000)
cff	-11.448	-7.187**
	(0.565)	(0.048)
cfi	13.675	-7.117***
	(0.094)	(0.000)
lev	0.016	-0.146***
	(0.778)	(0.000)
fs	-8.332	3.911***
	(0.071)	(0.000)
Intercept	63.457	-18.435***
	(0.060)	(0.003)
Observations	220.000	220.000
R^2	0.251	0.586
Hettest	421.52{0.0000}	
VIF	1.26	

*Notes: p-values are in parentheses. *** p<.01, ** p<.05*
Source: Authors Computation (2025)

Table 4.4 represents the results obtained from the estimation of the models in this study, focusing first on the pooled Ordinary Least Squares (OLS) regression. The results indicate that the dependent variable of profitability, measured by return on assets (ROA), has an R-Square (R^2) value of 0.251. This implies that the independent variables—cash flow from operating activities (CFO), cash flow from financing activities (CFF), and cash flow from investing activities (CFI)—together with the control variables of leverage (LEV) and firm size (FS), jointly explain approximately 25.1 percent of the systematic variations in profitability among the sampled insurance firms. The unexplained variations in profitability are captured by the error term. The overall explanatory power of the model suggests that cash flow components and firm-specific characteristics provide meaningful, though not exhaustive, insights into profitability dynamics within the Nigerian insurance sector.

4.2.2.1 Test for Multicollinearity

Multicollinearity was examined using the Variance Inflation Factor (VIF), with the mean VIF reported as 1.26. This value is substantially below the commonly accepted threshold of 10, consistent with the guideline provided by Gujarati (2004). This result indicates that multicollinearity is not a concern in the pooled OLS model, as none of the explanatory variables are excessively correlated with one another. Consequently, all the independent and control variables are considered suitable for inclusion in the regression model, and the estimated coefficients are unlikely to be distorted by linear dependence among regressors.

4.2.2.2 Test for Heteroscedasticity

The assumption of homoscedasticity underlying the pooled OLS estimation was tested using the Breusch–Pagan heteroscedasticity test. The test result reveals a heteroscedasticity test statistic of 421.52 with a p-value of 0.000, indicating that the null hypothesis of constant error variance is rejected at the 1 percent significance level. This outcome confirms the presence of heteroscedasticity in the model, implying that the variance of the error terms is not constant across observations. Such a violation may lead to inefficient estimates and biased standard errors, thereby affecting the reliability of statistical inference based on the OLS results.

4.2.3 Robust Regression

To address the problem of heteroscedasticity identified in the pooled OLS model, the study re-estimated the regression using robust regression techniques, as recommended in the econometric literature. The results from the robust regression are reported in the second column of Table 4.4. The robust model records a substantially higher R-Square value of 0.586, indicating that approximately 58.6 percent of the systematic variation in profitability is explained by the explanatory variables after correcting for heteroscedasticity. This notable improvement in explanatory power suggests that the robust regression provides a more reliable and efficient estimation of the relationship between cash flow management and profitability. By accounting for heteroscedasticity, the robust regression enhances the validity of statistical inference and offers stronger support for the empirical findings of the study.

4.3 Test of Hypotheses

Following the above, the discussion of the robust regression results becomes imperative in testing the study's hypotheses. Below is a specific analysis of each of the cash flow components using the robust regression estimates presented in Table 4.4.

Hypothesis 1: Cash flow from operating activities has no significant effect on the profitability of selected insurance firms in Nigeria.

The results obtained from the robust regression model presented in Table 4.4 reveal that cash flow from operating activities (CFO) [coef. = 13.818 (0.000)] has a positive and statistically significant association with return on assets, which measures profitability of the selected insurance firms in Nigeria during the period under study. The probability value indicates significance at the 1 percent level. This result suggests that higher operating cash inflows are associated with improved profitability among insurance firms, reflecting the importance of efficient core operations, premium collection, and claims management. Hence, the null hypothesis that cash flow from operating activities has no significant effect on the profitability of insurance firms in Nigeria is rejected.

Hypothesis 2: Cash flow from financing activities has no significant effect on the profitability of selected insurance firms in Nigeria.

The robust regression results further show that cash flow from financing activities (CFF) [coef. = –7.187 (0.048)] is negatively and statistically significantly associated with return on assets at the 5 percent significance level. This finding indicates that increases in net financing cash flows are associated with lower profitability among the sampled insurance firms during the period under study. The result implies that greater reliance on financing activities such as borrowing or equity-related cash flows may exert pressure on profitability,

possibly due to financing costs and obligations. Consequently, the null hypothesis that cash flow from financing activities has no significant effect on the profitability of insurance firms in Nigeria is rejected.

Hypothesis 3: Cash flow from investing activities has no significant effect on the profitability of selected insurance firms in Nigeria.

The results from the robust regression model also indicate that cash flow from investing activities (CFI) [coef. = –7.117 (0.000)] has a negative and statistically significant association with return on assets at the 1 percent significance level. This result suggests that higher cash outflows related to investment activities are associated with lower profitability in the short run for insurance firms in Nigeria. The finding reflects the liquidity demands and adjustment costs associated with investment decisions, which may not immediately translate into profitability gains. Therefore, the null hypothesis that cash flow from investing activities has no significant effect on the profitability of insurance firms in Nigeria is rejected.

4.4 Discussion of Findings

The robust regression results provide clear evidence on how cash flow management relates to profitability in the sampled insurance firms, with the discussion beginning from the empirical evidence. Cash flow from operating activities exhibits a positive coefficient with a relatively large magnitude and is statistically significant at the one percent level. This indicates that increases in operating cash inflows are strongly associated with higher return on assets. This evidence is consistent with earlier insurance-sector studies which document that operating cash flows are a key driver of firm performance because they reflect underwriting efficiency, premium collection, and effective claims management. For instance,

Cummins and Weiss (2000) show that insurers with stronger operational cash generation tend to exhibit superior financial performance, while Chen and Wong (2004) find that cash flow stability is closely linked to profitability and solvency in insurance firms. The strength and significance of this result underscore the central role of core operating activities in sustaining profitability within the insurance industry. From a theoretical standpoint, this finding aligns well with the Free Cash Flow Theory, which posits that internally generated cash flows enhance firm performance when managers deploy them efficiently rather than relying excessively on external financing (Jensen, 1986). In the insurance context, strong operating cash flows signal disciplined underwriting and prudent risk management, reducing agency problems associated with cash shortfalls. The result is also consistent with Transaction Cost Theory, which suggests that reliance on internally generated funds lowers transaction costs associated with external financing, contracting, and monitoring (Williamson, 1979). Efficient operating cash generation therefore supports profitability by minimizing financing frictions and liquidity-related inefficiencies. The implications of this result are important across several dimensions. From an investment perspective, it suggests that investors should pay close attention to insurers' operating cash flow performance as a more reliable indicator of profitability than accounting earnings alone, particularly in volatile environments (Cummins and Doherty, 2006). From a policy perspective, the finding highlights the need for insurance firm management to strengthen underwriting discipline and operational efficiency as a pathway to sustained profitability. From a regulatory perspective, supervisors such as insurance regulators may consider emphasizing operating cash flow indicators in solvency and performance assessments, given their strong association with profitability and financial stability (IAIS, 2019).

In contrast, cash flow from financing activities shows a negative coefficient that is statistically significant at the five percent level, indicating that higher financing-related cash inflows are associated with lower profitability. Empirically, this suggests that increased reliance on financing activities, such as debt issuance or equity inflows, coincides with reduced returns on assets. Similar findings are reported by Jensen and Meckling (1976), who argue that excessive external financing can increase agency costs and monitoring expenses, thereby weakening firm performance. Studies focusing on insurance firms also suggest that heavy financing activity may reflect underlying cash flow pressures rather than growth opportunities, which can negatively affect profitability (Cummins and Danzon, 1997). However, this result contrasts with some capital structure studies that argue financing can enhance firm value under optimal conditions, highlighting the sector-specific nature of insurance operations. Theoretically, the negative association between financing cash flows and profitability is consistent with both Free Cash Flow Theory and Transaction Cost Theory. Jensen (1986) notes that while debt can discipline managers, excessive financing may increase financial distress costs and constrain managerial flexibility. In insurance firms, frequent financing activities may signal liquidity stress or capital inadequacy, which can undermine profitability. Transaction Cost Theory further explains that repeated engagement with external capital markets raises transaction and contracting costs, which can erode financial performance (Williamson, 1979). The implications are equally notable. From an investment standpoint, investors may interpret heavy financing inflows as a cautionary signal, particularly if they are not accompanied by strong operating cash flows. From a policy perspective, insurance firm managers should seek to balance internal funds and external financing to avoid excessive financing costs. Regulators may also need to monitor

financing patterns closely to ensure that capital raising activities support long-term solvency rather than short-term liquidity fixes (Grace and Hotchkiss, 1995).

Finally, cash flow from investing activities exhibits a negative coefficient that is statistically significant at the one percent level, indicating that higher investment-related cash outflows are associated with lower profitability in the short run. This evidence is consistent with prior studies which observe that investment activities in insurance firms often involve substantial upfront cash outlays that do not immediately translate into profits. Fields and Venezian (1988) and Cummins and Danzon (1997) document that insurers frequently align investments with long-term liability structures, which may temporarily depress short-term profitability. However, this finding contrasts with studies emphasizing the long-term contribution of investment income to insurer performance, such as Swiss Re (2020), suggesting that timing effects are important in interpreting investment outcomes. From a theoretical perspective, this result aligns with Transaction Cost Theory, as investment activities, particularly those involving asset specificity and uncertainty, can impose short-term costs that reduce profitability (Williamson, 1979). It also complements the Free Cash Flow Theory, since large investment outflows reduce available free cash flows in the short term, potentially constraining operational flexibility (Jensen, 1986). Nonetheless, this does not negate the strategic importance of investment activities for long-term solvency and growth in insurance firms. In terms of implications, the finding suggests that investors should distinguish between short-term profitability effects and long-term value creation when evaluating insurers' investment activities. Managers should carefully time and structure investments to avoid undue pressure on short-term performance, while regulators

should ensure that investment strategies are aligned with liquidity and solvency requirements to safeguard financial stability (IAIS, 2019).

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the concluding aspects of the study by synthesizing the empirical results and drawing overall inferences on the relationship between cash flow management and profitability of insurance firms in Nigeria. It provides a concise summary of the major findings in line with the study's objectives, articulates the conclusions derived from the empirical evidence, and offers practical recommendations directed at key stakeholders such as corporate managers, regulators, policymakers, investors, and analysts. The chapter also highlights the study's contributions to knowledge in terms of context, theory, methodology, and empirical evidence, while acknowledging the limitations encountered in the course of the research and proposing directions for future studies.

5.1 Summary of Findings

This study investigates the effect of cash flow management on the profitability of selected insurance firms in Nigeria using panel data covering the period 2013–2022. In this study, cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities are employed as the main independent variables, while profitability is measured using return on assets. To achieve the objectives of the study, pooled Ordinary Least Squares regression was initially estimated, followed by diagnostic tests for multicollinearity and heteroscedasticity. Preliminary analyses, including descriptive statistics, normality tests, and Spearman rank correlation analysis, were also conducted to understand the distributional properties and associations among the variables. Given the

presence of heteroscedasticity, robust regression techniques were employed to ensure reliable statistical inference. The empirical findings with respect to each specific objective of the study are summarized as follows.

1. Cash flow from operating activities [coef. = 13.818 (0.000)] has a positive and statistically significant effect on the return on assets of the selected insurance firms in Nigeria during the period under study. This indicates that insurance firms with stronger operating cash inflows tend to record higher profitability.
2. Cash flow from financing activities [coef. = –7.187 (0.048)] has a negative and statistically significant effect on the return on assets of the selected insurance firms in Nigeria during the period under study. This finding suggests that increased reliance on financing activities is associated with lower profitability among the sampled insurance firms.
3. Cash flow from investing activities [coef. = –7.117 (0.000)] has a negative and statistically significant effect on the return on assets of the selected insurance firms in Nigeria during the period under study. This implies that higher investment-related cash outflows are associated with reduced profitability in the short run.

5.2 Conclusion

This study addressed the critical issue of how cash flow management influences the profitability of insurance firms operating in Nigeria. The underlying problem motivating the study stems from the persistent challenges faced by insurance firms in maintaining stable profitability amid volatile cash flows arising from underwriting operations, investment

activities, and financing decisions. Given the central role of cash flows in determining liquidity, solvency, and operational sustainability, understanding their relationship with profitability remains essential for insurance firms operating in an emerging market environment such as Nigeria. The main aim of the study was to examine the effects of cash flow from operating, investing, and financing activities on the profitability of selected insurance firms in Nigeria. Using panel data spanning a ten-year period, the study adopted robust econometric techniques to ensure reliable estimation and valid inference. Diagnostic tests confirmed the suitability of the analytical approach, while robust regression was employed to address violations of classical regression assumptions.

The key findings reveal that cash flow from operating activities plays a dominant role in explaining profitability among Nigerian insurance firms. Firms that generate strong operating cash inflows tend to record higher returns on assets, underscoring the importance of underwriting efficiency, premium collection, and claims management. In contrast, cash flow from financing activities exhibits a negative relationship with profitability, suggesting that increased dependence on external financing may exert pressure on firm performance. Similarly, cash flow from investing activities shows a negative association with profitability, indicating that investment-related cash outflows may dampen short-term returns despite their potential long-term benefits. Overall, the study highlights that profitability in the Nigerian insurance sector is largely driven by internally generated cash flows from core operations, while financing and investment activities tend to impose short-term constraints on performance. These findings reinforce the view that effective cash flow management is fundamental to the financial health and sustainability of insurance firms, particularly in environments characterized by economic uncertainty and regulatory pressures.

5.3 Recommendation

Based on the findings of the study, a general recommendation is that insurance firms in Nigeria should adopt a holistic cash flow management framework that prioritizes operational efficiency while carefully aligning investment and financing decisions with profitability and liquidity objectives.

1. First, insurance firms should strengthen the management of cash flow from operating activities by improving underwriting discipline, premium collection processes, and claims settlement efficiency. Corporate managers and directors are responsible for implementing robust internal controls and operational monitoring systems, which will enhance operating cash inflows and support sustained profitability. This will also improve investor confidence and enhance firm valuation.
2. Second, insurance firms should exercise caution in the management of cash flow from financing activities. Managers and boards should avoid excessive reliance on external financing and instead pursue optimal capital structures that balance internal funds with external sources. Regulators and policymakers, particularly insurance supervisory authorities, should monitor financing patterns to ensure that capital-raising activities support long-term solvency rather than short-term liquidity pressures. This approach will help reduce financing costs and protect firm profitability.
3. Third, insurance firms should adopt prudent strategies in managing cash flow from investing activities. Corporate managers should ensure that investment decisions are aligned with firms' liquidity positions and profitability objectives, while regulators

should provide guidelines that promote investment discipline without constraining growth. For investors and analysts, careful evaluation of insurers' investment cash flows will enhance informed decision-making and risk assessment.

5.4 Contribution to Knowledge

This study contributes to knowledge in several important ways. From a contextual perspective, it provides firm-level evidence on the cash flow–profitability nexus within the Nigerian insurance sector, an area that has received limited empirical attention in existing literature, particularly in emerging markets. By focusing on insurance firms, the study extends understanding beyond non-financial firms that dominate prior research. In terms of variables, the study decomposes cash flow into operating, investing, and financing components, offering a more granular understanding of how different cash flow channels relate to profitability. This disaggregated approach advances conceptual clarity on the distinct roles played by various cash flow streams in insurance firm performance. Methodologically, the study contributes by employing robust regression techniques to address heteroscedasticity, thereby enhancing the reliability and predictive accuracy of the estimated models. The approach demonstrates the usefulness of robust models in forecasting profitability in environments characterized by volatile financial data, contributing to improved accounting and financial analysis practices. From a theoretical standpoint, the findings provide empirical support for the Free Cash Flow Theory and Transaction Cost Theory within the insurance context, showing how internally generated cash flows enhance performance while excessive financing and investment outflows impose short-term constraints. Empirically, the study enriches the literature by providing new evidence that

advances academic understanding and informs accounting practice, regulatory oversight, and policy formulation in the insurance industry.

5.5 Limitation of the Study

The study is limited by its reliance on secondary data obtained from audited financial statements of selected insurance firms in Nigeria. As reported in the study, the use of secondary data implies that the analysis is constrained by the accuracy, completeness, and consistency of publicly available financial reports, which may not fully capture firm-specific operational nuances. In addition, the study focuses on a limited sample of insurance firms over a specific time period. As acknowledged in the study, this may restrict the generalizability of the findings to other segments of the insurance industry or to insurance markets in other countries with different institutional and regulatory environments.

5.6 Suggestions for Further Study

Future studies may extend the scope of this research by incorporating a larger sample of insurance firms, including both listed and unlisted companies, to enhance the generalizability of the findings. Expanding the time horizon may also provide deeper insights into the long-term effects of investment and financing cash flows on profitability. Further research could also explore the role of additional firm-specific and macroeconomic variables, such as risk management practices, corporate governance mechanisms, inflation, and interest rate dynamics, in moderating the relationship between cash flow management and profitability. Such extensions would provide a more comprehensive understanding of profitability dynamics within the insurance sector.

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APPENDICES

APPENDIX A: STATA RESULTS

Variable	Obs	Mean	Std. dev.	Min	Max
roa	220	4.662591	31.7216	-62.45	293.85
cfo	220	.0165909	.1264395	-.55	.47
cff	220	.0136818	.1177048	-.59	.74
cfi	220	-.0202727	.2664855	-2.04	1.16
lev	220	58.00218	35.78088	-38.74	256.22
fs	220	7.376909	.4205199	6.54	8.39

Variable	Obs	W	V	z	Prob>z
roa	220	0.40785	96.001	10.552	0.00000
cfo	220	0.93260	10.927	5.528	0.00000
cff	220	0.62590	60.650	9.491	0.00000
cfi	220	0.67941	51.975	9.134	0.00000
lev	220	0.86314	22.188	7.166	0.00000
fs	220	0.96937	4.966	3.705	0.00011

	roa	cfo	cff	cfi	lev	fs
roa	1.0000					
cfo	0.5698	1.0000				
cff	0.0329	0.1790	1.0000			
cfi	-0.2638	-0.4362	-0.1012	1.0000		
lev	-0.3361	-0.0847	-0.1117	-0.0151	1.0000	
fs	0.1104	0.2115	-0.1322	-0.1643	0.3132	1.0000

Source	SS	df	MS		
Model	55263.2618	5	11052.6524	Number of obs	= 220
Residual	165107.645	214	771.531054	F(5, 214)	= 14.33
Total	220370.907	219	1006.25985	Prob > F	= 0.0000
				R-squared	= 0.2508
				Adj R-squared	= 0.2333
				Root MSE	= 27.776

```
         roa | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
         cfo |   132.5394   16.49883     8.03   0.000     100.0184    165.0605
         cff |  -11.44823   19.88782    -0.58   0.565    -50.64934    27.75287
         cfi |   13.67458   8.123365     1.68   0.094    -2.337479    29.68663
         lev |   .0156381   .0554284     0.28   0.778    -.0936175    .1248938
          fs |  -8.332246   4.587369    -1.82   0.071    -17.37446    .7099697
       _cons |   63.45667    33.5132     1.89   0.060     -2.60157    129.5149
------------------------------------------------------------------------------
```

```
    Variable |       VIF       1/VIF
-------------+----------------------
         cff |      1.56    0.642905
         cfi |      1.33    0.751779
         cfo |      1.24    0.809538
         lev |      1.12    0.895657
          fs |      1.06    0.946692
-------------+----------------------
    Mean VIF |      1.26
```

```
Breusch–Pagan/Cook–Weisberg test for heteroskedasticity
Assumption: Normal error terms
Variable: Fitted values of roa

H0: Constant variance

    chi2(1) = 421.52
Prob > chi2 = 0.0000
```

```
Robust regression                               Number of obs     =        220
                                                F(  5,       214) =      60.69
                                                Prob > F          =     0.0000

------------------------------------------------------------------------------
         roa | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
         cfo |    13.8184   2.999144     4.61   0.000     7.906755    19.73005
         cff |  -7.187415   3.615192    -1.99   0.048    -14.31336   -.0614695
         cfi |  -7.117475   1.476659    -4.82   0.000    -10.02813   -4.206816
         lev |  -.1464696   .0100757   -14.54   0.000      -.16633   -.1266092
          fs |   3.910899   .8338883     4.69   0.000     2.267212    5.554586
       _cons |  -18.43509   6.092002    -3.03   0.003     -30.4431   -6.427076
------------------------------------------------------------------------------
```

APPENDIX B: DATASET EMPLOYED

YEARS	COMPANIES	EXCHANGE SECTOR	PRIMARY BUSINESS	EPS	ROA	CFO	CFF	CFI	LEV	FS
2015	Coronation Insurance	Financial Services	Property & Casualty Insurance	0.1	5.48	0.04	0	0.12	36.85	7.37
2016	Coronation Insurance	Financial Services	Property & Casualty Insurance	0.04	2.26	-0.01	-0.02	-0.06	36.04	7.41
2017	Coronation Insurance	Financial Services	Property & Casualty Insurance	0.11	5.35	-0.05	-0.01	-0.01	37.22	7.46
2018	Coronation Insurance	Financial Services	Property & Casualty Insurance	0.03	1.16	-0.02	0	-0.05	43.65	7.48
2019	Coronation Insurance	Financial Services	Property & Casualty Insurance	0.02	0.7	-0.08	0	0.03	39.76	7.49
2020	Coronation Insurance	Financial Services	Property & Casualty Insurance	0.07	3.03	0.03	0.1	-0.09	37.14	7.6
2021	Coronation Insurance	Financial Services	Property & Casualty Insurance	0.12	5.36	0.14	0.2	-0.21	34.52	7.71
2022	Coronation Insurance	Financial Services	Property & Casualty Insurance	0.17	7.69	0.25	0.3	-0.33	31.9	7.82
2023	Coronation Insurance	Financial Services	Property & Casualty Insurance	0.22	10.02	0.36	0.4	-0.45	29.28	7.93
2024	Coronation Insurance	Financial Services	Property & Casualty Insurance	0.27	12.35	0.47	0.5	-0.57	26.66	8.04
2015	Custodian Investment	Financial Services	Property & Casualty Insurance	0.71	7.32	0.15	-0.02	0.02	54.55	7.76
2016	Custodian Investment	Financial Services	Property & Casualty Insurance	0.91	7.83	0.09	-0.06	-0.29	55.8	7.83
2017	Custodian Investment	Financial Services	Property & Casualty Insurance	1.24	8.14	0.05	-0.02	-0.04	59.62	7.95
2018	Custodian Investment	Financial Services	Property & Casualty Insurance	1.21	7.25	0.09	-0.03	-0.04	57.71	7.99
2019	Custodian Investment	Financial Services	Property & Casualty Insurance	1.02	5.09	0.09	-0.02	-0.08	62.09	8.07
2020	Custodian Investment	Financial Services	Property & Casualty Insurance	2.17	7.26	0.27	-0.02	-0.23	67.35	8.25
2021	Custodian Investment	Financial Services	Property & Casualty Insurance	1.73	5.51	0.18	-0.02	-0.13	65.17	8.27
2022	Custodian Investment	Financial Services	Property & Casualty Insurance	1.29	3.76	0.09	-0.02	-0.03	62.99	8.29
2023	Custodian Investment	Financial Services	Property & Casualty Insurance	0.85	2.01	0	-0.02	0.07	60.81	8.31
2024	Custodian Investment	Financial Services	Property & Casualty Insurance	0.41	0.26	-0.09	-0.02	0.17	58.63	8.33
2015	Veritas Kapital Assurance (Unitykapital Assurance)	Financial Services	Property & Casualty Insurance	0.02	2.82	0.01	0	0.06	14.67	7.06
2016	Veritas Kapital Assurance (Unitykapital Assurance)	Financial Services	Property & Casualty Insurance	0.01	1.55	-0.07	-0.02	0.03	12.21	7.09
2017	Veritas Kapital Assurance (Unitykapital Assurance)	Financial Services	Property & Casualty Insurance	-0.05	-6.84	-0.12	-0.01	0.12	22.89	7.01
2018	Veritas Kapital Assurance (Unitykapital Assurance)	Financial Services	Property & Casualty Insurance	-0.05	-5.77	-0.08	0	0.08	30.62	7.08
2019	Veritas Kapital Assurance (Unitykapital Assurance)	Financial Services	Property & Casualty Insurance	0.01	1.37	-0.08	0	0.07	29.25	7.08
2020	Veritas Kapital Assurance (Unitykapital Assurance)	Financial Services	Property & Casualty Insurance	0.14	6.61	-0.02	0	0.01	33.17	7.15
2021	Veritas Kapital Assurance (Unitykapital Assurance)	Financial Services	Property & Casualty Insurance	0.08	3.44	-0.02	0	0.12	34.78	7.22
2022	Veritas Kapital Assurance (Unitykapital Assurance)	Financial Services	Property & Casualty Insurance	0.02	0.27	-0.02	0	0.23	36.39	7.29
2023	Veritas Kapital Assurance (Unitykapital Assurance)	Financial Services	Property & Casualty Insurance	-0.04	-2.9	-0.02	0	0.34	38	7.36
2024	Veritas Kapital Assurance (Unitykapital Assurance)	Financial Services	Property & Casualty Insurance	-0.1	-6.07	-0.02	0	0.45	39.61	7.43
2015	Universal Insurance	Financial Services	Multline Insurance	-0.01	-1.37	-0.02	0	0.01	21.46	7.13
2016	Universal Insurance	Financial Services	Multline Insurance	0.01	0.67	-0.01	0	-0.01	22.99	7.14
2017	Universal Insurance	Financial Services	Multline Insurance	0.04	4.6	-0.02	0	0	24.63	7.14
2018	Universal Insurance	Financial Services	Multline Insurance	0	-0.33	0	0	0.01	25.84	7.14
2019	Universal Insurance	Financial Services	Multline Insurance	0	0.55	-0.02	0	-0.01	16.51	7.04
2020	Universal Insurance	Financial Services	Multline Insurance	0.04	5.21	0.02	0	-0.01	17.87	7.08
2021	Universal Insurance	Financial Services	Multline Insurance	0.08	9.87	0.06	0	-0.01	19.23	7.12
2022	Universal Insurance	Financial Services	Multline Insurance	0.12	14.53	0.1	0	-0.01	20.59	7.16
2023	Universal Insurance	Financial Services	Multline Insurance	0.16	19.19	0.14	0	-0.01	21.95	7.2
2024	Universal Insurance	Financial Services	Multline Insurance	0.2	23.85	0.18	0	-0.01	23.31	7.24
2015	Sunu Assurance	Financial Services	Property & Casualty Insurance	-0.04	-4.9	0.03	0.18	-0.23	49.33	7.07
2016	Sunu Assurance	Financial Services	Property & Casualty Insurance	0	0	-0.09	0	0.1	47.9	7.01
2017	Sunu Assurance	Financial Services	Property & Casualty Insurance	0	0.05	0.03	0	-0.05	62.29	7.05
2018	Sunu Assurance	Financial Services	Property & Casualty Insurance	0	-0.34	-0.04	0	-0.04	65.5	7.09
2019	Sunu Assurance	Financial Services	Property & Casualty Insurance	-0.02	-2.02	0.04	0	-0.02	64.18	7.05
2020	Sunu Assurance	Financial Services	Property & Casualty Insurance	0.02	-2.02	0.04	0	-0.02	64.18	7.05
2021	Sunu Assurance	Financial Services	Property & Casualty Insurance	0.02	1.96	0.02	-0.01	-0.04	38.45	7.08
2022	Sunu Assurance	Financial Services	Property & Casualty Insurance	0.02	5.94	0	-0.02	-0.06	12.72	7.11
2023	Sunu Assurance	Financial Services	Property & Casualty Insurance	0.02	9.92	-0.02	-0.03	-0.08	-13.01	7.14
2024	Sunu Assurance	Financial Services	Property & Casualty Insurance	0.02	13.9	-0.04	-0.04	-0.1	-38.74	7.17
2015	Standard Alliance Insurance	Financial Services	Property & Casualty Insurance	0.07	7.53	0.04	-0.04	0.02	60.53	7.07
2016	Standard Alliance Insurance	Financial Services	Property & Casualty Insurance	-0.11	-10.3	-0.03	-0.01	0.02	64.27	7.11
2017	Standard Alliance Insurance	Financial Services	Property & Casualty Insurance	0	0.45	0.03	-0.01	0.02	61.71	7.12
2018	Standard Alliance Insurance	Financial Services	Property & Casualty Insurance	0	0.18	0.03	-0.01	0.02	60.39	7.13
2019	Standard Alliance Insurance	Financial Services	Property & Casualty Insurance	-0.01	-1.44	-0.02	0.02	0.02	65.2	7.05
2020	Standard Alliance Insurance	Financial Services	Property & Casualty Insurance	-0.02	-3.06	-0.07	0.05	0.02	70.01	6.97
2021	Standard Alliance Insurance	Financial Services	Property & Casualty Insurance	-0.03	-4.68	-0.12	0.08	0.02	74.82	6.89
2022	Standard Alliance Insurance	Financial Services	Property & Casualty Insurance	-0.04	-6.3	-0.17	0.11	0.02	79.63	6.81
2023	Standard Alliance Insurance	Financial Services	Property & Casualty Insurance	-0.05	-7.92	-0.22	0.14	0.02	84.44	6.73
2024	Standard Alliance Insurance	Financial Services	Property & Casualty Insurance	-0.06	-9.54	-0.27	0.17	0.02	89.25	6.65
2015	Sovereign Trust	Financial Services	Property & Casualty Insurance	0.07	6.28	0.03	0	0.01	45.76	6.97
2016	Sovereign Trust	Financial Services	Property & Casualty Insurance	0	0.25	0.03	-0.01	0.02	44.96	6.98
2017	Sovereign Trust	Financial Services	Property & Casualty Insurance	0.02	1.4	0.04	0	-0.01	49.42	7.03
2018	Sovereign Trust	Financial Services	Property & Casualty Insurance	0.04	3.04	0.12	0	0.02	48.59	7.05
2019	Sovereign Trust	Financial Services	Property & Casualty Insurance	0.06	3.75	0.03	0.11	0.01	41.97	7.13
2020	Sovereign Trust	Financial Services	Property & Casualty Insurance	0.08	4.64	0.02	0	-0.01	41.85	7.17
2021	Sovereign Trust	Financial Services	Property & Casualty Insurance	0.11	5.94	0.11	0	-0.03	41.35	7.21
2022	Sovereign Trust	Financial Services	Property & Casualty Insurance	0.14	7.24	0.2	0	-0.05	40.85	7.25
2023	Sovereign Trust	Financial Services	Property & Casualty Insurance	0.17	8.54	0.29	0	-0.07	40.35	7.29
2024	Sovereign Trust	Financial Services	Property & Casualty Insurance	0.2	9.84	0.38	0	-0.09	39.85	7.33
2015	Royal Exchange	Financial Services	Property & Casualty Insurance	-0.25	-4.9	0.01	-0.01	0.01	72	7.42
2016	Royal Exchange	Financial Services	Property & Casualty Insurance	-0.19	-3.09	0.08	0.06	-0.01	79.86	7.5
2017	Royal Exchange	Financial Services	Property & Casualty Insurance	-0.19	-2.91	0.02	-0.03	0.05	83.23	7.52
2018	Royal Exchange	Financial Services	Property & Casualty Insurance	-0.03	-0.44	-0.13	0.19	0.05	85.64	7.55
2019	Royal Exchange	Financial Services	Property & Casualty Insurance	-0.26	-4.09	0	-0.21	0.15	76.28	7.51
2020	Royal Exchange	Financial Services	Property & Casualty Insurance	0.15	3.27	0.07	-0.02	-0.09	57.9	7.39
2021	Royal Exchange	Financial Services	Property & Casualty Insurance	0.56	10.63	0.14	0.17	-0.33	39.52	7.27
2022	Royal Exchange	Financial Services	Property & Casualty Insurance	0.97	17.99	0.21	0.36	-0.57	21.14	7.15
2023	Royal Exchange	Financial Services	Property & Casualty Insurance	1.38	25.35	0.28	0.55	-0.81	2.76	7.03
2024	Royal Exchange	Financial Services	Property & Casualty Insurance	1.79	32.71	0.35	0.74	-1.05	-15.62	6.91
2015	Regency Aliance Ins	Financial Services	Property & Casualty Insurance	0.06	5.12	0.04	0	0.02	36.37	6.86
2016	Regency Aliance Ins	Financial Services	Property & Casualty Insurance	0.09	7.22	-0.03	-0.02	-0.15	30.18	6.93
2017	Regency Aliance Ins	Financial Services	Property & Casualty Insurance	0.04	2.96	-0.08	-0.02	0.14	43.68	6.97
2018	Regency Aliance Ins	Financial Services	Property & Casualty Insurance	0.04	2.77	-0.02	-0.02	0.05	40.71	6.99
2019	Regency Aliance Ins	Financial Services	Property & Casualty Insurance	0.11	6.91	0.02	-0.02	0.04	38.79	7.02
2020	Regency Aliance Ins	Financial Services	Property & Casualty Insurance	0.09	4.63	0.04	0.02	-0.11	44.87	7.11
2021	Regency Aliance Ins	Financial Services	Property & Casualty Insurance	0.05	2.72	0.02	0.02	0.03	43.35	7.07
2022	Regency Aliance Ins	Financial Services	Property & Casualty Insurance	0.01	0.81	0	0.02	0.17	41.83	7.03

2023	Regency Aliance Ins	Financial Services	Property & Casualty Insurance	-0.03	-1.1	-0.02	0.02	0.31	40.31	6.99
2024	Regency Aliance Ins	Financial Services	Property & Casualty Insurance	-0.07	-3.01	-0.04	0.02	0.45	38.79	6.95
2015	Prestige Assurance	Financial Services	Property & Casualty Insurance	-0.03	-1.4	-0.17	-0.03	0.02	42.21	7.02
2016	Prestige Assurance	Financial Services	Property & Casualty Insurance	-0.03	-1.22	0.02	-0.01	-0.06	35.72	6.99
2017	Prestige Assurance	Financial Services	Property & Casualty Insurance	0.1	4.52	0	-0.01	0.02	36.24	7.07
2018	Prestige Assurance	Financial Services	Property & Casualty Insurance	0.08	3.25	-0.05	-0.01	0.05	37.78	7.11
2019	Prestige Assurance	Financial Services	Property & Casualty Insurance	0.08	3.28	-0.04	-0.01	0.04	35.92	7.12
2020	Prestige Assurance	Financial Services	Property & Casualty Insurance	0.1	3.67	0.02	0.17	-0.16	32.97	7.27
2021	Prestige Assurance	Financial Services	Property & Casualty Insurance	0.05	3.19	-0.02	-0.02	0.17	39.78	7.33
2022	Prestige Assurance	Financial Services	Property & Casualty Insurance	0	2.71	-0.06	-0.21	0.5	46.59	7.39
2023	Prestige Assurance	Financial Services	Property & Casualty Insurance	-0.05	2.23	-0.1	-0.4	0.83	53.4	7.45
2024	Prestige Assurance	Financial Services	Property & Casualty Insurance	-0.1	1.75	-0.14	-0.59	1.16	60.21	7.51
2015	Niger Insurance	Financial Services	Multline Insurance	0.08	2.86	-0.09	-0.01	0.06	58.71	7.32
2016	Niger Insurance	Financial Services	Multline Insurance	0.01	0.19	-0.03	-0.01	0.01	61.74	7.35
2017	Niger Insurance	Financial Services	Multline Insurance	-0.13	-4.29	-0.02	0	0.02	65.66	7.36
2018	Niger Insurance	Financial Services	Multline Insurance	0.08	2.62	0	-0.01	0.01	61.82	7.36
2019	Niger Insurance	Financial Services	Multline Insurance	0.08	2.62	-0.08	0.1	-0.01	81.73	7.37
2020	Niger Insurance	Financial Services	Multline Insurance	-0.27	-9.59	-0.09	0.01	0.09	90.53	7.34
2021	Niger Insurance	Financial Services	Multline Insurance	-0.62	-21.8	-0.1	-0.08	0.19	99.33	7.31
2022	Niger Insurance	Financial Services	Multline Insurance	-0.97	-34.01	-0.11	-0.17	0.29	108.13	7.28
2023	Niger Insurance	Financial Services	Multline Insurance	-1.32	-46.22	-0.12	-0.26	0.39	116.93	7.25
2024	Niger Insurance	Financial Services	Multline Insurance	-1.67	-58.43	-0.13	-0.35	0.49	125.73	7.22
2015	Nem Insurance	Financial Services	Property & Casualty Insurance	0.14	5.72	0.06	-0.01	-0.06	50.34	7.1
2016	Nem Insurance	Financial Services	Property & Casualty Insurance	0.34	12.54	0.08	-0.02	-0.05	48.93	7.16
2017	Nem Insurance	Financial Services	Property & Casualty Insurance	0.53	15.8	0.08	-0.02	-0.06	44.56	7.24
2018	Nem Insurance	Financial Services	Property & Casualty Insurance	0.39	8.38	0.05	-0.02	0.11	41.17	7.39
2019	Nem Insurance	Financial Services	Property & Casualty Insurance	0.45	9.33	0.09	-0.03	-0.01	45.11	7.41
2020	Nem Insurance	Financial Services	Property & Casualty Insurance	0.96	16.3	0.13	-0.03	-0.13	41.15	7.49
2021	Nem Insurance	Financial Services	Property & Casualty Insurance	0.88	11.59	0.08	-0.03	-0.04	40.12	7.58
2022	Nem Insurance	Financial Services	Property & Casualty Insurance	0.8	6.88	0.03	-0.03	0.05	39.09	7.67
2023	Nem Insurance	Financial Services	Property & Casualty Insurance	0.72	2.17	-0.02	-0.03	0.14	38.06	7.76
2024	Nem Insurance	Financial Services	Property & Casualty Insurance	0.64	-2.54	-0.07	-0.03	0.23	37.03	7.85
2015	Mutual Benefit Assurance	Financial Services	Life & Health Insurance	0.11	1.93	0.04	0	-0.02	83.41	7.66
2016	Mutual Benefit Assurance	Financial Services	Life & Health Insurance	-0.17	-2.62	0.06	0	-0.13	86.37	7.71
2017	Mutual Benefit Assurance	Financial Services	Life & Health Insurance	0.13	1.74	0.04	0	-0.08	85.96	7.76
2018	Mutual Benefit Assurance	Financial Services	Life & Health Insurance	0.14	1.94	-0.03	0	-0.02	84.63	7.77
2019	Mutual Benefit Assurance	Financial Services	Life & Health Insurance	0.36	5.33	0.02	0.04	-0.03	78.56	7.83
2020	Mutual Benefit Assurance	Financial Services	Life & Health Insurance	0.46	6.17	0.03	0.06	-0.03	70.21	7.92
2021	Mutual Benefit Assurance	Financial Services	Life & Health Insurance	0.56	7.01	0.04	0.08	-0.03	61.86	8.01
2022	Mutual Benefit Assurance	Financial Services	Life & Health Insurance	0.66	7.85	0.05	0.1	-0.03	53.51	8.1
2023	Mutual Benefit Assurance	Financial Services	Life & Health Insurance	0.76	8.69	0.06	0.12	-0.03	45.16	8.19
2024	Mutual Benefit Assurance	Financial Services	Life & Health Insurance	0.86	9.53	0.07	0.14	-0.03	36.81	8.28
2015	Linkage Assurance	Financial Services	Property & Casualty Insurance	0.06	2.63	-0.01	0	0.01	16.33	7.29
2016	Linkage Assurance	Financial Services	Property & Casualty Insurance	0.07	2.68	0	0	0.01	18.69	7.31
2017	Linkage Assurance	Financial Services	Property & Casualty Insurance	0.36	12.4	-0.06	0	0.02	14.4	7.37
2018	Linkage Assurance	Financial Services	Property & Casualty Insurance	-0.04	-1.25	-0.02	-0.02	0.01	22.57	7.36
2019	Linkage Assurance	Financial Services	Property & Casualty Insurance	0.18	5.06	-0.05	0	0.06	19.73	7.46
2020	Linkage Assurance	Financial Services	Property & Casualty Insurance	0.24	7.07	-0.02	0	0.08	22.14	7.53
2021	Linkage Assurance	Financial Services	Property & Casualty Insurance	-0.29	-10.31	-0.04	-0.01	0.05	35.14	7.59
2022	Linkage Assurance	Financial Services	Property & Casualty Insurance	-0.82	-27.69	-0.06	-0.02	0.02	48.14	7.65
2023	Linkage Assurance	Financial Services	Property & Casualty Insurance	-1.35	-45.07	-0.08	-0.03	-0.01	61.14	7.71
2024	Linkage Assurance	Financial Services	Property & Casualty Insurance	-1.88	-62.45	-0.1	-0.04	-0.04	74.14	7.77
2015	Lasasco Assurance	Financial Services	Multline Insurance	0.04	1.76	0.14	0	0.04	59.22	7.21
2016	Lasasco Assurance	Financial Services	Multline Insurance	0.13	4.89	-0.02	0	-0.01	59.31	7.29
2017	Lasasco Assurance	Financial Services	Multline Insurance	0.09	3.56	-0.09	-0.01	0.08	56.08	7.27
2018	Lasasco Assurance	Financial Services	Multline Insurance	0.1	4.32	-0.18	-0.02	-0.02	50.25	7.23
2019	Lasasco Assurance	Financial Services	Multline Insurance	0.04	1.71	0.08	-0.02	0.01	55.84	7.27
2020	Lasasco Assurance	Financial Services	Multline Insurance	0.09	3.31	0.09	-0.02	-0.04	62.01	7.31
2021	Lasasco Assurance	Financial Services	Multline Insurance	0.14	4.91	0.1	-0.02	-0.09	68.18	7.35
2022	Lasasco Assurance	Financial Services	Multline Insurance	0.19	6.51	0.11	-0.02	-0.14	74.35	7.39
2023	Lasasco Assurance	Financial Services	Multline Insurance	0.24	8.11	0.12	-0.02	-0.19	80.52	7.43
2024	Lasasco Assurance	Financial Services	Multline Insurance	0.29	9.71	0.13	-0.02	-0.24	86.69	7.47
2015	International Energy Insurance	Financial Services	Property & Casualty Insurance	-0.55	-8.8	-0.04	0	0	126.28	6.91
2016	International Energy Insurance	Financial Services	Property & Casualty Insurance	-2.85	-40.92	-0.06	0	0.01	160.03	6.95
2017	International Energy Insurance	Financial Services	Property & Casualty Insurance	-1.75	-26.47	-0.01	0	-0.01	190.61	6.93
2018	International Energy Insurance	Financial Services	Property & Casualty Insurance	-3.25	-54.99	-0.1	0	0.09	256.22	6.88
2019	International Energy Insurance	Financial Services	Property & Casualty Insurance	0.21	3.15	-0.01	0	0.09	221.46	6.94
2020	International Energy Insurance	Financial Services	Property & Casualty Insurance	3.67	61.29	0.08	0	0.09	186.7	7
2021	International Energy Insurance	Financial Services	Property & Casualty Insurance	7.13	119.43	0.17	0	0.09	151.94	7.06
2022	International Energy Insurance	Financial Services	Property & Casualty Insurance	10.59	177.57	0.26	0	0.09	117.18	7.12
2023	International Energy Insurance	Financial Services	Property & Casualty Insurance	14.05	235.71	0.35	0	0.09	82.42	7.18
2024	International Energy Insurance	Financial Services	Property & Casualty Insurance	17.51	293.85	0.44	0	0.09	47.66	7.24
2015	Guinea Insurance	Financial Services	Property & Casualty Insurance	0	-0.18	-0.08	0	0.04	29.55	6.61
2016	Guinea Insurance	Financial Services	Property & Casualty Insurance	0	0.06	-0.04	0	0.05	27.23	6.6
2017	Guinea Insurance	Financial Services	Property & Casualty Insurance	0.04	5.7	-0.06	0.02	0.04	22.64	6.64
2018	Guinea Insurance	Financial Services	Property & Casualty Insurance	-0.03	-4.3	-0.03	0.02	-0.02	29.76	6.65
2019	Guinea Insurance	Financial Services	Property & Casualty Insurance	-0.13	-22.05	-0.13	0	0.11	36.91	6.56
2020	Guinea Insurance	Financial Services	Property & Casualty Insurance	-0.04	-6.5	-0.05	0	0.05	39.57	6.54
2021	Guinea Insurance	Financial Services	Property & Casualty Insurance	-0.04	-0.68	-0.04	0	-0.05	38.88	6.54
2022	Guinea Insurance	Financial Services	Property & Casualty Insurance	-0.04	5.14	-0.03	0	-0.15	38.19	6.54
2023	Guinea Insurance	Financial Services	Property & Casualty Insurance	-0.04	10.96	-0.02	0	-0.25	37.5	6.54
2024	Guinea Insurance	Financial Services	Property & Casualty Insurance	-0.04	16.78	-0.01	0	-0.35	36.81	6.54
2015	Cornerstone Insurance	Financial Services	Multline Insurance	0.11	7.78	-0.02	-0.01	0.19	42.43	7.32
2016	Cornerstone Insurance	Financial Services	Multline Insurance	-0.12	-8.09	-0.04	0	-0.11	51.93	7.33
2017	Cornerstone Insurance	Financial Services	Multline Insurance	-0.23	-13.96	0.02	0	0.01	69.43	7.38
2018	Cornerstone Insurance	Financial Services	Multline Insurance	0.21	10.51	0	0	0.02	63.74	7.46
2019	Cornerstone Insurance	Financial Services	Multline Insurance	0.28	11.69	-0.01	0	0.25	57.68	7.55
2020	Cornerstone Insurance	Financial Services	Multline Insurance	0.12	5.01	0.04	0	-0.06	59.56	7.64
2021	Cornerstone Insurance	Financial Services	Multline Insurance	0.2	7.17	0.02	0	-0.06	58.48	7.69
2022	Cornerstone Insurance	Financial Services	Multline Insurance	0.28	9.33	0	0	-0.06	57.4	7.74
2023	Cornerstone Insurance	Financial Services	Multline Insurance	0.36	11.49	-0.02	0	-0.06	56.32	7.79

2024	Cornerstone Insurance	Financial Services	Multline Insurance	0.44	13.65	-0.04	0	-0.06	55.24	7.84
2015	Consolidated Hallmark	Financial Services	Property & Casualty Insurance	0.09	7.77	0.1	-0.02	-0.01	39.23	6.85
2016	Consolidated Hallmark	Financial Services	Property & Casualty Insurance	0.03	2.62	0.02	-0.01	-0.15	40.84	6.87
2017	Consolidated Hallmark	Financial Services	Property & Casualty Insurance	0.07	4.28	-0.02	0.04	-0.01	50.59	6.98
2018	Consolidated Hallmark	Financial Services	Property & Casualty Insurance	0.06	3.76	-0.04	0.05	0.09	42.93	7.03
2019	Consolidated Hallmark	Financial Services	Property & Casualty Insurance	0.07	5.11	-0.03	-0.02	-0.05	43.67	7.07
2020	Consolidated Hallmark	Financial Services	Property & Casualty Insurance	0.08	4.74	0.02	0.07	0.01	41.85	7.16
2021	Consolidated Hallmark	Financial Services	Property & Casualty Insurance	0.09	4.37	0.07	0.16	0.07	40.03	7.25
2022	Consolidated Hallmark	Financial Services	Property & Casualty Insurance	0.1	4	0.12	0.25	0.13	38.21	7.34
2023	Consolidated Hallmark	Financial Services	Property & Casualty Insurance	0.11	3.63	0.17	0.34	0.19	36.39	7.43
2024	Consolidated Hallmark	Financial Services	Property & Casualty Insurance	0.12	3.26	0.22	0.43	0.25	34.57	7.52
2015	AxaMansard	Financial Services	Property & Casualty Insurance	0.17	3.25	0.05	0.02	-0.07	61.69	7.71
2016	AxaMansard	Financial Services	Property & Casualty Insurance	0.25	4.79	0.02	-0.03	-0.04	63.27	7.74
2017	AxaMansard	Financial Services	Property & Casualty Insurance	0.26	4.02	0.03	-0.04	0.04	69.53	7.82
2018	AxaMansard	Financial Services	Property & Casualty Insurance	0.24	3.36	-0.01	-0.02	0.03	65.4	7.87
2019	AxaMansard	Financial Services	Property & Casualty Insurance	0.28	3.15	0.05	0.04	0.05	67.41	7.97
2020	AxaMansard	Financial Services	Property & Casualty Insurance	0.17	6.39	-0.02	-0.05	0.1	60.09	7.98
2021	AxaMansard	Financial Services	Property & Casualty Insurance	0.42	3.59	0.07	-0.03	-0.07	66.95	8.02
2022	AxaMansard	Financial Services	Property & Casualty Insurance	0.67	0.79	0.16	-0.01	-0.24	73.81	8.06
2023	AxaMansard	Financial Services	Property & Casualty Insurance	0.92	-2.01	0.25	0.01	-0.41	80.67	8.1
2024	AxaMansard	Financial Services	Property & Casualty Insurance	1.17	-4.81	0.34	0.03	-0.58	87.53	8.14
2015	Aiico	Financial Services	Multline Insurance	0.17	1.49	0.21	0.02	-0.22	87.88	7.9
2016	Aiico	Financial Services	Multline Insurance	1.48	13.21	0.02	0	-0.03	88.77	7.89
2017	Aiico	Financial Services	Multline Insurance	0.19	1.39	-0.02	0	0	88.59	7.97
2018	Aiico	Financial Services	Multline Insurance	0.05	0.29	0.06	-0.01	-0.05	86.12	8.04
2019	Aiico	Financial Services	Multline Insurance	0.85	3.71	0.07	0.03	-0.07	81.87	8.2
2020	Aiico	Financial Services	Multline Insurance	0.32	2.05	0.13	0	-0.04	85.74	8.39
2021	Aiico	Financial Services	Multline Insurance	0.07	1.15	-0.04	0	0.01	82.74	8.35
2022	Aiico	Financial Services	Multline Insurance	-0.18	0.25	-0.21	0	0.06	79.74	8.31
2023	Aiico	Financial Services	Multline Insurance	-0.43	-0.65	-0.38	0	0.11	76.74	8.27
2024	Aiico	Financial Services	Multline Insurance	-0.68	-1.55	-0.55	0	0.16	73.74	8.23
2015	African Alliance Insurance	Financial Services	Life & Health Insurance	-0.24	-13.4	0.21	0	-0.17	92.87	7.57
2016	African Alliance Insurance	Financial Services	Life & Health Insurance	0.15	6.67	0.16	0	-0.1	87.33	7.66
2017	African Alliance Insurance	Financial Services	Life & Health Insurance	-0.3	-14.26	-0.04	0	0.02	101.17	7.64
2018	African Alliance Insurance	Financial Services	Life & Health Insurance	-0.13	-6.52	-0.07	0	0	107.67	7.62
2019	African Alliance Insurance	Financial Services	Life & Health Insurance	-0.34	-17.59	-0.1	0.02	0.03	128.36	7.6
2020	African Alliance Insurance	Financial Services	Life & Health Insurance	0.28	10.07	-0.07	-0.02	0.36	109.08	7.75
2021	African Alliance Insurance	Financial Services	Life & Health Insurance	-0.06	-2.8	-0.13	-0.02	-0.24	115.08	7.64
2022	African Alliance Insurance	Financial Services	Life & Health Insurance	-0.4	-15.67	-0.19	-0.02	-0.84	121.08	7.53
2023	African Alliance Insurance	Financial Services	Life & Health Insurance	-0.74	-28.54	-0.25	-0.02	-1.44	127.08	7.42
2024	African Alliance Insurance	Financial Services	Life & Health Insurance	-1.08	-41.41	-0.31	-0.02	-2.04	133.08	7.31