

Investigating the Factors that Affect the Financial Performance of Ghana's Insurance Companies

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Abstract:- The financial business is rapidly expanding, allowing for high quantities of transactions. This expansion has raised the demand for insurance and insurance products dramatically. Though previous research has looked at the elements that drive the profitability of the insurance business from both a general and a life viewpoint, little attention has been paid to the main indicators that define the financial performance of these insurance organizations. This study looked at the factors that impact the financial success of insurance businesses in Ghana, a developing country. It investigated the elements that influence financial performance. The findings of the study showed that General insurance was the most purchased type of insurance policy. It was also discovered that the majority of the policyholders who buy insurance policies were 24 years and above. Finally, the study showed that the most influential factor considered for the financial performance of the insurance company is the effective management factor followed by the competition factor. Other factors that were also identified were personality influence, liquidity, and profitability. As a result, the purpose of this project is to raise knowledge about the variables that impact the financial performance of insurance businesses in Ghana. This knowledge, on the other hand, will assist policyholders, stakeholders, brokers, and others concerned in understanding their insurance company's financial status and the variables impacting it. This research would also provide knowledge on the influential factors for insurance companies' financial performance as well as the most purchased insurance policy, which would help insurance companies understand why policyholders and investors patronize insurance by making more improvements to ensure a higher insurance penetration in Ghana.

Keywords: *General Insurance, Insurance Policy and Penetration, Factor Analysis, Effective Management, Liquidity, Profitability and Personality Influence.*

I. INTRODUCTION

The insurance industry contributes positively to Ghana's economy. Insurance businesses, as part of a country's overall financial system, provide great financial services to support economic growth and development. The insurance of risks inherent in economic organizations and

the mobilization of a large number of money through premiums for long-term investments are examples of specialized financial services (Agiobenebo and Ezirim, 2002). There is extremely little awareness about the insurance sector, particularly in a developing market like Ghana. Insurance works on the premise of risk pooling (loss pooling), in which people pay to a common fund in the form of premiums, and the fortunate who do not experience loss assist the unlucky who do suffer loss within a set insurance term. Insurance firms provide policyholders coverage for many sorts of risks, such as commercial property damage or loss, health and casualty, monetary losses, fire and theft, motor vehicle accident, and so on. The risk-absorption role of insurers fosters financial stability in financial markets and gives economic entities a sense of security.

Without insurance, the corporate world is unsustainable since hazardous enterprises may not be able to retain all types of risks in this ever-changing and uncertain global market (Ahmed, Ahmed, and Ahmed, 2010). Insurance firms get a premium from policyholders in exchange for this risk protection, which is used to pay expenditures and the predicted risk if they occur. The ability of an insurance business to continue covering risk in the economy is dependent on its ability to generate profit or value for its stakeholders.

A well-developed and evolved insurance business is advantageous for economic growth since it offers long-term finances for each economy's infrastructure development (Charumathi, 2012). Insurance firms can also provide long-term savings that can be utilized to support projects with extended maturities. The viability of the insurance sector is critical to any economy. In an economy, there is a clear relationship between sustainability and the financial performance of insurance businesses. Institutional stakeholders such as insurers, pension trusts, and sovereign wealth funds have more than USD 80 trillion in assets under management globally that can be deployed to fund long-term projects (PwC AWM Research Centre, 2017. Pp.6-7).

Consumers, investors, and policyholders should all be concerned about the insurer's financial sustainability and ability to make its claim payment commitments to policyholders. Part of the premiums is invested to get better yields for longer-term risk protection. Though the protection buyer transfers individual risk to the insurer's larger and

more diverse portfolio, the risk is not eliminated because the insurer may default on his commitments. When the losses on the diverse portfolio exceed the predicted losses, insurers must have enough equity or buffer capital to pay their commitments. Due to a lack of experienced insurance salesmen to offer goods, the general public is left with no foundation to make an educated expenditure or investment choice, or to choose which business to place their cover with (Kumba, 2011). There are many factors to examine when looking at the performance of insurance companies such as marketability, competition, profitability, and others. This research pursues to set the pace for more scientific research and also for academic purposes into the general financial performance of insurers in Ghana.

According to Shawar (2019), the financial performance of every sector in any country acts as a cornerstone of economic growth and industrialization. Insurance firms' financial performance may be assessed by identifying both internal and external elements represented by specific fundamental attributes of an insurance company. Under the financial industry's umbrella, the insurance sector plays a critical role in regulating money to many businesses, consequently delivering significant inflows to economic and financial growth. Furthermore, the insurance industry is deemed well-established if it can ameliorate any type of financial crises in the economy, hence boosting the country's economic structure. Financial performance is basically how a company uses its resources to generate a profit, and it is assessed using return on assets, return on sales, and growth. According to Jim (2007), the performance of any monetary institution can be assessed in a variety of ways, including profit growth, employee growth, asset growth, or any other sort of variable factor that management believes is a significant producer of a business's anticipated success.

The majority of life insurance performance research has focused on discovering insurer-specific characteristics and indicators that help in identifying insurers that are more likely to go bankrupt. Deakin (2005) investigated the 'run on the bank risk' and discovered that before 1992, rating firms did not usually recognize the risks contained in liabilities such as guaranteed investment contracts.

Furthermore, due to an apparent lack of uniform financial reporting formats, several insurance companies have failed to publish their profit and loss accounts, and some insurance companies have also failed to submit their audited annual report within the statutory time frame, making it difficult for the general public to gauge their profitability, overall written premiums, or even net incomes. Some corporations' sparse financial statements, given to the public, leave a lot of grey areas and possibilities for unethical behavior such as tax evasion and concealment of important ratios and numbers.

The insurance industry in Ghana; both Life and Non-Life insurance companies. Amid Ghana's present crisis, the insurance business has seen massive regulatory reforms and technological developments. Insurance is intended to transfer unanticipated losses by transferring such risk to the

insurance provider, which compensates the policyholder in the event of unanticipated losses. The notion of insurance first appeared in Ghana in 1955, and the industry is growing more active and competitive, with significant development made between 2015 and 2019. The office of the Commissioner of insurance was established under these provisions to strengthen the government regulation on insurance. The Commissioner of insurance was created as a department under the ministry of finance. To enhance the supervisory capacity of the regulator, the government delinked the department from the ministry to give it some autonomy.

The Insurance Act number 724 of 2006 established the National Insurance Commission with the commissioner of insurance as the managing director and the chief executive officer to take the role of regulating, supervising, and developing the insurance industry. The role of the Commission is: to ensure effective administration, supervision, regulation, and control of the insurance and reinsurance business in Ghana, to protect the 6 interests of insurance policyholders and insurance beneficiaries in any contract of insurance, to promote the development of the insurance sector and to advise the government on the national policy to be followed to ensure adequate insurance protection and security for national assets and national properties among other functions.

➤ *New Insurance Act:*

Given the changes in the insurance landscape, the NIC was evaluating the Insurance Act to make it more appropriate. The new Insurance law was enacted in 2021, and it was consistent with the most recent Insurance Core Principles of the International Association of Insurance Supervisors. It is also a primary duty of the Commission to verify practitioners' conformance to globally accepted standards. The NIC's latest frameworks, directives, and guidelines were included into the new Insurance Act. The enactment of Act 1061 was a major milestone towards a robust insurance regulatory environment as it empowers and grants adequate powers to the Commission. The insurance market of Ghana is relatively stable with more prospects and opportunities to explore. The total profit that was declared by the insurance industry by the end of 2019 was GHS 196 million and that of total corporate tax was GHS 72 million. The total number of people employed in the industry as an asset in 2019 was 12,000. According to the insurance industry report for the year 2019, there were 150 licensed insurance companies at the end of 2019. The total asset of the insurance industry according to NIC 2019 was GHS7.65 billion. It is against this background that, the NIC seeks to explore the challenges and strategies for increasing insurance penetration in line with the objective of the Commission.

➤ *Research Problem:*

Andersson (2010) noted that a country's economic growth is heavily reliant on a healthy financial system, and that without a strong insurance industry, the economy and the wealth creation connected with it can suffer (International Accounting Standards Board, 2007). The

insurance business is an essential component of the country's financial sector, and its advantages cannot be overstated. Ghana's non-life insurance industry is one of the fastest growing in Sub-Saharan Africa, according to Fitch Solutions (2021), and it is evolving. If this crucial sector was missing, the consequence on the economy would be devastating, knocking off billions of cedis from the Gross Domestic Product (GDP) index.

However, although offering crucial intervention policies and producing wealth via investments, the insurance business in Ghana and other nations has had its fair share of firm failures (Greene, 2000 Hagel, Brown, & Davison, 2010). The Bank of Ghana (BoG) and the Securities and Exchange Commission (SEC) revoked the licenses of hundreds of financial organizations in 2019, including savings and loan businesses, microfinance companies, finance houses, investment management firms, and other non-bank financial institutions. This had a huge impact on the solvency and liquidity of insurance businesses since a large number of regulated insurance companies had significant investments with these institutions. Several insurance firms have gone bankrupt or been dissolved in the previous decade. The majority of these enterprises have failed, leaving policyholders, pension plans, and life funds with billions of Cedis in cash. This brings out the question of whether insurance companies are financially sound and whether they are disclosing enough information to enable investors to make informed decisions. Financial health is critical for any business organization.

Previous empirical research on the factors influencing the financial success of the insurance sector has mostly focused on the United States, Europe, Asia, and East Africa. To establish the financial performance of the insurance business, several of these research focused solely on company-specific characteristics such as firm size, age, leverage, net premium earned, and profitability. Hardwick and Adams (2002) conducted a research on the UK life insurance business, as did Makembo (1992), who explored flaws in Kenya's compensation system (fault system) for personal injuries and fatalities in automobile insurance.

According to Greene (1963), most important research on the difficulties confronting the sector in Africa have focused on people's attitudes and views about insurance. Among these studies, Yusuf et al. (2009) in Nigeria and Ackah and Owusu (2012) in Ghana are noteworthy.

However, no empirical or particular study has been conducted on the elements that impact the financial performance of insurance businesses in Ghana. The study aims to bridge a knowledge vacuum in this area. The study intended to determine whether and how certain elements impact the performance of insurance businesses in Ghana, as well as which of the factors is most significant as a financial performance indicator.

➤ *Objectives of the Study:*

The main objective of this study is to investigate the factors that influence the financial performance of insurance companies in Ghana. To achieve the main objective of the study, the following specific objectives are set:

- To identify significant factors influencing the financial performance of insurance companies in Ghana
- To identify the most influential factor that influences the financial performance of insurance companies in Ghana.
- To identify the most purchased insurance type policy.

➤ *Research Questions:*

Given the aforementioned issue and the perceived advantages of insurance firms, the following research questions need careful examination as a means of assessing the elements that impact the financial performance of insurance companies in Ghana.

- What are some of the key factors that determine the financial performance of insurance companies in Ghana?
- What are the types of insurance policies that policyholders mostly buy?
- What is the most influential factor influencing financial performance in insurance companies?

II. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

According to Chang Lee and Chang (2013), the average rate of growth in the insurance business (i.e., 10%) was substantially greater than the worldwide rate of economic growth. The insurance sector is an essential component of the global financial market, with insurance companies serving as major institutional investors. Many current researchers have emphasized the significance of financial institutions in a country's development (Catalan, Impavido&Musalem, 2000); Levine, (1992); Nguyen, (2020). According to Saunders and Cornet (2008), financial institutions can be classified as commercial banks, savings banks, or insurance businesses. The bulk of them, however, highlight the function of the stock market or banks as the primary financial institution that may encourage economic progress. According to Ward and Zurbruegg (2000), insurance not only transfers and indemnifies risk, but it also serves the function of other financial institutions, such as if insurance has been poorly investigated (Hasna 2010; Haiss&Sumegi, 2008). Because of the critical necessity of insurance in a country's entire financial system, the function of insurance has grown throughout time. Nonetheless, the research on the factors influencing insurance financial performance is compared to other financial organizations. Expanding on the relationship between GDP and insurance market growth, it is important to recall that the basic job of the insurance sector is to provide people and companies with coverage against certain events by spreading losses among the pool of policyholders. As a result, insurance firms underwrite, manage, and finance risks. Furthermore, insurance is employed by businesses to hedge corporate risk, and it cannot be utilized for speculative objectives like derivatives.

According to NIC (2019), the principle of finance theories include understanding the procedures by which organizations and people generate cash or capital for any type of spending, as well as how money is distributed to projects while taking into account the risk aspects involved. It also involves the study of money and other assets, the management and profile of project risks, asset control and management, and the science of money management. This theory is used to model human decision-making, particularly in the context of microeconomics, where it assists economists in better understanding a society's behavior in terms of individual actions as explained by rationality, in which choices are consistent because they are made based on personal preference. The term rationality is used differently depending on the issue. Many additional ideas and concepts are involved with the market mechanism that allows for the creation and distribution of products. However, the Rational Choice Theory is a foundational game theory that gives a comprehensive mathematical framework for studying individuals' mutually interdependent interactions including resources such as prestige, time, and many others. According to the Rational Choice Theory, humans are driven by their own goals and preferences. Human behaviors are heavily influenced by knowledge about the conditions in which a specific individual will operate and attempt to achieve his or her objective. The selection of goals, as well as the selection of an appropriate technique to accomplish the previously stated aim, is critical in the domain of Rational Choice Theory. It regards reward and punishment as benefits and costs, respectively, and the theory contends that human behavior is governed by the desire to obtain favorable rewards (Organization for Economic Cooperation and Development, 2003). This hypothesis is applicable in the insurance sector. The reasonable decision for businesses is based on numerous criteria, such as the insurance company's financial success metrics. Most people would not acquire policies if they knew their prospective insurance company was likely to fail since, in the event of a risk, they would not receive benefits from the policies they purchased.

➤ *Interest Rate:*

Higher real interest rates have an uncertain influence on both life and non-life premiums. Because insurance firms make pledges or obligations to policyholders at the time of policy sale, they are not free to modify the rates specified or agreed in the sale later based on situation. This feature of insurance exposes them directly to the dangers associated with interest rate increases. Because insurance firms invest a large portion of their collected premiums, the money gained by investing is strongly dependent on interest rates. According to Beck and Webb (2003), higher real interest rates would boost the investment return of providers, allowing them to provide more appealing returns to customers. In a comprehensive research of the Chilean annuities market, Rocha and Thorburn (2007) and Rocha et al (2008) show that an increase in real interest rates has a favorable influence on real annuity rates but an equivocal effect on the quantity of new annuity contracts and the annuity premium.

Another disadvantage of interest rate swings (which is not limited to insurance businesses) is the cost of borrowing. A high-interest rate has a significant negative impact on the premium charged to policyholders, making it difficult for many people to purchase insurance products; however, if the rate charged is consistent, low, and nondiscriminatory, there will be a high penetration of insurance accessibility. For example, if all policyholders have the same risk exposure units, the same premium should be charged regardless of whether the cost of borrowing is high. Best (1992) discovered that the number of insolvencies is connected with the accident and health underwriting cycle in a study of the relationships between insurance market circumstances and insolvencies. The growing incidence of bankruptcies is partly tied to rising interest rates and the life-health insurance industry's emphasis on investment-related products. The Best research did not evaluate the numerous economic elements in a multivariate framework, making it impossible to determine the relative importance of the separate components.

Santomero and Babbel (1997) reported that in the United States, many life insurers' management failed to effectively foresee economic shocks (e.g., unfavorable interest rate movements), which harmed both business profitability and the rate of product-market growth. This insight implies that, if future economic shocks are mostly unexpected, so would business performance in the life insurance market. The asset/liability mismatch increases the insurer's leverage and increases the risk of bad performance (Carson and Hoyt, 1995), as well as guaranteed investment contract withdrawals (Carson & Scott, 1996).

➤ *Profitability:*

Mwangi (2013) proposed that profitability is a major driver for selecting whether to invest in his research of the elements that impact the financial performance of insurance firms. Ideally, you want to outperform the industry norm in terms of growth, but you also want to ensure that this higher growth does not come at the price of admitting higher-risk clients. A firm whose premium income is expanding at a slower rate, on the other hand, may be excessively choosy, seeking only the greatest quality insurance prospects. According to Santomero and Babbel (1997), the second area of profitability that should be considered is investment income.

Another important factor in assessing insurance business financial performance is the capacity of the insurance firm to pay claims to policyholders and give claim no discount to policyholders who do not make claims within a fiscal year. As a result, the effect of claim and award payment will have a long-term direct positive link with the financial success of the insurance business.

➤ *Competition:*

Efficiency is a popular quantitative indirect indicator of competition. High efficiency may imply the presence of competition and vice versa (Bikker&Leuvensteijn, 2008). The predominance of mergers and acquisitions among insurance carriers and agencies is one of the most significant developments in the insurance sector (Schich& Kikuchi,

2004). Economists have explored the measuring of industry rivalry in several ways over time. The first research sought to infer business competitive behavior and performance from industry market structure. The number of enterprises and any concentration of market share are thought to influence competitive behavior. Fewer enterprises with more concentrated market shares are more prone to engage in anticompetitive activities than a large number of small firms.

Blundell-Wignall, Atkinson, and Lee (2008) provided an alternate approach to competitive behavior and investigated company revenue and cost structures using the framework of perfect competition as a reference point. Firms in an industry with the perfect competition are unable to absorb any cost increases. They are required to pass on the whole increase in input costs in output pricing and income, but output remains unchanged. In contrast, under monopolistic circumstances in equilibrium, an increase in input prices, such as wages or administrative expenses, leads to a decrease in production and a price increase that is less than the increase in costs, resulting in a decrease in total income.

Firms with marginal profits may be forced to exit the sector. In long-run equilibrium, monopolistic competition determines output where the average cost curve is tangential to the average income curve. Because businesses produce at less than minimal cost, monopolistic competition theory argues that the industry has overcapacity. Firms in this field create money by insuring risks and investing their assets, according to Donlon and Gutfreund (1998). Given their underwriting losses, this indicates that enterprises in the GI industry must take more risks than would appear to be compatible with prudence. When applied to the topic at hand, this means that corporations can only recoup increased investment expenses by reshuffling their portfolios toward more er assets and thereby reaping larger returns. Market and credit concerns are manifestations of asset risk (O'Connor, 2000). Policyholders are also interested in the insurer's capacity to generate a positive product brand image and promote innovation in insurance service delivery. All of these variables have a beneficial impact on the financial success of the insurance sector. This is due to the indications in place, the insurance business will be able to benefit from the industry's major market share, resulting in a rise in the number of policyholders purchasing insurance from that firm.

➤ *Liquidity:*

Liquidity ratios are defined by Black, Wright, and Bachman (1998) as the amount of money that firms and other private organizations have on hand at any one moment to serve their obligation. Liquidity ratios are very significant when looking at a company's financial accounts and seeking to assess where it stands in terms of viability. The greater a company's liquidity ratio, the better. Entities having a high debt-to-liquidity ratio are more likely to fail and make riskier investments.

Liquidity risk could include two different types of risk: the risk that an insurance company will become unable to assure itself of adequate funding due to a decline in new premium income caused by a deterioration of its financial position, an increase in surrender value caused by large-lot cancellations, or an outflow of funds caused by a big disaster, or it will incur losses because it is forced to sell assets at markedly lower prices than normal and therefore unable to maintain cash flow and the risk that upheavals in the market will render it impossible to trade and therefore force the company to engage in transactions at prices that are markedly more disadvantageous than normal (Black, Wright & Bachman, 1998).

The acid test, according to Barney (1997), is the first measure of an insurer's ability to pay financial obligations. It determines if a company's short-term assets are sufficient to satisfy its immediate liabilities. When an insurer must sell assets early to meet claims, it suffers investment losses and hence poor financial performance. An insurer's cash flow should virtually always be positive. Cash flow is critical to an organization's survival. Having a sufficient amount of cash on hand ensures that creditors, workers, and others are paid on schedule. If a company or individual does not have enough cash to finance its activities, it is considered to be insolvent and, if the insolvency continues, it is a potential candidate for bankruptcy. Other factors to consider include the investment grades of the company's bond holdings. Too many high and medium-risk bonds may cause volatility and hence poor financial health.

➤ *Proximity:*

Proximity is a burgeoning theoretical framework in a variety of domains, including innovation studies, organizational science, and regional science (Knoben and Oerlemans, 2006). In organizational studies, proximity is a multidimensional notion that extends beyond geographical distance (Boschma, 2005). On the contrary, it refers to the degree of resemblance between individuals or organizations in aspects other than geographical proximity (Knoben and Oerlemans, 2006; Balland, 2012). A detailed examination of the notion of proximity is not only important for gaining a good understanding of the concept but it is also required due to its ambiguity. Economic, geographical, and sociological definitions of proximity vary and frequently pertain to conceptions of space, social ties, family, and institutions, to mention a few (Torre and Ballet, 2005; Dankbaar, 2007). As anticipated, proximity has gained a more abstract meaning, thus expanding from a being mere measure of geographical distance to encompassing several other dimensions (Knoben and Oerlemans, 2006).

As a result of these factors, as well as a thorough assessment of the relevant literature, proximity is defined as the degree of resemblance between entities in geographical, organizational, cognitive, social, institutional, and technical aspects. Proximity is defined as an organization's proximity to its customers and policyholders' places of residence, given that where insurance companies are concentrated and policyholders are widely dispersed, there is a tendency for a large number of policyholders and customers to buy

insurance policies because of its numerous branches established at those places of residence. To that aim, it can be argued that the closer the insurance sector is to its policyholders, the better the financial performance of the insurance firms will be due to the huge number of policyholders purchasing an insurance policy.

➤ *Marketability:*

Marketing is defined by Kotler, Armstrong, Saunders, and Wong (2001) as a social and management process through which individuals and groups achieve what they need and desire by developing and trading products and values with one another. It is a critical managerial discipline that assures product and service makers can perceive consumer expectations and meet or exceed them. Because it covers the most significant components of marketability, the marketing process is critical to the commercial performance of insurance firms of all sizes. It is about comprehending the competitive marketplace and ensuring that you can capitalize on significant trends to reach consumers with the correct insurance product at the right price, location, and time. Clever marketing has resulted in several recent corporate success stories, ranging from large insurance and business-to-business firms to tiny, specialized players. As digital and mobile technologies permeate all parts of life, getting close has become more crucial than ever. This change has also given rise to new techniques for marketing that are more focused, relevant, and effective.

As competitive demands mount, marketing skills have never been more valuable. What was formerly considered a departmental activity is now considered a frontline business mindset for all employees. Professionals who develop and implement marketing strategies make a direct contribution to the economy. Their abilities attract and keep clients, raise sales, and enhance profits, resulting in a large number of customers for the insurance firm. The influx of marketability in the form of a television advertisement, awareness creation, and good customer relations have a positive impact on insurance financial performance because it brings in a large number of policyholders to buy insurance products, increasing the insurance industry's capacity to have access to a large pool of funds that can help them make claim payment when the proximate cause of the risk insured occurs.

➤ *Personality Influence:*

Personality and personality psychology has been researched since the early 1900s, according to Greer (2018), with Freud initiating the subject. This psychology grew in the Western atmosphere of individualism on the premise that each person is unique and hence has numerous distinctions from others, with personality being one of the defining features. Personality influence is a major component in determining whether or not to invest in any firm. Policyholders typically purchase insurance goods because specific types of people invest with such insurance organizations. Insurance exists because policyholders are compensated for their losses in the event of a risk, but with those personalities such as popular artists, footballers, Journalists, and families investing with those firms, they are

assured of receiving their indemnity in the event of losses, which induces them to buy a large number of policies with the company. As a result, personality influences the financial success of insurance firms.

➤ *Empirical Review:*

Most earlier research on life insurance has focused on North America, Europe, and Asia, where markets may be classified as near-efficient, in contrast to markets in the developing world. According to Sigma (2001), the United States and Japan have the largest insurance sectors, accounting for more than half of worldwide premium income, followed by the United Kingdom, Germany, France, and Italy. Furthermore, throughout the previous four decades, the global insurance sector has exceeded global economic development on average. Between 1984 and 2001, the global insurance business expanded at a 9.7% annual pace (approximately 11.8 percent from the life insurance sector and 7.5 percent from the property-casualty sector). Growth in the global property-casualty market has slowed dramatically in recent years and has just kept pace with overall economic growth (Sigma, 2001). This development is primarily the result of a sustained downward trend in commercial business until profitability, interest rate fluctuations, liquidity, the financial performance of insurance companies, competition in the insurance industry, dependent variables, independent variables, and, most recently, the Asian economic and financial crisis, particularly in Japan, and the deregulation of the European market, both of which have resulted in appreciable price decreases.

This is in contrast to the life insurance industry, which has grown at a global rate of roughly 5.4% since 2000. The rising demand for private pension plans in the United States and Western Europe, as well as the soaring demand for unit-linked products, are primarily responsible for the growth in the life insurance market. In terms of total premiums, the Organization for Economic Cooperation and Development (OECD) nations accounted for 95.52 percent of the life insurance market in 1994 and 93.99 percent of the property-casualty premium volume in 2001, respectively. Furthermore, insurers in OECD nations have suffered declining premium revenue, decreasing capital market earnings, and low-interest rates, all of which have placed them under strain (Sigma, 2002). Furthermore, the expanding importance of the insurance business in emerging nations is evident in the increased insurance density and penetration of non-OECD insurance markets (Sigma, 1996, 2001).

Nonetheless, emerging economies have a long way to go before they can equal the relative size and importance of the insurance business in developed nations. Mwangi (2013) opined in a study on the factors that determine the financial performance of insurance companies in Kenya that the credit policy should specify credit risk philosophy governing the extent to which an institution is willing to accept credit risk; levels of authority should be subject to timely review to ensure that it remains appropriate to current market conditions and credit officers' expertise. The policy should

be conveyed to all people associated with customer terms and payments, including sales representatives, for them to set the proper expectations with clients. Credit rules should also include criteria that allow the company to select the terms of sale that will be offered to the client.

III. METHODOLOGY

This paper employed the use of statistical techniques in the analysis of the data. Factor analysis is the main method used for the analysis of the data. The computer software used to analyze the data was the Statistical Package for the Social Sciences (SPSS) and Microsoft Excel. Also, tables were used to support the analysis.

➤ *Data Collection:*

To meet the data requirement of this research, a questionnaire was designed as a quantitative study based on the researcher’s pre-observations to find the most purchased insurance policy and the factors that influence the financial performance of insurance companies in Ghana. The study was conducted in three regions, namely, Greater Accra, Ashanti region, and Central region, which comprises top management and policyholders because the researchers live in these three main regions which happen to be the major areas where industrial insurance activities take place.

➤ *Sampling Techniques:*

Sampling is the process of choosing a subset of a population to represent the complete population. To collect data for the investigation, a straightforward sampling strategy was used. MacCallum (1999), states that the sample size required to get a greater probability is between 200 and 400 samples. This aids in successfully interpreting a large number of variables. In this case, 210 questionnaires were distributed to policyholders of a few insurance companies and 10 questionnaires were distributed to the top management of 5 insurance companies across the three regions.

➤ *Factor Analysis Model:*

let P variables be X_1, \dots, X_p with the mean vector μ_p (which is assumed to be equal to zero and variance ϵ , then each of the observed variables can be written as a linear combination of m ($m < p$) factors as:

$$X_j = \gamma_{p1}f_1 + \gamma_{p2}f_2 + \dots + \gamma_{pm} + \epsilon_p \text{ where } j=1, 2, \dots, p \text{ ----- (1)}$$

Where γ_{ij} is the factor loadings of the i^{th} variable on the j^{th} factor;

f_{ii} is the score of the common factor of the i^{th} observation;

ϵ_p are the specific factors for variable p

In matrix notation the factor model is represented as;

$$X = \lambda f + e, \text{ -----(2)}$$

Where $f' = (f_1, f_2, f_3, \dots, f_m)$

$e' = (e_1, e_2, e_3, \dots, e_p)$

and,

λ

$$= \begin{pmatrix} \lambda_{11} & \lambda_{12} & \dots & \lambda_{1m} \\ \lambda_{21} & \lambda_{22} & \dots & \lambda_{2m} \\ \vdots & \vdots & & \vdots \\ \lambda_{p1} & \lambda_{p2} & \dots & \lambda_{pm} \end{pmatrix}$$

➤ *The Communality of a Variable:*

The communality of a variable is the proportion of each variable's variance that can be explained by the factors. It is also denoted as h^2 and can be defined as the sum of squared factor loadings for the variables. The communalities for the i^{th} variables are computed by taking the sum of the squared loadings for that variable (McGarigal et al, 2013). This is expressed as:

$$\hat{h}_i^2 = \sum_{j=1}^m \tilde{\gamma}_{ij}^2 \text{ ----- (3)}$$

Where \hat{h}_i is the variability of the i^{th} variable

$\tilde{\gamma}_{ij}$ is the loading or correlation between the i^{th} component and the j^{th} variable

➤ *Suitability of Factor Analysis:*

Two statistical tests must be conducted to examine the adequacy of the sample and the suitability of data for Factor Analysis. These are;

• *Bartlett’s Test of Sphericity:*

This test determines whether or not the data is suitable for factor analysis. The test examines the extent to which the correlation matrix departs from orthogonality. If the correlation matrix has unit determinants, it indicates that the variables are not correlated. If the determinant is close to zero then there is a high correlation between the set of variables. If the hypothesis that the correlation matrix is an identity matrix cannot be rejected because the observed significance level is large, then the use of factor analysis should be questioned.

• *Kaiser-Meyer-Olkin (KMO) Test:*

This test statistic is used to test for sampling adequacy. Is a measure of how suited your data is for Factor Analysis. KMO measure indicates whether or not the variables can be grouped into a smaller set of underlying factors. Higher

values close to one generally indicate the factor analysis may be useful with the data set.

According to Kaiser and Rice (1974) the following are the guidelines that are put on the values of a KMO results:

Table 1 KMO Guidelines

KMO Measure	Recommendation
0.00 - 0.49	Unacceptable.
0.50 - 0.59	Miserable
0.60-0.69	Mediocre
0.70-0.79	Middling
0.80-0.89	Meritorious
0.90-1.00	Marvelous

Even though Kaiser and Rice (1974) proposed the above guideline, according to Zwick and Velicer (1986), the precision of the recommendation of the KMO test depends on the number of indicators underlying a particular factor.

After the extraction phase, the researcher must decide how many constructs to retain for rotation. Factors are rotated to make them more meaningful and easier to interpret. An important difference between them is that they can create factors that are correlated or uncorrelated with each other. There are two types of factor rotation which are oblique rotations (axes are not maintained at 90 degrees) and orthogonal rotations (axes are maintained at 90 degrees). In oblique rotation, the resulting factors will be correlated whereas in orthogonal rotation the rotated factors will remain uncorrelated. There are different methods of rotation and they are Varimax, Quartimax, Equimax, and Promax. Two orthogonal rotation methods are discussed below;

✓ *Varimax Rotation:*

Varimax is the most popular rotational method. Varimax use orthogonal rotations yielding uncorrelated factors. It attempts to minimize the number of variables that have high loadings on different factors. It projects the variable that loads high on particular principal components to keep the factor loadings to a pattern that is easier for interpretation.

✓ *Quartimax Rotation:*

It is an orthogonal alternative which minimizes the number of factors needed to explain each variable. This type of rotation often generates a general factor on which most variables are loaded to a high or medium degree. Such a factor structure is usually not helpful to a specific research purpose (Gorsuch ,1983). Most researchers do not expect a general factor since it is now being done, most research aims on finding out all the factors.

IV. RESULTS PRESENTATION

Findings are presented according to research questions. In addressing each research question the response were organized as follows: the first section provides the results of the descriptive of the variables used in the study. The second section presents the results of the factor analysis.

➤ *Basic Analysis of the Data:*

• *Age of Respondents:*

The age of respondents was important in the study because the financial performance of insurance companies could not be linked to a particular age group. Different age groups buy insurance policies in Ghana. The study considered the following age categories: Below 18, 18-25, 26-32, 33-40, and above. Table 2 describe the distribution of age of the data set.

Table 2 Age Distribution of Respondents

Age of Respondent	Frequency	Percent
Below 18	41	19.5
26-32	72	34.3
33-40	71	33.8
40	26	12.4
Total	210	100.0

Source: Field Survey

From table 2, It was observed that age group 26-32 participated in the study than any other group making a total of 72 representing 34.3%. It was observed that the age group

of 40 and above participated the least in the study making a total of 26 representing 12.4%.

• *Sex of Respondent:*

Table 3 Distribution of Sex of Respondent

Sex	Frequency	Percent
Female	87	41.4
Male	123	58.6
Total	210	100.0

Source: Field Survey

From Table 3 it was observed that 123 males representing 58.6% purchased most insurance policies while 87 females constituting 41.4% buy insurance policies.

• *Educational Background:*

The educational background of the respondents was also taken into consideration during the study; this is because it could be a factor influencing the financial performance of insurance companies in Ghana. Table 4.2 describes the distribution of the educational background of respondents.

Table 4 Distribution of Educational Background of the Respondents

Educational Background	Frequency	Percent
No Formal Education	3	1.4
Basic	6	2.9
Secondary	20	9.5
Tertiary	181	86.2
Total	210	100.0

Source: Field Survey

Table 4 showed that the highest number of respondents that took part in the study had tertiary education with a frequency of 181 representing 86.2%. However, the “no formal education” had the least number of respondents.

• *Most Purchased Insurance Product among Respondents:*

The most purchased insurance product was also taken into consideration to reveal what influenced the policyholders to buy insurance. It was also important in the study to reveal generally which type of insurance policy is the most purchased in Ghana. Table 5 shows the distribution of the frequency and percentages of the most purchased insurance policy among respondents.

Table 5 Distribution of the Most Purchased Type of Insurance Policy among Respondents

Type of Insurance Policy	Frequency	Percent
Life Insurance	65	31.0
General Insurance	145	69.0
Total	210	100.0

Source: Field Survey

From Table 5, it was observed that 145 out of 210 policyholders buy General insurance constituting 69% while Life insurance was 65 representing 31%. This suggested that the policyholders buy General insurance more than Life insurance.

• *Distribution of Status of Respondents:*

Table 6 describes the distribution of the status of the respondents on the financial performance of insurance companies. This data was necessary in revealing the number of policy holders in the status category who buy insurance.

Table 6 Distribution of Status among Respondents

Status of Respondent	Frequency	Percent
Government Worker	42	20.0
Private Worker	115	54.8
Self-Employed	25	11.9
Unemployed	28	13.3
Total	210	100.0

Source: Field Survey

From Table 6, it was observed that majority of the private workers with a frequency of 115 buy most insurance policies representing 54.8%. However, government workers with a frequency of 42 constitute 20% of respondents who buy insurance while the least number of respondents who buy insurance are self-employed workers with a frequency of 25 representing 11.9%.

➤ *Reliability Statistics:*

From Appendix E, the Cronbach’s alpha value was 0.939 and this implies that there was a level of consistency and reliability in the dataset.

➤ *Descriptive of Statistic of Indicators:*

From Appendix C, Based on the cut-off grand mean of 3.7, it was observed that there were high mean values for some particular indicator variables which are V1 (I stand to gain rather than loss), V2 (The premiums are consistent), V3 (The insurance company has high equity level), V5 (The workers are receptive and friendly), V8 (The insurance company has a lot of branches), V9 (I can access my claims anywhere I am), V11 (I fully understand the insurance pricing policy), V13 (The company has good cash equivalence), V14 (I insure because the claim payment is made on time), This however suggested that they have been rated high by most of the policyholders and therefore influence the financial performance of insurance companies. In addition, there was a set of variables that were easily seen in the table and were to be deliberated on for critical observation. They produced the lowest means and had almost equal standard deviation values. Some are V6 (I insure because of the owner of the insurance company), V30 (I insure with the insurance company because it is closer to my place of residence), V32 (I buy insurance because of an effective advertisement on TV and radio) and V33 (I insure because most of my family insure there). Besides, what makes them more significant is the fact that their standard deviation was around 1.

➤ *Correlation Matrix:*

Appendix B shows a 36 x 36 correlation matrix of the variables under study. It was observed that some of the correlations were low and some were high. However, for this study, a correlation of 0.5 was used as a cut-off, a correlation greater than 0.5 will be considered highly correlated, and below will be considered weakly correlated. The use of the cut-off value will help us to identify the variables that belong to a group. From Appendix B it was observed that the highest positive correlation of 0.756 was obtained from V20 (I insure because the insurance company

has good policies) and V23 (I insure because the insurance company is reliable). Since it is a positive value, it means that all those who considered the variable V20 (I insure because the insurance company has good policies) also considered V23 (I insure because the insurance company is reliable) as equally important and vice versa. This implies that those who purchased insurance policies because the insurance company has good policies also considered it because the insurance company is reliable. The next highest correlation matrix of 0.725 was observed between V20 (I insure because the insurance company has good policies) and V21 (I insure because the company policies are well understood). Since it is also a positive value, it implies that those who buy insurance because the insurance company has good policies also buy insurance because the company policies are well understood. A correlation matrix of 0.719 was also observed between V21 (I insure because the company policies are well understood) and V23 (I insure because the insurance company is reliable). It can also be seen that there exists a high pairwise correlation coefficient among some of the indicator variables. Variables with high correlation coefficients greater or equal to 0.5 belong together and can be put into a group. Based on the above the following groups can be identified (V5, V8, V10), (V6, V32, V33), (V9, V10, V20, V21, V23, V29), (V22, V24, V27), and (V30, V32, V33). That is, the variables in each set suggest a group of 5.

Thirty-six indicator variables were involved in this study. The correlations among the indicator variables revealed that five (5) groups could be formed from the 36 indicator variables. However, some of the variables forming the group were correlating multiple times with each other.

➤ *Factor Analysis:*

Factor Analysis was used in the analysis of the sample data. In our basic analysis, the correlation analysis suggested about 4 factors that are best in describing the factors that influence the financial performance of insurance companies in Ghana among the respondents. Hence factor analysis was performed to confirm or otherwise.

Table 7 KMO and Bartlett’s Test

Measure	Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.854
Bartlett's Test critical value	5509.106
Bartlett's Test Degree of freedom	630
Bartlett's Test significant value	0.000

Source: Field Survey

Table 7 showed the KMO value of 0.854 is closer to 1 indicating that the test was very sufficient for factoring and will provide a very good result. Also, the Bartlett’s Test of Sphericity is also highly significant with the p-value of 0.00, this means that we have enough correlation for factor analysis. These values suggest that factor analysis is suitable to be used for the data set.

➤ *Total Variance Explained:*

In determining how many components to be extracted, the Kaiser’s Criterion was used. The Criterion is based on the value of eigen values. The eigen values greater than 1 is used.

Table 8 Total Variance Explained

	Total	% Of Variance	Cumulative %
1	13.098	36.383	36.383
2	4.025	11.182	47.565
3	2.000	5.555	53.120
4	1.627	4.521	57.641
5	1.406	3.907	61.547
6	1.288	3.578	65.126
7	1.020	2.833	67.958
8	1.006	2.796	70.754

Source: Field Survey

It was observed from Table 8 that, going by the eigen values greater-than-one concept eight eigen values were greater than one. It is however noted that two of the eigen values though greater than one is very close to one which is a suspect. There is therefore the need to use the Scree Plot to determine the cut-off loadings.

➤ *The Scree Plot:*

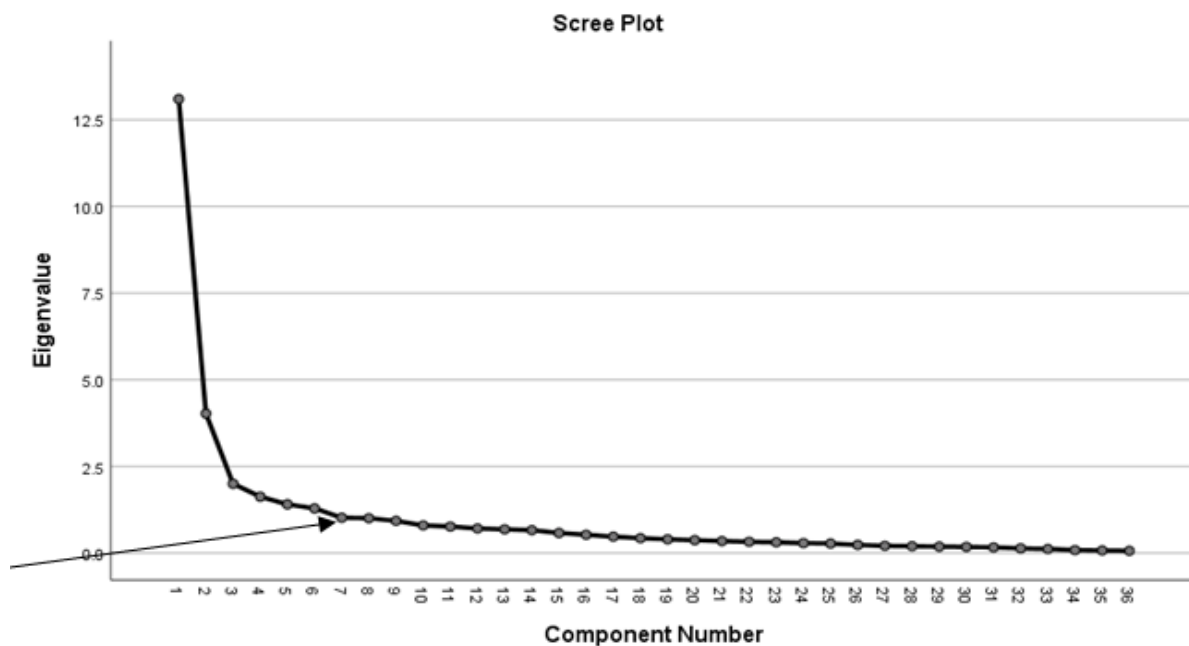


Fig 1 Scree Plot of Eigen Values

The Scree Plot shows that seven main components are very important in explaining the factors associated with the determinant of financial performance of insurance companies in Ghana since it was seen from the diagram that the elbow of the diagram occurs at the seventh component. It further suggests that the number of factors that must be considered should not exceed seven.

➤ *Factor Rotation:*

After conducting the unrotated factor matrix, some of the loadings were very difficult to interpret hence it was very difficult to assign a label to the factors. Therefore, to obtain a better interpretation of the factors, the components were rotated. To rotate a component for better interpretation, the Varimax rotation was performed and the results are presented in Table 9 Varimax rotation is used to obtain a factor structure in which each variable loads highly on one and only one factor.

Table 10 Varimax Rotated Factor Matrix

Variables	Component						
	1	2	3	4	5	6	7
V1	.333	.179	-.072	.033	.159	-.041	-.134
V2	.073	.152	.208	.104	.018	-.070	.348
V3	-.077	.332	-.100	.091	.219	.219	-.095
V4	.446	.144	-.133	.100	-.051	.409	-.258
V5	.747	.007	.007	.253	.065	-.159	.072

V6	-.045	.042	.707	.039	.371	.171	-.044
V7	.595	.354	.100	.030	.154	.393	.050
V8	.748	.083	.020	-.005	.112	.332	.203
V9	.629	.307	-.134	.045	.161	.385	.049
V10	.735	.332	.049	.096	-.011	-.009	.130
V11	.130	.742	.099	.237	.083	.080	-.116
V12	.194	.158	.051	.138	.218	.043	.701
V13	.379	.695	.082	.090	.172	-.058	.042
V14	.448	.247	.138	.152	.487	-.247	.106
V15	.282	.350	.063	.158	.373	.290	.308
V16	.104	.212	.057	.084	.799	.104	.196
V17	.025	.769	.088	-.031	.138	.111	.312
V18	.284	.709	.171	.184	.064	.183	-.038
V19	.263	.663	-.012	.261	.103	.090	.343
V20	.502	.609	.022	.295	-.018	.198	.065
V21	.516	.490	-.058	.396	-.128	.069	.028
V22	.222	.288	.235	.354	.093	.658	.133
V23	.572	.556	.045	.346	-.010	.071	.094
V24	.305	.234	.265	.635	-.041	.281	.199
V25	.239	.234	.225	.757	.265	.042	.092
V26	.183	-.055	.581	.362	.241	.273	-.029
V27	.289	.468	.265	.619	.175	.117	-.007
V28	.541	.158	-.038	.169	-.248	.361	.425
V29	.629	.456	-.002	.277	.115	.002	.049
V30	.019	.042	.807	.091	-.016	.107	.080
V31	.153	.359	.402	.516	-.192	.029	.183
V32	-.088	-.005	.823	.145	.059	-.054	-.096
V33	.026	.051	.877	.109	-.036	-.006	.153
V34	.132	.250	.733	-.025	-.176	-.223	.019
V35	.329	.545	.043	.031	.069	-.019	.434
V36	.634	.208	.291	.214	.111	.017	.070

Source: Field Survey

In Table 10, a cut-off value of 0.5 is used. Thus, loadings greater than or equal to 0.5 will be taken as high and those less than 0.5 will be considered as low. It was observed that factor one loaded highly on V5 (The workers are receptive and friendly), V7 (The insurance company is effective on online media platforms), V8 (The Insurance has a lot of branches), V9 (I can access my claims anywhere I am), V10 (The insurance company has a good policy awareness creation), V21 (I insure because the insurance company policies are well understood), V23 (I insure because the insurance company is reliable), V28 (The insurance company has been in existence for a long time), V29 (The insurance company does well on the financial market) had similar loadings, V36 (The agents have good communicative skills). Therefore, the first factor can be described as an effective management factor.

The second factor has a high significant loading from V11 (I fully understand the insurance pricing policy), V13 (The company has a good cash equivalence), V17 (I insure because of its reputation), V18 (I insure because of its goodwill), V19 (I insure because it is the best insurance company you can invest), V20 (I insure because the insurance company has good policies), V23 (I insure because the insurance company is reliable). Hence, the second factor can be labelled as a competition factor.

The third factor loaded very highly on V6 (I insure because of the owner of the insurance company), V26 (I insure with the insurance company because renowned personalities insure with the company), V30 (I insure with the insurance company because it is closer to my place of residence), V32 (I buy insurance because of an effective advertisement on TV and radio), V33 (I insure because most of my family insure there), V34 (I insure because my friend introduced me to that insurance company). The third factor is therefore labelled as a personality influence factor.

The fourth factor also loads high on V24 (I insure because the insurance company has a good way of managing its losses), V25 (I insure because the company has a good capacity for pooling losses), V27 (I insure because the returns are high), V31 (I buy insurance due to reasonable premium). The fourth factor is, therefore, referred to as the liquidity factor.

The fifth, sixth, and seventh factors were only one-factor indicator and therefore it was not significant enough to assign a factor label to those loadings. Ideally, four factors are clearly established.

➤ *Final Factor Solution:*

After observing the solutions which were obtained from the rotated factor matrices, it provided the salient

factors that best explained the variations in factors that influence the financial performance of insurance companies. It is therefore important to know that the varimax transformation is crucial in determining the order of importance of the factors. It was observed from the analysis that a four-factor solution is appropriate and adequate in describing why there are differences in the financial performance of insurance companies in Ghana. The first factor was effective management; the next was competition, followed by personality influence, and finally liquidity.

V. DISCUSSION AND FINDINGS

The research was based on the factors that influence the financial performance of insurance companies in Ghana. The research was conducted to identify the most influential factor that influences financial performance in Ghana and to find out the most purchased insurance policy among policyholders in Ghana. With regards to the most purchased insurance policy, the life insurance policy happens to be the most purchased insurance policy among all respondents having a percentage of 69.0 followed by general insurance having a percentage of 31.

Moreover, the study examined the correlation coefficients between pairs of variables. The highest correlation coefficient 0.756 was observed between the pairs of variables V20 (I insure because the insurance company has good policies) and V23 (I insure because the insurance company is reliable).

The KMO value and the p-value of Bartlett's Test of Sphericity obtained suggested that Factor Analysis Technique was suitable to analyze the data.

After however, conducting the Factor Analysis of the data, the revelations were that the factors that accounted for the financial performance of insurance companies are decreasing in order of importance: effective management, competition, personality influence, and liquidity.

Much research has been conducted on the factors that influence the financial performance of insurance companies, notable among them is the research conducted by Wanjugu (2014), according to her finding profitability influences the financial performance of insurance companies. This was not in line with our research.

The study conducted by M. Al-Dwiry & T. Al Shaher (2020) revealed that Inter develop an insurance culture is the most influential factor which influences the financial performance of insurance companies. This was in line with our research.

Moreover, our study also revealed that the effective management factor was the most influential and it also revealed that profitability was the last factor which suggested it hardly influenced the financial performance of insurance companies.

In addition, the findings of our research revealed that the majority of the policyholders buy General insurance

policies. The study revealed that people below the age of 18 purchased few insurance policies and people between the ages of 26 to 32 purchased the most insurance policies.

VI. CONCLUSION AND RECOMMENDATION

➤ *In this Study, the following Conclusions were Drawn:*

- General Insurance is the most purchased policy among respondents in Ghana
- Four factors were considered important when it comes to the financial performance of insurance companies. The most influential factor is the effective management factor.
- The other factors were competition, personality influence, liquidity, and profitability.

➤ *The following Recommendations were However made from the Study:*

- There is the need for insurance companies to establish more branches to place of residence of policyholders, create policy awareness, and provide reliable insurance services since effective management factor came up as the most influential factor and it also revealed that most policyholders and customers purchase insurance products when the insurance companies are close to them and does well on the financial market.
- It also suggested that insurance companies should adopt an effective management strategy as a means of ensuring high insurance patronage and penetration in the insurance industry and increasing the capital in companies and insurance premiums. Therefore, insurance companies must take into account the shortage in human resources and try to increase and qualify them and organize them to supervise the insurance process.
- Finally, it is also recommended that policyholders and insurance companies should be sensitized more on the awareness creation of insurance policies since profitability is not the most influential factor.

REFERENCES

- [1]. M. Best Company Inc., (1992). *Best' Insolvency Study: Life/Health Insurers 1976-1991*, Best's Review of Life/Health Edition, June: 18-24, 130-134.
- [2]. Abreu, M., & Mendes, V. (2001). Commercial Bank Interest Margins and Profitability: and Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360.
- [3]. Ackah, C. & Owusu, A. (2012). *Assessing the knowledge of and attitude towards insurance in Ghana*.
- [4]. Adams, M., & Buckle, M. (2000). The Determinants of Operational Performance in Bermuda Insurance Market. *Applied Financial Economics*, 13, 133-43.
- [5]. Agiobenebo, T. J., & Ezirim, B. C. (2002). *Impact of Financial Intermediation on the Profitability of Insurance Companies in Nigeria*. First Bank of Nigeria Quarterly Review, 2(1), 4-14.

- [6]. Agiomirgiannakis, C., Voulgaris, F., & Papadogonas, T. (2006). Financial Factors Affecting Profitability and Employment Growth: The Case of Greek Manufacturing. *International Journal of Financial Services Management*, 1(2), 232–42.
- [7]. Ahmed, N., Ahmed, Z., & Ahmed, I. (2010). Determinants of Capital Structure: A Case of Life Insurance Sector of Pakistan. *European Journal of Economics, Finance and Administrative Sciences*, 6(24), 1450-75.
- [8]. Almajali, A. Alamro, S., & Al-Soub, Y. (2012). Factors affecting the financial performance of Jordanian insurance companies listed at Amman stock exchange. *Journal of Management Research*, 4(2).
- [9]. Al Shaher, T. Kasawneh, O., & Salem, R. (2011). Major Factors that Affect Banks' Performance in Middle Eastern Countries. *Journal of Money, Investment and Banking*, (20), 101-109.
- [10]. Ambrose, Jan M. and Anne M. Carroll, (1994). Using Best Ratings in Life Insurer Insolvency Prediction. *Journal of Risk and Insurance*, 61:317-327.
- [11]. Ansah-Adu, K., Andoh, C., & Abor, J. (2012). Evaluating the Cost Efficiency of Insurance Companies in Ghana. *Journal of Risk Finance*, 13(1), 61-76.
- [12]. Asimakopoulos, I., Samitas, A., & Papadogonas, T. (2009). Firm-Specific and Economy Wide Determinants of Firm Profitability: *Greek Evidence Using Panel Data. Managerial Finance*, 35(11), 930-939.
- [13]. Babbal, D.F. & Klock, D.R., (1994). "Measuring the Interest Rate Risk of Insurer Liabilities", *Insurance Risk Management and Public Policy*, pp 49-73.
- [14]. Baldoni R. J. (2008). A Best Practices Approach to Risk Management, *TMA Journal*, Jan/Feb pp.30-34.
- [15]. Barney, J. B. (1991). Firm resources and Sustainable Competitive Advantage. *Journal of Management*, 17(1), 99-120.
- [16]. Batool, A., & Sahi, A. (2019) Determinants of financial performance of insurance companies of USA and UK during global financial crisis (2007–2016). *International Journal of Accounting Research*, 7(194).
- [17]. Batra, G. (1999). Job Reallocation, the Export Market, and Firm Performance: *Microeconomic Evidence. World Bank Policy and Research; Business Environment Unit*, 10(1), 683-26.
- [18]. Berger, P., & Ofek, E. (1995). Diversifications Effect on Firm Value. *Journal of Financial Economics*, 37, 39-65.
- [19]. Bernadette, M. R., Krishnamurty, M., Brown, R. M., Janny, J. J., & Karen, P. (2001). An Empirical Investigation of the Relationship Between Change in Corporate Social Performance and Financial Performance: *A Stakeholder Theory Perspective. Journal of Business Ethics*, 32(2), 143-56.
- [20]. Black, A.P., P. Wright, & J. E. Bachman. (1998). In Search of Shareholder Value: *Managing the Drivers of Performance. London: Pitman Publishing.*
- [21]. Blattberg, C. (2004). "Welfare: Towards the Patriotic Corporation". From Pluralist to Patriotic Politics: Putting Practice First. New York: Oxford University Press.
- [22]. Blundell-Wignall, A., P. Atkinson, & Lee, S. H. (2008). "The Current Financial Crisis: Causes and Policy Issues", *OECD Financial Market Trends Volume 2008/2*, December, pp. 11-31.
- [23]. Bryman, A. & Bell, E. (2007). *Business Research Methods*. New York: Oxford University Press Inc
- [24]. Burca, A. & Batrinca, G., (2014). The Determinants of Financial Performance in the Romanian Insurance Market, *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(1), 299–308.
- [25]. Cummins, J. D., Grace, M. & Phillips, R. (1999). —Regulatory solvency prediction in property-liability insurance: Risk-based capital, audit ratios, and cash flow simulation. *Journal of Risk and Insurance* 66, 417-458
- [26]. Carson, J. M. & Hoyt, R. (1995). —Life Insurer Financial Distress: *Classification Models and Empirical Evidence. Journal of Risk and Insurance*, 62:764-775.
- [27]. Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.
- [28]. Collins, N.R., & L.E. Preston, (1969). Price-Cost margins and industry structure. *Review of Economics and Statistics*, 51(3), 71-86
- [29]. Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods* (12th ed.). New York: McGraw-Hill/Irwin.
- [30]. Chaharbaghi, L. & Lynch, P. (1999). Revisiting the Concept of Sustainable Competitive Advantage: Perceptions of Managers in Malaysian MNC.
- [31]. Charumathi, B. (2012). On the Determinants of Profitability of Indian Life Insurers – An Empirical Study. *Proceedings of the World Congress on Engineering*, 1, 978-88.
- [32]. Chen, R., & Wong, K. A. (2004). The Determinants of Financial health of Asian Insurance Companies. *The Journal of Risk and Insurance*, 71(3), 469-99.
- [33]. Cornish, R. (2007). *Factor Analysis. Mathematics Learning Support Centre*. Retrieved August 5, 2009, from <http://www.stat-help.com/notes.html>
- [34]. Chidambaran, N. K., Pugel, T. A., & Saunders, A. (1997). An Investigation of the Performance of the U.S. *Property-Liability Insurance Industry. The Journal of Risk and Insurance*, 64(2), 371-81.
- [35]. Donlon, J.P. & Gutfreund, J. (1998). "Good for the Company, Good for the Shareholder?" *Chief Executive* 132 (March 1998): 50–59.
- [36]. Deakin, S. (2005). "The Coming Transformation of Shareholder Value. " *Corporate Governance* 13, no. 1 pp 11–18
- [37]. Donald, H., & McBurney, T. L. (2009). *Research Methods*. New York. NY: Cengage Learning.

- [38]. Doumpos, M., Gaganis, C., & Pasiouras, F. (2012). Estimating and explaining the financial performance of property and casualty insurers: A two stage analysis. *The Business and Economics Research Journal*, 5, 155- 170.
- [39]. Freeman, E. R. (1984). *Strategic Management: A stakeholder approach*. Boston: Pitman.
- [40]. Gorsuch, R. L. (1983). *Factor Analysis* (2nd ed.). Hillsdale, NJ: Erlbaum.
- [41]. Giesbert, L., & Steiner, S. (2011). Perceptions of (Micro) Insurance in Southern Ghana: *The Role of Information and Peer Effects*. Working Papers 183/2011: German Institute of Global and Area Studies (GIGA).
- [42]. Greene, W. H., (2000). *Econometric Analysis*, 4th ed. Prentice Hall, Upper Saddle River, N.J.
- [43]. Gatsi, J. G. & Gadzo, S. G. (2013). Firm Level and Macroeconomic Effects on Financial Performance of Insurance Companies in Ghana. *International Journal of Business Administration and Management*, 3(1), 1-9
- [44]. Hafiz Malik, (2011) Determinants of Insurance Companies Profitability: *An Analysis of Insurance Sector of Pakistan*. *Academic Research International*, 1(3), 56-64.
- [45]. Hardwick, P. (1997). Measuring Cost Inefficiency in the UK Life Insurance Industry. *Applied Financial Economics*, 7(4), 37-44
- [46]. Hinterhuber, A. (2004). Towards Value-Based Pricing – an integrative framework for decision making. *Industrial Marketing Management*, 33(8), 765–778.
- [47]. Hinterhuber, A. (2008). Customer Value-Based Pricing Strategies: *Why companies resist*. *Journal of Business Strategy*, 29(4), 41–50.
- [48]. Hansen, M. T. (1999). Administrative Science Quarterly: *The Role of Weak ties in Sharing Knowledge Across Organizational Sub Units*. *Journal of Financial Management*, 44(6), 82-111.
- [49]. Harrington, R., & Wilson, D. (1989). Corporate Financial Analysis. *Journal of Financial Economics*, 3, 316-20.
- [50]. Herbert, S., & Rescher, N. (1966). Cause and Counterfactual. *Philosophy of Science*, 33, 323–40.
- [51]. Holland, P. W. (1986). Statistics and Causal Inference. *Journal of the American Statistical Association*, 81(396), 945–60.
- [52]. Hagel, J. Brown, J. S. & Davison, L. (2010). *The Best Way to Measure Company Performance*. Harvard Business Review. Harvard: Harvard Business Publishing.
- [53]. International Accounting Standards Board (2007). *International Financial Reporting Standards 2007 (including International Accounting Standards (IAS (tm)) and Interpretations as at 1 January 2007)*, LexisNexi.
- [54]. Iswati, S., & Anshori, M. (2007). The influence of intellectual capital on financial performance of insurance companies in Jakarta stock exchange (JSE). 13th Asia Pacific Management Conference, Melbourne, Australia, 2007, 1393-1399.
- [55]. Kalantari, H. (2013). Evaluating the Impact of Socioeconomic Factors on Individuals 'Tendency for Life Insurance Demand in Iran, M.A. Thesis in Business Management (Insurance), Islamic Azad University, Rasht Branch.
- [56]. Kaiser, H. F. & Rice J. (1974). Little Jiffy Mark. *Educational and Psychological Measurement*, 34, 111-117.
- [57]. Kiriba, W. M. (2015). The Relationship Between Lagging Macroeconomic Indicators and Stock Market Return of Insurance Companies Listed in the Nairobi Securities Exchange. Masters of Science in Commerce, Unpublished Thesis. KCA University.
- [58]. Kothari, C. R. (2011). *Research Methodology. Methods and Techniques*. New Age International Publishers. New Delhi. India.
- [59]. Kozak, S. (2011). Determinants of Profitability of Non-Life Insurance Companies in Poland During Integration with the European Financial System. *Electronic Journal of Polish Agricultural Universities*, 14(1), 20-25.
- [60]. Kumba, S. (2011). How to determine whether your financier is financially sound. *The Financial Post*, Vol 2 pp 16.
- [61]. Laplume, A., Karan, S., & Reginald, L. (2008). Stakeholder Theory: *Reviewing a Theory That Moves Us*. *Journal of Management*, 34(6), 1152–1189.
- [62]. Lee, S. (2008). Ownership Structure and Financial Performance: *Evidence from Panel Data of South Korea*. *Corporate Ownership and Control*, 6(2), 18-30.
- [63]. Monroe, K. B., (2003). *Pricing Making Profitable Decisions* (3rd ed.). New York: McGraw.
- [64]. Mehari, D., & Aemiro, T. (2013). Firm specific factors that determine insurance companies' performance in Ethiopia. *European Scientific Journal*, 9(10).
- [65]. Moghadam, K., Atefi, K., Barati, P., Omid, M., & Zoghi, A. (2012). Performance comparison of insurance companies. *Inter-disciplinary Journal of Contemporary Research in Business*, 4(7).
- [66]. Mwangi, M., & Murigu, J. (2015). The determinants of financial performance in general insurance companies in Kenya. *European Scientific Journal January*. vol.11, No.1.
- [67]. Majumdar, S. (1997). The Impact of Size and Age on Firm-Level Performance: *Some Evidence from India*. *Review of Industrial Organization*, 12(2), 231-41.
- [68]. Makembo S. M. (1992). An Investigation of the Problems in the Compensation System for Personal Injuries and Deaths in Motor Insurance in Kenya; Unpublished MBA Thesis, University of Nairobi
- [69]. Mugenda, O.M. & A.G. Mugenda. (1999). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press. Mutugi, P. M. (2012). The determinants of financial performance of life assurance companies in Kenya. University of Nairobi Unpublished MBA Project.

- [70]. Mwangi, C. M. (2013). An Investigation into Factors That Determine Financial Performance of Insurance Companies in Kenya. University of Nairobi Unpublished MBA Project.
- [71]. Malik, H. (2011). Determinants of Insurance Companies Profitability: An Analysis of Insurance Sector of Pakistan. *Academic Research International*, 1(3), 315-21.
- [72]. Moravcsik, J. M. (1974). Aristotle on Adequate Explanations. *Syntheses*, 28, 3–17.
- [73]. Mugenda, O. M., & Mugenda, A. G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.
- [74]. Norusis, M. (1993). *SPSS for Windows Professional Statistics R6.0*. Chicago, III: SPSS Inc.
- [75]. Nagle, T., & Holden, R. K., (2003). *Strategy and Tactics of Pricing*, Prentice Hall, Upper Saddle River, N
- [76]. Nyamu, F. (2016). The Effect of Macroeconomic Factors on Financial Performance of Insurance Organizations, Theory and Practice, London: Oxford University Press. Performance of Insurance Companies in Ghana, *International Journal of Business Administration and Management*, 3(1), 1-9.
- [77]. NIC. (2019). Retrieved from [https://www.nicgh.Org/annual report of insurance industry, Ghana](https://www.nicgh.Org/annual%20report%20of%20insurance%20industry%20ghana)
- [78]. Ostroff, C., & Schmitt, N. (1993). Configuration of Organizational Effectiveness and Efficiency. *Academy of Management Journal*, 36(6), 1345-61.
- [79]. O'Connor, T. (2000). "The Formula for Determining Cash Flow". *Denver Business Journal*, Vol 3 pp 24-26.
- [80]. Pervan, M., & Pavic, K. T. (2010). Determinants of Insurance Companies' Profitability in Croatia. *The Business Review Cambridge*, 16(1), 231-38.
- [81]. Performance: An Insight of Indian Insurance Industry, *International Journal of Science and Research*, 4(11), pp.1424-1433. practices. New York: Routledge.
- [82]. Sekaran, U. & Bougie, R., (2013). *Research Methods for Business* (6th ed.). John Wiley & Sons Ltd.
- [83]. Shiu, Y. (2004). Determinants of United Kingdom General Insurance Company Performance. *British Actuarial Journal*, 10(5), 1079-1110.
- [84]. Sanchez, J. A. (2006). —Calculating insurance claim reserves with fuzzy regression. *Fuzzy Sets and Systems* 157, no. 23:3091-3108.
- [85]. Santomero, A. M. & Babbei, D. F. (1997). "Financial Risk by Insurers: An Analysis of the Process": *The Journal of Risk and Insurance*, 64, 231-270.
- [86]. Schich, S. (2008). Challenges related to Financial Guarantee Insurance, *OECD Financial Market Trends*, Volume 2008/1, June, pp. 81-113.
- [87]. Schich, S. & Kikuchi, A. (2004). The Performance of Financial Groups in the Recent Difficult Environment, by *OECD Financial Market Trends* No. 86, March, pp. 63-81.
- [88]. Shawar, K. & Siddiqui, D. A. (2019). Factors Affecting Financial Performance of Insurance Industry in Pakistan. *Research Journal of Finance and Accounting*, 10(5), 29-41.
- [89]. Swiss, R. (2013). *Global Risk a Global Risk Network Report*, World Economic Forum Report in collaboration with Citi Marsh & McLennan Companies (MMC). Zurich: Zurich Financial Services.
- [90]. Teece, D. J. (2009). *Dynamic Capabilities and Strategic Management*. New York: Oxford University Press.
- [91]. Tybout, J. R., (1992). Linking Trade and Productivity: *New research directions*. The World Bank Economic Review 6(2)189-211.
- [92]. Wani, A. A. & Showket, A. D., (2015). *Relationship between Financial Risk and Financial York: McGraw-Hill*.
- [93]. Wangui, K. P. (2020). Analysis of Key Financial Ratios on Performance of General Insurance Business in Kenya. Greta University of Kenya.
- [94]. Ward, D. & Zurbruegg, R. (2000). *The Journal of Risk and Insurance*. Vol. 67, No. 4 (Dec., 2000), pp. 489-506 (18 pages).
- [95]. Wabita, F. M. (2013). Determinants Of Financial Performance of Insurance Companies in Kenya. University of Nairobi unpublished Master of Science in Finance project.
- [96]. Yang, Ho-Li, (2007). Effect of Interest Rate Changes on the Profitability of Insurance Companies. *International Business Journal*, Vol 2 pp 46.
- [97]. Young, V. R. (1996). —Insurance rate changing: A fuzzy logic approach. *Journal of Risk and Insurance* 63, no. 3:461-484.
- [98]. Zhara, M. & Mazreku, I. (2014). Risk management and its impact on the performance of insurance companies: the case of Kosovo. *Academic Journal of Inter-disciplinary Studies*. MCSER Publishing, 3(2).

APPENDIX - A

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Table 11 Frequency Distribution of Various Indicators

Variables	Frequency				
	1	2	3	4	5
V1	10	5	41	70	34
V2	6	5	43	74	82
V3	6	15	29	86	74
V4	16	20	50	124	0
V5	0	13	40	84	73
V6	98	41	21	27	23
V7	17	20	43	65	65
V8	6	16	30	66	92
V9	4	17	26	67	96
V10	1	19	49	71	70
V11	6	13	36	83	72
V12	22	46	33	43	66
V13	0	15	32	80	83
V14	5	18	56	79	52
V15	11	23	55	54	67
V16	44	26	46	42	52
V17	5	18	48	64	75
V18	0	6	61	78	65
V19	3	19	47	55	86
V20	0	18	28	84	80
V21	4	16	36	82	72
V22	10	24	67	60	49
V23	7	18	39	67	79
V24	12	18	59	74	47
V25	9	25	74	35	47
V26	25	46	46	54	39
V27	9	40	57	55	49
V28	4	18	26	64	98
V29	2	7	28	81	91
V30	41	55	37	43	33
V31	6	21	59	70	53
V32	39	46	59	33	32
V33	46	62	59	18	24
V34	31	30	55	44	49
V35	4	10	38	75	82
V36	2	11	47	91	58

APPENDIX – B

➤ Correlation Matrix:

V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18
1.000																
0.357	1.000															
0.153	0.366	1.000														
0.235	0.075	0.343	1.000													
0.157	0.009	-0.024	0.021	1.000												
0.209	0.232	0.437	0.482	0.183	1.000											
0.227	0.163	0.367	0.532	0.036	0.534	1.000										
0.151	0.211	0.449	0.382	-0.024	0.611	0.634	1.000									
0.245	0.199	0.410	0.563	0.005	0.526	0.601	0.571	1.000								
0.235	0.343	0.352	0.279	0.155	0.442	0.214	0.338	0.381	1.000							
0.174	0.011	0.058	0.186	0.095	0.194	0.324	0.253	0.279	0.211	1.000						
0.302	0.378	0.257	0.393	0.057	0.477	0.432	0.461	0.540	0.696	0.334	1.000					
0.376	0.258	0.269	0.396	0.161	0.247	0.361	0.366	0.422	0.339	0.312	0.474	1.000				
0.285	0.302	0.277	0.324	0.096	0.538	0.367	0.457	0.406	0.370	0.308	0.466	0.478	1.000			
0.236	0.351	0.150	0.213	0.305	0.338	0.233	0.280	0.203	0.272	0.310	0.366	0.444	0.579	1.000		
0.292	0.285	0.126	0.141	0.149	0.408	0.232	0.345	0.318	0.604	0.357	0.530	0.330	0.450	0.367	1.000	
0.298	0.360	0.291	0.256	0.126	0.451	0.346	0.432	0.548	0.620	0.232	0.645	0.450	0.519	0.283	0.563	1.000
0.344	0.340	0.201	0.311	0.078	0.487	0.423	0.470	0.491	0.498	0.356	0.609	0.381	0.551	0.336	0.601	0.536
0.293	0.286	0.401	0.434	0.020	0.564	0.547	0.566	0.545	0.566	0.291	0.708	0.377	0.491	0.296	0.519	0.676
0.199	0.193	0.298	0.510	-0.028	0.503	0.392	0.538	0.567	0.511	0.214	0.506	0.358	0.404	0.175	0.292	0.520
0.221	0.222	0.331	0.180	0.287	0.528	0.461	0.433	0.315	0.368	0.311	0.320	0.295	0.497	0.361	0.311	0.526
0.344	0.247	0.295	0.494	0.054	0.577	0.497	0.603	0.667	0.545	0.231	0.635	0.502	0.526	0.227	0.463	0.626
0.283	0.230	0.276	0.296	0.257	0.446	0.414	0.356	0.434	0.451	0.350	0.418	0.330	0.443	0.220	0.341	0.488
0.294	0.255	0.180	0.450	0.200	0.424	0.298	0.329	0.343	0.463	0.257	0.415	0.430	0.443	0.406	0.304	0.434
0.205	0.122	0.157	0.199	0.478	0.170	0.266	0.175	0.201	0.239	0.189	0.257	0.271	0.283	0.272	0.409	0.264
0.232	0.219	0.247	0.204	0.295	0.463	0.317	0.366	0.468	0.481	0.269	0.463	0.404	0.404	0.333	0.446	0.648
0.186	0.091	0.270	0.423	-0.068	0.477	0.502	0.479	0.540	0.290	0.335	0.314	0.192	0.447	0.117	0.308	0.577
0.208	0.127	0.268	0.465	0.073	0.490	0.531	0.572	0.395	0.414	0.292	0.595	0.494	0.415	0.244	0.385	0.547
0.128	-0.007	-0.102	0.075	0.490	0.091	0.071	-0.033	0.063	0.143	0.097	0.135	0.137	0.119	0.075	0.123	0.216
0.244	0.116	0.174	0.253	0.200	0.245	0.214	0.206	0.244	0.447	0.263	0.368	0.298	0.345	0.125	0.363	0.400
0.182	-0.040	-0.127	-0.013	0.517	0.043	-0.046	-0.113	0.006	0.123	-0.045	0.048	0.173	0.066	0.075	0.107	0.156
0.230	-0.093	-0.093	0.047	0.573	0.147	0.039	-0.042	0.116	0.122	0.172	0.141	0.146	0.196	0.117	0.163	0.192
0.135	-0.090	-0.088	0.073	0.443	0.127	-0.010	-0.080	0.165	0.150	0.126	0.218	0.152	0.068	-0.026	0.131	0.250
0.272	0.245	0.200	0.338	0.050	0.451	0.354	0.351	0.203	0.429	0.395	0.474	0.358	0.410	0.249	0.493	0.478
0.083	0.021	0.200	0.464	0.199	0.510	0.499	0.400	0.477	0.274	0.317	0.272	0.360	0.290	0.227	0.215	0.298

APPENDIX – C

Table 12 Descriptive Statistics of Indicators

Descriptive Statistics	N	Mean	Std. Deviation
V1	210	4.01	1.060
V2	210	4.05	.974
V3	210	3.99	1.019
V4	210	3.34	.937
V5	210	4.03	.888
V6	210	2.22	1.424
V7	210	3.67	1.234
V8	210	4.06	1.070
V9	210	4.11	1.034
V10	210	3.90	.983
V11	210	3.96	1.011
V12	210	3.40	1.395
V13	210	4.10	.910
V14	210	3.74	1.004
V15	210	3.68	1.181
V16	210	3.15	1.463
V17	210	3.89	1.065
V18	210	3.96	.846
V19	210	3.96	1.062
V20	210	4.08	.925
V21	210	3.96	.997
V22	210	3.54	1.111
V23	210	3.92	1.097
V24	210	3.60	1.099
V25	210	3.50	1.095
V26	210	3.17	1.294
V27	210	3.45	1.166
V28	210	4.11	1.047
V29	209	4.21	.866
V30	209	2.87	1.370
V31	209	3.68	1.050
V32	209	2.87	1.315
V33	209	2.58	1.246
V34	209	3.24	1.355
V35	209	4.06	.969
V36	209	3.92	.892

APPENDIX - D➤ *Summary of Original Indicators:*

- V1- I stand to gain rather than loss
- V2- The premiums are consistent
- V3- The insurance company has high equity level
- V5- The insurance company is creative and innovative
- V5- The workers are receptive and friendly
- V6- I insure because of the owner of the insurance company
- V7- The insurance company is effective on online media platforms
- V8- The insurance company has a lot of branches
- V9- I can access my claims anywhere I am
- V10- The insurance company has a good policy awareness creation
- V11- I fully understand the insurance pricing policy
- V12- The insurance company charges different premiums for different people
- V13- The company has a good cash equivalence
- V14- I insure because the claim payment is made on time
- V15- I insure because a lot of people have received their claims
- V16- The insurance company rewards me when I don't make a claim
- V17- I insure because of its reputation
- V18- I insure because of its goodwill
- V19- I insure because it is the best insurance company you can invest
- V20- I insure because the insurance company has good policies
- V21- I insure because the company policies are well understood
- V22- I insure with the insurance company because it has a lot of customers
- V23- I insure because the insurance company is reliable
- V24- I insure because the insurance company has a good way of managing its losses
- V25- I insure because the insurance company has a good capacity of pooling losses
- V26- I insure with the insurance company because renowned personalities insure with the Company
- V27- I insure because the returns are high
- V28- The insurance company has been in existence for a long time
- V29- The insurance company does well on the financial market
- V30- I insure with the insurance company because it is closer to my place of residence
- V31- I buy insurance due to reasonable premium
- V32- I buy insurance because of effective advertisement on TV and Radio
- V33- I insure because most of my family insure there
- V34- I insure because my friend introduced me to that insurance company
- V35- The insurance company has a good brand image
- V36- The agent has a good communicative skill

APPENDIX – E

Table 13 Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.670	2.215	4.206	1.990	1.898	.229	36
Inter-Item Covariances	.367	-.215	1.156	1.370	-5.384	.046	36

Source: Field Survey

Table 14 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.939	.944	36

Source: Field Survey