SOLVENCY RISK AND FINANCIAL PERFORMANCE: EVIDENCES FROM LISTED INSURANCE FIRM IN NIGERIA

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Abstract

This study examined the impact of solvency risk on performance of listed Insurance firms in Nigeria. The objective of the study is to investigate the impact of solvency risk on the performance of listed Insurance Firm in Nigeria. The population covered 25 listed insurance firms in Nigeria and a census was used to determine the sample size of the study. Secondary data was employed for the study and data were extracted from the annual report of listed insurance firms in Nigeria. Simple Regression Analysis was employed to determine the impact of solvency risk on performance of listed insurance firm in Nigeria. The results revealed that solvency risk has a positive and significant influence on the performance of listed insurance firms in Nigeria. The study concluded that solvency risk has impact on financial performance in listed insurance firms in Nigeria. The study recommended that management of insurance firms in Nigeria should lower their solvency risk by buying reinsurance contracts from reinsurers and solvency risk guidelines should be established in order to mitigate against solvency risks for a better performance.

Keywords: Solvency, Risk, Performance, Liability, Management

1. Introduction

The insurance sector in Nigeria has been inundated in a continuous updating process, nurturing the changes considered necessary to adapt to the dynamic and turbulent business environment as well as the growing levels of safety, transparency and effectiveness which are increasingly being requested by financial markets and citizens. Insurance firms are in the business of taking risk. Globally, these firms write a policy that deals with specific risks, and in several occasions underwrite exotic risk. A stable and vibrant insurance sector of any country provides the population with peace of mind in performance of their daily economic activities in a dynamic and turbulent business environment as well as boosting investor confidence. It is from these investments that governments are able to generate revenues to finance their budget that may lead to alleviation of hunger, poverty, achieve sustainable development goals and in general raising the standard of living of the populace.

Solvency influence a firm’s capacity to acquire financing and investment capital. This is on account of solvency shows a firm’s current and long-term financial wellbeing and steadiness as controlled by the proportion of assets to liabilities. The level of solvency in a business is estimated by the connection between the assets, liabilities and equity of a business at a given point in time. An might have the capacity to cover current liabilities by rapidly liquidating assets with little business interference. Be that as it may, fluctuations overtime in the value of assets while the worth of liabilities stays unaltered influence as assets to liability proportions. Businesses more often than not have positive equity and when this value ends up negative, the business is said to be bankrupt. Liquidation is the next action for an insolvent business if it fails to generate enough cash flow income to meet its debt requirements in a timely manner (Obudho, 2014).

A vigorous risk management structure is capable of assisting organisations to cut down their level risk exposure (Iqbal & Mirakhor, 2007). Merton (1995) affirms that the fundamental role of an insurance firm their ability and capacity to distribute risk across diverse participants. Insurance firms are in a business of managing risk as such insurance firms bear risk and manage such risk on behalf of their customers by pooling of risks and sales of their services as risk specialists. This signifies that management of risks should take centre stage in the operations of insurance firms in Nigeria. Due to the turbulent business environment, insurance firms have improved their focus on solvency risk management. Meredith (2014) suggests that there ought to be a careful judgment, by the management of insurance companies, of insurable financial risks to steer clear of excessive losses in settling the insured claims.
For the insured, insurance is a risk management structure, so it is vital to limit the disruption of an insurance firm's indebtedness or insolvency. Insurer insolvency exposes claimants and policyholders to unforeseen financial misfortune and may conceivably be related with considerable personal and economic cost. In addition, insurance industry sector is based on or built on policyholder certainty that contracts will be discharged and eligible claims paid. Insurer insolvency may therefore prompt diminished trust and confidence in financial institutions. The performance of the insurance industry in Nigeria appears to be poor nevertheless the industry's importance in the financial system cannot be underestimated.

Many studies focus on insurance firm such as Omasete (2014) on the relationship between solvency and performances in insurance firms but in Nigeria, there is a shortage of study in this context. In Nigeria, most studies such as Adesugba and Bambale (2016) focused on the study of risk management in the banking sector ignoring the insurance sector which is an essential segment of the financial industry. Again due to the growing attention is given to the insurance firms in Nigeria has escalated the research interest in this area as well.

Thus, to the perceptive of the present research, none of the reviewed extant literature reviewed have covered the period 2010-2016 which the present study covered. This study, therefore, filled the gap in knowledge about the possible existence of a relationship between solvency risk and performance by listed Insurance Companies in Nigeria.

The objective of the study is to investigate the impact of solvency risk on the performance of listed Insurance Firm in Nigeria.

In line with research objectives, the followings research hypothesis was be drawn: H0. Solvency Risk has no significant impact on the performance of listed Insurance Firm in Nigeria.

Furthermore, this study will be utmost importance in providing a better ground for insurance firm managers, businessmen/women, professionals and policymakers. Also, the research will also contribute a better understanding of the subject-matter and ignite areas for future research.

2. Literature Review

Conceptual Clarification

Ralph (2000) described risk as the existence of uncertainty about future occurrence. A risk is a crucial matter in business because people and companies make certain investments decision without knowing whether or not the future cash flows from these investments might be sufficient to compensate both debt and equity holders.

Stulz (2010) argued that solvency is having an adequate amount of value in the form of assets in a business concern to enable to cover all of the liabilities of the company. On the bases of accounting ratio that assets = liabilities plus equity, this means that a business has a real stake. As soon as a businesses’ equity turns out to be negative, it is said to be insolvent. Solvency is the capability of a corporation to meet up its long-term fixed operating cost and to carry out long-term development and growth. Solvency is the ability or capacity of a corporation to meet its long-term fixed expenses and to accomplish long-term expansion and growth. Solvency of greater than 20 percent is considered financially healthy.

The basic purpose of an organisation is always to do better than the competition and deliver continuous, better returns to the shareholders at the same time as satisfying other stakeholders. The organisational performance consists of the definite yield or outcome of an organisation as measured against its expected outputs (Ongeti, 2014). Performance is a corporate efficiency, effectiveness, financial capability and significance (Javier, 2002).

Baldwin and Scott (1983) opined that when a firm’s business gets worse to a level where it cannot meet its financial commitment, the firm is said to be in a state of financial distress. The first warning sign of financial distress is a breach of debt payments or drop of dividends payouts. Whitaker (1999) postulated that entry into financial distress as at the initial year is a situation where the cash flows are not as much as the current maturities’ long-term debt. The firm has an adequate amount of to pay its creditors as long as the cash flows go above the current debt commitment. The primary factor in recognising a firm in financial distress is the failure to meet up with contractual debt obligations.

Financial distress is where an organization cannot meet or has issues settling its financial commitments particularly to its creditors. It implies there is a tight cash situation and if delayed or protracted may lead to insolvency and even liquidation. In advanced countries like, USA, filing for bankruptcy has been the most utilized paradigm for corporate financial distress. It is a lawful event or process which is vigorously affected by the activities of bankers or others creditors. Financial distress liquidity issues that cannot be settled or sort out
without a sizable rescaling of the business concern. Outecheva (2007) opined that financial distress can be divided into deterioration of performance, failure, insolvency, and default. where deterioration and failure have an effect on the profitability of the firm, insolvency and default are embedded in liquidity. In all, financial distress is described by a sharp decrease in the company’s performance and worth.

On the other hand, significant financial distress effects are acquired ahead of the failure to pay. Wruck (1990) affirmed that firms go through financial distress because of economic distress, fall in their performance and bad management practices in particular on risks. Boritz (1991) portrayed a procedure of financial distress that commence with an incubation phase characterised by a state of severe economic circumstances and bad management which takes costly error.

**Theoretical consideration**

Financial distress theory stems from the liquidity and capital management facing a firm. Financial distress theory makes available for a non-biased point of view on the relationship between capital management risk and performance variables that will be used for the research. By making available information that the influence financial distress take place prior default risk, the financial distress theory presents an impartial platform to embark on a keen empirical analysis of this relationship within the insurance firms in Nigeria.

**Empirical Review**

Kariuki (2013) studied the effect of financial distress on commercial banks performance in Kenya. Due to the high number of banks that have collapsed in Kenya due to financial distress, there was the need to establish or find out how financial distress affects the financial position of a bank. From a population of forty-four banks, a sample of twenty-two banks was selected. The sample included eleven listed banks at the NSE and eleven non-listed banks. Data are extracted from the annual report and financial statements of the banks. Altman’s Z score model was used to measure financial distress while return on assets ratio was used to measure financial performance. Regression analysis is used to establish the influence of financial distress on the financial performance of banks in Kenya, and the study covered 2008 to 2012. The research discovered that most of the banks under study had financial distress. The non-listed banks experienced more from financial distress when contrasted with listed banks. The study likewise demonstrated that financial distress had a significant effect on the financial performance of banks where performance is negatively influenced. A rise in financial distress influenced a decrease in financial performance and vice versa. The study confirmed the need to reduce financial distress by ensuring financial stability in banks to ensure shareholders confidence.

Khidmat and Rehman (2014) examined the impact of liquidity and solvency on performance on the firm in Pakistan. The model developed for the study may be used efficiently to improve the level of liquidity which will enhance profitability of the company. The population for the study is derived from the chemical sector of Pakistan and from the population of 36 companies 10 firms were sampled. 9 years data were extracted from 2001 to 2009. Regression was used to test the research hypotheses. The results reveal that solvency ratio has a negative and highly significant impact on the ROA and ROE.

Mwangi (2014) determined the influence of risk management on the financial performance of commercial banks in Kenya. The descriptive research design was utilised for the study. Secondary Data was extracted from annual reports and multiple regression analysis was used as a tool for data analysis. From the findings, the study found that there was a strong positive relationship between risk management and financial performance. The study also discovered that there is an adverse relationship between credit risk, insolvency risk, interest rate sensitivity and financial return of commercial banks in Kenya. The study revealed that there is a positive link between capital adequacy on financial performance as well as the size of the banks, operational efficiency and financial performance of commercial banks.

Mburu (2015) examined the impact of liquidity and solvency on the profitability of listed Commercial Banks in Kenya for the period 2010 to 2014. The population of this study comprised the population 43 Commercial Banks in Kenya and 42 Commercial Banks are sampled. Secondary data is collected from 2010 to 2014 for the banks from their annual reports. Data are analysed using multiple regression analyses, and the study found that both liquidity and solvency had adverse but insignificant effects on the performance of banks in Kenya. Further, the study found that asset quality had an adverse but negligible influence on bank performance. Growth had a positive but insignificant influence on the bank performance in Kenya. The results showed that bank size had a positive and significant effect on bank performance. The study concluded that both liquidity and solvency do not influence the performance of Commercial Banks in Kenya.
3. Methodology

This research was used correlation research design. Correlation research design is appropriate because it assists in understanding the influence of solvency risk on performance of listed insurance firms in Nigeria and therefore answers the research objectives of the study. The target population of the study included all the 25 listed insurance firms in Nigeria Stock Exchange as at December, 2016. Census survey was conducted in the 25 listed insurance firms in Nigeria. The sampling frame of this study was a total of 25 listed insurance firms in Nigeria. This was justified on the basis that the outcome of the study can be generalized to the entire 25 listed insurance firm in Nigeria. Due to the size of the population of all the listed insurance firms in Nigeria, Census Method of Data Collection was used.

The study utilized the descriptive, correlation, and simple regression as method of data analysis to meet the objective of the study which entails a logical analysis of the annual reports and accounts of listed insurance firms in Nigerian Stock Exchange.

The study only used secondary data, and the data are extracted from the annual reports and accounts of listed insurance firms in Nigerian Stock Exchange. The annual reports and accounts was sourced from the internet. Data were extracted and input into the STATA version 12 for descriptive statistics and inferential statistics. Descriptive statistics was used to determine the influence of solvency risk on performance of listed insurance firms in Nigeria. A regression model was used for establishing the relationship or influence between the solvency risk and performance. The model adopted consisted of two variables. The independent variable was the solvency risks ratio of listed insurance firms while the dependent variable was the performance ratio. The study used a linear regression model to show the relationship between solvency risks and performance.

Model Specification

This study adopted Muriithi (2016) model with little modification. The model is adopted because it a description of a given system and a strategy used to approach a problem in Nigeria context and the modification done to Muriithi’s model adopting liquidity gap instead of liquidity ratio used by Muriithi. The model is specified in function form as follows:

\[ \text{PERF} = f(\text{SR}) \]

Express in equation form as follows:

\[ y = f(\beta \text{SR}_i) \]

\[ \text{PERF}_i = \alpha + \beta_1 \text{SR}_i + \epsilon \]

Where:

\[ \alpha = \text{Constant} \]
\[ \beta = \text{Coefficients for independent variables.} \]
\[ \text{PERF} = \text{is the performance of insurance firms} \]
\[ \text{SR} = \text{Solvency Risk} \]
\[ \epsilon = \text{Error term.} \]

\[ \text{PERF}: \text{is the performance of insurance firms, it will be is measured using Return on Assets (profit after tax to total asset) as a proxy variable for firm's performance (Wani & Dar, 2014).} \]

\[ \text{SR}: \text{Solvency Risk, it will be proxy by solvency ratio (Wani & Dar, 2014).} \]
Table 1 Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>perf</td>
<td>175</td>
<td>.2428341</td>
<td>2.951477</td>
<td>-.9242386</td>
<td>39.0285</td>
</tr>
<tr>
<td>sr</td>
<td>175</td>
<td>13.09752</td>
<td>1.671028</td>
<td>8.395263</td>
<td>20.09443</td>
</tr>
</tbody>
</table>

Source: STATA Output (2018)

Table 1 displays the summary statistics for the variables used in the study. It shows the descriptive statistics for the dependent (PERF) and independent (SR) variables. The outcome shows that the means value of .2428341 with a maximum value of 39.0285 and minimum of -.92438.

Correlation Results

The summary of the Pearson correlation coefficients of the variables of the study are presented in Table 2 as follows:

Table 2 Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>perf</th>
<th>sr</th>
</tr>
</thead>
<tbody>
<tr>
<td>perf</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>sr</td>
<td>0.2841</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Source: STATA Output (2018)

Table 2 shows the correlations matrix between the dependent and independent variables. The correlation matrix indicates the degree of connection or relationship that exists between the two variables of the study (dependent and independent variables). The result revealed that solvency risk shows a low positive relationship with performance.

Model Estimation and Test of Hypotheses

This research estimated the parameters using statistical and econometric software known as STATA 12.
Table 3 Result of Regression

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 175</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>122.368353</td>
<td>1</td>
<td>122.368353</td>
<td>F( 1, 173) = 15.19</td>
</tr>
<tr>
<td>Residual</td>
<td>1393.3637</td>
<td>173</td>
<td>8.0542102</td>
<td>Prob &gt; F = 0.0001</td>
</tr>
<tr>
<td>Total</td>
<td>3515.75206</td>
<td>174</td>
<td>8.7112167</td>
<td>R-squared = 0.0807</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adj R-squared = 0.0754</td>
</tr>
</tbody>
</table>

| perf      | Coef.    | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|-----------|----------|-----------|-------|------|---------------------|
| sr        | 0.5018527| .128752   | 3.90  | 0.000| .2477257 , .7559798 |
| _cons     | -6.330192| 1.699924  | -3.72 | 0.000| -9.685453 , -2.974932|

Dependent variable: PERF
Source: STATA Output (2018)

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the results from table 3 the value of adjusted R squared was 0.0754 an indication that there was variation of 7% on performance of insurance firms listed on Nigeria Stock Exchange due to changes in solvency risk. The table above indicates that the predictor variable (solvency risk) is positively correlated to performance as indicated by the coefficient of 0.5018527. Furthermore, the predictor variable explains up to 8% of the changes in the performance of the listed insurance firms in Nigeria as indicated by an R-square of 0.0807. This implies that the remaining 92% of the changes in the frequency of performance changes are explained by other factors not considered in this research. The model summary has been used to determine the correlation between solvency risk and performance of listed insurance firms in Nigeria.

The relationship between solvency risk (SR) and performance (PERF) is significant and positive with a coefficient of 0.5018527 and a P-Value of 0.00. From the results in the models, as solvency risk (SR) rises, performance (PERF) increases: Thus, a rise in solvency risk (SR) means an increase in performance (PERF) of listed Insurance Firm in Nigeria which is contrary to the study of (Khidmat & Rehman, 2014). This suggests that solvency risk (SR) significantly influences performance of listed Insurance Firm in Nigeria during the period 2010 to 2016. Based on this, the study rejects the null hypothesis one (H01) which states that solvency risk (SR) does not influence performance of listed Insurance Firm in Nigeria. Therefore, the study deduces that solvency risk (SR) strongly influence performance of listed insurance firm in Nigeria during the period 2010 to 2016.

5. Conclusion

In this research, empirical analysis has been conducted to determine the impact solvency risk on the performance of listed insurance firm in Nigeria. The objective of the study was to explore the relationship between solvency risk and performance of listed insurance firms in Nigeria over the period 2010-2016. In this study, we modelled selected internal factors of listed insurance firms in Nigeria using linear regressions model to establish the impact of solvency risk on the performance of listed insurance firms in Nigeria. For this purpose, one internal factor, i.e., solvency risk was taken as explanatory variable, whereas return on assets (ROA) was used as a proxy for firm’s performance. The results of this study contributed better understanding of the performance of listed insurance firms in Nigeria. The result of the regressions model revealed that solvency risk is an important determinant of performance of listed insurance firms in Nigeria. It also showed that solvency risk exhibit a positive relationship with performance of listed insurance firms in Nigeria. Hence, solvency risk (SR) is spur force for performance of listed insurance firms in Nigeria. The study established that solvency risk is expected to positively and significantly influence the performance of listed insurance firms in Nigeria. The study recommends that management of insurance firms in Nigeria should lower their solvency risk by buying...
reinsurance contracts from reinsurers and solvency risk guidelines should be established in order to mitigate against solvency risks for a better performance.

Reference


