FUNDAMENTAL RISK FACTORS AND FINANCIAL PERFORMANCE OF INSURANCE FIRMS IN KENYA

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Abstract: The financial performance of Insurance firms plays a vital role in increasing the sector's market value and leads to the economy's overall growth. There exists substantial empirical literature on fundamental risk factors and the financial performance of commercial banks and microfinance institutions. However, few studies have delved much into the relationship between fundamental risk factors and the financial performance of Insurance firms. The downward financial performance trend of the Insurance firms in Kenya is a cause for concerns among various stakeholders. The financial performance has shown a downward trend from 2011 to 2018 before a little bullish movement in 2019. The study investigates the effect of fundamental risk factors on the financial performance of Insurance firms in Kenya. Operating ratio measured financial performance for the Insurance firms as applied by the Insurance regulatory authority. The study's specific objectives are to determine the effect of inflation, exchange rates, and interest rates on the financial performance of Kenya's insurance firms. The study further establishes the moderating effect of capital adequacy on the relationship between fundamental risk factors and the financial performance of the Insurance firms in Kenya. This study adopts Positivism philosophy and an Explanatory research design. The study the Modern portfolio theory, expectations, and the Liquidity preference theory. The study uses quarterly data obtained from the insurance firms in Kenya and uses STATA software to analyze. Data analysis through Descriptive statistics, Pearson's simple correlation, Time-series regression analysis over a time scope of 10 years, Interest rates have a positive but not statistically significant effect on operating ratio as indicated by the p value ($P = 0.081 < 0.05$). Furthermore, Inflation rates has positive but statistically insignificant effect on Fundamental risk factors with p value ($P = 0.863 < 0.05$), exchange rate has a positive statistically significant effect on operating ratio ($P = 0.000 < 0.05$). rom 2014-2021. The hypothesis was tested at the 0.05 level of significance; findings reveal that Interest rates have a positive but statistically insignificant effect on operating ratio at p value of 0.081. Furthermore, Inflation rates has positive but statistically insignificant effect on Financial performance with p value ($P=0.863$), exchange rate has a positive statistically significant effect on operating ratio ($P = 0.000$). Therefore, the research suggests the insurance firms should be keen to quantify and control the effect of foreign exchange gain or loss on their financial performance The firms should also take into account the impact of interest and exchange rates to mitigate the impact of their volatility on financial performance.

Keywords: Fundamental Risk Characteristics, Capital Adequacy, Interest rates, Exchange rates, Inflation rates.

1. INTRODUCTION

1.1 Background to the study

Burca (2014) states that both fundamental risk factors and firm-specific characteristics impact on revenue and expenditure of insurance firms. In finance, Market parameters that impact the monetary value of financial instruments, such as interest, inflation, and currency exchange rates, are known as "fundamental risk factors". (Duestch, 2004). Interest rates are major economic influences; they facilitate capital formation and profoundly affect everything from monetary policy,

investment decisions to job creation, and corporate financial performance (Mboga, 2014). Insurance firms pool risks and mobilize capital by premium collection for investments (Agiobenebo & Ezirim, 2004). Insurers cover risk and promote the financial stability of financial markets because firms may lack sufficient capital to bear all risks in such a dynamic global economy (Ahmed & Ahmed, 2010).

Financial performance is the indicator of the ability of a company to employ assets in revenue generation and to meet its financial targets over a specific period (Ozeke & Abadolaye, 2020). According to Chen, Sun, and Yu (2010), financial performance is indicated by earnings, profitability, and growth in the firm's value. For Insurance companies, performance is measured by equity, profits earned from underwriting activities, net premiums underwritten, annual sales, and return on investment (Insurance Regulatory Authority, 2018). The potential losses posed by changes in exchange rates and interest rates lower insurance companies' financial investment income from bonds, loans, and real estate (Gerald & Ulrike, 2018). The Consumer Price Index, which records the average cost of goods and services, is the standard of measure for inflation rates (Akers, 2014). The index tracks the typical retail prices consumers pay; a high inflation rate raises costs which in turn results in a decline in overall consumer spending. Decrease in insurance policy uptake translates to decrease in the total underwritten premium (Ahmed, 2011).

Interest rate fluctuation among lending and deposit-taking institutions originates from unpredictable fluctuation in the current market rates (Akpomiemie & Euphemia, 2016). In Pakistan, Ahmed, Rehan, and Supro (2018) contend that fluctuation in interest rates influences the cost of capital in the financial markets and impacts the Continuum of consumption by people. In addition, Noreen, Liaqat, and Parveen (2018) contend that interest rate change significantly affects the economy. Rising interest rate affects financial performance as it also increases the cost of borrowing and in a similar vein, declining interest rates also result in lower deposit rates, which decreases the desire to save.

According to Hicks (2000), Insurance companies have a vast array of revenue streams besides collecting premiums, and as such, various fundamental risk factors have a substantial part in the financial performance of insurance firms. Fluctuation of fundamental risk factors has an effect on the financial health of Insurer's world over. In Croatia, Pervan and Pavic (2010) and Curak *et al*. (2011) investigated the effects of fundamental risk factors on the financial performance of insurance companies in croatia. The study's findings showed an inverse and significant influence of inflation rates movement on the financial health of the Insurance firms.

According to Brainard (2008), insurance plays a crucial role in ensuring stability and financial security. Bhatia (2013) states that several fundamental risk factors like interest rates, inflation rate, and GDP affect the growth of insurance services as they influence critical aspects of the firm like total premium collection and Insurance uptake. Fundamental risk factors affect domestic price levels, the profitability of companies, investment decisions, allocation of resources, and export sales (Nyairo, 2018). According to Mulwa (2013), movement of exchange rates has a ripple effect on the value of international transactions both in goods and financial assets. The impact of exchange rate volatility manifests when there are financial obligations to be met in foreign currency. This kind of risk has more significance in financial performance non-life than in life insurance (Hales,2005).

In Nigeria, Williams (2018) investigated how currency rates affected the performance of insurance companies listed on the Nigerian stock exchange. He reveals that increasing rapid changes exchange rate result in reduction in the Return on capital invested among Insurance firms in Kenya. Njoroge (2013) study how interest rates affect the financial health of insurance companies that trade on the National Securities Exchange. He observes a positive relationship between the interest rate and the profitability of listed companies. Furthermore, Muchiri (2012) Examine the connection between interest rates and the financial success of insurance companies listed on the National Securities Exchange; conclusions show that the inflation rate has a positive but insignificant effect on share prices while the exchange rate has a significant impact on stock market financial performance.

1.1.1 Fundamental Risk Factors

Fundamental risk factors are the market-related factors like, inflation rates, interest rates and currency exchange rates that can impact how financial instruments are valued and priced in the financial markets (Deutsch, 2004; Akims & Jagongo, 2018). Fluctuation of these factors causes changes in the value and pricing of underlying financial instruments because of inherent market risk (Misund, 2018). Movement in Fundamental risk factors is associated with trends in asset prices and financial instruments trading on various financial markets (Aguiar & Broner, 2006). Berends *et al.* (2013) investigate profitability and the interest rate risk insurance firms face through the behaviour of policyholders. There are several

insurance products that provide policyholders the opportunity to use their discretion to surrender or terminate their policies.

Inflation refers to the constant upsurge in cost of goods and services over a specified period (Karl & Holzheu, 2010). The primary cause of inflation is a constant increase in income that is not proportionate with goods and services (Osoro, 2014). Where the money supply supersedes the available goods and services; in the long run, price increase, leading reduction in disposable income and the purchasing power of the population (Ongeri, 2014), it, therefore, affects the financial performances of a deposit-taking institution like insurance companies. The study uses the average quarterly Consumer Price Index (CPI) to quantify the inflation rate.

Interest rate refers to the cost that a lender usually charges the borrower for lending money (Nyambura, 2016); insurance companies recognize it on the income statement partly financed by debt. A real interest rate is computed net of the expected inflation rate to account for the actual cost of capital for the debtor and the real yield for the creditor, (Brock, 2018). According to Ngugi (2001), interest rates are amongst the most significant determinants of a firm's financial performance. He further states that interest rates also impact investing decisions and monetary policies. This study adopts quarterly real lending interest rates, which is more objective since it considers inflation adjustment (Akers, 2014).

Exchange rate Currency fluctuations directly affect firms through transactions whose obligations are in foreign currencies (Bailliu & Bouakez, 2004). Exchange rate movements translated to local prices through imported consumer goods and local goods priced in foreign currency, the extent of the exchange rate movements reflected in the consumer price index (McCarthy, 2000). Mwangi (2017) stated that exchange rate fluctuations might affect the general price levels in any economy depending on foreign exchange transactions. This study uses the quarterly average exchange rate between USD/ Kenya Shilling.

1.2 Statement of the Problem

According to the Insurance Regulatory Authority (2019), insurance sectors aggregate Return on Equity (ROE) has been on a slopping trend, the Kenyan insurance sector records an ROE of 11.4 % in 2015, it slumps lower to 9.9% and 8.9% in 2016 and 2017, respectively, it slumps further to 4.9 % in 2018 before rising to 9.9 % in 2019. According to Insurance Regulatory Authority (2018), investment income records a negative growth rate of -13.89% from 2011 to 2018. Bank interest rate has been steadily rising from an average of 6.5% in 2014 to 7.9% in 2018 to 7% in 2019 and lower to 6.7% in 2020 (Central Bank of Kenya, 2020). In the wake of this trend in interest rate statistics, there has been a smooth decline in performance.

The Kenya National Bureau of Statistics reported in 2020 that the annual average Inflation rate was relatively stable with 6.8% in 2011, 6.5% in 2015 and 2016. The KSH/USD rate was on an upward trend from Ksh.88.07 in 2014 upwards to Ksh.103.39 in 2017, and bearish movement is recorded at Ksh.101.3 in 2018 before rising to an annual average of Ksh.106.62 per USD in 2020(Central Bank of Kenya,2020). Amidst the volatility of the fundamental risk factors, the trend in ROE stays on average downward trajectory from 2014-2020.

Financial performance remains key subject among researchers in business and management since nearly every business stakeholder is interested in performance (Batra, 2007). Despite playing a critical role in wealth creation through investments and risk management, the insurance industry in Kenya has witnessed several firms close down (Hagel, Brown & Davison, 2010). Insurance firms like Blue Shield Insurance and united insurance have closed business and faced liquidation in the decade ending 2018. Consquentialy, Policyholders have lost billions of shillings in pension schemes and life funds (Kumba, 2011). Such instances raise questions about the financial soundness of the insurance sector and their extent of disclosure to potential investors that helps investors make informed investment decisions.

Substantial empirical evidence has dwelt on the financial performance of Banks, while others studies have reported scant research on how interest rates affect performance of insurance firms in Kenya. For instance, Kipngetich (2011) investigated the financial performance of Banks while Bioreri (2015) investigated the real estate sector. Evidence from these studies indicates that interest rates significantly affect the financial performance of both banks and real estate firms. According to Bioreri (2015), there is need to conduct the Study again to cover Fundamental risk factors in other areas like insurance firms; this research aims to fill this gap. Moreover, Akotey (2013) studied the effect of interest rates on Life insurers. Findings reveal a negative relationship between investment income and interest rates, but he does not cover other factors like inflation. Akotey (2013) delves into the case of general insurers. This study addresses this by investigating both life and general insurers and looking at the effect of other fundamental risk factors on both classes of Insurers.

Muya (2013) holds that deposit interest rates positively correlate with the insurance firm's financial performance. However, this study employs a descriptive research design in analyzing quantitative panel data rather than exploratory research design, which would be a more effective technique. A study by Nyamu (201) and Ndichu (2014) investigates the effect of fundamental risk factors on the financial performance of insurance firms in Kenya. However, he uses a descriptive research design that measures financial performance by ROA. This study seeks to fill the gaps by employing exploratory and causal design; this study also measures financial performance using the operating ratio.

There are methodological gaps in the reviewed studies. Both Mwangi (2012) and Murungi measure financial performance using ROA; this study takes the operating ratio approach recommended for insurance firms as a metric for financial performance. They also use the descriptive research technique while this study aims to use causal and exploratory research design. Despite the extensive empirical evidence reviewed, all studies don't have moderating variables, while others are a mix of macro and micro factors. The studies do not conclude the effect of fundamental risk factors on financial performance. There is still room for research to study the insurance firms' performance and fundamental risk factors. Furthermore, most of the studies on the fundamental risk variables have dwelt on commercial banks. This study uses the Time series regression model and exploratory research design. This current study fills the gaps documented above and is keen assess the effect of fundamental risk factors on the financial performance of Insurance firms in Kenya.

1.3. Objectives of the Study

1.3.1 General Objective

The study's general objective was to assess the effect of fundamental risk factors on the financial performance of Insurance firms in Kenya.

1.3.2 Specific Objectives

The specific objectives of the study were:

i. To determine the effect of interest rates on the financial performance of Insurance firms in Kenya.

ii. To establish the effect of inflation on the financial performance of Insurance firms in Kenya.

iii. To determine the effect of exchange rates on the financial performance of Insurance firms in Kenya.

iv. To determine the moderating effect of capital adequacy on the relationship between fundamental risk factors and financial performance of Kenya's insurance firms.

1.4 Research Hypotheses

The study sought to test the following null hypotheses

H_{01} Interest rates do not have a significant effect on financial performance of Insurance firms in Kenya.

H_{02}. Inflation rate do not have a significant effect on financial performance of Insurance firms in Kenya.

H_{03}. Exchange rates do not have a significant effect on financial performance of Insurance firms in Kenya.

H_{04}. Capital adequacy does not have a significant moderating effect on the relationship between fundamental risk factors and the financial performance of the Insurance firms in Kenya.

2. LITERATURE REVIEW

2.1 Theoretical Review

The Modern Portfolio theory refers to an investment-based theory advanced by Harry Markowitz in his "Portfolio Selection" (1952). It suggests that an investor can settle for an efficient combination of optimal investment opportunities at the highest possible risk they can bear. The aim of an ideal portfolio is to achieve maximum possible return of a portfolio at a given level of risk by efficiently selecting the composition of the investment portfolio (Levchenko *et al*., 2016). The modern portfolio theory explains shows the way an investor can select a portfolio and, aiming for maximum return at the lowest potential risk. The risk and anticipated return of a financial asset are positively correlated. (Sadiye, 2014)

Under the Markowitz analogy, insurance companies are expected to be risk averse like any other rational investor. They should therefore choose the portfolio with reduced risk when given a choice between two portfolios that have the same return. When selecting portfolios with similar risk levels, being rational, they invest in the portfolio with a higher rate of

return. (Li & Huang, 1996). Because of the fluctuation of interest rates, inflation rate, and exchange rates, insurance companies ought to invest in a portfolio of investments with an array of classes of financial instruments to maximize returns (Kung'u, 2013).

To maximize their financial performance, insurance firms being a pool of investments, should diversify their investment portfolio to reduce risk to generate revenue from various investment options they venture to (Gollier & Wibaut, 1992). Insurance companies apply the portfolio theory to maximize portfolio expected return at a measurable level risk by carefully selecting the quantities of financial assets invested (Read, 2012). The modern portfolio theory also has limitations, for example; it places significant reliance on historical performance data, yet assets can perform in the future differently than from the past, and both the returns and correlation between assets can change. It also uses variance to measure risk, which is not the best technique to measure portfolio risk.

The Liquidity Preference Theory of Interest rate was first proposed by Keynes (1936). The theory holds that interest rate is a monetary feature affected by the overall demand level and supply of money. People keep money for a variety of reasons, including for consumption, investments, speculative objective, and precautionary measures. The supply of money at a particular period is the fixed quantity of money in circulation (Appelt, 2016). Money constitutes the total currency stock in coins, notes, and deposits held by commercial banks, companies, and individuals (Amanda, 2020). Money supply remains fixed into the foreseeable future through the controlling actions of a countries central bank. Similarly, citizens and businesses prefer to hold on to cash rather than invest in a highly risk portfolio; the need to hoard cash rather than invest is referred to as liquidity preference (Millikan, 2020).

Lending out funds for a particular period earns interest income. Lending institutions earn interest from lending; borrowers incur a cost when they borrow money in exchange for gains from interest rates (Bektas,2014). The supply of credit by lenders, such as banks and insurance firms, and the demand for credit from borrowers both have an impact on the interest rate. When demand for credit is greater than supply, it raises interest rates and vice versa. Because its fundamentals explain how interest rate fluctuations relate to the profitability of deposit and taking institutions (Insurance Companies), the liquidity theory of interest rates is pertinent to this study as insurance firms are affected through policy loans and debt capital.

The interest rates placed on loans from banks are a cost for Insurance firms, and a source of profit of banks (Appelt, 2016). While its income form for Insures when they issue policy loans. High interest rates pegged on lending activities result in high interest income and vice versa (Corb, 2012). Contrarily, the Liquidity Theory of Interest Rates, does not view the interest rate as an incentive to save. There won't be any formation of liquidity without savings (deposits); therefore, the theory primarily focuses on demand and supply for money; Interest rates also determine the price of government bonds. The Liquidity Theory of Interest Rates supports the relationship between interest rates and the financial performance of Insurance Companies.

The Expectations Theory of Exchange Rates was incepted by Moth (1961). In his research, "Rational Expectations and the Theory of Price fluctuations," Moth used the phrases to characterize a variety of circumstances where a result partially depends on people's expectations. The great British economist John Maynard Keynes is the proponent of this theory, who allocated people's future expectations. He referred to them as "waves of optimism and pessimism" in his opinion, they play a crucial part in defining the business cycle. (Tardy, 2020).

Economists typically utilize rational expectations to describe anticipated inflation rates or economic state. Suppose past inflation rates were higher than expected. In that case, policyholders might consider this, along with other indicators, expectations theory targets to assist investors in making choices based on future interest rates Moth (1961). The theory forecasts the rate for short-term bonds using long-term rates, often from government bonds. Theoretically, long-term rates can predict how short-term bond rates change in the future. (Murphy, 2020). Proponents of the biased expectations theory hold that the yield curve's shape varies due to various systematic factors besides what the market currently anticipates the future interest rates. They state that market expectations of future rates influence investors' preferences over bonds with different yield times that affect the yield curve (Brainard, 2019).

An extension to the expectations theory by Chapellow (2019) says that investors prefer short-term bonds unless long-term bonds pay a higher reward. In addition, preferred habitat theory can help explain, in part, why two shorter-term bonds that when combined together have the same maturity period as a long-term bond but still often pay out lower interest rate. (Murphy, 2020). For Insurance firms, it is worth noting that the expectation theory comes into play to affect their levels of premium collection. When the general public anticipates inflation and interest rates, they tend to make investment and

expenditure decisions in line with the market expectations of such fundamental risk variables. This is because inflation and interest rates affect the levels of disposable income among households.

Expectations Theory is relevant to this study due to the fact that many people have expectations regarding exchange rates based on information available in the market. The theory illustrates how the supply and demand for money are influenced by the general expectations of individuals., which in turn impacts a country's currency exchange rates. As a result, changes in the currency rate are affected by mass expectations. Hence, Individuals' expectations of higher exchange rates result in economies' exchange rates increasing and vice versa, which ultimately affects financial institutions' profitability. The most significant criticism against rational expectations is that it is unrealistic to say and assert that individual expectations are essentially the same as the predictions of the relevant economic theory.

2.2 Empirical Review

2.2.1 Inflation Rates and Financial performance

Mwangi (2017) investigated how fundamental risk factors affect financial performance of 35 insurance companies in Kenya. Findings from the event methodology study on cross-sectional data indicate that when both inflation and interest rates increase, there is a decline in the ROA listed of Insurance firms. Nyamu (2016) used a descriptive research design to examine how macroeconomic conditions affect the financial performance of 50 Kenyan insurance companies; results show that Interest rates and financial performance have a considerable relationship. Dorofti and Jakubik (2015) investigated the connection between macroeconomic factors and the financial performance of insurers using a panel data approach. Their census study of cross-country European aggregate data shows that high inflation negatively affects insurance financial performance.

Further studies by (Murungi, 2014) employs a descriptive research design to investigate the effect of macroeconomic variables on the financial performance of Kenyan insurance firms. The results show that there is a strong positive correlation between interest rates and financial performance. Another study by Moraine (2013) analyzed the impact of fundamental risk factors on the financial performance of insurance companies in Malaysia. Multiple Linear Regression analyses on data collected from six listed insurance companies from 1996 to 2015. The results conclude that GDP and interest rates affect the company's performance while inflation has less impact on the firm's performance. A study by Swiss Reinsurance Company (2012) used a census approach to investigate the US insurance sector; results reveal that inflation increases nominal liabilities by growing claim obligations, hence raising claims expenses.

Becker and Hall (2012) employed a census approach to review the European Insurance Market; the study results tell that inflation has excellent sensitivity to investment return. Additionally, from 1914 through 2009, Ahlgrim and Arcy (2012) look into how inflation and deflation affected the US life insurance market.; they employ the fisher hypothesis to examine the relationship between inflation and investment income. Findings indicate that high to moderate inflation has a positive relationship with the net investment income. Morrow and Conrad (2010) performed a regression analysis between claims and inflation in a section of German Insurance companies; results show that inflation is among the key economic indicators that affect the claims costs of Insurance firms.

2.2.2 Interest rates and Financial Performance

Njeru (2018), utilizes a quantitative research design to look into determining factors of financial performance of non-life insurance companies in Kenya; findings from 34 firms under review reveals that interest rates and the association between inflation rates and financial performance is insignificant. Ndichu (2014) utilized a descriptive research design and random sampling technique to examine how interest rates affect the financial health of Kenya's deposit-taking institutions. Secondary data analyzed, and studies show that the financial success of the financial institutions is negatively correlated with interest rate spread. Muya (2013) used a descriptive research approach and panel regression analysis to investigate the key factors affecting the financial performance of insurance businesses in Kenya. According to research, changes in interest rates have an impact on insurance firms' borrowing and investment rates, which has a dual impact on their financial performance.

Mboka (2013) studied the impact of macroeconomic factors on Kenya's commercial banks' performance. For ten years, he analyzed data using both descriptive and inferential statistics. The findings of the study reveal a strong correlation between financial performance and both inflation and interest. Gilchris (2013) investigated the influence of macroeconomic factors on 25 commercial banks' financial performance from 2007 to 2011 in Pakistan. The regression findings showed that the Return on Equity was significantly and favorably impacted by Net Interest Margin (ROE).

A study conducted in Ghana looking into the factors affecting the financial performance of life insurance firms by Akotey *et al.* (2013) used panel regression model to analyze data over ten years; their findings indicated that interest rate and asset size the income of Insurance companies is positively correlated furthermore while investigating the relationship between insurance markets and insolvencies. Buyinza (2010) analyzed 23 commercial banks' financial performance in Sub Sahara Africa countries from 1999 to 2006. The study used panel data, and the regression results showed that interest rates movement and inflation significantly affect the profitability of banksy.

Pervan *et al.* (2011) analyzed the Macedonian insurance industry's financial performance in light of the panel data regression analysis's conclusions about the factors that affect profitability. According to findings, changes in interest rates and inflation have a statistically significant impact on how well insurers perform. Brewer *et al.* (2007) used a panel data regression model to investigate parts of American Insurance companies. They establish a correlation between the P/E ratio and the US treasury note and hold that interest rate changes affect the firm's assets and liabilities in terms of value. Analyzing the interest risk behavior of insurance companies in Asia, Wang (2006) employed an explanatory research design to investigate life insurance companies' performance. Findings show that their corporate bond portfolio's excess yield rises as interest rates rise.

2.2.3 Exchange Rates and Financial Performance

A study by Tesfaye (2018) employs a panel regression and a descriptive research design to analyze factors affecting selected insurance firms from 2010 to 2016. The analysis' findings show that performance and exchange rates are negatively correlated, but they significantly affect it. Kamau (2016) used a descriptive research design to analyze market risk's impact on the financial performance of the Insurance Exchange at Nairobi Securities. According to analysis of top risk managers' questionnaire responses, descriptive statistics reveal a negative relationship between market risk and financial performance.

Ongeri (2015) used a descriptive research design and correlation analysis to study the effect of fundamental risk factors on the financial performance of Kenyan insurance companies. The financial performance of non-bank deposit-taking financial entities and exchange rate changes was found to be positively correlated. Nyambura (2014) employed time series analysis to investigate the effect of exchange rates among other fundamental risk factors on the financial performance of Kenyan Insurance Companies. The study's findings show a strong correlation between financial performance and currency exchange rates. Gul, Irshad, and Zaman (2011) used a regression model, panel data estimation, and Pooled Ordinary Least Square to study the factors affecting 15 commercial banks' profitability from 2005 to 2009 in Pakistan. The investigation result indicated that GDP, inflation, and exchange rates significantly impact return on assets (ROA).

Khrawish and Siam (2011) studied the influences on financial performance between 2005 and 2009 utilizing samples from three successful Jordanian Islamic banks. Findings from multiple linear regression show a substantial inverse association between the financial performance of Islamic banks in Jordan and inflation and exchange rates. Kung'u (2013) used a correlation analysis technique to analyze data while studying the effect of fundamental risk factors on the Kenyan private equity firms' financial performance. Findings of this research reveal a tenuous negative correlation between real exchange rates and financial performance. Furthermore, Murungi (2017) used a descriptive correlation research design to study the association between fundamental risk factors and the financial performance of insurance firms in Kenya. The study's conclusions reveal that the exchange rate significantly positively correlates with the financial performance of insurance firms.

2.2.4 Capital adequacy and Financial performance

Namusonge and Makokha (2017) looking into how the financial performance of Kenyan companies listed on the Nairobi Securities Exchange is impacted by capital adequacy, both qualitative and quantitative research design to analyze secondary data, this study shows that capital adequacy and financial performance are positively correlated. Malik (2011) studied the variables affecting Pakistani insurance organizations' financial performance. The regression undertaken on panel data over five years show a significant positive relationship between profitability and capital adequacy for Insurance firms.

Sasaka and Gonga (2017) employed a descriptive research design to investigate factors financial performance of a section of Nairobi insurance companies. The findings from analysis done on questionnaire responses from top managers and descriptive statistics indicate that firms' capital and interest rates are all positively correlated with firms' financial performance. Bawa and Samaiya (2013) employed descriptive statistics to analyze the financial performance of Indian life insurers. The financial performance of the firms was discovered to be was positively correlated with firm capital adequacy.

Kaguri (2013) investigated the association between business attributes and the financial performance of Kenyan life insurance firms. Between 2008 and 2012, he employed return on assets to assess the financial performance data of 17 Kenyan life insurance firms. According to the study's findings, an insurance company's profitability and firm capital are positively correlated. Mehrjardi (2012) examined the connection between the size and profitability of Kenyan banks using information from 43 licensed banks for the years 2008 to 2010. Having employed CAR as a measure of capital adequacy. The study's findings demonstrate a substantial correlation between bank profitability and size, as determined by market share.

Akinyomi and Olagunju (2013) examined how size affected the manufacturing sector's profitability in Nigeria. From the audited annual reports of the chosen manufacturing companies listed on the Stock Exchange, they extracted Panel data from 2005 to 2012 for analysis. Return on assets (ROA) measured profitability, while log of total assets and the sales record measured capital adequacy. He utilized a regression model to investigate the connection between manufacturing firm size and profitability. The study's findings showed that Nigerian manufacturing enterprises' profitability is positively impacted by capital availability in terms of total assets.

Collins and Preston (2007) employed a descriptive survey methodology to investigate the connection between financial performance and capital availability of Insurance Companies in Macedonia. Findings from the census survey show a positive relationship between capital availability and the financial performance of Insurance firms. The relationship between the size of insurers and their financial performance of life insurers in India was examined by Charumathi (2014) He employed descriptive statistics to analyze the census of life insurers. Findings reveal that an insurer's size has a positive correlation; premium growth and equity capital both affect an insurer's financial performance.

A descriptive correlation research design by Mwangi (2013) sought to establish factors influencing the financial performance of insurance companies in Kenya. He revealed that the key variables that affect the financial performance of Kenyan insurance companies are company firm capital, capital structure, and liquidity. Amaton and Burson (2007) studied the relationship between size and financial performance data covering various firms. They put the relationship's linear and cubic forms to the test.; evidence reveals a linear relationship between return on assets and firm capital; in conclusion, larger firms utilize their scale of economies to gain an edge over minor industry participants Glancey (2017). This study adopts the Capital adequacy ratio to measure capital adequacy.

3. RESEARCH METHODOLOGY

3.1 Research Philosophy

The positivism philosophy underpins this research. According to the ideology of positivism, only factual knowledge obtained by senses, including measurement is reliable. (Bell 2015). According to the positivist concept, a researcher's only responsibility is to gather and interpret objective facts so that the research's conclusions can be observable and measurable. (Crowther, 2008). According to positivism, only factual information obtained via observation and measurement is reliable. The researcher's responsibility in positivist studies is to ensure that data is collected and interpreted objectively in order to increase the observability and quantifiability of the research findings (Crowther & Lancaster, 2008). Positivism is an ideal option to this research, mainly because the study focused on Time series data whereby the researcher observed trends of fundamental risk factors alongside the financial performance of Insurance firms in Kenya for five years from 2011 to 2021.

3.2 Research Design

Research design is defined by (Robson 2014) as a detailed road map of conducting a study. Research design includes data collection methods, the instruments employed in the collection, and the mode of data analysis used (Creswell, 2013. The present study adopts an explanatory research design whose primary focus is to address problems that were not reviewed in-depth previously; it focuses on providing a better research model and a better explanation of the main aspects of the study.

This design is preferred because It focuses on examining a particular circumstance or problem to identify the patterns of correlations between various variables (Salkind,1999). Explanatory research gives the researcher the ability to provide a thorough comprehension of a topic, which gives rise to numerous themes and increases the opportunity for the researcher to study and inquire about novel subjects (Saunders, 2012). Explanatory research gives the researcher the ability to provide in-depth comprehension of a topic, which generates a variety of topics and expands the researcher's scope of inquiry into new areas, leading to more ways for researchers to study the subject. (Thornhill, 2012) It helps to describe the characteristics of a large population. Additionally, the findings are highly dependable for reference in future research

(Mugenda & Mugenda, 1999). The present study translates to gathering secondary data over seven years from 2011-2021, intending to investigate the relationship between fundamental risk factors and the financial performance of the Insurance firms in Kenya.

3.3 Empirical Model

This study adopts a Time-series data analysis model that ensures accuracy and reliability in estimating the study's parameters, improved analysis of events by incorporating time in the model, and simplicity in applying statistical inferences. In order to comprehend, clean, and forecast future data, the time series approach seeks to find significant characteristics in the data. The model was used in the study as follows: The analysis started for series of data for Kenya's Insurance firms observed over some time t. The following general model was written and used to analyze the dependent variable (Y) by determinant factors (Xk).

3.3.1 General Model

The general model is a time series regression model where FP is a function of explanatory variables represented by (Fr).

Fp = f (Fr)…………………………………………………………………… Equation i

Where:

Fp= Financial performance

Fr = Fundamental risk factors

3.3.2 Direct Effect Model

Under this model, FP is a function of predictor variables which are quarterly interest rates (INT), exchange rates (EX), and inflation rates (IFR) for a specific time (t) period.

$FP_t = \beta_0 + \beta_1 INT_t + \beta_2 IFR_t + \beta_3 EX_t + \mathcal{E}_t$…………………………………. Equation ii

FP_t = Financial performance of Insurance firms at time t

INT_t = Interest rates at time t

IFR_t = Inflation rates at time t

EX_t = Exchange rates at time t

β_0 = Intercept

$\beta_1 - \beta_3$ = Coefficients

$\mathcal{E}_t$ = error term

The study elects operating and investment ratios as a measure of financial performance because a report by Insurance Regulatory Authority (2018) highlights both operating and investment ratios as Key performance indicators used in Kenya's Insurance (IRA, 2020).

3.3.3 Moderating Effect Model

To ascertain how capital adequacy affects the relationship between financial performance and fundamental risk factors. Whisman and McClelland (2005) cite evidence to support the claim that the moderation test should check to see if the interaction term's coefficient statistically deviates from zero Meme (2017). The moderating variable was incorporated into the regression mode to determine the moderating impact on the relationship between the independent and dependent variables. Consequently, the relationship between fundamental risk variables, moderated by the influence of capital adequacy and financial performance of Insurance firms in Kenya was estimated as:

Model 3.3, regress financial performance on fundamental risk factors and note the r squared (r^2_1)

$FP_t = \alpha + \beta_1 FR_t + \varepsilon_t$ …………………………………………………...Equation (iii)

Model 3.4. introduce Capital Adequacy and note the new r squared (r^2_2)

Introduce the product of Fundamental risk factors and capital adequacy and note the new r squared (r^2_3)

$FP_t = \beta_0 + \beta_1 FR_t + \beta_2 FP_t + \beta_3 FR*CA_t + \varepsilon_t$ ……...……….………….……… Equation (v)

The increment in the squared multiple correlations ($r^2_2 - r^2_3$). If the difference is significantly greater than 0, the difference between the two models is statistically significant.

Where,

FP_t = Financial performance of Insurance firms at time t

β_0 = Intercept

$\beta_0 - \beta_3$ = Coefficients

FR_t = Fundamental risk factors at time t

CA_t = Firms' Capital Adequacy at time t

Subscript t = Years (time-series dimensions) ranging from 2011 to 2021. ε_t = Composite error term of the model.

α = Constant term.

4.   RESEARCH FINDINGS AND DISCUSSION

4.1 Descriptive Analysis

The descriptive analysis comprises the lowest and highest figures, average and standard deviation for; inflation rate, exchange rate, interest rate, and capital adequacy for the period 2011 to 2021. The descriptive analysis is tabulated below.

Table 4.1: Descriptive Analysis

Variable	Obs	Average	Std. Dev.	Min	Max
Operating Ratio	44	98.95409	5.329724	87.4	110.04
Interest rate	44	15.21875	2.615526	11.877	20.213
Inflation rate	44	6.990773	2.851682	3.687	16.29
Exchange rate	44	97.26434	8.828021	82.309	111.897
Capital Adequacy	44	4.799291	1.13756	2.4065	6.2946

Source: Research findings, (2024)

Analysis from Table 4.1 revealed that from the 44 observations across the variables, the mean Interest rate was 15.29, the highest rate was 20.21, and the lowest rate was 11.88. The standard deviation of the interest rate was 2.64 which shows that the interest rates are quite stable over the period reviewed. In addition, the inflation rates throughout the period of study had a mean of 6.99, and a maximum value of 16.29 which is the point in time at when the highest price level fluctuation was highest, and the lowest inflation rate at 3.687. The standard deviation in the period under review is 2.85 which indicates that values of inflation rates varied significantly from the mean during the period reviewed. Table 4.1 depicts that the exchange rate recorded a mean of 97.26, the highest exchange rate was 111.897 while the minimum value was 82.309 between the shilling and USD. The standard deviation at 8.83 indicated a substantive variation from the mean, this is occasioned by a positive growth rate of exchange rate. The Capital adequacy ratio was at a mean of 4.793, the maximum was 6.294 while the minimum was 2.406. The standard dev of 1.137 indicated great dispersion from the average CAR. The average Operating ratio was 98.95, the maximum operating ratio was 110.4 while the minimum value was 87.4. This consequently resulted in a standard deviation of 5.38 which deduces a high dispersion between the best and least-performing firms.

4.2 Correlation Analysis

Correlation statistical technique that assesses the direction and degree of the association between each set of two or more variables. This research analyzed the correlation between fundamental risk factors and financial performance. After undertaking correlation analysis, the outcome was highlighted below.

Table 4.2: Correlation Analysis table

	OR	INT	INF	EX	CAD
OR	1				
INT	-0.6428*	1			
	0.0000				
INF	-0.4888*	0.5571*	1		
	0.0008	0.0001			
EX	0.7828*	-0.6416*	-0.5446*	1	
	0.0000	0.0000	0.0001		
CAD	0.7933*	-0.6061*	-0.4904*	0.8040*	1
	0.0000	0.0000	0.0007	0.0000	

Source: Research Data, 2024

Table 4.2 enlisted the correlation statistics between fundamental risk factors and operating ratio. The matrix reveals Operating Ratio had a weak, negative, and insignificant correlation with interest rates (p = -0.643, p < 0.05). The findings hold that inflation rates had a weak, negative, insignificant relationship with the operating ratio (p=-0.489, p<0.05). Besides, exchange rates had a robust, favorable, and noteworthy connection with the Operating ratio (p = 0.783, p>0.05). Finally, Capital adequacy had a very weak negative and insignificant association with the operating ratio (p=-0. 723, p>0.05). According to these analysis financial performance as determined by operating ratio increases when exchange rates between KSH/USD increase. Furthermore, the significant negative relationship between financial performance, interest rates, and Inflation rates implied that financial performance declines when interest rates and inflation rates increase. Thirdly, financial performance declined when the capital adequacy ratio increased, this is indicated by the weak negative correlation between the two variables. This validates the conclusions of Mwangi (2014), who found a strong and adverse correlation between interest rates and financial success.

4.3 Regression Analysis

The fundamentals of this study show that there is an association between fundamental risk factors and financial performance, in addition, this association is moderated by capital adequacy. The time series model with financial performance as the response variable determined the degree of direct association between fundamental risk factors and the Kenyan Insurance firms' financial performance. Time series analysis was also conducted to ascertain various hypotheses' statistical significance. The F statistics determined the goodness of fit of the model for the data set, the (R^2) depicts the change in the dependent variable caused by the independent variable.

4.3.1 Fundamental Risk factors and Financial Performance

In analyzing the result of fundamental risk factors on Kenyan Insurance firms. The specific objectives of the research were: to ascertain the effect of interest rates, inflation rates and exchange rates on the financial performance of Kenyan Insurance firms on the financial success of the Kenyan Insurance corporations. Fundamental risk factors were regressed against the financial success of the Kenyan Insurance corporations; the outcome is displayed below.

Table 4.3: Fundamental Risk Factors and Financial Performance

OR	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
INT	-0.47220 0.2638	-1.79		0.081	-1.00548 0.0610	
INF	-0.03844 0.2213	-0.17		0.863	-0.48573 0.40885	
EX	0.37603 0.07740	4.86		0.000	0.21960 0.5324	
_cons	69.83396	10.3750	6.73	0.000	48.86526	90.8026

Number of obs 44

F(3, 40) 24.39

Prob > *F* 0.000

R − Squared 0.6466

Adj R − Squared 0.6201

Root MSE 3.2852

Source: Study Data (2024)

Table 4.3 demonstrates the regression model's findings regarding the direct effect of fundamental risk factors on financial performance of Kenyan insurance firms with the operating ratio as the metric for the dependent variable. Overall, the results in Table 4.3 show an R^2 of 0.6466 and an F statistic of 0.0002, which explains that fundamental risk factors account for 64.66 percent of the changes in the operating ratio.

$FP_t = 69.83 + - .47X_{1t} + -.038X_{2t} + .37X_{3t}$

Where, S

FP_t = Financial performance of Insurance firms at time t

β_0=Intercept

β_0–β_3 = Coefficients

X_{1t}=Interest rate at time t

X_{2t}=Inflation rate at time t

X_{3t}=Exchange rate at time t

Subscript **t**=Time series range from 2011 to 2021.

ε_t=Model's composite error term.

α=Constant term

The p value (P=0.0002<0.05) demonstrated how the model fits the operating ratio. The study conforms to Njeru (2018) which holds that; interest rates and inflation rates do not significantly influence the financial performance of Kenyan non-life insurers. This research however differs from Gonga & Sasaka (2017) who discovered a strong correlation between fundamental risk factors and financial performance.

The outcome specifically revealed that Interest rates have an adverse but not statistically significant effect on the operating ratio as indicated by the p value (β =-0.472; P = 0.081) at a 5% significance level. Therefore, an increase in one unit of interest rates causes a 0.472-unit decreased in the financial success of insurance corporations in Kenya. The research agrees with Murungi (2014) who revealed that interest rates influenced the insurance company's financial success. On the contrary, Kamau (2016) discovered an inverse correlation between market risk and financial success.

Furthermore, Inflation rates had an adverse but not statistically significant effect on financial success with p value (β =-0.038; P = 0.863) at a 5% level of significance. This deduces that a unit increase in inflation rates resulted in a decline of 0.038 units in the fiscal health of insurance corporations in Kenya. This study upholds the conclusions of Mwangi (2017), which suggest that an upsurge in inflation adversely affects the profitability of insurance corporations. On the contrary, Tesfaye (2018) finds out that inflation rates affected the financial success of insurance firms significantly.

The outcome demonstrated that the exchange rate had a positive, statistically significant effect on the operating ratio (β =0.376; P = 0.000) at a 5% level of significance. This outcome was evidence that a unit rise in exchange rates resulted in a 0.376 growth in the financial success of insurance corporations in Kenya. Nyamu (2016) who contends that the inflation rate, exchange rate, and GDP have a significant positive relationship with financial success. The analysis upheld that the general time series regression model for this study was significant.

4.3.2 Test for Moderating Effect

The fourth aim of this research was to ascertain the moderating effect of corporate capital adequacy on the relationship between fundamental risk factors and the financial performance of Kenyan Insurance firms. It was hypothesized that capital adequacy didn't have a significant effect on the association between fundamental risk factors and financial success of Kenyan Insurance firms. The regression model with financial health as the response variable was calculated to ascertain the degree of correlation between fundamental risk factors and financial health taking into account the moderating effect of capital adequacy.

Table 4.4: Fundamental risk factors and financial performance

Coef.		Std. Err.	t	P>t	[95% Conf.Interval]	
FR	0.34	0.29	1.17	0.25	-0.24	0.9137204
CAR	3.31	0.56	5.94	0.00	2.19	4.439805
_cons	69.71	9.99	6.98	0.00	49.54	89.88247
F (2, 41)	36.66					
Prob>F	0.0000					
R-squared	0.6413					
Adj R-squared	0.6238					
Root MSE	3.2688					

Source: Study Data (2024)

b) The moderation effects

	Coef.	Std. Err.	t	P>t	[95% Conf .Interval]	
FR	-1.487937	1.275681	-1.17	0.250	-4.066185	1.09031
CAR	-12.17643	10.58388	-1.15	0.257	-33.56724	9.214388
CAR*FR	0.3929865	.2681638	1.47	0.151	-.1489927	0.9349657
_cons	140.9382	49.59326	2.84	0.007	40.70652	241.17

F (3, 40) 25.84

Prob>F   0.0000

R-squared 0.6596

Adj R-squared 0.6341

Root MSE 3.224

Source: Study Data (2024)

Y = 140.93 -1.49FR-12.18CAR +0.39U + ε

Whereby:

Y=Financial Performance.

FR= Fundamental risk factors.

CAR= Capital adequacy.

CAR*FR = Interaction term between capital adequacy and fundamental risk factors.

Table 4.4 showed a significant p-value (P = 0.000 >0.05) for the moderating variable capital adequacy with fundamental risk factors when regressed against the Operating ratio was statistically significant in describing the connection between fundamental risk factors and financial success. The effect of interaction of the coefficient of fundamental risk factors and capital adequacy at β =0.3929; P = 0.151 which is more than 0.05 implied that Capital adequacy and fundamental risk factors have a positive statistically insignificant influence on financial performance. The coefficient shows that a unit increase in fundamental risk factors and firm size leads to a 0.3929 increase in FP.

Findings revealed that the R^2 in the first model is 0.6413, introduction of the interaction term causes an increase of 0.0183 in r^2 in the second model to 0.6596. The study therefore rejects the null hypothesis and concludes that firm size had a significant moderating effect on the link between fundamental risk factors and financial success. This study contends that firm size and fundamental risk factors influence Financial performance. The study is consistent with Gonga and Sasaka (2017) who stated that the capital of the Insurers was positively correlated with financial performance.

4.4 Hypothesis Testing

The research examined the hypotheses to determine whether the research variables were related. Fundamentally, the intent of the research was to ascertain the effect of fundamental risk factors on the financial health of Kenyan insurance firms.

4.4.1 Interest Rates and Financial Performance

H$_{01:}$ Interest rates do not have a significant effect on financial performance of Insurance firms in Kenya.

From the outcomes, interest rates did not have a significant effect on the financial performance of Insurance firms in Kenya (P = 0.081 > 0.05), and hence the null hypothesis is supported. This outcome conforms to Njeru (2018) who affirms that interest rates and inflation rates do not significantly influence the financial performance of Kenyan non-life insurers. This is contrary to Akotey *et al*. (2017) who contend that interest rates are positively correlated with the profitability of insurers.

4.4.2 Inflation Rates and Financial Performance

H$_{02}$. Inflation rates do not have a significant effect on financial performance of Insurance firms in Kenya.

The outcome the hypothesis showed that inflation rates do not have a substantial impact on the financial health measured by operating ratio (P = 0.863> 0.05) and thus the null hypothesis is supported. This study agrees with Mwangi (2017) who holds that growth in inflation causes a downward trend in the profitability of insurance firms.

4.4.3 Exchange Rates and Financial Performance

H$_{03}$. Exchange rates do not have a significant effect on the financial performance of Insurance firms in Kenya.

The results indicated that the exchange rate had a significant effect on the financial success of the Kenyan Insurance firms as demonstrated by (P = 0.000 < 0.05). Consequently, the null hypothesis which asserts there is no substantial influence of the exchange rate on financial success is rejected.

4.4.4 Fundamental Risk factors, Capital adequacy, and financial performance

H$_{04}$. Capital adequacy does not have a significant moderating effect on the relationship between fundamental risk factors and the financial performance of the Insurance firms in Kenya.

In light of the results of the hypothesis, the null hypothesis was rejected because the p-value was below 0.05 and there was a change in r^2 after introduction of the interaction term in the second model. The results of the moderating effect model showed that Capital adequacy has a significant moderating effect on the link between fundamental risk factors and financial success as measured by the operating ratio (p = 0.000 < 0.05).

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This part highlighted the research summary outcome, discussion of the findings, addition to knowledge, and recommendations for further research. The summary predominantly entails the results made out of the analysis and their interpretation. In addition to recommendations for policy, practice, and finance theory. This part further addresses conclusions made from the interpretation of the findings and it goes on to delineate suggestions for future researchers to consider. This chapter also covers the contribution of the study to finance theory as well as recommendations for future studies.

5.2 Summary

The study set out to ascertain the association between fundamental risk factors, financial health and the moderating effect of capital adequacy of the interaction between financial success of the Kenyan Insurance corporations and fundamental risk factors. Specifically, the study aimed to ascertain the impact of inflation rates, exchange rates and interest rates on the financial success of insurance corporations in Kenya. The research further ascertained the moderating effect of capital adequacy on the interaction between the financial health of insurance firms in Kenya and fundamental risk factors. This study adopted the census approach hence the absence of sampling. The study analyzed data through descriptive statistics, correlation, and regression analysis.

The maiden aim of this research was to determine the effect of interest rates on the financial performance of Insurance firms in Kenya. The outcome of correlation analysis of the research reveals that interest rate does not have a strong correlation with financial success as measured by operating ratio. The regression coefficients indicate that interest rate does not have a strong correlation with financial performance as measured by the operating ratio. The study's conclusions hypothesized that interest rates and financial performance of Insurance firms in Kenya are negatively and significantly related. Thus, the null hypothesis was accepted.

The study's second goal was to ascertain the effect of inflation rates on the financial success of Insurance corporations in Kenya. The study's correlation analysis showed that inflation rate does not have a significant relationship with financial performance of insurance firms expressed by the operating ratio. The results of the regression showed that Inflation rates have a negative but not statistically significant influence on financial success. Therefore, the null hypothesis of the study was not rejected

The research's third objective was to determine how exchange rates affected the financial success of Insurance corporations in Kenya. The findings reveal that exchange rates had a significant influence on the financial success of Insurance firms in Kenya. The outcome of the regression analysis depicts that exchange rate had a positive statistically significant effect on the operating ratio. Consequently, the null hypothesis was rejected.

The research's fourth objective was to establish the moderating effect of capital adequacy on the association between fundamental risk factors and financial performance. Findings of the moderation model reveal that Capital adequacy and fundamental risk factors have a positive but statistically insignificant influence on financial success as measured by the operating ratio. The interaction term is significant because of the change in r^2 after introduction of the moderation term effect. The study confirms that capital adequacy moderates the link between fundamental risk factors and the financial performance of Insurance firms in Kenya. Capital adequacy had a very weak negative correlation with operating ratio

5.3 Conclusion

The results of the study drew various conclusions. Insurance firms are key stakeholders in the intermediation and their substantial investment in financial markets contributes to the stability of financial systems. The research aimed to ascertain the connection between the link between fundamental risk factors and Insurance firms' financial performance. The outcome of the correlation analysis shows that Operating Ratio had a weak, negative, and insignificant correlation with interest rates. The findings from the hypothesis study demonstrate that interest rates have insignificant effect in the determination of the financial success of insurance firms in Kenya as measured by operating ratio. In conclusion, this indicates that the financial health of insurance corporations in Kenya is determined by other factors aside from interest rates. This outcome consistently indicated that growth in interest rates prompts a recession in financial performance.

This study sought to ascertain the effect of inflation rates on the financial success of Insurance firms in Kenya. Findings from correlation analysis show that inflation rate and Kenyan insurance firms' financial performance do not have a significant correlation. The regression coefficients further show that inflation rates had an insignificant impact on financial success of insurance corporations in Kenya. The research findings from the regression analysis affirmed the conclusion that the inflation rates do not explain significantly the changes in financial success of insurance firms as measured by the operating ratio and hence the variations in the financial performance of Kenyan insurance companies can also be attributed to other factors. The study held that Interest rates and inflation rates do not significantly influence the financial success of Kenyan non-life insurers.

The third study objective was to ascertain the connection between fundamental risk factors and financial success of insurance corporations in Kenya. The correlation analysis of this study reveals exchange rates had a strong, positive, and significant correlation with the Operating ratio. Additionally, results from regression analysis revealed that exchange rates significantly impacted Kenyan insurance companies' financial results. The regression coefficients also suggested that exchange rates have a substantial impact on the financial health of Kenyan Insurance firms. The research concludes that Insurance firms' performance is influenced by the incidence of foreign exchange loss or gain from diaspora transactions. The researcher confirmed that exchange rates have a significant relationship with financial performance.

This study's ultimate aim was to ascertain the moderating effect of capital adequacy on the link between fundamental risk factors and financial health. According to the correlation study, capital adequacy had positive and significant correlation with the Operating ratio. In addition, the moderating effect model indicates that firm size had a significant moderating effect on the link between fundamental risk factors and financial success. This study confirmed that the financial performance of life insurers is influenced by the capital availability and liquidity. In conclusion, the performance of insurance corporations in Kenya is sensitive to fundamental risk factors encountered by the firms in the local market.

5.4 Recommendations

The subsequent recommendations were based on the hypotheses of the study.

5.4.1 Recommendation to Policy Makers

The study's findings demonstrated that exchange rates have a profoundly positive impact on the performance of insurance corporations in Kenya. As a consequence of that, the CBK ought to employ smooth financial-policy actions to attain exchange rate stability. The CBK should be objectively intentional through policies aimed at protecting the local currency from instability caused by imported inflation through goods and services. In addition, the Insurance Regulatory Authority ought to organize training for Insurance firms on the guidelines of the proposed IFRS 17 reporting standard. Informed and effective application of IRFS 17 ensures financial reports reflect the effect of interest rates and inflation rates on the firms' financial performance reports, this ensures that financial reports portray a fair view of the Insurance firm's performance.

Secondly, as per the study, interest rates have a somewhat favorable impact on the financial health of insurance enterprises in Kenya. In reference to the findings, the government through the central bank should put in place policies that enhance interest rate stability, this would help to mitigate the adverse effects of fluctuation of interest rates on the equity market returns. Thirdly, based on the research's findings, inflation rates have a somewhat favorable correlation with financial success. In this light, the government should protect local industries from imported inflation through the customs regime. Through the tax authority, the government can control imports by imposing heavier levies on imports. Consequently, this central bank action would mitigate the incidence of imported inflation in the local insurance industry.

5.4.2 Recommendation to practitioners

The research finds that exchange rates have a significant positive effect on the financial success of insurance firms in Kenya. This is an indicator that insurance companies are heavily affected in periods of high volatility in currency markets

and hence any obligations to be met in foreign currency should be adequately timed and evaluated to alleviate the effects of foreign exchange loss from diaspora transactions. Furthermore, the study discovers that that interest rates had a positive but insignificant effect on the financial success of insurance firms in Kenya. As per the findings Insurance firms should strive to lessen the adverse effects of interest rates on their financial performance by carefully timing the cost and nature of debt capital. Insurance firms should also aim to take advantage of interest waivers to acquire cheap debt capital and pay off debt at much cheaper rates.

Thirdly, the research suggested that financial performance was positively, although not significantly, impacted by inflation rates. With knowledge of that, this study recommends that Insurance firms' management ought to inculcate policies to curb the effect of foreign exchange loss. For instance, the management of the volume of transactions settled in varying currencies to mitigate the incidence of possible foreign exchange loss. For instance, where they must pay in foreign currency, Insurance firms should explore the options of negotiating lower exchange rates of payment through banks.

Furthermore, the correlation analysis indicates that capital adequacy had significant positive correlation with the Operating ratio. In addition, the moderating effect model infers that company size has a substantial moderating impact on the link between the fundamental risk factors and financial performance. Therefore, the shareholders of insurance firms should be keen to maintain capital adequacy levels that yield market power. The shareholders should prudently formulate a sustainable capital structure that accounts for the effect of market risk exposure.

5.4.3 Recommendation to Theory

The analysis finds that exchange rates had a significant positive impact on the financial performance of insurance enterprises in Kenya. This implied that transactions settled in two different currencies bear an element of either foreign exchange loss or gain. Insurance firms should make sure the take into account how foreign exchange transactions affect the companies' performance. Firms should take advantage of the arbitrage that comes with foreign exchange to carefully schedule payments to minimize foreign exchange loss and maximize foreign exchange gain.

Evidence of the results of the analysis shows that inflation rates had a positive insignificant effect on the financial success of Insurance enterprises in Kenya, from the findings it is worth noting that inflation rates highly affect the underwriting revenue of mainly general insurers. The motor insurance business is highly dependent on the cost of spare parts and repairs which are mostly imported, this is the basis for how inflation rates affect Kenyan insurance companies' financial success.

5.5 Contribution to Knowledge

This work contributes to the existing body of information from several perspectives. The study's objective was to determine the relationship between fundamental risk factors and financial success of insurance enterprises and the moderating effect of capital adequacy on the link between fundamental risk factors and the financial success of insurance firms in Kenya. Thus, the study advances the understanding of how interest rates affect the financial success of insurance firms in Kenya. It also reveals information on the impact of inflation rates on the financial health of Insurance firms in Kenya. Thirdly, the study contributes to the knowledge of effect of exchange rates on the financial success of insurance firms in Kenya. It further gives an insight into how the capital adequacy of the firm can affect how fundamental risk factors relate to the financial success of insurance corporations.

5.6 Limitations of the Study

The Study faced some restrictions which are worth noting. For instance, the researcher faced an inherent audit reporting risk where there could be inefficiencies in the firms reporting functions. This study counterchecked data in the IRA report with the financial statement of the specific insurance firms to affirm validity to mitigate the problem owing to the fact that monthly data on certain study variables such as; Operating ratio and capital adequacy is unavailable. Therefore, the use of monthly data analysis of these variables in further studies enhanced the granularity of data which brings out the most accurate nature of the link between fundamental risk factors and the financial success of insurance corporations in Kenya.

5.7 Suggestions for Further Research

Considering the results of the correlation and regression models of this study, there are two suggestions for more study. The results of the study having demonstrated a significant positive link between financial performance and exchange rates, a study should be done to ascertain the effect of currency the Kenya shilling and Euro exchange rate fluctuations on the financial performance of insurance firms in Kenya. Furthermore, interest rates and inflation rates were discovered to

have a negative insignificant effect on financial success. For further insight, more research ought to be done on the effect of interest rates and inflation rates on the financial success of insurance firms. This aimed to uncover more about the effect of interest rates on life insurance investment-based market products which are heavily affected by market factors.

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