ABSTRACT

Insurance industry is among the large investors in the financial markets that play a key role of stabilizing financial systems. The industry acts as a growing link between insurers and other financial intermediaries by safeguarding the financial security of households and firms through insurance of risks, provision of long-term capital and overall stability of an economy. Global corporate failure has not spared the insurance industry at regional and local levels which has triggered insurance companies to opt for diversification to expand their markets, enhance returns and survival. This study examines corporate diversification-market share link in the Kenyan insurance sector. The study employs entropy index to measure corporate diversification, and market share as indicator for performance. The study is anchored on modern portfolio theory and supported theory of organizational effectiveness. The target population comprises fifty-six insurance firms in Kenya. Secondary data was collected from published account and company accounts filled at the insurance regulatory authority. Market share was computed as the percentage of gross written premium (GWP) for each company in relation to total industry GWP between the years 2016 and 2020. This study adopted a descriptive research design. Preliminary statistical tests undertaken include descriptive statistics such as the mean, standard deviation, skewness and kurtosis. Correlation analysis was done to test the direction of the relationships while regression analysis was used to test the hypotheses. The study findings established that corporate diversification has a significant influence on market share. From the empirical findings of this study, companies that have ventured into more lines of business have reported higher entropy index than those with fewer lines of products and perform well thus managers of insurance companies should focus on creation and selling more appealing products and improve on penetration to the large untapped market. Future research can be extended to contexts within the developing economies category and other financial service sectors and non-financial sectors by evaluating the diversification index that is well suited to them that would provide more insights into the relationships.

Keywords: Corporate Diversification, Kenyan Insurance Sector, Market, Performance.

I. INTRODUCTION

In the light of global financial crisis, diversification has become an imperative issue that concern financial stability. Corporate diversification is used to enlarge firm’s operations by enhancing existing business through additional products, markets, services or reworking on the stages of production (Santalo & Becerra, 2008). Further, Ronald and George (2016) assert that organizational performance is best evaluated by quality products and services, satisfying customers and employees and how well it controls the market. When firms are faced with shrinking market or diminishing sales, diversification may be considered and used by a firm as a tool for reducing investment risk or facilitating resource deployment thereby enhancing efficiency. In support of this view, Kuppuswamy and Villalonga (2015) and Shi et al. (2016) believe that companies diversify into businesses that have profit opportunities.

Westerman et al. (2020) revealed that making customers feel valued through increased customer focus and offering additional value-added services may inspire additional business in the future. Improving the way, the public views a firm may mean increased business and stronger relationships with the community which translate to gaining more space in the market (Datta, 2017). Therefore, focus on organizational culture should be emphasised by firms that seek to improve performance. Financial and non-financial performance goals drive higher profits and aid in improving the company performance. The non-financial improvements help supplement company’s strengths in areas like brand awareness, value added services and customer focus. These areas create a stronger company that can perform better in the market and augment profits. Monika et al. (2019) stated that, performance may be managed through operating metrics or service level agreements that increase profitability. The learning perspective performance take account of acquiring
new competencies and capabilities which lead to more quality services and larger market share.

Since organizations pursue identifiable and ultimate goals, organizational performance can be expressed in relation to goal attainment. Further, Ronald and George (2016) assert that organizational performance is best evaluated by quality products and services, satisfying customers and employees and market performance. The non-financial metrics of preference, customer retention, customer experience, innovation and take rate all point to company’s market share. This makes market share the primary measure for both the company and marketing’s success and allows for accountability. A non-financial measure of market share helps to communicate marketing’s contribution and their influence on an organization. Market share has been commonly used to indicate firm performance, especially in management studies (Humphrey, 2018; Delai & Daip, 2019), and therefore was used in this study as an indicator of performance.

In Kenya, insurance industry service providers have expanded their operations into related and unrelated activities with some expanding operations beyond borders into other markets including Rwanda, Uganda, Tanzania, and Southern Sudan. Others have also ventured heavily in unrelated areas that include investments in loans, securities, properties and mortgages that form a huge asset base (IRA, 2019).

II. RESEARCH PROBLEM

Insurance companies and other financial intermediaries are faced with financial crises that have adverse effect on their performance. This has been occasioned by reliance on one source of income, and failure to seize untapped market among others. With the majority of Kenya’s population lack to consume insurance products, many challenges face insurance companies’ industry including persistence low penetration, low profitability, constrained resources to promote products, consumer apathy and competition among others. The industry gross earned premium has been relatively constant over the past 5 years. However, profit before tax was on a decreasing trend from 2016 to 2018 as profits after tax dropped by 61.56% but increased significantly in 2019 then significantly dropped with over 68% in 2020. Insurance industry also faces negative attributes for instance unhealthy competition and apathy by consumers (IRA, 2017).

An empirical review of literature has concurred on lack of consensus on the link between diversification and proportion of market controlled by firms. Corporate diversification has been projected by Chen and Keung (2018) as a critical strategy to turn around performance of financial institutions. Observations have cited a positive relationship that diversification improves performance over time (Hoskis et al., 2016). Evidence still projects the relevance of corporate diversification in gaining competitive edge in a dynamic market (Nisar et al., 2018). Proponents of diversification argue that divergence becomes a central avenue to control market power both locally and in foreign markets. Critics of diversification have indicated negative linkage and that diversification curtail performance in the market (Ibragimov et al., 2011).

In 2013, global insurance industry has continued to record shrinkage of insurance growth. Similar shrinkage trends were recorded in 2016-2018 and were accelerated more by Covid 19 pandemic (OECD, 2021). While profitability can be partially explained by specific economic or political events in individual countries, some countries operate amid persistent challenging environment while to others under performance is driven by mature markets and negative perception by potential customers. For example, in Jordan, poor performance of insurance industry was linked to challenges in cash flow that significantly affected operations while Indian decline in performance of insurance firms was attributed to customer apathy. Santalo and Becerra (2008) provided evidence that differences on diversification components adopted brings variations on results. Disagreement also exists as to whether diversification is universally viable or not hence the relationship becomes contradictory and inconclusive. Evidence also reveals that effect of diversification is shaped by maturity of markets and larger business group affiliations (Rudolph & Schwetzler, 2013). Moreover, researchers’ show that differences could stem from selection bias and database biases. Therefore, whether diversification improves or diminishes value remains a controversy.

Concepts under analysis have been analyzed in different sectors or across several countries. The current study aims to bridge the gap by analyzing these concepts in the Kenyan insurance sector. Other than the conceptual gaps, the effect of diversification is contingent on data and methodologies applied, time period and geographic location. Studies have employed HHI. To address the shortfalls of this measure, current study utilizes Shannon Entropy Index. Shannon Entropy Index incorporates diverse business segments and quantifies unrelated product diversification. Because of the logic of its development and application, the entropy index is sensitive to very small firms and also takes into account the number of segments that a firm undertakes and the relative significance of each segment in sales. It is against this backdrop that this study examines the effect of corporate diversification-market share linkage in the insurance sector in Kenya. The question then hinges on; does corporate diversification influence market share?

III. RESEARCH OBJECTIVE

The objective of this study is to determine the influence of corporate diversification on market share of insurance companies in Kenya.

IV. THEORETICAL UNDERPINNING

The diversification and performance relationship are founded on modern portfolio theory (MPT). The fit in of organizational culture in this relationship is supported by the stakeholder theory. Modern portfolio theory was originally advanced by Markowitz (1952) and is among significant economic theories concerned with investment and weights the advantages of diversification. The theory explains how investors optimize wealth and reduce exposures through introduction of different products in various investment
portfolios. The theory projects diversification as a factor to minimize risk even though assets or product returns are positively correlated. In advocacy of MPT, Jansson and Biel (2011) argue that it’s commonly applicable and acts a vital task to financial institution performance studies. The theory conceptualization indicates that investors minimize exposures through diversification of business activities where firms can profitably apply resources and increase return on asset. The underpinning of modern portfolio theory in this study forms the basis for assessment of lines of business undertaken by insurers (as insurers investment portfolios) and what return they give in proportion to the total gross premium written by a company.

Theory of organizational effectiveness was developed by Freeman and Hannan (1979) who argued that organizational effectiveness depends on its immediate resource base. They further contend that organizations that perform adequately during challenging market dynamisms are possibly more effective than those that perform in a relatively stable environment. Hannan and Freeman (1979) believe that long-term change in the diversity of organizations form through selection rather than adaptation. According to the theory, effective organizations deal with constraints that hinder them from attaining goals by strategically aligning to the market. In absence of funds to access best and most efficient solution, managers opt for alternative ways to achieve results needed. Effective organizations find ways to perform effectively by using the assets they have prudently and strategically adapted to their market environment. As such, performance effects of diversification can be attributed to how diversified firms effectively allot resources. However, the allotment is often biased towards promising opportunities in instances of related diversifiers, and towards poor opportunities in highly diversified firms. Norbert (2014) who is a proponent of the theory posits that most organizations have structural inertia that obstructs adaptation during changes. Organizational inertia is acknowledged as obstacles that prevent organizations from adjusting due to a particular existing dynamism. To achieve high effectiveness, organizations need to identify the constraints and consciously work towards minimizing their effect. Such strategy enables firms to readily adapt to changes and performance challenges. Hurry and Bowman (2015) indicate that organizations that become incompatible with the market needs are eventually phased out through competition by organizations that are well suited to external demands. A usual measure of effectiveness of an organization is also regarded as how well an organization accomplishes its goals, which is indicated by measuring performance. This theory was applicable in this study since it sheds light on understanding diversification as an antecedent for firm effectiveness and the market share.

V. EMPIRICAL LITERATURE

Hoskis et al. (2016)’s focus was multiproduct diversification and firm performance. Empirical findings indicated that unrelated multiproduct diversification is often used in developed and efficient markets. Models tested suggested that unrelated diversification is linked to less attractive risk and return profiles while related diversification is linked to more attractive risk and return profiles.

The study supported the predicted curvilinear connection of diversification and firm performance. The relationships were reported to be temporarily stable throughout swings in business economic cycles. The study analyzed data across developed and efficient markets which have distinct market features hence the study findings could not be generalized in developing economies. This study sought to address similar constructs in an emerging insurance market.

McGrath and Nerkar (2016) analyzed pharmaceutical industry in relation to organizational size and unrelated diversification. They established considerable diversifications in pharmaceutical industry and those enterprises leverage resources into increasingly unrelated product markets. It was also established that unrelated diversifications performed at a premium. Though classification using discretionary nature of assets is appropriate for diverse forms of resources, operational definition of size in the study used human capital data that does not account for other types of resources. The focus of the study was pharmaceutical industry that is mostly composed of closely held private small sized firms (asset base) and disregards the market dominance but focus on profits. Their operations are also focus-based as opposed to insurance firms that engage with varied scope of underwriting and investment undertakings. The study tested the effect of diversification on market share.

Diversification, structure and organizational assets to improve on performance are emphasized by Howard and Walters (2014) who studied Chinese firms for a five-year period using primary data. They revealed that organizations are dependent on assets that are key task in establishing structures to enable firms to derive best performance. The study found that market changes that call for diversification relied on asset configurations. In China, for instance, changing market patterns led to multiple strategic fits of culture, resources and markets. The results of the study were based on China’s transition economy and must be viewed with caution for generalization and applicability to other contexts since conditions of other economies could vary significantly.

VI. CONCEPTUAL FRAMEWORK

The conceptual model depicts a relationship of corporate diversification and market share as an indicator of performance of insurance companies. A possible link between corporate diversification and performance was represented in the model. The conceptual model showing the schematic linkages between the study variables is illustrated in Fig. 1.
VII. RESEARCH HYPOTHESIS

H0: The relationship between corporate diversification and non-financial performance is not significant.

VIII. METHODOLOGY

The target population in this study comprised fifty-six insurance firms in Kenya. According to the AKI report (2020), 56 firms were registered to undertake insurance business in Kenya as of December 2020. Of the 56 insurance companies, 18 operate life insurance business, 33 are in general insurance business and 5 combine both life and general businesses. All the 52 companies in the insurance industry that met the sought data requirements for computing diversification index, and financial performance measures during the years 2016-2020 were encompassed in the analysis.

Secondary data for computing performance measures were drawn from the firm’s annual accounts, Insurance regulatory authority (IRA) and association of Kenya insurers (AKI) annual reports. To measure corporate diversification, data was sourced on insurance premiums for each line of insurance collected from annual records. Data to capture market share was collected on gross written premium (GWP) for each company in relation to total industry GWP between the years 2016 and 2020.

A. Measurements

Corporate diversification was measured by Entropy index. The index is considered more reliable when measuring related and unrelated diversification. Because of the logic of its development and application, entropy measure is also more sensitive to very small firms. Entropy measure also takes into account the number of segments that a firm undertakes and the relative significance of each segment in sales therefore was found to be appropriate and adopted in this study.

Market share was computed as the percentage of gross written premium (GWP) for each company in relation to total industry GWP between the years 2016 and 2020.

B. Data Analysis

Regressions analysis was utilized to test the association of corporate diversification and non-financial performance as measured by market share. Correlation analysis was conducted to establish relationships between the study variables, to reveal direction as well as the magnitude of the relationships.

C. Model

\[ NFP = \alpha + \beta CDV + \epsilon \]

where:

NFP is non-financial performance computed as the mean of market share,
CDV denotes Corporate Diversification calculated as the entropy index,
\( \alpha \) = Regression constant,
\( \beta \) = Regression coefficients,
\( \epsilon \) is the random error term that accounts for variability unexplained by linear effects.

The correlation coefficient was determined, and the tests of significance done using t-test to establish existence of relationship between independent and dependent variables. A relationship existed if the coefficients were found to be statistically significant.

IX. FINDINGS AND DISCUSSIONS

Descriptive statistics for the study variables were as shown in Table I.

Entropy index was computed to measure corporate diversification and the descriptive statistics are as summarized in Table I. The results indicated on Table I show that corporate diversification (CDV) reported mean of 1.5443, a standard deviation of 0.64. These values indicated that some companies were operating several lines of insurance thus largely diverse while others were limited to few lines of business. Kurtosis of 0.0489 and skewness reported at 0.1549 respectively. This implies that corporate diversification measure (entropy index) is flatter than normal but within the acceptable range and skewed to the right. Entropy Index is symmetrical as it is skewed to the right as evidenced by the positive skewness score.

### TABLE I: DESCRIPTIVE STATISTICS

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std.Dev</th>
<th>SK</th>
<th>KU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Diversification</td>
<td>52</td>
<td>0.17</td>
<td>2.61</td>
<td>1.5443</td>
<td>0.639</td>
<td>0.155</td>
<td>0.049</td>
</tr>
<tr>
<td>Market Share</td>
<td>52</td>
<td>0.45</td>
<td>23.05</td>
<td>3.6040</td>
<td>4.099</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

### TABLE II: REGRESSION RESULTS FOR CORPORATE DIVERSIFICATION AND NON-FINANCIAL PERFORMANCE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>6.693031</td>
<td>1.440068</td>
<td>4.647718</td>
<td>0.0000</td>
</tr>
<tr>
<td>CDV</td>
<td>-1.998602</td>
<td>0.862310</td>
<td>-2.317730</td>
<td>0.0251</td>
</tr>
</tbody>
</table>

R-squared 0.097001
Adjusted R-squared 0.079056
S.E. of Estimate 3.933400
Sum squared resid. 773.5778
F-statistic 5.371140
Prob. 0.024594

Dependent Variable: N FP
Predictors: (Constant), CDV
Periods included: 5
Observations: 52
The market share values also showed that some few companies controlled a big market share while majority shared a small proportion of the market. Pearson Moment Correlation was utilized to test the presence of relationships. Results of correlation analysis between non-financial performance (market share) and corporate diversification is inverse and not statistically significant ($r = -0.311$). Results of regression analysis were as indicated in Table II.

The model of second sub hypotheses was calculates using (2).

$$NFP = \alpha + \beta_1 CDV + \varepsilon_1$$

As indicated by Table II of regression results, the association between corporate diversification and non-financial performance as measured by market share was statistically significant but inverse ($\beta = -1.99, p<0.05$). This implies that corporate diversification is a significant predictor of market share. Specification of the prediction equation is given in (3).

$$NFP = 6.693 - 1.998 CDV$$

Results of the overall model reported a significant F value of 5.37 and p values of 0.024. The adjusted $R^2$ was ($R^2 = 0.0790$) while 0.921 was explained by other factors not tested in this model. The overall model was statistically significant. The study null sub-hypothesis was therefore rejected, and it was concluded that corporate diversification has significant effect on non-financial performance (as measured by market share) of insurance companies in Kenya.

As indicated by Table II of regression results, the model reported a significant F value ($p < 0.05$). The adjusted $R^2$ was ($R^2 = 0.0790$) while 0.921 was explained by other factors not tested in this model. The model was statistically significant. The research findings indicate that corporate diversification is a significant predictor of market share ($\beta = -1.99, p<0.05$) although the relationship is inverse. The study noted that the p-value of CDV was less than 0.05 ($t=2.32, p=0.025$), and deduced that CDV had a significant effect on market share. The overall model was also found to be of significance ($F=5.37, p<0.05$).

The null hypothesis was therefore rejected, and it was concluded that corporate diversification has significant effect on non-financial performance (as measured by market share) of insurance companies in Kenya.

The study results are in line with those of Nyaingiri and Ogollah (2015) who noted that when diversification activities and functions are well-strategized, they lead to broader customer base, new markets hence translate to larger market share. On the contrary, Hoskis et al. (2016) empirical findings indicated that unrelated multiproduct diversification is often used in developed and efficient markets. Their study supported the predicted curvilinear connection of diversification and firm performance.

X. Recommendation

As documented in this study, the effects of corporate diversification on performance will aid corporate executives, insurance managers and practitioners to have a basis to lay imperative factors to focus on when setting strategies to steer company performance. From the empirical findings of this study, companies that have ventured into more lines of business have reported higher entropy index than those with fewer lines of products and perform well thus managers of insurance companies should focus on creation and selling more appealing products and improve on penetration to the large untapped market.

XI. Suggestions for Future Research

It is evident that insurance companies invest a great deal on assets. From their annual financial reports, a good number continue to report losses or at least diminishing returns. Interestingly, more new entrants in this industry are registered every year. This raise questions as to what motivates the investors in this industry? Does introduction of new products necessarily create a new pool of consumers? These questions necessitate a qualitative study that can answer them.

A study can also be done that targets either companies in life insurance business or those in non-life that would address specific issues in the two lines of operation. Similar studies can be extended to contexts within the developing economies category and other financial service sectors and non-financial sectors by evaluating the diversification index that is well suited to them that would provide more insights into the relationships.

REFERENCES


