Effect of Liquidity on Insurance Penetration in Kenya

Evusa Zablon,[1] Joshua Matanda,[2] Duncan Mugambi[3]

[1] *PhD Candidate, Jomo Kenyatta University of Agriculture and Technology*
[2] *Senior Lecturer, Jomo Kenyatta University of Agriculture and Technology*
[3] *Senior Lecturer, University of Embu*

Abstract: *The contribution of life insurance sector to Kenya's GDP dropped to 3.4% in 2019 compared 3.5% in 2018. This means that other sectors of the economy grew faster than life insurance. According to Third Medium Term Report, Health insurance coverage in Kenya is generally low 19%. It is important to note that Third Medium Term Plan (2018-2022) has not addressed firm financial characteristics and insurance penetration of the Life Insurance Firms in Kenya. The general objective of the study was to analyze the relationship between firm financial characteristics and insurance penetration in Kenya. The study is based on the Liquid Asset Theory. The study was based on positivists' research philosophy. This study adopted longitudinal research design and targeted 18 companies as the sample size suitable to attain the set objectives. Both primary and secondary data was collected. Primary data was collected using a questionnaire while secondary data was collected using a secondary data collection schedule. Data was analyzed using panel data regression based on Hausman Test which was used to choose between fixed and random model. The study established that there was significant evidence for a relationship between liquidity and insurance penetration in this model. The study concluded that policies and initiatives aimed at promoting insurance penetration in Kenya should consider not only the characteristics of individual consumers but also the characteristics of firms.*

Keywords: Liquidity, Insurance, Insurance penetration, firm, Health insurance

I.   Introduction

As part of the general financial system, insurance companies provide unique financial services to the growth and development of every economy. Such specialized financial services range from the underwriting of risks inherent in economic entities and the mobilization of large amount of funds through premiums for long term investments (Nwosa & Mustapha, 2017). The risk absorption role of insurers promotes financial stability in the financial markets and provides a sense of peace to economic entities. The business world without insurance is unsustainable since risky business may not have the capacity to retain all kinds of risks in this ever changing and uncertain global economy (Ehiogu & Eze, 2018).

Insurance companies sell protection to policyholders against many types of risks: Property damage or loss, health and casualty, financial losses, etc (Varenik, Pestovskaya & Opaliichuk, 2016). In return for this risk protection, insurance companies receive a premium from the policyholder that is used to cover expenses and the expected risk. For longer-term risk protections, part of the premiums is invested to get higher yields. Hence, Insurers need to have sufficient equity or buffer capital to meet their obligations in adverse conditions when their losses on the diversified portfolio exceed the expected losses (Hartwig, Niehaus & Qiu, 2020).

The insurance sector in Kenya and other countries while providing critical interventions and creating wealth through investments, has had a fair share of instability challenges which has results to many collapses (Mumo, 2017; Herciu & Şerban, 2016). Over the last one decade, a number of insurance companies have closed shop and eventually liquidated. Such insurance companies include BlueShield Insurance Company in the year 2011 and Concord Insurance Limited in the year 2013.On the other hand, Xplico insurance companies limited have been put under statutory management while Invesco Assurance Company Limited has been put under liquidation. According to Mugo (2018) most of these companies have gone under with billions of shillings, in cash, belonging to policy holders, pension schemes and life funds. This brings out the question of whether insurance companies are financially sound and whether they are

disclosing enough information to enable investors make informed decisions. Obviously financial health is critical for any business organization (Mumo, 2017).

Penetration of insurance is calculated by the absorption of insurance goods (Muriuki & Mutugi, 2017). In 2020, insurance penetration, defined as the ratio of gross direct insurance premiums to GDP, was 2.17 percent (2019: 2.34 percent). The global average insurance penetration rate was 7.4%. Insurance density, or the ratio of gross direct insurance premiums to total population, declined slightly from KES 4,788 in 2019 to KES 4,787 in 2020, indicating a modest fall in insurance spending (Mburu, 2017; IRA, 2020). Compared to the global average, the penetration of insurance in Kenya is still very low. In 2020, the asset base of the industry expanded by 8.0 percent to KES 765.93 billion (2019: KES 709.05 billion). The asset base was mostly made up of investments, accounting for 85.7 percent of the total. Investments climbed by 10.5 percent in the year under review, from KES 594.03 billion in 2019 to KES 656.46 billion at the conclusion of the year. Government securities accounted for 67.1 percent of the investments (KES 440.68 billion) (IRA, 2020).

Locally, Kenya's insurance plan penetration was very poor at just 2.54 percent of Gross Domestic Product (GDP) compared to 2.57 percent in 2005 (AKI, 2019). A penetration ratio (GDP) compared to 2.57 percent in 2005 was reported by long-term (life) insurance. Long-term (life) insurance reported a penetration ratio of 0.76 percent, compared with 1.78 percent for general insurance. Kenya's insurance sector also faced a daunting monetary landscape in 2011, with a penetration of 3.02% compared to 3.1% in 2010. Insurance penetration in Kenya in 2014 was estimated at 3.44% (Mutegi, 2018) compared to Malaysia, which had an estimate of 41% of the population included in some form of lifestyle insurance. The penetration ratio shows the insurance market's current coverage and growth challenges in a given region.

As mentioned, insurance penetration in Kenya is estimated at 2.34 percent, which is very low considering that Kenya's population now stands at over 40 million and is much lower than both the continent and the global penetration of 3.6 percent and 6.28 percent respectively (AKI, 2019). Nevertheless, with the gross written premiums of the industry, there is notable and steady growth in the insurance industry. Though gross written premiums grew 5.3% to Ksh 228 billion compared to Ksh 216 billion by the end of the same period in 2018 (Kenya Institute for Public Policy Research and Study, 2019), insurance penetration growth remained low. There is a great deal of experimentation with different insurance plans targeted at the mass market, but the use of these goods is still very limited.

KPMG (2017) estimated that overall premiums in Kenya were equivalent to 3.2 percent of GDP in 2011, while approximately 63 percent of the market was for non-life insurance products according to Appiah (2020), and 43 percent of the non-life insurance market was for auto insurance (26 percent is commercial and 17 percent was private), while nearly 20 percent is for personal accident insurance. Insurance companies are vying for a small market that is marked by low penetration (Kinyua, 2018). Due to price undercutting, cut throat competition in the motor and community life insurance guidelines led these parts to perform dismally in 2013. A loss of over shs. 600 million was recorded by the motor insurance plan, while the growth of community life was lower than that recorded in 2012 (Mweu, 2021). In 2012, with the average gross premium falling by 0.8 percent in real terms, the insurance sector faced a tough economic climate. An average growth of 1.3 percent was achieved by emerging markets (Mweu, 2021).

Tinier companies have solid liquid reserves and are perceived to be more profitable in the short term than larger organizations. Similarly, larger companies, especially those with illiquid assets, are more profitable than smaller firms assuming longer durations (Auliyah, & Basuki, 2021). Tsvuura (2017) also investigated the effect of company-level characteristics on the performance of Pakistan's life insurance sector over the seven-year period from 2001 to 2007. The tangibility of assets and liquidity also has a positive relationship with the success of insurance firms, but they are statistically negligible, according to this report. Firm size is therefore an important determinant of the financial strength of insurers in both emerging and advanced economies. In their empirical research on the empirical analysis of the performance determinants of Ethiopian insurance firms, Zainudin, Mahdzan and Leong (2018) revealed that company size, debt-loss ratio and asset tangibility were statistically significant to explain performance. The researcher further was motivated to carry out the study that will determine if firm size influence insurance penetration in Kenya's life insurance market.

The willingness of the company to unlock maturing short-term debt is firm liquidity. For corporate objectives, upholding reasonable liquidity is more relevant. Low levels of liquid organization can lead to financial cost increases and affect its ability to fulfill its financial obligations (Yahaya & Lamidi, 2015). When external sources of funds are not available, a company may use its liquid assets to finance its operations and investments. Increased liquidity levels allow

an entity to cope with unforeseen eventualities in times of low earnings and fulfill its obligations (Abubakar, Sulaiman & Haruna, 2018).

In government securities, which include government treasury bills and bonds, life insurance companies may invest. Other Life Insurance Company investments include, for the most part, investments listed on the stock exchange or shares of private companies and bonds issued privately by other companies. Furthermore, Life Insurance Firms also invest in debentures and ordinary shares in subsidiaries, affiliates, joint ventures and other miscellaneous investments that are either directly purchased or acquired by takeovers, acquisition or restructuring (Islam et al., 2017). In addition, Insurance Companies also reorganize their current assets to meet the demands of their short-term financial obligations (Okonu, Umeh, Akinwande & Muraina, 2019). Liquidity being an important internal firm factor, the researcher of the current study found it key in analyzing its influence on insurance penetration among in Kenya.

II.   Statement of the Problem

In Kenya, insurance penetration has fallen to 2.34%, the lowest in the last 15 years (Kenya Insurance Industry Survey, 2019), compared to South Africa, whose penetration is 16.9% with a population of 53.2 million (National Insurance Commission, 2019). In Kenya, the number of insurance firms is 59, equivalent to a 1:1 ratio for every 1 million Kenyans, which is close to that of the banking sector in Kenya. In the last five years, 10.7 percent in the year 2015, 13.2 percent in the year 2016, 6.3 percent in the year 2017, 3.5 percent in the year 2018 and 6.1 percent in the year 2019, the Gross Direct Premium in Kenya was on the downward trend (IRA, 2019). This situation is the subject of the current study to determine if the worsening situation is caused by particular firm financial characteristics and the economic climate of insurance companies in Kenya.

Kenya's insurance sector is affected by specific factors, both internal and external, that affect the performance of insurance companies. Internal variables include retention of premiums, margin of solvency, business size and company age (Nduati, 2018). Lin (2015) analyzed the relation between bank-specific variables and commercial banks' bank efficiency, and the findings showed that bank performance was influenced by factors such as financial leverage, bank size and solvency ratio. The current research examined firm financial characteristics from insurance companies since different scholars have already studied the impact on results of specific factors from companies. Muneeni (2015) revealed that bank size, leverage and liquidity improved the performance of listed companies. Osoro (2014) analyzed the variables influencing the performance of the bank sector and the results showed that bank size, liquidity, solvency margin influenced the performance of the bank. Bongoye, Banafa and Kingi (2016) examined the correlation between company-specific factors and listed companies' financial performance, and the results showed that company size and financial leverage were significantly linked to financial performance.

While businesses operating in the same sector have different levels of financial performance and deal with the same external variables, studies have shown that internal factors influence firm performance. Firm size, financial leverage, liquidity, investment efficiency, capital adequacy are among the main internal factors (Zablon & Ariemba, 2015). Lwaminah (2017) examined the impact of asset quality, liquidity, investment quality, capital adequacy and firm size on the financial performance of commercial banks in Kenya in a further empirical analysis of company specific factors. Study by Kitati, Zablon and Maithya (2015), which sought to identify evidence supporting the presence of effect of the selected macro-economic variables: hard currency foreign exchange rate, interest rate and inflation rate on fluctuations in share prices, found that interest rate and inflation had an impact on stock prices.

In addition, the general lack of a savings culture, insufficient tax incentives and a perceived industry reputation crisis in the public eyes, especially with regard to the settlement of claims, were cited as likely causes for a low penetration of insurance in Kenya (Gakeri, 2015). Since the low insurance penetration is a recorded problem in Kenya based on insufficient literature hence the need of empirical research that examines the relevant factors, economic environment and insurance penetration of companies in Kenya. The study examined the moderating effect of economic environment on the firm financial characteristics and the penetration of insurance in Kenya in order to fill this gap.
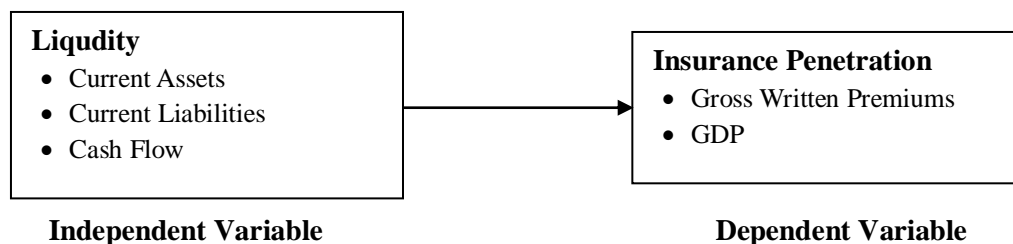
III.   Purpose of the Study

The study seeks to examine the effect of firm liquidity on insurance penetration in Kenya.

3.1 Hypothesis of the Study

H_0: Liquidity has no statistically significant effect on insurance penetration in Kenya

IV.   Conceptual Framework

A conceptual framework is a system that organizes a meaningful structure of empirical findings (Shapira, 2011). A conceptual framework was argued by Childs (2010) to be a collection of broad ideas and concepts taken from related fields of study and used to form a subsequent presentation. The conceptual framework for the current study demonstrates the impact of firm size on insurance penetration of insurance companies in Kenya

Liqudity	**Insurance Penetration**
• Current Assets	• Gross Written Premiums
• Current Liabilities	• GDP
• Cash Flow	

Independent Variable   **Dependent Variable**

4.1 Liquid Asset Theory

Beaver (1966) initially introduced the Liquid Asset Theory. The theory looks at a corporation as a pool of liquid assets that is either supplied or drained by inflow and outflow, respectively, and serves as a buffer in combinations of flows. The firm solvency is also clarified in the possibility that the reservoir will be drained, which could lead to bankruptcy due to the company's inability to settle matured obligations. It is the hypothesis that when debt obligations surpass earnings in the current year or when the amount of both the estimated equity value and current year profit becomes less than zero or negative, a company goes bankrupt.

In and out of the business, the principle concerns itself with cash flow management. The theory explains how the debt is funded within the business and how excess cash is spent in order to do this. How to handle corporate cash flow in brief terms is of significant concern in all corporations. The reason for the concern is that it is difficult to accurately predict the cash flow, particularly the inflows, and there are also no perfect coincidences with cash inflows and outflows (Aziz & Dar, 2006). The management should preserve a cash balance in the company in order to prevent financial distress. Neither too much money nor a negative level of cash is helpful to the company (Aziz & Dar, 2006).

The liquid asset theory, which suggests that firms hold liquid assets to meet short-term financial obligations and capitalize on investment opportunities, remains relevant in understanding firms' liquidity management decisions. The theory posits that firms balance the opportunity cost of holding liquid assets against the costs of liquidity shortages, guiding their decisions regarding cash holdings and investment in liquid assets. The model highlights the trade-offs between the costs of holding cash (including forgone interest earnings) and the costs of converting non-cash assets into cash. Opler, Pinkowitz, Stulz & Williamson, (1999) examine the determinants of corporate cash holdings, drawing on the liquid asset theory to analyze the factors influencing firms' cash management decisions. The study highlights the role of financial flexibility, growth opportunities, and risk management considerations in shaping firms' liquidity preferences.

Critics argue that the liquid asset theory neglects firm-specific characteristics and industry dynamics that may influence liquidity management decisions. Factors such as firm size, industry risk, growth opportunities, and access to capital markets can all shape firms' liquidity preferences and investment strategies, but these factors are often overlooked or simplified in the theoretical framework of the liquid asset theory. Critics suggest that the liquid asset theory may be too static in its approach, assuming that firms' liquidity preferences and investment decisions remain constant over time. In reality, firms' liquidity needs and investment opportunities may change dynamically in response to evolving market conditions, economic cycles, and strategic objectives, requiring more dynamic models to capture the complexity of liquidity management decisions. The liquid asset theory often assumes rational decision-making by firms based on optimizing objectives such as profit maximization or shareholder wealth maximization. Critics argue that this rational choice framework may overlook behavioral biases, bounded rationality, and institutional constraints that influence firms' liquidity management decisions in practice.

Overall, while the liquid asset theory provides a useful framework for understanding firms' liquidity management decisions, it is important to recognize its limitations and consider alternative perspectives that offer a more nuanced understanding of liquidity behavior in real-world contexts. Integrating insights from behavioral economics, institutional theory, and empirical research can help address some of the critiques leveled against the liquid asset theory and advance the understanding of firms' liquidity management practices. This theory was the basis for the analysis of the effect of liquidity on insurance penetration in Kenya.

4.2 Firm Liquidity and Insurance penetration

In an effort to understand the state of the banking sector to help launch effective policies, Nguyen, Thanh and Nguyen (2018) researched the determinants of the profitability of 13 commercial banks in Vietnam from 2006 to 2015. Scale, liquidity, capital adequacy, ownership structure, credit risk and cost to income ratio are the bank-specific variables that were analyzed. GDP and inflation were the macroeconomic variables investigated. Nguyen et al (2018) found, based on their empirical study, that capital structure was positively linked to NIM and liquidity was positively related to ROE.

Ariwidanta & Wiksuana (2018) in a study on the effect of credit and liquidity risk on bank profitability and capital adequacy ratio as mediation variables in Indonesia aimed to determine the relationship between credit and liquidity risk to profitability through the capital adequacy ratio as a mediating variable. The population in this study was 43 Indonesian banks listed on the Indonesia Stock Exchange. The method in determining the sample uses purposive sampling and obtained 26 banking companies that meet the sample criteria. Data in the study are secondary data. The data analysis technique used is Path Analysis. The results of this study found that credit risk has a negative and significant effect on profitability, liquidity has a positive and significant effect on profitability, credit risk has a negative and significant effect on the capital adequacy ratio, liquidity has a positive and insignificant effect on the capital adequacy ratio, capital adequacy ratio has a positive and not significant to profitability. As well as the capital adequacy ratio is not able to mediate the effect of credit and liquidity risk on profitability. This research can provide information to be considered by banks in Indonesia to maintain the standard provisions for financial ratios that have been implied by Bank Indonesia.

Desjardins, Denise & Dionne, & Koné, (2020) studied "Reinsurance demand and liquidity creation: A search for bi-causality." The main objective was to establish reciprocal links between reinsurance demand and liquidity creation. Early studies proposed that financial institutions enhance economic growth by creating liquidity in the economy. However, liquidity creation exposes firms to liquidity risk because they make themselves illiquid when they create liquidity in the economy. In the insurance industry, unexpected claims can be protected through reinsurance, which introduces a trade-off between the demand for reinsurance and the creation of liquidity. This trade-off can be significant for insurers that have fewer diversification opportunities. This study empirical results, from regularized GMM and ML-SEM estimation methods, show positive bicausal effects between liquidity creation and reinsurance demand for small insurers. The link between the two activities is not significant for large insurers. In all estimations, the standard GMM model is rejected. This study results may have policy implications for liquidity risk management.

Ghasemi & Ab Razak (2016) examined the impact of liquidity on the capital structure of a sample of 300 companies in Malaysia listed on the Bursa Malaysia Main Market from 2005 to 2013. The results showed that liquidity had a big influence on all the financial leverage metrics used, namely the debt / equity ratio and the debt / asset ratio. The relationship between liquidity and the capital structure of IT and real estate companies listed on the Nasqad OMX in Sweden was examined by Karlsson and Svensson (2016). The findings showed a positive relationship between the liquidity and leverage levels of companies in the IT sector and a negative relationship between companies in the real estate sector. Rashid and Mehmood (2017) analyzed the effects on the leverage decisions of listed on-financial Pakistan companies of stock market liquidity. The findings showed that liquidity had a substantial negative effect on the company's leverage rate, adding that the more liquid a company's stock, the more equity and not debt preference. The effect of firm liquidity on insurance penetration for life insurance companies in Kenya was not evaluated in these studies.

Thabiso (2022) in a study on evaluating the influence of leverage and liquidity on the financial performance of general insurance companies in Sub-Saharan Africa noted that the factors of the insurance industry's business performance are of concern to a variety of participants in any economy, such as the government, politicians, policyholders, and speculators. There has been very little research on this issue in Sub-Saharan Africa, with the majority focusing on specific factors that influence the performance of insurance businesses. The purpose of this paper was to evaluate the influence of leverage and liquidity on financial performance of general insurance companies in Sub-Saharan Africa. The study used descriptive correlational techniques to obtain panel data across 113 general insurers operating in Sub-Saharan Africa as of December 31, 2019, for 11 years (2008–2019). The pooled OLS, fixed effects and random effects models were estimated with the financial performance measures (proxied by ROA) as the dependent variables where the Hausman test was employed to test the hypothesis. The study found that there is a negative negligible link between leverage and financial performance, whereas there is a positive association between liquidity and financial performance. The study suggested that proper liquidity management is critical for insurance businesses to enhance a company's value

as well as financial success. The focus should be on establishing a proper asset-liability mix, in which a company's total liabilities do not exceed its total assets. Furthermore, organizations require cash flow policy recommendations to optimize profit potential while limiting liquidity risk in the financial statement.

Barus, Muturi, Kibati and Koima (2017) concluded that the financial performance of 83 savings and credit companies in Kenya was affected by liquidity management. Njeru (2016) showed that while SACCOS undertake a strict cash flow forecast in Kenya, there are external variables that can influence liquidity management, posing a higher risk to the institutions' operations. Mwashi and Miroga (2018) found that the liquidity management activities of DT SACCOs play a key role in DT SACCOs' profitability. Waswa, Mukras and Oima (2018) found that the liquidity current liability coverage ratio is negatively associated with business performance, suggesting that the financial status of a company is inevitably determined by a higher liquidity current liability value.

Via a descriptive survey, Theuri (2021) conducted an investigative report on the factors that affect the financial performance of Kenya's insurance companies. He tried to define some of the key factors that decide the financial performance of insurance companies and the degree to which they affect their financial performance. As a financial success metric, he used profitability. He noted that the main factors affecting Kenyan insurance companies ' financial results are interest rate volatility, liquidity and competition, but he did not state their relationships.

In a study to find out the effect of liquidity risk on the profitability of commercial banks in Kenya, Ouma (2015) found that liquidity had a positive impact on commercial banks ' profitability. There has been an important relationship between Kenya's liquidity and commercial bank profitability. In their analysis on the influence of liquidity risk on the financial performance of insurance companies listed on the Nairobi Stock Exchange, Kamau and Njeru (2016) established that there is a negative relationship between liquidity risk and financial performance calculated by the ROE for insurance companies. Eljelly (2004) found that a major negative relationship existed between the profitability of a company and its degree of liquidity. Studies by Ouma (2015) and Kamau and Njeru (2016) did not examine the impact of the liquidity of companies on the insurance penetration of Kenya's life insurance companies.

Barus, Muturi and Kibati (2017) concluded that the financial performance of 83 savings and credit companies in Kenya was affected by liquidity management. Njeru (2016) showed that while SACCOS undertake a strict cash flow forecast in Kenya, there are external variables that can influence liquidity management, posing a higher risk to the institutions' operations. Mwashi and Miroga (2018) found that the liquidity management activities of DT SACCOs play a key role in DT SACCOs' profitability. Mwaswa, Mukras and Oima (2018) found that the liquidity current liability coverage ratio is negatively associated with business performance, suggesting that the financial status of a company is inevitably determined by a higher liquidity current liability value.

A research on the impact of liquidity management on the financial performance of deposit taking SACCOs in Nairobi County, Kenya, was conducted by Song'e (2015). The study found that there is a clear positive relationship in Nairobi County between liquidity, liquidity risk financing, operational quality, cash ratio and financial performance of deposit taking SACCOs. However, in his research on the Impact of Liquidity Management Strategies on Sustainability of Table Banking Groups in Uasin Gishu County, Kenya, the study did not concentrate on investing liquid funds and withdrawal of membership. Kimani (2018) found that liquidity management strategies affect the sustainability of table banking groups. In order to increase profitability, the Table Banking Groups can control liquidity levels. The study concluded that having sufficient liquidity levels was essential for table banking groups in order to ensure that groups met short-term obligations and, more importantly, to boost sustainability. Studies were conducted between Sacco societies in Song'e (2015) and Kimani (2018), while the current study will be conducted among Kenya's Life Insurance Companies to establish the literature gap to be filled.

Macharia (2019) studied effect of firm characteristics on the financial performance of insurance companies in Kenya. The study noted that insurance makes a noteworthy contribution to financial development and improvement of the economy and is a vital part in cultivating business investment and infrastructural progression and expansion. Insurance facilitates economic dealings by providing indemnification and risk transfer. It also encourages management of risks while promoting safe practices in business transactions, encourages financial steadiness by offering long-lasting investment in the economy. Insurance also stimulates steady and viable savings and in provision of pension. The performance of insurance is, therefore, a critical component that warrants attention. In light of the above preceding, the foundation of the study was to evaluate the effects of firm characteristics on the performance of insurance companies in Kenya. The objectives of the research were to evaluate the effects of size, liquidity, leverage and diversification on the

financial performance of insurance companies in Kenya. The research was guided by agency theory, trade-off theory, and the pecking order theory. This research problem adopted the use of a descriptive design. The target population was 53 insurance companies operating in Kenya. Secondary data of the period 2013-2017 obtained from insurance regulatory authority was used. The panel data collected was analyzed through descriptive and inferable statistics like multiple regression to find the effect between the predictor and predicted variables. Panel data analysis using STATA software was carried out. Diagnostic tests were carried out on the model. The results were presented using graphs, charts, and tables. The research established that the firm size had no significant effect on the financial performance of the insurance companies in Kenya. The study further established that liquidity positively affected the financial performance of the insurance companies in Kenya. The effect was however not significant. The effect of leverage on the financial performance was negative and significant. Finally, diversity negatively affected the financial performance of insurance companies in Kenya insignificantly. The study recommended that smaller firms should consider merging to reap from the economies of scale. The insurance companies should strengthen their liquidity to enhance their financial performance. Further, Insurance companies should keep low their debts and maximize their equity to enhance their financial performance. Lastly, insurance companies need to specialize of few products that will maximize their profitability.

Kimani (2023) studied determinants of financial performance of general insurance companies in Kenya. The study noted that stability and good performance of insurance companies is paramount. Kenyan insurance companies have, for the last decade, faced a turbulent business environment. This study evaluated determinants of financial performance for the insurers. It focused on five specific objectives namely: to establish the effect of underwriting risk on financial performance of general insurance companies in Kenya, to evaluate the effect of liquidity on financial performance of general insurance companies in Kenya, to find out the effect of solvency on financial performance of general insurance companies in Kenya, to assess the effect of firm size on financial performance of general insurance companies in Kenya to establish the effect of capital adequacy on financial performance of general insurance companies in Kenya. The basic theory for this study is theory of asymmetrical information while others for specific variables were liquidity preference theory, resource based view and pecking order theory. The study targeted thirty one general underwriters. Data was sourced for a period of seven years from 2014 to 2020. A panel data set was collated from the seven-year observations. Data analysis was done using panel estimation method. The study concluded that the most significant determinants of financial performance of insurance companies in Kenya are underwriting risk and solvency. Underwriting risk had a negative and significant influence on return on assets. Also, solvency was found to better financial performance of insurance companies significantly. Moreover, the study concluded that liquidity and capital adequacy negatively and insignificantly affected financial performance of insurance companies in Kenya. Lastly, firm size positively and insignificantly affected financial performance of insurance companies in Kenya. It is recommended that insurance companies in Kenya need to diversify underwriting business in order to mitigate risks associated with underwriting risk as it hampers financial performance. Also, insurance firms should maintain high solvency ratios as solvency was found to boost financial performance. This study is valuable because it provides empirical evidence that can be used by regulators to form policies that may stabilize the sector. At the same time, it contributes to firm performance literature in Kenya and beyond. The study too is useful to scholars in the field of insurance as it adds to insurance literature from Sub-Saharan Africa

Kariuki, Muturi & Njeru (2021) studied the influence of liquidity on financial performance of insurance companies in Kenya noted that liquidity is the capacity of a company to satisfy its current financial obligations after they fall due. A firm may incur extra costs if it fails to honor its short term financial obligations. The aim of the study was to determine the influence of liquidity on the financial performance of insurance companies in Kenya. The research applied a correlational research design. A correlational study design is administrated to debate the connection between variables. The target population for this study was the fifty-three insurance companies in Kenya that were operational in 2018. The investigation found that liquidity had an enormous positive effect on financial performance (Return on assets and return on equity). The study concludes that the greatest threat to liquidity may occur in an insurance firm during a catastrophe when a large number of claims are received directly or there could even be prospects of a significantly large claim which insurance companies should have optimal liquidity for such situations. The review recommends that Insurance firms should monitor liquidity in their firms and adopt corrective actions in instances of high liquidity risk.

Chen, Adrian & Cronje (2019) studied the moderating role of capital on the relationship between bank liquidity creation and failure risk. The study examined the role of bank capital in moderating the relationship between bank liquidity creation and the failure risk in U.S. banks over the period of 2003–2014. We find that, conditional on bank capital, bank liquidity creation is related to bank failure risk negatively. The negative relationship is moderated

positively (i.e. strengthened) by (changes in) bank capital. This finding is consistent with the view that banks may strengthen their solvency through increased capital in response to the illiquidity risk associated with liquidity creation; and higher capital enhances the ability of banks to create liquidity. The result is robust to different estimation methods, and alternative measures of liquidity creation, bank failure risk, and bank capital. Further analysis shows that the significant and negative effect is more prominent for small banks, and the impact of bank capital was more pronounced during the recent financial crisis of 2007–2009.

Ajao & Ogieriakhi (2018) studied firm specific factors and performance of insurance firms in Nigeria. This study investigated the relationship between firm specific factors and the performance of insurance firms in Nigeria over the period 2009-2017 for twelve sampled insurance firms quoted on the Nigeria stock exchange using the panel least square technique. The empirical results revealed a direct and statistically significant relationship between insurance performance and firm's age. Besides, firm size and growth rate are specific firm factors that have significant inverse relationship with insurance firm's performance which is an indication of diseconomies of scale suffered by insurance firms due to uncontrolled increase in size. The study recommends that exogenous factors that relate to performance of insurance companies in Nigeria should be considered as most of the firm specific factors examined in this study did not have significant positive impact on performance of insurance firms during the period considered.

In order to evaluate the determinants of the financial results of insurance companies in Kenya, Shaaban and Wahome (2018) carried out a descriptive research model. He described the three key factors affecting the financial performance of Kenyan insurance companies as follows: the growth of the insurance industry has a positive impact on financial performance, the leverage of the insurance industry has a negative impact on financial performance, and the financial performance is positively affected by the amount of tangible assets kept by the insurance industry. The three variables that his research found to have a significant effect on financial results were very different from those that Mwangi (2013) found.

Mutua (2023) studied insurance risks and financial performance of insurance companies in Kenya. This study noted that the insurance industry is instrumental in economic growth by enabling protection, capital creation and promoting commerce. A stable insurance industry capable of mitigating risks ensures sustainable economic growth. There has been a decline in the insurance industry's profitability in Kenya; this has raised questions about whether the risks affecting the industry have contributed to the declining trend. Risks and uncertainties would lead to an organization's failure to achieve its objectives. Hence, the study assessed the effect of insurance risks on the financial performance of insurance companies in Kenya. Specifically, the study examined the effects of credit risk, liquidity risk, solvency risk, reinsurance risk and underwriting risk on the financial performance of insurance companies in Kenya. GDP was used as a moderating variable on the relationship between insurance risks and financial performance. The study was anchored on agency theory, credit risk theory, liquidity preference theory and collective risk theory. The target population of the study was all 53 licensed insurance companies operating in Kenya between 2015 and 2020. A census approach was used. Explanatory research design and positivism research philosophy were utilized in the study. Secondary data was gathered from audited financial statements submitted to Insurance Regulatory Authority for the period between 2015 and 2020. With the aid of STATA software, panel data was analyzed through descriptive statistics, correlation analysis and multiple linear regression model. Study findings were presented in tables and figures. The following diagnostics tests were conducted; normality, multicollinearity, heteroscedasticity, autocorrelation, stationarity and hausman tests. The panel data regression results revealed that credit risk had a negative significant effect on financial performance, liquidity risk had a negative significant effect on financial performance, solvency risk had a negative significant effect on financial performance and underwriting risk had a negative significant effect on financial performance. But reinsurance risk had a positive insignificant effect on financial performance. The study also found that GDP significantly moderates the relationship between insurance risks and financial performance of insurance companies in Kenya. The study recommended that insurance companies; should have good credit risk management frameworks to minimize credit risks, implement proper investment portfolio management to guard against liquidity risks, in cases of negative asset base increase share capital, cover most of their claims themselves but ensure they have adequate reinsurance where high-risk investments are involved and put in place proper policy estimation and valuation techniques. Additionally, Insurance regulatory Authority should ensure strict adherence to the capital adequacy requirements for insurance companies. Finally, the government should implement proper fiscal and monetary policies to ensure a stable economy. The study recommends further study on other insurance risks such as strategic risk, operational risk and investment risk that may affect financial performance. A follow-up study focusing on the period from year 2021 when COVID-19 restrictive measures were relaxed is also recommended.

Effect of Liquidity on Insurance Penetration in Kenya

Muriuki (2022) studied the relationship between firm liquidity and financial performance of commercial banks in Kenya. The study noted that liquidity plays a significant role in the corporate financial performance of commercial banks. A bank should ensure that it does not suffer from lack of or excess liquidity to meet its short-term compulsions which may create financial performance issues. This study sought to determine the relationship between firm liquidity and financial performance of commercial banks in Kenya. This study utilized descriptive and correlational research design. This research targeted 39 commercial banks in Kenya between 2017 and 2021. The data sources were secondary. A data collection sheet was used to collect the data Commercial banks' annual reports were used to collect the data. Between 2017 and 2021, data were collected from commercial banks in Kenya. The annual reports were sourced from Central Bank of Kenya where all commercial banks publish their annual financial reports with. Panel data was adopted for analysis. This research made use of annual data relating to the commercial banks between 2017 and 2021. Descriptive correlation and regression analysis were done via STATA 14. The study carried out diagnostic tests of multicollinearity, normality, heteroskedasticity and specification test. To examine the significance of the model the investigation adopted Statistics via Analysis of Variance. From the findings, correlation analysis showed that firm liquidity had a correlation coefficient of -0.1063 indicating that firm liquidity had a weak negative relationship with financial performance. On the other hand, firm size showed a strong positive relationship with financial performance (Corr=0.6068). Capital Adequacy showed a weak negative relationship with financial performance (Corr=- 0.0799) while asset quality showed a negative weak relationship shown by correlation coefficient of -0.0112. The correlation coefficient of firm size was significant while that of firm liquidity, capital adequacy and asset quality were insignificant. The study concludes that firm liquidity has a negative insignificant relationship with financial performance of commercial banks in Kenya. Firm size has a positive significant relationship; capital adequacy has an insignificant negative relationship; while asset quality has a negative insignificant relationship with financial performance of commercial banks in Kenya. The study recommends that commercial banks7in Kenya reduce their liquidity to optimal levels; increase their assets; reduce the unproductive assets; increase their revenue streams and levels; reduce their total liabilities; issue more shareholder's capital; sell their non-performing loans to collection agencies; and increase the gross loans extended to customers optimally. Future studies should adopt other factors influencing financial performance, other measures of variables, other periods of study; and adopt primary data.

Ismail & Anwarul (2021) studied liquidity management and financial performance of listed oil and gas companies in Nigeria. The purpose of this study was to figure out the link between liquidity and profitability, as well as the impact of liquidity on profitability. Ten listed companies with a bigger market share in the oil and gas sector of the Nigerian economy were subjected to a fixed panel regression study. Secondary data was gathered for ten years, from 2011 to 2020, from their published annual reports. Profit after tax (PAT), Return on Asset (ROA), and Return on Equity (ROE) were used to determine profitability (ROE). Internal liquidity variables such as equity, debt, and sales were utilized to determine the behavior of the dependent variable, but external elements such as lending interest rate and exchange rate were employed to further explain profitability behavior. The data were analyzed using a multiple regression approach. The findings reveal that debt has a significant negative impact on companies' profitability. Similarly, equity capital, as well as retained earnings, are more beneficial to firms than the debt financing of the oil and gas sector. The study, therefore, recommends that oil and gas firms should boost their equity capital, improve their revenues, increase their retain earnings, and reduce debt financing to enable them to generate more wealth for shareholders.

The effect of liquidity risk on the financial performance of commercial banks in Kenya has been examined by Muriithi and Waweru (2017). The focus of this study was to examine the effect of liquidity risk on financial performance of commercial banks in Kenya. The period of interest was between year 2005 and 2014 for all the 43 registered commercial banks in Kenya. Liquidity risk was measured by liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) while financial performance by return on equity (ROE). Data was collected from commercial banks' financial statements filed with the Central Bank of Kenya. Panel data techniques of random effects estimation and generalized method of moments (GMM) were used to purge time-invariant unobserved firm specific effects and to mitigate potential endogeneity problems. Pairwise correlations between the variables were carried out. Wald and F- tests were used to determine the significance of the regression while the coefficient of determination, within and between, was used to determine how much variation in dependent variable is explained by independent variables. Findings indicate that NSFR is negatively associated with bank profitability both in long run and short run while LCR does not significantly influence the financial performance of commercial banks in Kenya both in long run and short run. However, the overall effect was that liquidity risk has a negative effect on financial performance. It is therefore advisable for a bank's management to pay the required attention to the liquidity management.

V. Research Methodology

5.1 Research Design

The study was anchored on positivism philosophical foundation. Moreover, the study applied longitudinal research design. The main objective of a longitudinal research design is to collect and generalize numerical data through groups of people or to clarify a particular phenomenon (Garg & Kothari, 2014). The target population for this study included all of the 26 licensed Life Insurance Companies in Kenya that were operational between 2011 and 2022 and filed their audited financial statements with the insurance regulatory authority for the period (IRA, 2020). The analysis intentionally took 18 insurance companies as the acceptable sample size to achieve the set goals.

5.2 Data Collection Instruments

A research instrument is described by Parahoo (2014) as a tool used to gather data. An instrument is a system designed to test perception, attitude, and abilities. The analysis used secondary data from the audited financial statements of 18 Life Insurance Companies and economic environment (GDP, inflation and interest rate) from the Kenya Economic Survey through 2011 – 2022. A secondary data collection template was used to collect secondary data which was quantitative in nature. There is a need to build a data collection method to help with data collection, according to Kothari (2011). Primary data which is qualitative in nature was also collected using a questionnaire.

VI. Study Findings

6.1 Liquidity

The study further sought to establish the effect of liquidity on insurance penetration in Kenya. Liquidity, in the context of insurance firms in Kenya, refers to the ability of these companies to quickly convert their assets into cash to meet short-term financial obligations. It reflects the ease with which insurance companies can access cash to pay claims, operating expenses, and other immediate liabilities. Liquidity is a critical aspect of financial health, as it ensures that insurance firms can operate smoothly and fulfill their commitments without facing cash flow shortages. Table 1 presents the descriptive statistics of liquidity.

Table 1: Descriptive Statistics of Liquidity

Descriptive Statistics	Liquidity
Minimum	-0.187
Maximum	12.131
Mean	1.07785
Std. Deviation	2.290562
N	216

Table 1 presents the descriptive statistics of the average liquidity ratio of insurance firms in Kenya. The minimum value of -0.187 is unexpected for a liquidity ratio, as it indicates a negative value. This suggest that there were instances where insurance firms faced challenges in meeting short-term obligations with their liquid assets. This justify why some insurance firms were placed under adminsitration during the study period. The maximum value of 12.131 indicated instances where insurance firms had an abundance of liquid assets relative to their short-term obligations. The mean (average) liquidity ratio of approximately 1.07785 suggests that, on average, insurance firms had slightly more liquid assets than necessary to cover their short-term obligations. This value is greater than 1, which implies a positive average liquidity position.

Desciptive statistics of average liquidity ratio for insurance firms in Kenya presents a range of implications, including financial health, efficiency, variability, and potential outliers. The data underscores the importance of effective liquidity management for insurance companies to ensure their ability to meet short-term obligations and maintain operational stability. These finding are consistent with those of Theuri (2021) who noted that the main factors affecting Kenyan insurance companies' financial results are interest rate volatility, liquidity and competition, but he did not state their relationships. Mwaswa, Mukras and Oima (2018) also found that the liquidity current liability coverage ratio is negatively associated with business performance, suggesting that the financial status of a company is inevitably determined by a higher liquidity current liability value.
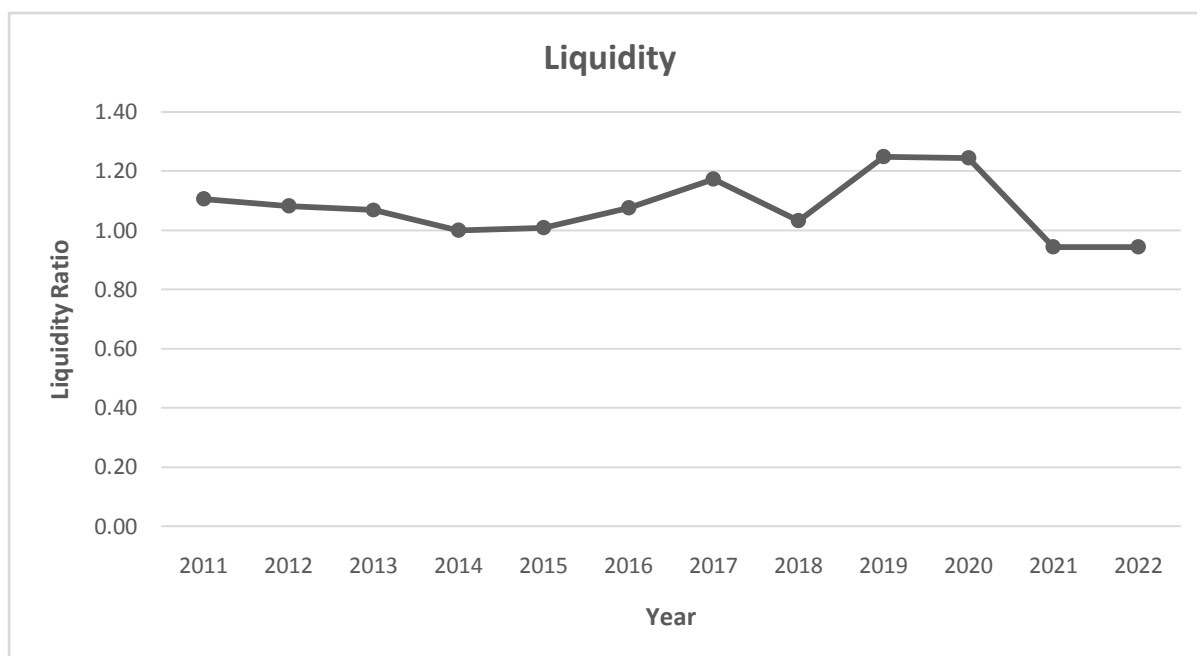
Figure 1: Variation in Average Liquidity Ratio for Insurance Industry between 2011 and 2022

Figure 1 illustrates the trend analysis of the average liquidity ratio of insurance firms in Kenya over a twelve-year period. The liquidity ratio measures the ability of companies to cover their short-term obligations with their most liquid assets. The liquidity ratio in 2011 was 1.11, indicating that, on average, insurance firms had slightly more than one unit of liquid assets to cover their short-term obligations. The liquidity ratio remained relatively stable in the subsequent years (2012 to 2016), fluctuating around values of 1.08 and 1.01. This suggests that insurance firms maintained a consistent liquidity position during this period.

A decline in the liquidity ratio was observed in 2017, with a value of 1.17 which indicated a slight improvement in liquidity relative to the earlier years, potentially due to more efficient cash management or improved operational processes. The liquidity ratio experienced variations in the following years (2018 to 2020), hovering around 1.03 to 1.25 implying that insurance firms managed their liquidity within a reasonable range, adapting to changing circumstances. In 2021 and 2022, the liquidity ratio dropped to 0.94, marking a decline in liquidity compared to the preceding years.

The stability of the liquidity ratio from 2012 to 2016 suggests that insurance firms maintained a relatively consistent liquidity position during this period. This consistency reflected prudent cash management and effective allocation of resources. The trend analysis of the average liquidity ratio for insurance firms in Kenya reflects stability, adaptability, and potential concerns during specific years. Effective liquidity management is crucial for insurance firms to ensure their ability to fulfill short-term obligations, maintain operational efficiency, and uphold financial stability. These finding are consistent with those of Theuri (2021) who noted that the main factors affecting Kenyan insurance companies ' financial results are interest rate volatility, liquidity and competition, but he did not state their relationships. Mwaswa, Mukras and Oima (2018) also found that the liquidity current liability coverage ratio is negatively associated with business performance, suggesting that the financial status of a company is inevitably determined by a higher liquidity current liability value.

This study further collected primary data on each of the study variable to assess the perception of managers in insurance sector in Kenya on the effect of liquidity on and insurance penetration in Kenya. Table 2 presents the results from descriptive analysis of the primary data collected.

Table 2: Descriptive Analysis of Liquidity Statements

	SD	D	N	A	SA	Mean	Std Dev
Liquidity is essential for insurance firms to promptly settle claims	5.6%	11.1%	5.6%	0.0%	77.8%	4.33	1.33

Liquid assets enable insurance companies to maintain smooth and efficient operations	0.0%	11.1%	5.6%	5.6%	77.8%	4.50	1.04
Liquidity provides insurance firms with the financial flexibility to invest in product development and innovation	5.6%	16.7%	5.6%	22.2%	50.0%	3.94	1.35
Insurers with sufficient liquidity are better positioned to navigate uncertainties, seize growth opportunities, and support the expansion of insurance penetration in the market	5.6%	11.1%	0.0%	11.1%	72.2%	4.33	1.28
Aggregate score						**4.28**	**1.25**

The result in Table 2 suggests that liquidity plays a crucial role in insurance penetration in Kenya, with an aggregate score of 4.28 and relatively low standard deviations across individual statements. The results show that 77.8% strongly agree that liquidity is essential for prompt claim settlement. This highlights the importance of adequate liquid assets for maintaining trust and customer satisfaction, which drive insurance adoption. The result further show that 72.2% agree that sufficient liquidity positions insurers to navigate uncertainties and seize growth opportunities. This emphasizes the resilience and adaptability liquidity provides in a dynamic market, ultimately supporting the expansion of insurance reach. The results implied that maintaining adequate liquidity levels ensures prompt claim settlement, smooth operations, and the ability to capitalize on growth opportunities. Regulatory frameworks may need to consider setting minimum liquidity requirements for different types of insurance firms.

6.2 Insurance Penetration Rate

The Insurance Penetration Rate is a significant metric that measures the level of insurance coverage within a specific market or economy, in this case, Kenya. It reflects the proportion of the total population or GDP that is covered by insurance products. The Insurance Penetration Rate was calculated by dividing the total insurance premiums (both life and non-life) by the total population or GDP of the country. The Insurance Penetration Rate provides insights into the extent to which individuals, households, and businesses in Kenya are financially protected against various risks through insurance products. A higher penetration rate implies better financial protection, increased economic stability, and opportunities for the insurance industry to grow and innovate. Table 3 presents the descriptive statistics of insurance penetration rates.

Table 3: Descriptive Statistics of Insurance Penetration Rate

Insurance Penetration Rate	Descriptive Statistics
Minimum	2
Maximum	3.7
Mean	2.642
Std. Deviation	0.575
N	216

The minimum Insurance Penetration Rate value of 2 indicated the lowest recorded average penetration rate during the period implying that only around 2% of the population or economy was covered by insurance products. The maximum value of 3.7 represents the highest average penetration rate observed. This implies that, at its peak, approximately 3.7% of the population or economy had insurance coverage. The mean (average) Insurance Penetration Rate of approximately 2.642 indicates the overall average penetration rate for the entire period. This value gives an overview of the general level of insurance coverage within the country over these years.
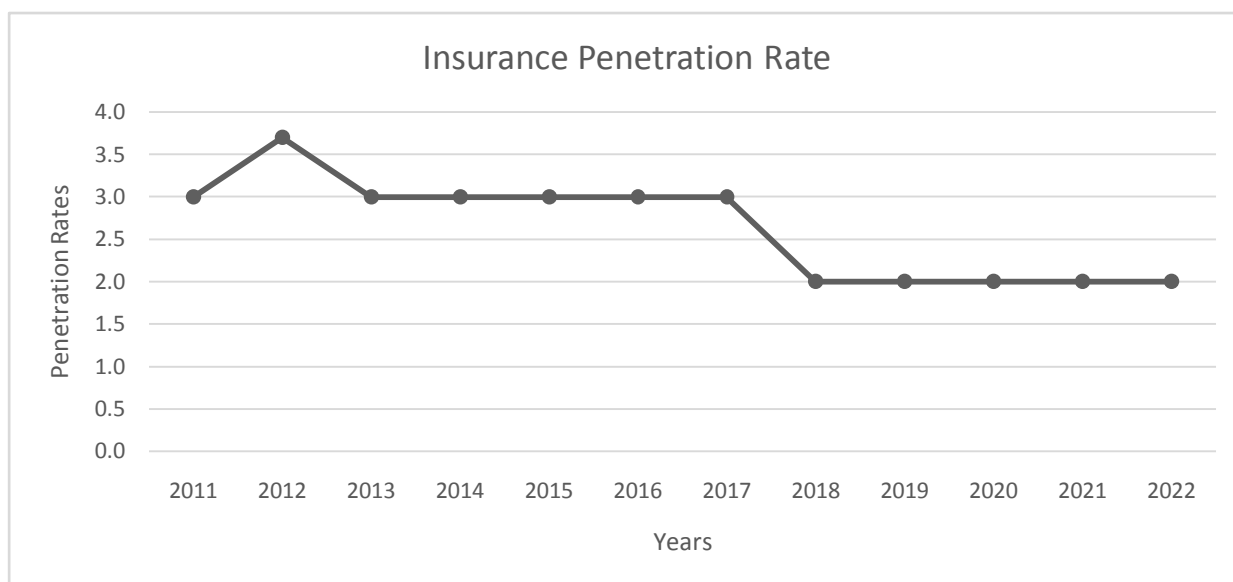
Insurance Penetration Rate

Figure 2: Variation in Average Insurance Penetration Rates in Kenya between 2011 and 2022

Figure 2 illustrates the yearly trends in the average insurance penetration rate in Kenya from 2011 to 2022. The insurance penetration rate represents the proportion of the population or economy that is covered by insurance products. The Insurance Penetration Rate was at 3.0 in 2011 and increased to 3.7 in 2012, indicating a relatively high level of insurance coverage during this period. It then decreased back to 3.0 in 2013. The consistent high penetration rate in the early years during this period suggests that the insurance market was relatively mature, with a significant portion of the population or economy already covered by insurance.

The insurance penetration rate remained constant at 3.0 from 2014 to 2017. This period reflects a consistent level of insurance coverage, suggesting that the market reached a saturation point in terms of the percentage of the population or economy covered by insurance. Starting from 2018, the Insurance Penetration Rate experienced a decline, reaching 2.0 and remaining at this level from 2018 to 2022. The decrease in the Insurance Penetration Rate from 2018 to 2022 suggests a potential shift in consumer behavior or external factors that influenced the demand for insurance products. These findings are consistent with a report by IRA, (2019) that indicated that insurance continued to be a relatively niche sub-sector under the Third Medium Term Plan (2018-2022), with the level of use remaining below 3% of the population and contributing 1.5% to GDP in 2019.

Table 4: Descriptive Analysis on the level of Insurance Penetration in Kenya

	Very Low	Low	Moderate	High	Very High	M	Std Dev
Insurance Premiums as a Percentage of GDP	55.6%	16.7%	5.6%	5.6%	16.7%	2.11	1.57
Number of Insured Individuals and Policies	38.9%	33.3%	5.6%	5.6%	16.7%	2.28	1.49
Penetration of Different Insurance Types	44.4%	38.9%	0.0%	16.7%	0.0%	1.89	1.08
Insurance Awareness and Understanding	44.4%	38.9%	0.0%	0.0%	16.7%	2.06	1.43
Aggregate score						**2.08**	**1.39**

The results in Table 4 suggests that insurance penetration in Kenya is currently low, with an aggregate score of 2.08 and relatively high standard deviations indicating some variance in perceptions across different measures. The results show that 55.6% of respondents categorized this as "very low," highlighting that insurance spending contributes minimally to the national economy. This indicates relatively low overall insurance adoption. A similar pattern emerges here, with 38.9% categorizing the number of insured individuals and policies as "low." These points to a limited reach of insurance services across the population.

Penetration of different insurance types shows the most extreme result, with 44.4% indicating "very low" penetration of different insurance types. This suggests a lack of diversity in the types of insurance products offered or purchased, further limiting overall market penetration. While slightly higher than the previous measures, 44.4% still categorize awareness and understanding as "low." This highlights the need for better education and information dissemination to improve public knowledge about insurance benefits and options.

VII.   Relationship between Firm Liquidity and Insurance Penetration

The study undertook correlation analysis to examine the relationship between firm liquidity and insurance penetration in Kenya. The findings from the analysis were as presented in Table below.

Table 5: Correlation between Liquidity and Insurance Penetration

		Liquidity
Insurance Penetration Rate	Pearson Correlation	0.561**
	Sig. (2-tailed)	0.003
	N	216

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

Liquidity showed positive and moderate (r=0.56, p=0.003) correlation with insurance penetration rates. This implied that more liquid firms tend to have higher insurance penetration rates. This further suggests that access to liquid assets allows firms to promptly settle claims, maintain smooth operations, and potentially invest in product innovations, all of which can contribute to market growth. These finding are consistent with those of Theuri (2021) who noted that the main factors affecting Kenyan insurance companies ' financial results are interest rate volatility, liquidity and competition, but he did not state their relationships. On the other hand, the finding contradicts those by Mwaswa, Mukras and Oima (2018) who found that the liquidity current liability coverage ratio is negatively associated with business performance, suggesting that the financial status of a company is inevitably determined by a higher liquidity current liability value. Based on these findings, the null hypothesis was rejected and the study concluded that firm liquidity has a statistically significant effect on insurance penetration in Kenya.

7.1 Conclusions and Recommendations

The study concluded that the presence of a significant relationship between liquidity and insurance penetration suggested that firms' immediate cash availability or ability to convert assets into cash does directly influence their propensity to invest in insurance products. The government of Kenya and stakeholder in the insurance sector should develop policies that consider the dynamic nature of the relationship between firm characteristics, financial factors, and insurance penetration, accounting for variations in the economic environment. This could involve creating incentives or subsidies for firms to invest in insurance during economic downturns and encouraging risk-sharing mechanisms during periods of economic growth. The management of insurance firms should invest in comprehensive data collection and analysis efforts to better understand the drivers of insurance penetration in Kenya. This includes collecting data on firm size, financial characteristics, economic indicators, and insurance uptake trends to inform evidence-based policymaking and practice improvement initiatives.

REFERENCES

[1]   Abubakar, A., Sulaiman, I., & Haruna, U. (2018). Effect of firms characteristics on financial performance of listed insurance companies in Nigeria. *African Journal of History and Archaeology*, *3*(1), 1-9.

[2]   Africa Insurance Outlook (2019). *Market Survey, African Insurance Organisation*, Douala, Cameroon.

[3]   Ajao, M. G., & Ogieriakhi, E. (2018). Firm specific factors and performance of insurance firms in Nigeria. *Amity Journal of Finance*, *3*(1), 14-28.

[4]   Appiah, E. (2020). *The Determinants of the Financial Performance of Insurance Companies in Mauritius* (Master's thesis, Faculty of Commerce).

[5]   Ariwidanta, K. T., & Wiksuana, I. G. B. (2018). The effect of credit and liquidity risk on bank profitability and capital adequacy ratio as mediation variables in Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*, *81*(9), 165-171.

[6]   Association of Kenya Insurers (2019). *Insurance Industry Statistics Report for the year* 2009, Vol. 22 No.3, 350-356.

[7]   Auliyah, R., & Basuki, B. (2021). Ethical values reflected on Zakat and CSR: Indonesian sharia banking financial performance. *The Journal of Asian Finance, Economics, and Business*, *8*(1), 225-235.

[8]   Aziz, M. & Dar, H. (2006). Predicting corporate financial distress. Where we stand? Corporate Governance. *The International Journal of Business in Society, 6*(1), 18-33.

[9]   Barus, J. J., Muturi, W., Kibati, P., & Koima, J. (2017). Effect of management efficiency on financial performance of savings and credit societies in Kenya. *Journal of Strategic Management*, *2*(1), 92-104.

[10]   Beaver, W. H. (1966). Financial Ratios as Predictors of Failure. *Journal of Accounting Research. Supplement, 4*(3), 71-111.

[11]   Bongoye, G.M., Banafa, A., & Kingi, W. (2016). Effect of firm specific factor on financial performance of non-financial firms listed at Nairobi Securities Exchange, *Imperial Journal of Interdisciplinary Research*, 12, 2454-1362.

[12]   Chen Z, Adrian C, & Tom C (2019). The moderating role of capital on the relationship between bank liquidity creation and failure risk. *Journal of Banking & Finance.*

[13]   Desjardins D, Dionne G & Koné N (2020). "*Reinsurance demand and liquidity creation: A search for bi-causality,*" *Working Papers* 20-1, HEC Montreal, Canada Research Chair in Risk Management, revised 20 Jan 2022.

[14]   Ehiogu, C., Eze, O. R., & Nwite, S. C. (2018). Effect of inflation rate on insurance penetration of Nigerian insurance industry. *International Research Journal of Finance and Economics*, *170*(1), 66-76.

[15]   Eljelly, A. (2004): Liquidity-Profitability Tradeoff: An empirical investigation in an emerging market, *International Journal Of Commerce & Management*, *14*(2), 48-61.

[16]   Gakeri, J. K. (2015). Financial Services Regulatory Modernization in East Africa: The Search for a new. *International Journal of Humanities and Social Sciences, 1*(16), 161 - 172.

[17]   Ghasemi, M., & Ab Razak, N. H. (2016). The Impact of Liquidity on the Capital Structure: Evidence from Malaysia. *International Journal of Economics and Finance*, *8*(10), 130–139.

[18]   Hartwig, R., Niehaus, G., & Qiu, J. (2020). Insurance for economic losses caused by pandemics. *The Geneva Risk and Insurance Review*, *45*(2), 134-170.

[19]   Herciu, M., & Şerban, R. A. (2016). Creating value–from corporate governance to total shareholders return. An overview. *Studies in Business and Economics*, *11*(2), 36-50.

[20]   Insurance Regulatory Authority (2020), *Insurance Industry Annual Report*, Insurance Regulatory Authority, Kenya.

[21]   Insurance Regulatory Authority. (2019). *Annual Report.* Nairobi: IRA.

[22]   Ismail, A. & Anwarul, I. (2021). Liquidity Management and Financial Performance of Listed Oil and Gas Companies In Nigeria, *International Journal of Accounting & Finance Review 8*(1):15-25.

[23]   Kamau, F. & Njeru, A. (2016). Effect of Liquidity Risk on Financial Performance of Insurance Companies Listed at the Nairobi Securities Exchange, *International Journal of Science and Research, 5*(10).

[24]   Kariuki, D. W., Muturi, W., & Njeru, A. (2021). Influence Of Liquidity On Financial Performance Of Insurance Companies In Kenya. *Journal of Agriculture, Science and Technology*, *20*(3), 94-101.

[25]   Karlsson, D., & Svensson, M. (2016). *The Linkage between Liquidity Management and Capital Structure-A Comparative Analysis Essay between Real Estate and IT Companies in Sweden.* University of Gothenburg.

[26]   Kimani E. M. (2018). Effect of Liquidity Management Strategies on Sustainability of Table Banking Groups in Uasin Gishu County, Kenya. *International Journal of Finance Accounting and Economics (IJFAE), 1*(1), 1-11.

[27]   Kimani P.G (2023). *Determinants of financial performance of general insurance companies in Kenya.* Master of Science in Commerce (Finance and AccountiDAVISng) Dissertation KCA University.

[28]   Kinyua, B. M. (2018). *Effects of micro factors on the financial performance of listed insurance companies in Kenya* (Doctoral dissertation, KCA University).

[29]   Kitati, E., Zablon, E., & Maithya, H. (2015). Effect of Macro-Economic Variables on Stock Market Prices for the Companies Quoted on the Nairobi Securities Exchange in Kenya. *International Journal of Sciences: Basic and Applied Research* (IJSBAR) 21 (2235-263.

[30]   Kothari, C. R., & Garg, G. (2014). *Research Methodology: Methods and Techniques*. New Delhi: New Age International Publishers.

[31]   Kothari, C.R. (2011*). Research Methodology: Methods and Techniques*. New Age International, New Delhi.

[32]   KPMG (2017). *KPMG Survey of Corporate Responsibility Reporting*, Kenya.

[33]   Lwamina, F. A. (2017). Effect of Capital Adequacy and Financial Leverage on Profitability of Deposit Taking Saccos in Nairobi County, Kenya. *IOSR Journal of Economics and Finance (IOSR-JEF) 13*(5), 01-12.

[34]   Macharia M.W. (2019). *Effect of Firm Characteristics on The Financial Performance Of Insurance Companies In Kenya*. Business and Public Management at KCA University.

[35]   Mburu, J. M. (2017). *Penetration and Uptake of Insurance in Kenya: A Case of shopping malls in Nairobi County, Kenya* (Doctoral dissertation, United States International University-Africa).

[36]   Mugo, I. N. (2018). *Strategic Management Determinants of Organizational Performance in the Insurance Industry in Kenya* (Doctoral dissertation, JKUAT).

[37]   Mumo, P. (2017). "Effects of Macroeconomic Volatility on Stock Prices in Kenya: A Cointegration Evidence from the Nairobi Securities Exchange (NSE)," *International Journal of Economics and Finance, Canadian Center of Science and Education, 9*(2), 1-14.

[38]   Muriithi, J. G., & Waweru, K. M. (2017). Liquidity Risk and Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Finance*, *9*(3), 256– 265.

[39]   Muriuki, R. N. (2022). *Relationship between Firm Liquidity and Financial Performance of Commercial Banks in Kenya*. Masters of Science in Finance, Dissertation, University Of Nairobi.

[40]   Muriuki, W. R., & Mutugi, M. T. (2017). The Effect of IRA Regulation on Insurance Penetration in Kenya. *International Journal of social science and information technology, 3*(4), 2158-2169.

[41]   Mutegi, F. K. (2018). *Role of Innovation Strategy on Insurance Penetration in Kenya* (Doctoral dissertation, COHRED-JKUAT).

[42]   Mutua, B. M. (2023). *Insurance Risks And Financial Performance Of Insurance Companies In Kenya* (Doctoral dissertation, Kenyatta University).

[43]   Mwangi, A. (2013). *Effect of Financial Innovation on the Financial Performance of Deposit Taking Microfinance Institutions in Kenya*. Unpublished MBA Project, University of Nairobi, Nairobi.

[44]   Mwashi, P.T. & Miroga, J. (2018). Influence of liquidity management practices on profitability of deposit taking SACCOS in Kakamega County, Kenya. *The Strategic Journal of Business & Change Management.* 5(4), 902 – 922.

[45]   Mweu, F. M. (2021). *Influence of market share determinants on the non-financial performance of insurance firms in Kenya* (Doctoral dissertation, Strathmore University).

[46]   National Insurance Commission (2019). Annual Report of the Insurance Industry, Ghana.

[47]   Nduati, L.W. (2018). *Firm specific factors on financial performance of insurance companies in Kenya*, Unpublished Thesis, University of Nairobi, Kenya.

[48]   Nguyen, D., Thanh, H., & Nguyen, H. (2018). What Determines the Profitability of Vietnam Commerial Banks? *International Business Research*, 231-245.

[49]   Nwosa, P. I., & Mustapha, Z. B. (2017). The dynamics of insurance development and economic growth in Nigeria. *The Indian Economic Journal*, *65*(1-4), 37-44.

[50]   Okonu, A. A. A., Umeh, O. L., Akinwande, T. O. & Muraina, O. A. (2019). Comparative analysis of risks and returns on residential property sub-market in Lagos: Case study of 1004 Estate. *Journal of Land Management and Appraisal*, *6*(2), 6-13.

[51]   Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999). The Determinants and Implications of Corporate Cash Holdings. *Journal of Financial Economics, 52*(1), 3-46.

[52]   Ouma, T. M. (2015). *Effects of liquidity risk on profitability of commercial banks in Kenya* (Doctoral dissertation, University of Nairobi).

[53]   Parahoo, K. (2014). *Nursing Research: Principles, Process and Issues*. Palgrave Macmillan, London.

[54]   Rashid, A., & Mehmood, H. (2017). Liquidity and Capital Structure: The Case of Pakistani Non-financial Firms. *Economics Bulletin*, 37(2), 675–685.

[55]   Shaaban, R., & Wahome, M. N. (2018). Influence of premium deposits on financial performance of insurance companies listed at Nairobi securities. *IJSSIT. Available online: http://repository. seku. ac. ke/handle/123456789/4300 (accessed on 6 June 2021).*

[56]   Shapira R. (2011). *Effective and Valuable Relationships of Involved Managers: The Prime Contextual Factor of High-Trust Relations in Highly Specialized Organizations*. Retrieved from: https://ssrn.com/abstract=1974372.

[57]   Song'e, H. K. (2015). *The effect of liquidity management on the financial performance of deposit taking Saccos in Nairobi County.* Doctoral dissertation, JKUAT-COHRED.

[58]   Thabiso, M. (2022). Evaluating the influence of leverage and liquidity on the financial performance of general insurance companies in Sub-Saharan Africa. *Insurance Markets and Companies 13*(1):36-46.

[59]   Theuri, B. (2021). *Selected Investment Choices and Effect on Financial Performance of Insurance Companies in Kenya. Available at SSRN 3963680.*

[60]   Tsvuura, J. (2017). *An investigation into the firm specific factors affecting profitability of short term insurance and reinsurance companies in Zimbabw*e (2009-2013).

[61]   Varenik, V. N., Pestovskaya, Z. S., & Opaliichuk, A. V. (2016). Modern approaches to development of motor insurance as a means of protection against financial losses. *Економічний нобелівський вісник*, (1), 48-55.

[62]   Waswa, C. Mukras, M. & Oima, D. (2018). Effect of Liquidity on Financial Performance of the Kenyan Sugar Industry. *International Journal of Education and Research, 6*(6), 29 – 44.

[63]   Yahaya, O. A. & Lamidi, Y. (2015). Empirical Examination of the Financial Performance of Islamic Banking in Nigeria: A Case Study Approach. *International Journal of Accounting Research*, 2(7), 1 – 13.

[64]   Zainudin, R., Mahdzan, N. S. A., & Leong, E. S. (2018). Firm-specific internal determinants of profitability performance: An exploratory study of selected life insurance firms in Asia. *Journal of Asia Business Studies*.