

Market Status as a Determinant of the Performance of Kenyan Insurance Firms During Hard and Soft Market Cycles

Benjamin O. Abongo

Kenya Methodist University

Abstract— This study examined market status as a determinant of the performance of Kenyan insurance firms during hard and soft market cycles by analyzing insurance sector data covering the period 2015–2025. The objective was to assess the nature of insurance market cycles in Kenya, evaluate the financial and operational characteristics associated with these cycles, and determine their implications for firm performance. The study employed descriptive statistical analysis using market cycle indicators, financial measures, operational variables, and performance metrics obtained from insurance firms operating in Kenya. The findings revealed that the Kenyan insurance industry experienced recurring transitions between soft, transitional, and hard market cycles, with a mean market cycle score of 1.90 and a standard deviation of 0.831, indicating moderate but persistent cyclical fluctuations. The period 2015–2017 was characterized by a soft market marked by intense competition, declining premium rates, expanding underwriting capacity, and compressed profitability. A market correction emerged during 2018–2019, driven by rising claims, worsening loss ratios, and declining underwriting margins. The industry then entered a pronounced hard market phase during 2020–2022, characterized by premium rate increases, stricter underwriting standards, reduced capacity, and heightened profitability pressures exacerbated by the COVID-19 pandemic and increasing claims costs. Between 2023 and 2025, the market gradually stabilized and returned to softer conditions as capital positions improved and profitability recovered. The results showed that market status significantly influenced insurance firm's performance. Profitability indicators exhibited substantial variability, with profit margins recording a standard deviation of 13.687, ROA averaging 6.3%, and ROE averaging 24.8%. Hard market conditions were associated with increased underwriting discipline and premium growth but were accompanied by elevated claims costs and operational pressures that constrained profitability in some segments. Conversely, soft market conditions promoted premium expansion and market share growth but often resulted in margin erosion due to aggressive pricing competition. Financial factors such as capital adequacy, claims experience, investment income, and operational efficiency displayed considerable variation across firms and were important determinants of performance throughout the underwriting cycle. The study concludes that market status is a critical determinant of the performance of Kenyan insurance firms, influencing profitability, underwriting outcomes, and financial stability across different phases of the insurance cycle. While technological advancements, enhanced risk management practices, and regulatory oversight have moderated market volatility, cyclical patterns remain an inherent feature of the Kenyan insurance industry. The findings underscore the need for insurers to adopt adaptive pricing, capital management, and underwriting strategies to sustain performance under both hard and soft market conditions.

Keywords— Market status, insurance market cycles, soft market, hard market, firm performance, profitability, underwriting cycle, Kenyan insurance industry.

I. INTRODUCTION

Insurance markets are structurally cyclical, alternating between hard and soft phases that significantly influence pricing behavior, underwriting discipline, and firms' financial outcomes. Hard markets are typically associated with increased premium rates,

constrained underwriting capacity, and heightened risk aversion. Conversely, soft markets are marked by premium compression, excess capacity, intensified competition, and relaxed underwriting standards (Thomas, 2023). These cycles are driven by a combination of macroeconomic volatility, capital

market conditions, regulatory interventions, catastrophic loss events, and strategic interactions among insurers. As a result, insurers' capacity to recognize, anticipate, and strategically respond to prevailing market conditions is essential for maintaining profitability, capital adequacy, and long-term solvency throughout the underwriting cycle. Within this context, Kenya's insurance industry provides a valuable empirical setting for analyzing the performance implications of market status. Although relatively young compared to mature insurance markets, the Kenyan insurance sector has experienced significant transformation over the past three decades, including expanded product offerings, enhanced regulatory oversight, and gradual growth in market penetration. Despite these developments, insurance penetration remains below 3 percent of GDP, compared to a global average exceeding 7 percent (Association of Kenya Insurers [AKI], 2024). The sector also faces intensifying competition, frequent regulatory reforms, capital adequacy challenges, and shifting consumer expectations. These structural characteristics amplify the impact of hard and soft market cycles and result in varied performance outcomes based on insurers' market positioning, capital strength, and strategic resilience.

Empirical research on the Kenyan insurance industry underscores the multifaceted determinants of firm performance. Morara and Sibindi (2021) identified underwriting risk, liquidity management, solvency margins, and firm size as critical drivers of financial performance among Kenyan insurers. Njuguna (2019) highlighted the significance of competitive positioning and innovation in promoting firm resilience. Wainaina (2023) reported that failures and distress substantially erode net worth and hinder the ability to meet policyholder obligations, with these vulnerabilities intensifying during extended soft market conditions characterized by aggressive price competition and declining underwriting margins. Collectively, these studies demonstrate that performance outcomes cannot be comprehensively understood without explicitly accounting for market status and its interaction with firm-specific characteristics. Accordingly, this study positions market status, defined by hard and soft market cycles, as a central

determinant of Kenyan insurance firms' performance. Through systematic analysis of insurer performance across various phases of the underwriting cycle, the study seeks to elucidate how cyclical market conditions affect traditional performance drivers. This approach enhances understanding of insurance market dynamics in emerging economies and offers policy-relevant insights for regulators, investors, and industry practitioners concerned with financial stability and sustainable sectoral growth.

1.1. Problem Statement

The Kenyan insurance industry operates within a volatile environment marked by cyclical fluctuations in market conditions. In hard markets, insurers benefit from higher premiums and stricter underwriting, but face challenges related to limited capacity and increased regulatory scrutiny. In contrast, soft markets expose insurers to intense price competition, reduced profitability, and elevated risk exposure. These cycles contribute to uncertainty and instability, undermining long-term performance and sustainability. While global literature on insurance cycles is extensive, limited research contextualizes these dynamics within Kenya's specific environment. Existing studies on the determinants of performance among Kenyan insurers (Kimani, 2023; Morara & Sibindi, 2021; Wainaina, 2023) have predominantly examined firm-level factors such as underwriting risk, liquidity, and solvency, without explicitly linking these factors to cyclical market phases. Consequently, a knowledge gap remains regarding the interaction between market status and firm-level determinants in shaping performance.

This knowledge gap is particularly significant considering Kenya's low insurance penetration, frequent firm failures, and ongoing regulatory reforms intended to enhance industry resilience. Without a subtle understanding of how hard and soft market cycles affect performance, insurers risk adopting strategies that are misaligned with prevailing market conditions. Policymakers similarly lack the evidence-based insights required to design interventions that stabilize the industry across market cycles. This study therefore addresses the lack of empirical and theoretical clarity regarding the influence of market

status, specifically hard versus soft cycles, as a determinant of performance among Kenyan insurance firms. By investigating this relationship, the study seeks to provide actionable insights for insurers, regulators, and scholars, thereby supporting the stability and growth of Kenya's insurance sector.

2.0. Theoretical and Literature Review

2.1. The Signaling Theory

This study adopts Signaling Theory, as developed by Michael Spence, as the primary conceptual framework for analyzing market status as a determinant of Kenyan insurance firm performance across hard and soft market cycles. Signaling Theory is particularly relevant because it addresses the mechanisms by which market status is communicated and interpreted, thereby linking firm behavior to performance throughout different market conditions. Rooted in information economics, the theory explains how informed parties transmit credible signals to less-informed parties to reduce uncertainty. In insurance markets, firms frequently face asymmetric information challenges, as clients, regulators, and competitors may lack full insight into their financial strength, risk management practices, or long-term stability. Signals such as pricing policies, product innovation, advertising intensity, and capital adequacy serve as key indicators of a firm's market position and reliability. Spence (1973) posited that markets are characterized by asymmetric information, with actors conveying signals to reduce uncertainty and establish credibility. Within this framework, market status functions as a signal of reliability, stability, and trustworthiness. In the insurance industry, where contracts depend on uncertain future events, signaling assumes a particularly important role. Customers, regulators, and investors cannot directly observe insurers' internal prudence or risk management; instead, they rely on observable indicators such as premium growth, claims fulfillment, and financial solidity as signals of credibility. This review examines the application of signaling theory to the determinants of insurance market status, drawing on empirical findings that highlight both the strengths and limitations of the signaling perspective.

Insurance markets exemplify environments characterized by pronounced asymmetric information. Policyholders are unable to fully assess insurers' solvency or reliability, while insurers cannot accurately predict policyholders' risk profiles. In these circumstances, signals become essential. For insurers, market status operates as a meta-signal reputational construct that communicates credibility, resilience, and the capacity to fulfill obligations under stress to stakeholders. According to Spence's (1973) framework, signals must be costly to imitate, ensuring that only genuinely credible firms can maintain them. In the insurance sector, claims fulfillment and sustained market visibility satisfy this criterion, as both require significant financial strength and operational competence.

While signaling theory provides a valuable analytical lens, its application to insurance market status presents several limitations. First, signaling theory assumes that stakeholders interpret signals uniformly; however, empirical evidence indicates considerable heterogeneity in interpretation. For example, premium growth may be viewed positively as a sign of market leadership in some contexts, but negatively as an indicator of increased risk exposure in others. This variability challenges the universality of signaling theory and underscores the necessity for contextualized interpretations. Second, signaling theory emphasizes observable signals while often neglecting latent or internal characteristics. The limited predictive value of capital adequacy, liabilities, and efficiency for market status suggests that stakeholders may not directly observe or prioritize these fundamentals, despite their importance for long-term solvency. This raises a critical question: Does signaling theory overemphasize observable actions at the expense of underlying fundamentals? If so, market status may be susceptible to misperceptions, allowing firms that are adept at signaling but lack substantive robustness to attain inflated reputations. Third, signaling theory presumes that signals are costly and therefore credible. However, in contemporary insurance markets, regulatory supervision and institutional safeguards have reduced the costliness of certain signals. For instance, minimum capital requirements ensure that all firms meet baseline

solvency standards, thereby diminishing the signaling value of capital adequacy. This institutional context complicates the application of signaling theory, as signals may lose their discriminatory power when regulatory homogenization is prevalent.

A critical synthesis indicates that signaling theory remains valuable but requires adaptation for the insurance context. Signals such as claims fulfillment clearly enhance market status, aligning with the theory's predictions. However, other signals, such as premium growth, may be interpreted in ways that undermine credibility. Additionally, regulatory homogenization and volatility dynamics constrain the explanatory power of signaling theory when considered in isolation. A more comprehensive framework would integrate signaling theory with institutional theory and behavioral finance, acknowledging that signals are socially constructed, context-dependent, and subject to dynamic interpretation. While signaling theory offers a robust perspective for understanding how insurance firms convey credibility amid asymmetric information, its application to market status reveals both strengths and limitations. Claims fulfillment exemplifies the costly, credible signals described by Spence (1973), whereas premium growth demonstrates the potential for signal distortion. The limited significance of traditional financial ratios highlights the constraints of observable signals, and volatility dynamics emphasize the transient nature of reputational shocks. Therefore, signaling theory should be applied critically, contextualized, and supplemented with complementary frameworks to fully explain the determinants of insurance market status. This perspective advances discourse by emphasizing the need for dynamic, multi-theoretical approaches to understanding reputation and credibility in complex financial markets.

2.2.0 Literature Review

2.2.1 Status and Insurance Firm Performance

Market status, defined as a firm's socially constructed standing derived from collectively held perceptions of legitimacy, credibility, and competitive status, is a critical yet insufficiently examined determinant of firm performance, particularly in cyclical market

environments. In the Kenyan insurance sector, defined by persistent volatility, recurrent regulatory reforms, and low levels of public trust, market status plays a central role in directing how insurers respond to and perform across hard and soft market cycles. Studies indicate that the insurance market is structurally prone to information asymmetry due to long-term contractual commitments, delayed service delivery, and the technical complexity of underwriting and claims settlement. Policyholders and other stakeholders, therefore, seem unable to fully evaluate underwriting quality, claim management efficiency, or solvency *ex ante*. As a result, social signals have become key in economic decision making. Drawing on signaling theory (Spence, 1973) and agency-based perspectives on information and incentives (Holmström, 1999), market status serves as a heuristic that enables stakeholders to infer a firm's reliability, governance quality, and sustained viability. Podolny (2005) conceptualized market status as a collectively constructed social evaluation that denotes underlying quality and confers legitimacy independently of short-term performance outcomes. This conceptualization distinguishes status from reputation, which is more directly linked to perceivable past performance and is therefore more susceptible to short-run fluctuations (Rindova, Pollock, & Hayward, 2006), a distinction that is particularly salient in cyclical insurance markets.

During hard market phases, characterized by rising premium rates, tightening underwriting standards, constrained capacity, and improved profitability prospects, insurers with high market status are better able to exploit favorable conditions. Their perceived legitimacy facilitates access to capital, reinsurance capacity, and regulatory goodwill, allowing them to expand underwriting selectively while continuing compliance with regulatory prudential requirements (Cummins & Doherty, 2006). High-status insurers are also viewed as more trustworthy by policyholders, reducing resistance to premium increases and stricter policy terms that typically accompany hard market conditions (Born, 2001). By contrast, soft market cycles are defined by intense price competition, declining underwriting discipline, compressed margins, and elevated risk exposure. In these periods,

market status functions as a stabilizing mechanism. Whereas reputation may deteriorate rapidly due to losses, delayed claims payments, or solvency concerns, status evolves gradually and is more resistant to short-term shocks (Podolny, 2005).

High status is considered an impetus for greater tolerance among customers, investors, and regulators, who are more forgiving of temporary underperformance when firms are perceived as legitimate and trustworthy. This buffering effect is critical where frequent insurers' failures have increased industry-wide skepticism and weakened baseline trust.

High organizational status serves as an effective social buffer, fostering greater tolerance among customers, investors, reinsurers, and regulators when firms experience temporary underperformance. Prior research on social evaluations of firms suggests that stakeholders tend to be more forgiving of short-term setbacks when organizations are perceived as legitimate, structurally sound, and trustworthy (Podolny, 2005; Deephouse & Suchman, 2008). In such cases, adverse performance signals are interpreted as transitory rather than symptomatic of deeper organizational weaknesses. This buffering effect is particularly critical in situations where repeated firm failures have increased industry-wide skepticism and eroded baseline trust/reputation in insurance firms. Studies have confirmed that market status and reputation are analytically distinct but closely intertwined and mutually reinforcing forms of social evaluation. While reputation reflects stakeholders' assessments of a firm's recent and observable performance, status is a durable and relationally embedded position within a recognized hierarchy of firms (Rindova, Pollock, & Hayward, 2006; Podolny, 2005). In insurance markets characterized by cyclical volatility, these distinctions themselves matter. Reputation tends to fluctuate rapidly in response to claims delays, underwriting losses, governance scandals, or liquidity pressures during soft market conditions, while status, by contrast, evolves more gradually and is anchored in long-standing market participation, network ties,

institutional legitimacy, and governance credibility (Deephouse & Suchman, 2008).

In the Kenyan insurance industry, firms that occupy high-status positions have been able to draw on both accumulated status and reputational capital to navigate cyclical pressures. Established insurers with long-standing market footholds and strong regulatory standing benefit from reputational spillovers that increase customer confidence during favorable conditions, while their elevated status cushions them in downturns. Where reputational signals may temporarily weaken due to pricing pressures or adverse claims experience, status serves as a stabilizing reference point that supports stakeholders' perceptions of the firm's underlying viability and compliance orientation. This cooperation enables high-status insurers to retain customers, sustain investor assurance, and preserve regulatory goodwill even if short-term financial indicators deteriorate. Conversely, low-status insurers tend to face sharper penalties when reputational shocks occur. Because stakeholders lack strong prior beliefs about their legitimacy or corporate quality, negative performance signals are more readily interpreted as indicative of structural fragility rather than cyclical misfortune. Empirical studies of organizational evaluations show that firms lacking either reputational depth or status recognition are less likely to benefit from stakeholder patience and more likely to experience capital, customer, or regulatory support withdrawal following adverse events (Rindova et al., 2006). In Kenya, this pattern has contributed to differential survival outcomes, with higher-status insurers demonstrating greater resistance across underwriting cycles while lower-status firms struggle to recover from even modest shocks.

Importantly, the Kenyan experience illustrates that status and reputation are not substitutes but complementary assets. Reputational performance over time contributes to the accumulation and reinforcement of status, while status shapes how market participants interpret reputational signals. Insurers that consistently meet claims obligations, maintain governance standards, and engage constructively with regulators improve their

reputations, thereby gradually strengthening their position. In turn, elevated status increases the credibility of positive reputational signals and lessens the consequence of negative ones. This interdependent dynamic has enabled leading Kenyan insurers to benefit from both forms of social evaluation, strengthening performance stability across hard and soft market cycles. Firm-level characteristics commonly associated with performance, such as capital adequacy, liquidity, governance quality, and firm size, do not operate independently of market status. Rather, their performance effects are mediated by social evaluations. For example, while capital adequacy enhances robustness throughout market cycles, high-status insurers can attract capital more readily and at lower cost, increasing their performance-enhancing impact (Fombrun & Shanley, 1990). Similarly, governance reforms designed to improve efficiency and accountability are perceived as more credible and effective when implemented by high-status firms, thereby increasing stakeholder belief in managerial intentions and sustained viability (Suchman, 1995).

Corporate social responsibility (CSR) initiatives constitute an additional non-financial pathway through which market status is constructed and reinforced in emerging market contexts. Empirical evidence indicates that CSR engagement strengthens stakeholders' trust, enhances social legitimacy, and improves firm evaluations, particularly in contexts with pronounced institutional voids and trust deficits (Matten & Moon, 2008; Servaes & Tamayo, 2013). In insurance markets with low penetration and weak public trust, CSR signals a commitment to societal welfare and collective risk-sharing principles. During soft market phases, CSR-enhanced status helps insurers retain customers despite aggressive price competition, while during hard markets it contributes to public acceptance of premium adjustments and tighter underwriting standards.

However, the stabilizing role of market status also carries important structural implications. Status hierarchies tend to be self-reinforcing, concentrating advantages among high-status incumbents and limiting mobility for lower-status firms (Podolny,

2005; Bitektine, 2011). In the Kenyan insurance industry, this pattern enables established insurers to consolidate market power across cycles, while lower-status firms face persistent barriers to accessing capital, reinsurance, and strategic alliances, even when they demonstrate strong short-term performance. These dynamics may contribute to increased market concentration, reduced competition, and heightened systemic fragility during cyclical downturns. The interaction between market status and insurance market cycles thus demonstrates a critical gap in the existing Kenyan insurance literature. Much of the prior work has focused on firm-level financial indicators without adequately situating performance within cyclical contexts or examining how social evaluations mediate the effectiveness of these indicators. By including market status in the analysis of hard and soft market cycles, this study fosters a more sophisticated, institutionally grounded understanding of performance dynamics in Kenya's insurance sector.

From both managerial and policy perspectives, these insights suggest that sustainable performance across market cycles requires deliberate, long-term status-building strategies. Continuous investment in governance quality, capital strength, CSR engagement, and transparent communication enhances legitimacy and organizational resilience.

For regulators, reducing information asymmetry through improved disclosure and accountability frameworks may weaken entrenched status hierarchies, creating opportunities for capable lower-status firms to compete more effectively across market cycles. In sum, market status emerges as a powerful determinant of insurance firm performance in Kenya, shaping how firms experience and respond to both hard and soft market conditions.

It amplifies the effects of financial and governance factors, provides insulation against cyclical shocks, and facilitates stakeholder confidence and market access. At the same time, it entrenches structural inequalities that policymakers must carefully manage. Understanding this dual role is essential for promoting stability, competitiveness, and sustainable growth in Kenya's insurance industry.

2.2.2 Insurance Firm Reputation and Performance across Hard and Soft Market Cycles

Within the insurance sector, market status is closely intertwined with reputational capital arising from contractual reliability. Insurance contracts are inherently forward-looking and incomplete, requiring policyholders to pay premiums in anticipation of uncertain future claims payments. This structure makes trust and credibility central to insurer performance. Shapiro's (1983, 1987) theory of reputational capital explains how firms that repeatedly honored contractual commitments-built credibility, enabling them to command price premiums, retain customers, and deter opportunistic behavior. In markets with low insurance penetration, such as Kenya, reputational signals are particularly salient because consumers rely heavily on observable outcomes, most notably claims settlement, to assess insurer reliability (Cummins & Doherty, 2006; Outreville, 2013). Claims settlement performance, therefore, plays a pivotal role in sustaining insurer market status across hard and soft insurance cycles. Soft markets insurers tend to cut costs by delaying or contesting claims to provide shorter financial relief; however, this may erode reputational capital and reduce a company's long-term competitiveness (Berger, Cummins, & Weiss, 1997). Conversely, during hard markets, characterized by rising premiums, tighter underwriting standards, and increased scrutiny by policyholders and regulators, perceived unfairness in claims handling can significantly damage trust, accelerate customer defection, and intensify adverse selection pressures (Akerlof, 1970; Winter, 1994).

Because insurance contracts cannot specify or enforce all contingencies *ex ante*, reputation and trust act as governance mechanisms that substitute for costly monitoring, litigation, and regulatory enforcement (Arrow, 1963; Williamson, 1985). Firms with strong reputations benefit from lower transaction costs, more stable policyholder bases, and greater resilience to cyclical shocks. Empirical evidence shows that insurers with superior claim-paying reputations exhibit lower lapse rates and more stable underwriting performance across business cycles (Grace & Leverty, 2012; Eckles, Hoyt, & Miller, 2014).

Market status shapes an insurer's exposure to volatility in stakeholder perceptions, which increasingly influences performance outcomes. While volatility has traditionally been conceptualized as statistical variance in returns, contemporary research extends it to reputational and perceptual domains (Fombrun & Shanley, 1990). Reputational volatility reflects fluctuations in collective assessments of insurers' solvency, fairness, and ethical conduct, often triggered by claims disputes, regulatory sanctions, or adverse media coverage. In emerging markets, reputational shocks are particularly destabilizing due to weaker institutional trust, limited consumer protection, and heightened information asymmetries (Deephouse, 2000; Klein, 2012). Behavioral finance literature helps explain why perceptual volatility disproportionately affects lower-status insurers. Loss aversion and negativity bias imply that adverse events exert stronger and more persistent effects on reputation than positive performance signals (Kahneman & Tversky, 1979; Baumeister et al., 2001). Once negative beliefs take hold, herding behavior among consumers and intermediaries can amplify reputational damage, producing clustered periods of financial and reputational instability that coincide with market downturns (Bikhchandani & Sharma, 2000). High-status insurers, by contrast, benefit from reputational buffers that moderate the impact of bad news and stabilize earnings across cycles (Rhee & Valdez, 2009; Pollock, Chen, Jackson, & Hambrick, 2010).

For Kenyan insurance firms, maintaining high market status is therefore a strategic imperative rather than a peripheral concern. Strong claims' reliability, transparent governance, and proactive stakeholder communication reduce perceptual volatility, enhance trust, and strengthen customer loyalty (Morgan & Hunt, 1994; Ndubisi, 2007). High-status insurers also enjoy improved bargaining power with regulators, reinsurers, and institutional investors, reinforcing their ability to withstand hard market conditions while pursuing disciplined growth during soft markets (Fombrun & Shanley, 1990; Eling & Schmit, 2012). In sum, the literature indicates that market status constitutes a critical determinant of insurer performance across insurance cycles. In the Kenyan

context, where trust deficits, regulatory pressures, and cyclical volatility intersect, the ability to build and sustain reputational capital through high governance quality and claims' reliability determines whether hard and soft market conditions translate into risk or opportunity. Future research should examine how digital claims processing, enhanced disclosure regimes, and regulatory reforms can further stabilize reputational capital and insurance performance in emerging markets.

2.2.3. Governance and Performance of Kenyan Insurance Firms during Hard and Soft Market Cycles

The performance of insurance firms in Kenya cannot be adequately explained without situating governance challenges within the broader dynamics of fluctuating market conditions, particularly the alternating phases of hard and soft insurance market cycles. The prevailing market phase at any given time exerts a significant influence on firm behavior, the effectiveness of governance mechanisms, and, ultimately, organizational performance. Governance weaknesses tend to be more pronounced during soft market cycles, when intensified competition and declining premiums weaken underwriting discipline. In contrast, hard market conditions often impose greater financial discipline, strengthen incentives for enhanced oversight, and are more likely to contribute to improvements in operational performance (Cummins & Outreville, 1987; Vaughan & Vaughan, 2013).

Organizational complexity theory provides a useful lens for understanding how market status interacts with governance structures to influence firm outcomes. As insurance firms grow in size and diversify their product portfolios, they face escalating coordination and control demands. Williamson's (1985) transaction cost economics (TCE) framework explains how governance structures evolve to minimize costs arising from bounded rationality, uncertainty, and opportunism. In insurance markets, these pressures intensify during soft market phases, when declining premiums and thin margins incentivize risk-taking, aggressive growth strategies, and weakened internal controls. For Kenyan insurers

operating under stringent regulatory oversight by the Insurance Regulatory Authority (IRA), failure to manage these governance risks can result in solvency stress, regulatory sanctions, and reputational damage (IRA, 2022).

Market cycles exacerbate governance challenges by altering managerial incentives and risk appetites. During soft markets, insurers often pursue rapid market share expansion to maintain revenue levels, increasing reliance on complex distribution networks and decentralized decision-making. Such expansion raises transaction and monitoring costs, consistent with Williamson's (1985) argument that organizational growth heightens governance complexity. Relational governance mechanisms based on trust, informal controls, and repeated interactions become more prevalent in these periods. However, as Jones, Hesterly, and Borgatti (1997) caution, relational governance is fragile in environments characterized by institutional weakness and opportunism, conditions often observed in emerging markets. In Kenya, uneven enforcement and information opacity can undermine these informal controls, adversely affecting firm performance during soft cycles.

Information asymmetry is a critical mechanism through which market status influences governance effectiveness. Eisenhardt's (1989) agency perspective highlights how dispersed information within complex organizations leads to moral hazard and adverse selection. In Kenyan insurance firms, soft market conditions amplify these risks as underwriting and claims decisions are pushed downward to achieve volume targets. Distorted information flows can compromise actuarial pricing, claims reserving, and regulatory reporting, weakening financial performance and increasing insolvency risk. During hard market cycles, by contrast, improved pricing power and capital constraints encourage tighter monitoring, better information systems, and enhanced managerial discipline.

Agency problems are also shaped by market status. Jensen and Meckling's (1976) agency theory suggests that conflicts between shareholders, boards, and managers intensify when performance pressures

mount. In soft markets, managers may prioritize short-term growth over long-term solvency, diverging from the interests of policyholders and regulators. In hard markets, declining competition and higher premiums realign incentives toward profitability, allowing governance mechanisms to function more effectively. Empirical studies in insurance economics consistently show stronger operating performance and capital adequacy during hard market phases, reflecting improved governance discipline (Cummins, Harrington, & Klein, 1995).

Finally, coordination and decision-making challenges inherent in complex insurance organizations interact with market cycles to influence performance. Mintzberg's (1979) structural theory underscores how fragmentation impedes timely decision-making. In Kenya, delayed claims settlement or regulatory non-compliance during soft markets can severely erode public trust, damaging long-term competitiveness. Hard market conditions, however, tend to restore operational discipline and strategic focus, mitigating these risks. Overall, the literature suggests that market status is a critical determinant of governance effectiveness and performance in Kenyan insurance firms. As firms navigate hard and soft cycles, robust governance frameworks, transparent information systems, and strong regulatory oversight are essential to sustaining performance and safeguarding stakeholder confidence.

3.0 RESEARCH METHODOLOGY

3.1 Model Specification

The study uses a firm-level analytical framework to examine market conditions in the insurance sector. Market status is modeled as a function of operational and managerial determinants, including gross premiums, net incurred claims, capital adequacy, liabilities, mergers and acquisitions, product variety, efficiency, and investment income. This specification is highly effective because it combines both short-term operational indicators (e.g., claims and liabilities) and long-term strategic drivers (e.g., capital adequacy and diversification). By encompassing these dimensions, the model captures the multifaceted nature of insurance market performance, ensuring the analysis captures both resilience and competitiveness.

3.2 Estimation Technique

An Autoregressive Conditional Heteroskedasticity (ARCH) model was used to estimate the relationship between firm-level determinants and market status. The relevance of ARCH lies in its capacity to account for volatility persistence, a common phenomenon in insurance markets, where, for example, regulatory changes or catastrophic claims lead to times of increased uncertainty. Unlike classic regression methods that assume constant variance, ARCH clearly models conditional variance, thereby aligning the estimation technique with the sector's dynamic risk environment. This methodological choice enhances robustness and ensures that the analysis does not reflect only mean effects but also the changing risk conditions under which firms operate.

3.3 Statistical Validity

The conceptual framework emphasizes statistical soundness through employing joint significance testing explanatory variables. This approach ensures that isolated effects do not drive the model, but instead reflect the collective explanatory power of firm-level determinants. Such validation strengthens the method's credibility, confirming that the chosen specification is appropriate for inference and policy analysis.

3.4 Data Scope

The study uses firm-level panel data, which is especially effective for capturing cross-sectional and time-based dynamics simultaneously. Panel data controls for unmeasured heterogeneity across firms, thereby decreasing bias and improving the reliability of estimates. Moreover, it allows the study to distinguish between instant effects (e.g., claims affecting market status in the short run) and cumulative effects (e.g., capital adequacy shaping extended stability). This scope improves the generalizability of findings across the insurance sector while preserving sensitivity to firm-specific and time-specific variations.

3.5 Methodological Relevance

The chosen methodology is highly pertinent to the study's objectives. By combining a detailed model specification with an estimation technique designed

for volatility, the approach ensures that the analysis is both conceptually grounded and empirically robust. The use of panel data further strengthens the method by enabling subtle insights into firm behavior over time. Collectively, these research choices offer a firm basis for examining the drivers of market status in the insurance sector and for deriving implications meaningful to both regulators and industry practitioners.

4.0. STUDY FINDINGS

4.1 Introduction

This chapter discussed the study's outcomes and presented the key findings from the data analysis. It presents a descriptive analysis of the investigation constructs, as well as inferential statistics that explain relationships within the research model. The chapter examines the status of market cycles in the insurance sector, assesses whether financial and operational factors in insurance companies determine them, and ionally highlights the implications of market cycles on in-company performance.

4.2 Descriptive Findings

The study undertook descriptive data analysis to assess how market cycles relate to various insurance industry factors. The outcomes presented in this section show the results of these analyses, highlighting the nature of the information informing the state of the insurance market, based on descriptive statistics such as the mean, standard deviation, minimum, and maximum values reported in the dataset.

4.3 Market cycles in the insurance sector

Figure 4.1 illustrates the cyclical dynamics of the insurance market over the period 2015–2025, showing the gradual transition over distinct phases commonly identified in insurance economics: the soft market, market deterioration, hard market, and stabilization or transition phase. The figure illustrates well-established theoretical and observed findings on underwriting cycles, driven by delayed capital adjustments, competitive pricing pressures, and evolving loss experience.

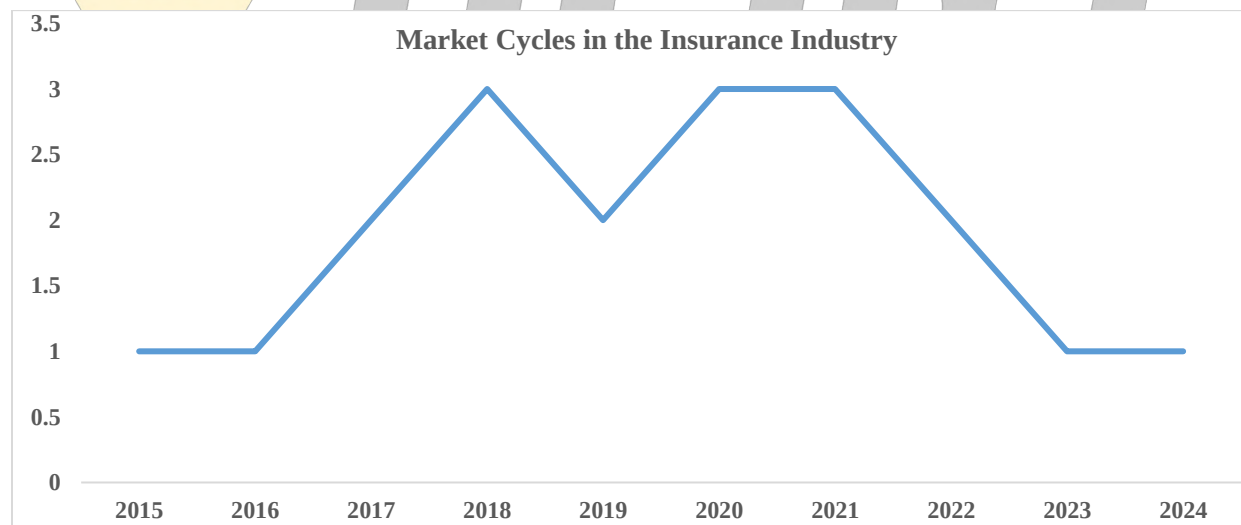


Figure 4.1: Insurance market cycles (2015-2025)

4.3.1 Soft Market Phase (circa 2015–2017)

The period from 2015 to 2017 constituted a prolonged soft market phase in the insurance underwriting cycle. During this phase, premium rates declined or remained suppressed, underwriting capacity expanded, and underwriting standards became increasingly accommodative. These conditions were supported by

strong insurer capitalization, bolstered by favorable investment performance and relatively low catastrophe losses in preceding years. Consequently, competitive pressures intensified across the industry.

Empirical results indicated that compressed profit margins characterized the soft-market environment alongside rising exposure levels. This combination

suggested that insurers prioritized market share expansion more than strict adherence to technical pricing discipline. By 2017, the market displayed characteristics of a transitional or mixed cycle (cycle value = 2), indicating the early stages of a shift away from soft-market conditions. Over this transition period, loss ratios rose, and profitability pressures intensified, as evidenced by slower premium growth and declining margins amid constant underwriting challenges.

Within the Kenyan insurance market, these pressures were distinctly strong in the non-life segment. Sustained profitability strain was reflected in consistently elevated combined ratios, which indicated chronic underwriting underperformance. The subsequent transition to a hard market phase in 2018 suggests that cumulative pressures, arising from prolonged underpricing, escalating claims, and margin erosion, necessitated corrective adjustments in pricing and risk management practices.

In 2019, the market reverted to a cycle value of 2, showing a renewed transitional or softening phase. This moderation implies that the tightening observed in 2018 had begun to ease as insurers partially stabilized their financial positions. However, premium growth resumed during this period, while underwriting losses, particularly in non-life insurance companies, led to subdued cumulative profitability. The data thus reveal an expansion in premium volumes without a corresponding recovery in underwriting margins, a pattern typical of transitional phases in the insurance cycle.

From a behavioral perspective, this phase was defined by renewed optimism and elevated risk tolerance among insurers. Firms demonstrated a greater willingness to accept marginal risks and to broaden policy terms, while reinsurance pricing remained relatively soft. Figure 4.x illustrates how excess capital and intensified price competition constrained premium rate increases, even as exposure levels and latent risk accumulation continued to rise.

4.3.2 Market Deterioration and Early Turning Point (circa 2018–2019)

The second phase depicted in Figure 4.1 reflected the early signs of market correction. Although pricing conditions remained broadly soft, loss ratios began to deteriorate, indicating delayed recognition of prior underpricing and adverse claims development. Rising claims severity, caused by increased frequency of natural catastrophes, evolving liability risks, and social inflation, exerted upward pressure on losses (Swiss Re, 2019).

In Figure 4.x, this phase is represented by flattening or declining profitability trajectories, indicating the unsustainability of prevailing pricing schemes. Insurers responded with incremental increases in underwriting discipline along with adjustments to reinsurance purchasing strategies. However, rivalrous forces remained sufficiently strong to postpone a rapid market correction. The figure captures this lagged adjustment process, strengthening the view that insurance cycles evolve gradually, determined by institutional inertia, information asymmetry, and delayed capital responses (Cummins, Weiss, and Zi, 2014).

4.3.3 Hard Market Phase (circa 2020–2022)

A pronounced hard market phase emerges in Figure 4.x during the early 2020s. Sharp increases in premium rates, tightened underwriting standards, reduced capacity, and higher insurer retentions characterize this period. Visually, the phase is defined by steep premium increase and enhanced profitability trends, albeit with increased volatility.

During this period, policyholders faced more restrictive coverage terms, higher deductibles, and reduced availability of insurance capacity, while reinsurance markets hardened concurrently. The persistence of this hard phase suggests that insurers continue to face significant profitability pressures from elevated claims activity, macroeconomic disruption, and financial market volatility.

In 2020, the global and domestic insurance sectors were adversely affected by the COVID-19 pandemic. Underwriting results deteriorated as premium growth lagged behind claims growth, placing substantial

pressure on underwriting metrics. In 2021, underwriting losses remained prevalent, particularly in the motor and medical portfolios, further constraining total profitability.

The data in Figure 4.x underlines the corrective role of the underwriting cycle in reestablishing equilibrium among risk exposure, capital adequacy, and pricing.

The transition back to cycle level 2 in 2022 denotes a shift toward stabilization following the severe hard market conditions of the preceding years.

Although gross premiums expanded strongly, exceeding 13.4 percent, and profits increased markedly (by more than 70 percent), underwriting results in certain non-life segments remained under stress, reflecting incomplete normalization.

4.3.4 Stabilization and Transitional Phase (circa 2023–2025)

The final phase, illustrated in Figure 4, is characterized by gradual stabilization and a transition toward a more balanced market environment. Premium growth moderated as insurer capital positions were replenished through retained earnings and external financing.

By 2023 and 2024, the market cycle had returned to soft market conditions (cycle value = 1), indicating renewed competitive pressures across the industry.

In 2023, the sector recorded strong premium growth of approximately 16–17 percent, and continued expansion of the asset base. However, underwriting performance remained mixed, with several segments still operating at a loss.

In 2024, premium growth persisted at around 9.4 percent, accompanied by rising investment income and evidence of underwriting improvement, including the first recorded medical underwriting profits in several years.

During this phase, insurers expanded underwriting capacity and moderated pricing to attract customers and preserve market activity.

While underwriting discipline remained comparatively stronger than in prior soft cycles, competitive pressures began to re-emerge as profitability improved, consistent with broader global trends (Swiss Re, 2022).

This phase was identified by reduced volatility and more predictable loss ratios. Figure 4.x likely depicts a leveling of both pricing and profitability curves, indicating the maturation of the post-hard-market adjustment.

Importantly, advances in risk modeling, technological innovation, and enhanced regulatory supervision helped dampen extreme cyclical fluctuations, though cyclical dynamics were not eliminated entirely (Vaughan and Vaughan, 2014).

4.3.5 Conclusion

Taken together, Figure 4.x gives a coherent and systematic representation of the insurance underwriting cycle from 2015 to 2025. The noted patterns across successive phases reflect enduring structural characteristics of insurance markets, including delayed capital adjustment, competitive pricing behavior, and exposure to exogenous loss shocks.

The figure affirms the persistent relevance of underwriting cycle theory in explaining insurance market patterns, while also illustrating the role of evolving institutional, technological, and regulatory factors in moderating, but not eradicating, cyclical behavior in contemporary insurance markets.

4.4.0 State of the insurance sector in Kenya

To improve understanding of the insurance industry in Kenya, the study undertook a descriptive analysis of the collected data, providing distributional statistics (minimum, maximum, mean, and standard deviation) to help explain the volatility and dispersion observed in the yearly averages.

The outcomes presented in Table 4.x provide the structural dynamics and variability of the Kenyan insurance market between 2015 and 2024.

Table 4.x: Distributional patterns of insurance sector information

Factors	Factors	N	Minimum	Maximum	Mean	Std. Dev
Market Cycle	Market Cycle	870	1	3	1.90	0.831
Financial Indicators	Capital Adequacy Ratio	622	0.050	1123.700	10.684	72.084
Financial Indicators	Efficiency Ratio	659	0.020	529.440	2.743	28.562
Financial Indicators	Gross Premiums NL*	671	5.063	17.554	14.461	1.493
Financial Indicators	Income NL*	526	6.616	15.785	12.248	1.491
Financial Indicators	Investment Income NL*	524	0.693	17.163	12.478	1.823
Financial Indicators	Net Incurred Claims NL*	671	0.010	73.500	5.950	11.438
Financial Indicators	Total Assets NL*	667	12.391	19.020	15.426	1.230
Financial Indicators	Total Equity NL*	646	10.063	17.451	14.108	1.144
Financial Indicators	Total Liabilities NL*	667	10.023	18.890	14.987	1.404
Operational Indicators	Market Share	671	0.010	73.500	5.950	11.438
Operational Indicators	Number of Products	672	1	25	9.918	5.736
Operational Indicators	Mergers and Acquisitions	1	5	2.12	0.585	1
Performance Measures	Profit Margins	448	0.000	201.780	1.683	13.687
Performance Measures	ROA	455	0.000	1.300	0.063	0.086
Performance Measures	ROE	468	0.000	5.510	0.248	0.472
NL* stand for natural logarithms of the numbers shown.	NL* stand for natural logarithms of the numbers shown.	NL* stand for natural logarithms of the numbers shown.	NL* stand for natural logarithms of the numbers shown.	NL* stand for natural logarithms of the numbers shown.	NL* stand for natural logarithms of the numbers shown.	NL* stand for natural logarithms of the numbers shown.

As reported in Table 4.x, the market cycle variable takes discrete values from 1 to 3, corresponding to soft, transitional (neutral), and hard market phases, respectively. The measured distribution indicates

frequent movement across these phases rather than persistence in a single, stable market condition. The variable has a mean of 1.90 and a standard deviation of 0.831, implying that the insurance market oscillated

among the three defined market states over the study period. This level of dispersion reflected moderate variability, indicating that although market conditions changed over time, the changes were not excessively volatile. Overall, the results were consistent with the view that insurance markets followed a relatively predictable cyclical pattern influenced by underwriting performance, capital adequacy, and claims experience.

This recurrent behavior was mirrored in the financial and performance indicators presented in the table, many of which showed substantial dispersion. Profitability measures, in particular, displayed notable variability, including profit margins ($SD = 13.687$), return on assets (ROA; $SD = 0.086$), and return on equity (ROE; $SD = 0.472$). When viewed alongside the annual mean values, these patterns imply that profitability tends to deteriorate during adverse (hard) market conditions, as reflected in greater volatility in returns, and to improve when underwriting conditions normalize and capital positions stabilize.

The analysis considered multiple key financial indicators, including capital adequacy, efficiency, premiums, claims, and other balance sheet measures. Among these, the capital adequacy ratio exhibited the greatest dispersion, with a mean of 10.684 and an exceptionally high standard deviation of 72.084. The ratio ranged from 0.05 to 1,123.70, indicating extreme heterogeneity in insurers' capital positions. This wide distribution shows that while some insurers maintain substantial solvency buffers, others operate with comparatively thin capital cushions. Such dispersion helps explain the pronounced spikes in annual average capital adequacy observed in 2017 and 2023, where extreme values markedly inflated the yearly means. More broadly, the results show that capital adequacy within the sector is highly uneven, likely showing differences in firm size, capitalization strategies, and regulatory conformity. Further, the efficiency ratio also showed considerable variability, ranging from 0.02 to 529.44, with a mean of 2.743 and a standard deviation of 28.562. This dispersion implies substantial differences in operating efficiency across firms and over time. The extreme upper values contribute to the unusually high annual average

observed in 2017, suggesting episodes of elevated costs, restructuring, or operational disturbances during that period. Taken together, the findings show that business efficiency remains a crucial yet unstable determinant of financial results in the sector.

The natural logarithmic measures of gross premiums, income, and investment income exhibited relatively moderate dispersion compared with other financial indicators. Gross premiums (LN) have a mean of 14.461 and a standard deviation of 1.493, while income (LN) has a mean of 12.248 and a standard deviation of 1.491. Investment income (LN) showed slightly higher variability, with a standard deviation of 1.823, indicating greater sensitivity to financial market conditions. Overall, these relatively low standard deviations suggested steady growth in underwriting activity and income generation, consistent with the upward trends observed in the annual mean values. The comparatively higher dispersion in investment income illustrates the role of financial market performance as an important source of revenue volatility alongside underwriting results. The net incurred claims displayed pronounced variability, with values ranging from 0.01 to 73.50, a mean of 5.95, and a standard deviation of 11.438. This wide dispersion reflected substantial differences in claims experience across firms and time periods, probably driven by variations in underwriting portfolios, risk exposure, and the occurrence of catastrophic loss events. The increase in claims, reflected in the annual mean values between 2019 and 2021, is consistent with the elevated level of variability.

Balance sheet indicators, including total assets, equity, and liabilities, exhibited comparatively stable dispersion relative to operational and profitability measures. Total assets (LN) had a mean of 15.426 and a standard deviation of 1.230; total equity (LN) showed a mean of 14.108 with a standard deviation of 1.144; and total liabilities (LN) had a mean of 14.987 and a standard deviation of 1.404. These moderate standard deviations indicated that, although firms differed in scale, balance sheet growth across the sector followed relatively stable patterns. This finding corresponds to the steady increases in assets, equity, and liabilities observed in the annual means over the

study period. Additional operational indicators include market share, product offerings, and mergers and acquisitions. Market share exhibited substantial dispersion, with a mean of 5.95 and a standard deviation of 11.438, and values ranging from 0.01 to 73.50. This distribution indicated a highly competitive industry structure, characterized by a small number of dominant insurers alongside many smaller firms with limited market share. The results highlighted a sector that is simultaneously concentrated and fragmented.

The number of insurance products offered ranged from 1 to 25, with a mean of 9.918 and a standard deviation of 5.736, indicating moderate variation in product diversification across insurers. The upward trend in annual mean values from 2015 to 2021 suggested a calculated shift toward broader product offerings, apparently aimed at broadening market reach and responding to evolving customer demands. Similarly, the mergers and acquisitions indicator displayed relatively low variability, with a mean of 2.12 and a standard deviation of 0.585. This firmness suggested that large-scale consolidation was limited during the study period. Instead, insurers appeared to rely more on internal restructuring and operational modifications than on extensive merger activity.

Finally, performance was assessed using profit margins, ROA, and ROE. Profit margins showed extreme variability, ranging from 0.00 to 201.78, with a mean of 1.683 and a standard deviation of 13.687. This high dispersion indicates that profitability outcomes differed markedly across firms and time, helping to explain the pronounced spikes in annual mean profit margins observed in 2016 and 2023. The results show the sensitivity of underwriting profitability to swings in claims experience,

operational proficiency, and investment income. The information collected revealed that ROA had a mean of 0.063 (6.3%) and a standard deviation of 0.086, with values ranging from 0 to 1.30. This suggested that most insurers generated modest returns on assets, with a small number of observations reflecting unusually high performance. Overall, the relatively low mean ROA indicated the thin margins typical of the insurance industry. In contrast, ROE displayed a higher mean of 0.248 (24.8%) and greater dispersion ($SD = 0.472$), showing more volatile returns to shareholders. The maximum value of 5.51 suggested that some firms benefited from leverage effects or extraordinary income events, resulting in exceptionally high equity returns.

5.0 Empirical Review of Findings

Table 5.1 presents the Pearson correlation coefficients among key financial and operational characteristics of insurers, including the Capital Adequacy Ratio (CAR), Efficiency Ratio, Gross Premiums (log), Income (log), Investment Income (log), Market Share, and Net Incurred Claims (log). The correlation analysis serves to diagnose and interpret the relationship between descriptive firm fundamentals and the multivariate ARCH-based estimation of Market Status discussed in the subsequent empirical review. This approach clarifies how scale, risk exposure, and operational structure are interrelated within the insurance sector. It also provides early insight into which variables convey overlapping information and may lose marginal explanatory power in a multivariate context. Finally, the analysis establishes a theoretical foundation for understanding why certain variables emerge as significant or insignificant in the Market Status regression, even when they possess strong intuitive appeal.

Table 5.1: Correlation matrix of the financial indicators in the insurance sector

Financial Indicators	Financial Indicators	Capital Adequacy Ratio	Efficiency Ratio	Gross Premiums (LN)	Income (LN)	Investment Income (LN)	Market Share	Net Incurred Claims (LN)
Capital Adequacy Ratio	Pearson Correlation	1	.298**	-0.054	0.013	-0.041	.104**	-.397**

Capital Adequacy Ratio	Sig. (2-tailed)		0.000	0.183	0.765	0.369	0.010	0.000
Capital Adequacy Ratio	N	622	616	620	499	485	618	621
Efficiency Ratio	Pearson Correlation	.298**	1	-.077*	-.094*	-.148**	-0.028	-.222**
Efficiency Ratio	Sig. (2-tailed)	0.000		0.047	0.033	0.001	0.474	0.000
Efficiency Ratio	N	616	659	657	513	515	656	644
Gross Premiums (LN)	Pearson Correlation	-0.054	-.077*	1	.568**	.686**	.273**	.732**
Gross Premiums (LN)	Sig. (2-tailed)	0.183	0.047		0.000	0.000	0.000	0.000
Gross Premiums (LN)	N	620	657	671	521	522	666	648
Income (LN)	Pearson Correlation	0.013	-.094*	.568**	1	.586**	.418**	.461**
Income (LN)	Sig. (2-tailed)	0.765	0.033	0.000		0.000	0.000	0.000
Income (LN)	N	499	513	521	526	387	520	509
Investment Income (LN)	Pearson Correlation	-0.041	-.148**	.686**	.586**	1	.357**	.612**
Investment Income (LN)	Sig. (2-tailed)	0.369	0.001	0.000	0.000		0.000	0.000
Investment Income (LN)	N	485	515	522	387	524	522	508
Market Share	Pearson Correlation	.104**	-0.028	.273**	.418**	.357**	1	.243**
Market Share	Sig. (2-tailed)	0.010	0.474	0.000	0.000	0.000		0.000
Market Share	N	618	656	666	520	522	671	646
Net Incurred Claims (LN)	Pearson Correlation	-.397**	-.222**	.732**	.461**	.612**	.243**	1

Net Incurred Claims (LN)	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	
Net Incurred Claims (LN)	N	621	644	648	509	508	646	651

All size-related financial variables are expressed in natural logarithms to mitigate skewness, reduce heteroscedasticity, and allow for elasticity-based interpretation. Statistical significance is evaluated at the 1% and 5% levels. Sample sizes range from 387 to 671 observations, reflecting reporting availability, but remain sufficiently large to ensure reliable inference.

5.1 Capital Adequacy, Risk Exposure, and Informational Redundancy

The Capital Adequacy Ratio (CAR) demonstrates a moderate and statistically significant positive correlation with the Efficiency Ratio ($r = 0.298$, $p < 0.01$), indicating that better-capitalized insurers generally operate more efficiently. This relationship aligns with governance-based explanations, as firms with stronger capital buffers typically invest more in risk controls, internal monitoring, and disciplined underwriting, all of which support operational efficiency. In relation to Market Share, CAR displays a positive but weak correlation ($r = 0.104$, $p < 0.01$). Although capital strength can facilitate incremental expansion by enhancing regulatory credibility and customer confidence, the modest magnitude of this relationship suggests that capital adequacy is not the principal driver of market presence.

Additionally, CAR is strongly and negatively correlated with Net Incurred Claims ($r = -0.397$, $p < 0.01$). This inverse relationship identifies claims exposure as a primary channel through which solvency is eroded. Elevated claims reflect adverse risk realization, weak underwriting discipline, or catastrophic shocks, all of which directly deplete capital buffers. This finding is central for interpreting the regression results: although CAR is theoretically important, its informational content overlaps substantially with realized claims outcomes.

Consequently, CAR may lose statistical significance in the Market Status model when claims are explicitly included. Notably, CAR exhibits no statistically meaningful correlation with Gross Premiums, Income, or Investment Income, reinforcing the conclusion that capital adequacy reflects risk quality and balance-sheet resilience rather than firm size.

5.2 Efficiency Ratio, Scale, and Cost Structures

The Efficiency Ratio is negatively and significantly correlated with Gross Premiums ($r = -0.077$, $p < 0.05$), Income ($r = -0.094$, $p < 0.05$), and Investment Income ($r = -0.148$, $p < 0.01$). Although modest in magnitude, these relationships are systematic and indicate that larger insurers tend to operate more efficiently, consistent with economies of scale and scope. As revenue bases expand, fixed administrative and compliance costs are distributed more broadly, lowering relative expense burdens. Efficiency also displays a strong negative correlation with Net Incurred Claims ($r = -0.222$, $p < 0.01$). Claims represent the dominant cost component in insurance operations; higher claims volumes increase administrative load, litigation, and monitoring costs, directly reducing operational efficiency.

However, the Efficiency Ratio does not display a significant correlation with Market Share, implying that market dominance does not guarantee cost discipline. This disconnect anticipates its lack of explanatory power in the Market Status regression. Internal efficiency measures, although economically meaningful, are not sufficiently salient or observable to influence external perceptions of status.

5.3 Gross Premiums as the Central Scale Variable

Gross Premiums (log) emerge as the central scale proxy in the correlation matrix. Premiums are strongly

correlated with Income ($r = 0.568$, $p < 0.01$) and Investment Income ($r = 0.686$, $p < 0.01$), confirming the dual-revenue structure of insurance firms, where underwriting volume supports both operating income and investable asset growth. The very strong positive correlation between Gross Premiums and Net Incurred Claims ($r = 0.732$, $p < 0.01$) reflects the direct linkage between underwriting volume and risk assumption. Increased business volume inevitably expands exposure to insured events, raising absolute claims.

Gross Premiums are also positively correlated with Market Share ($r = 0.273$, $p < 0.01$), as expected since market share is typically derived from premium volumes. However, the absence of any significant relationship between Gross Premiums and CAR is particularly instructive. Premium growth does not strengthen solvency unless accompanied by adequate pricing, reserving, and capital accumulation. This insight directly supports the regression finding that gross premiums exert a negative effect on Market Status, indicating that growth may be interpreted as overextension rather than stability.

5.4 Income, Investment Income, and Scale Effects

Income (log) is strongly correlated with Investment Income ($r = 0.586$, $p < 0.01$), highlighting the importance of asset returns in shaping total earnings. Income also shows a positive and significant association with Net Incurred Claims ($r = 0.461$, $p < 0.01$), reflecting scale effects: larger insurers earn more but also incur more claims. Additionally, Income's moderate positive correlation with Market Share ($r = 0.418$, $p < 0.01$) reinforces the size-based interpretation of revenue generation. However, similar to efficiency and capital adequacy, income does not retain independent explanatory power for Market Status once premiums and claims are included. The correlation structure explains this outcome: income aggregates underwriting and investment returns but provides little additional information beyond scale and risk realization.

5.5 Investment Income and Financial Complexity

Investment Income (log) is strongly correlated with Gross Premiums, Income, and Net Incurred Claims (all $p < 0.01$), confirming that investment performance

scales directly with the volume of premiums collected and reserves held. Larger insurers possess greater investable funds and therefore generate higher absolute investment returns. Investment Income also exhibits a moderate positive correlation with Market Share ($r = 0.357$, $p < 0.01$), suggesting that firms with broader market presence benefit from enhanced investment capacity. However, its negative correlation with the Efficiency Ratio ($r = -0.148$, $p < 0.01$) implies that reliance on investment activities may introduce organizational complexity and higher oversight costs. These offsetting relationships explain why investment income fails to achieve statistical significance in the Market Status model. While economically important, it is neither a clear signal of prudence nor an unambiguous marker of stability from an external perspective.

5.6 Market Share, Claims, and Status-Relevant Signals

Market Share is positively correlated with all scale-related variables and with Net Incurred Claims, indicating that market dominance is closely linked to both revenue generation and risk exposure. However, its weak correlation with CAR underscores that visibility and size do not guarantee solvency strength. Net Incurred Claims occupy a pivotal position in the correlation structure. Claims are positively associated with scale variables but strongly negatively related to CAR and efficiency, indicating that they are the principal conduit through which growth translates into financial strain. Simultaneously, claims are highly observable and reputationally salient. This dual nature explains their positive and significant coefficient in the Market Status regression: claims volumes, when interpreted as credible claim settlement capacity rather than distress, enhance perceived reliability.

5.6 Integrated Interpretation and Implications

The correlation matrix reveals a clear structural dichotomy. Gross Premiums, Income, Investment Income, and Market Share form a tightly interconnected scale cluster, while Capital Adequacy, Efficiency, and Claims capture risk, cost, and stability dimensions. Strong correlations within the scale cluster explain why only a subset of these variables, most notably Gross Premiums and Net Incurred

Claims, retain explanatory power in the multivariate and ARCH-adjusted model.

The correlation structure anticipates the regression results: aggressive premium growth increases claims exposure without improving capital adequacy, thereby undermining market status, while visible claims servicing enhances reputational standing despite its accounting cost. Methodologically, the strong interrelationships justify caution regarding multicollinearity and validate the selective significance observed in the ARCH framework.

Overall, the correlation analysis reinforces the central conclusion of the empirical model: market status in insurance is shaped less by static balance-sheet strength and more by observable engagement with risk, particularly in terms of firm growth and performance when claims materialize.

6.0 Recommendations for Further Study

Nonlinear Relationship Between Premium Growth and Capital Adequacy

Future empirical research should explicitly test for nonlinear relationships between premium growth and capital adequacy in Kenyan insurance firms. It is important to examine whether a threshold exists beyond which aggressive premium expansion adversely affects solvency ratios when capital growth does not keep pace. Conversely, periods of subdued premium growth may sustain adequate capitalization if firms maintain prudent underwriting and risk management practices. Applying established nonlinear econometric techniques, such as threshold or regime-switching models, would enable formal identification of growth levels at which financial stability risks increase.

Extended Longitudinal Analysis

Subsequent studies should employ longer panel datasets to capture the delayed effects of strategic decisions, including mergers, acquisitions, and product diversification. These strategic interventions often exert their impact over multiple years and across varying market conditions. Extending the temporal scope of analysis will improve the ability to distinguish transitory performance fluctuations from

persistent structural changes in profitability and solvency.

Integration of External Performance Indicators

Performance evaluation frameworks should be expanded to include systematically measurable external indicators such as credit ratings, customer retention rates, and complaint ratios. These variables capture elements of market confidence and stakeholder trust that are not fully reflected in financial statements. Incorporating these indicators alongside accounting-based measures will enhance the explanatory power of performance models, particularly in competitive market environments.

Cross-Sector Comparative Analysis

To assess the specificity of observed dynamics within insurance markets, future research should conduct comparative analyses with other regulated financial sectors, such as banking and asset management. These sectors are subject to similar regulatory oversight and are also exposed to cyclical market conditions. Cross-sector comparisons would clarify whether the identified performance patterns are unique to insurance firms or reflect broader financial-sector behavior, thereby informing a more coherent financial-sector policy design in Kenya.

APPENDIX

The appendix sits at the junction of the small intestine and large intestine. It's a thin tube about four inches long. Normally, the appendix sits in the lower right abdomen.

The function of the appendix is unknown. One theory is that the appendix acts as a storehouse for good bacteria, "rebooting" the digestive system after diarrheal illnesses. Other experts believe the appendix is just a useless remnant from our evolutionary past. Surgical removal of the appendix causes no observable health problems.

ACKNOWLEDGMENT

Acknowledgement letter is very short business letter, and is intended to communicate brief and clear message. It is quite common to use this letter if you are not aware at the time of future developments in regard to someone's query.

REFERENCES

- [1] Akerlof, G. A. (1970). The market for “lemons”: Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3), 488–500. <https://doi.org/10.2307/1879431>
- [2] Arrow, K. J. (1963). Uncertainty and the welfare economics of medical care. *The American Economic Review*, 53(5), 941–973.
- [3] Association of Kenya Insurers. (2024). Insurance industry annual report 2023/2024. Nairobi, Kenya: AKI.
- [4] Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5(4), 323–370. <https://doi.org/10.1037/1089-2680.5.4.323>
- [5] Berger, A. N., Cummins, J. D., & Weiss, M. A. (1997). The coexistence of multiple distribution systems for financial services: The case of property–liability insurance. *The Journal of Business*, 70(4), 515–546.
- [6] Bikhchandani, S., & Sharma, S. (2000). Herd behavior in financial markets. *IMF Staff Papers*, 47(3), 279–310.
- [7] Bitektine, A. (2011). Toward a theory of social judgments of organizations: The case of legitimacy, reputation, and status. *Academy of Management Review*, 36(1), 151–179. <https://doi.org/10.5465/amr.2009.0382>
- [8] Born, P. (2001). Insurer insolvency and market stability. *Journal of Risk and Insurance*, 68(3), 413–443.
- [9] Cummins, J. D., & Doherty, N. A. (2006). The economics of insurance intermediaries. *Journal of Risk and Insurance*, 73(3), 359–396. <https://doi.org/10.1111/j.1539-6975.2006.00187.x>
- [10] Cummins, J. D., Harrington, S. E., & Klein, R. W. (1995). Insolvency experience, risk-based capital, and prompt corrective action in property–liability insurance. *Journal of Banking & Finance*, 19(3–4), 511–528.
- [11] Cummins, J. D., & Outreville, J. F. (1987). An international analysis of underwriting cycles in property–liability insurance. *Journal of Risk and Insurance*, 54(2), 246–262.
- [12] Cummins, J. D., Weiss, M. A., & Zi, H. (2014). Economies of scope in financial services: Evidence from the US insurance industry. *Journal of Banking & Finance*, 39, 93–108.
- [13] Deephouse, D. L. (2000). Media reputation as a strategic resource: An integration of mass communication and resource-based theories. *Journal of Management*, 26(6), 1091–1112.
- [14] Deephouse, D. L., & Suchman, M. (2008). Legitimacy in organizational institutionalism. In R. Greenwood et al. (Eds.), *The SAGE handbook of organizational institutionalism* (pp. 49–77). London: SAGE.
- [15] Eckles, D. L., Hoyt, R. E., & Miller, S. M. (2014). Reputational risk and the financial performance of insurance companies. *Journal of Risk and Insurance*, 81(4), 819–844.
- [16] Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57–74.
- [17] Eling, M., & Schmit, J. T. (2012). Is there market discipline in the European insurance industry? *Journal of Risk and Insurance*, 79(3), 789–814.
- [18] Fombrun, C., & Shanley, M. (1990). What’s in a name? Reputation building and corporate strategy. *Academy of Management Journal*, 33(2), 233–258.
- [19] Grace, M. F., & Leverty, J. T. (2012). Property–liability insurer financial strength ratings: Associations with profitability, leverage, and risk. *Journal of Risk and Insurance*, 79(1), 133–164.
- [20] Holmström, B. (1999). Managerial incentive problems: A dynamic perspective. *Review of Economic Studies*, 66(1), 169–182.
- [21] Insurance Regulatory Authority. (2022). Insurance industry annual report. Nairobi, Kenya: IRA.
- [22] Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- [23] Jones, C., Hesterly, W., & Borgatti, S. (1997). A general theory of network governance. *Academy of Management Review*, 22(4), 911–945.

- [24] Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291.
- [25] Kimani, J. (2023). Determinants of financial performance of insurance firms in Kenya. Unpublished doctoral dissertation, University of Nairobi.
- [26] Klein, R. W. (2012). Insurance regulation in transition. *Journal of Risk and Insurance*, 79(3), 569–580.
- [27] Matten, D., & Moon, J. (2008). “Implicit” and “explicit” CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424.
- [28] Mintzberg, H. (1979). *The structuring of organizations*. Englewood Cliffs, NJ: Prentice Hall.
- [29] Morara, K., & Sibindi, A. (2021). Financial performance determinants of Kenyan insurance firms. *Journal of Accounting and Finance in Emerging Economies*, 7(1), 89–104.
- [30] Morgan, R. M., & Hunt, S. D. (1994). The commitment–trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20–38.
- [31] Ndubisi, N. O. (2007). Relationship marketing and customer loyalty. *Marketing Intelligence & Planning*, 25(1), 98–106.
- [32] Njuguna, A. (2019). Competitive strategies and performance of insurance firms in Kenya. *International Journal of Business and Management*, 14(6), 45–59.
- [33] Outreville, J. F. (2013). *Risk, insurance and development*. Cambridge: Cambridge University Press.
- [34] Podolny, J. M. (2005). *Status signals: A sociological study of market competition*. Princeton, NJ: Princeton University Press.
- [35] Pollock, T. G., Chen, G., Jackson, E. M., & Hambrick, D. C. (2010). How much prestige is enough? *Academy of Management Journal*, 53(1), 52–78.
- [36] Rhee, M., & Valdez, M. E. (2009). Contextual factors surrounding reputation damage. *Academy of Management Journal*, 52(1), 104–125.
- [37] Rindova, V. P., Pollock, T. G., & Hayward, M. L. A. (2006). Celebrity firms. *Academy of Management Journal*, 49(1), 50–71.
- [38] Servaes, H., & Tamayo, A. (2013). The impact of CSR on firm value. *Management Science*, 59(5), 1045–1061.
- [39] Shapiro, C. (1983). Premiums for high quality products as returns to reputations. *The Quarterly Journal of Economics*, 98(4), 659–680.
- [40] Shapiro, C. (1987). Reputation and the dynamics of oligopoly. *The Economic Journal*, 97(385), 134–144.
- [41] Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355–374.
- [42] Swiss Re. (2019). *Sigma: Natural catastrophes and man made disasters*. Zurich: Swiss Re Institute.
- [43] Swiss Re. (2022). *World insurance: Inflation risks and rising claims*. Zurich: Swiss Re Institute.
- [44] Thomas, R. G. (2023). Insurance market cycles and underwriting behavior. *Journal of Insurance Regulation*, 42(1), 1–29.
- [45] Vaughan, E. J., & Vaughan, T. M. (2013). *Fundamentals of risk and insurance* (11th ed.). Hoboken, NJ: Wiley.
- [46] Vaughan, E. J., & Vaughan, T. M. (2014). *Risk management and insurance* (10th ed.). Hoboken, NJ: Wiley.
- [47] Williamson, O. E. (1985). *The economic institutions of capitalism*. New York, NY: Free Press.
- [48] Winter, R. A. (1994). The dynamics of competitive insurance markets. *Journal of Financial Intermediation*, 3(4), 379–415.
- [49] Wainaina, G. (2023). Insurance firm distress and solvency dynamics in Kenya. *African Journal of Economic and Management Studies*, 14(3), 412–428.