Potential Implication Of Firm Specific Factors On Insurance Profitability In Nigeria

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Abstract: This work determined the potential implication of firm specific factors on profitability of listed Insurance companies in Nigeria, 2015 to 2019. Firm specific factors are Firm Size, FSSIZE; Firm Age FSAGE; Firm Leverage FSLE; and Firm Liquidity FSLQ and the dependent variable is Profitability-Return on Asset ROA. This study applied ex-post facto research design and the population comprised all the quoted insurance companies in the Nigerian Stock Exchange NSE, 2014-2019. A purposive sampling technique selected 10 listed insurance firms with the required annual reports made available to the public in, 2020 NSE. The statistical techniques employed: Descriptive statistics; Pearson Correlation Matrix and Robust Least Square (RLS) Regression. The results show that the R-squared value is 0.0342, which implies that all the independent variables jointly explain only about 3.42% of the systematic variations in the (ROA). The final findings indicated that: FSSIZE has insignificant negative implication; FSAGE is positively insignificant; FSLEV is negatively insignificant; and FSLIQ are positively insignificant on, profitability of insurance firms pooled for the period. Our recommendations are that Insurance firms should increase firm size; earn more premiums to increase liquidity and leverage in order to increase profitability. We contribute with the findings that depict the true state of polled insurance companies in Nigeria, the modernized model and the rich literatures for academia. Implications are that insurance firms in increasing the firm size, and premium to drive profitability, and that Nigeria law only mandated third party vehicle insurance and also Nigerians' hostile attitude toward other insurance cover.

Keywords: Firm Size, Leverage, Liquidity, Firm Age, Specific Factor, Profitability.

Introduction

Bobenič Hintošová, Bobenič , Hajduová and Szajt, (2020) have observed that one of the most intensive discussions within business economics literature is related to the factors that determine firms´ performance, especially comparing industry- as well as firm-specific factors in a broader or narrower context. Previous studies have tried to explain firms´ performance variance, adopting the terms firm-specific factors (Blašková and Dvouletý, 2018). Firms are eager to maintain and improve quantity of expendable money by not only investing, but identifying, nurturing and maintaining some specific factors that promotes organizational performance. Thus improved and sustainable performance ensures that an organization continue to fulfill its plans and survive future competitions. The performance of any firm not only plays the role to increase the market value more so adopting some firm specific factors also leads toward the growth of the organization and the overall success of any economy (Ahmed, Naveed & Usman 2008). Thus, a sound financial management should be consistent with the drives to improve and increase profitability so as to meet the goal of individual firm owners and this is determined by the firm specific factors. Every firm focus is to earn more profit and enhance the wealth of its stakeholders (Gitman, 2007). Firms should be able to overcome internal and external environment challenges in order to meet their goals. Therefore, performance is a function of the ability of an organization to gain and manage its resources in several different ways so as to develop competitive advantages (Iswatia & Anshoria, 2007). Some studies have been conducted by (Blažková & Dvouletý 2018, 2019; Bobenič Hintošová , Bobenič, Hajduová , Szajt , 2020) in this regard. Similarly, a study conducted by Pervan et al., (2018) confirmed that both industrial characteristics as well as firm-specific factors in the form of dynamic capabilities statistically significantly affect business performance, but the impact of the later was shown to be greater. Several firm-specific internal factors have been examined as potential determinants of firm´s performance within subsequent empirical literature with often inconclusive results. Firm size is one of the most influential firm specific factors in organizational studies (Pervan et al., 2018) provide a summary and overview of the importance of firm size. Larger insurance companies are more likely to have more layers of management, greater number of departments, increased specialization of skills and functions, greater centralization and greater bureaucracy than smaller insurance companies (Daft, 1995). But with a high degree of financial leverage come high interest payments. The trade-off between agency costs of debt and equity (Jensen and Meckling, 1976); limited liability affect debt (Brander and Lewis, 1986); disciplines the effect of debt (Grossman and Hart, 1983; Jensen, 1986) all suggest a positive effect of leverage on performance. According to Subrahmanyam and Titman (2001), liquidity improves firm operating financial performance. Insurance, companies with more liquid assets are less likely to fail because they can realize cash at the time of need thus outperforming those with less liquid assets. Browne et al., (2001) found evidence supporting that performance is positively related to the proportion of liquid assets in the asset mix of insurance company. Higher liquidity allows a firm to deal with unexpected contingencies and to cope with its obligations during periods of low earnings (Liargovas and Skandalis, 2008). If performance declines as firms grow older, it could explain why

most of them are eventually taken over (Loderer, Neusser, and Waelchli, 2009). Age could actually help insurance companies become more efficient. Over time, firms discover what they are good at and learning how to do things better (Jovanoic, 1982). Studies on the effect of firm characteristics on firm performance have generated mixed and conflicting results ranging from those supporting a positive relationship to those opposing it and those that found no statistically significant effect at all. A positive relationship between firm size and performance was found by Vijayakumar and Tamizhselvan (2010); while controlling for other variables that can influence firm performance, he found evidence that larger firms are less productive but more profitable. The study relating to the relationship of firm specific and financial performance of insurance industries provides an important data for comparing determinants of performance of insurance companies in any economy. A study has been carried out by Kagu r, (2013) in life insurance industry in Kenya by investigating the effect of firm's characteristics (firm size, age, liquidity, and leverage) on corporate performance of listed insurance companies in Nigeria. Considering other prior studies, our focus is in more details on firm- specific factors that potentially impact insurance performance in Nigeria. Our search has shown that very few studied were done in this regard.

This current work is presented as follows: Section 1 gives the introduction of the background of the study. Section 2 summarizes the related literature. Section 3 gives description of the data and measurement of the variables. Section 4 presents the discussion on specification of model. Section 5 discusses the results from the models used and Section 6 presents the conclusion, recommendations, contribution to knowledge and implications of the findings.

Our focus is on firm- specific factors that potentially impact insurance profitability in Nigeria. Other objectives are to determine:

1. The potential implication of firm size on insurance profitability;
2. The potential implication of firm age on insurance profitability;
3. The potential implication of firm leverage on profitability of insurance; and
4. The potential implication of firm liquidity on insurance profitability.

Research questions are as follows what are the:

1. Potential implication of firm size on insurance profitability?
2. Potential implication of firm Age on insurance profitability?
3. Potential implication of firm leverage on insurance profitability?
4. Potential implication of firm liquidity on insurance profitability?

We posit the following null hypotheses:

Ho1: Firm size does not have a potential implication on profitability of insurance.
Ho2: Firm age does not have a potential implication on profitability of insurance.
Ho3: Firm leverage does not have a potential implication on profitability of insurance.
Ho4: Firm liquidity does not have a potential implication on profitability of insurance.

Literature Reviews

Conceptual Framework

The Concept of Firm Characteristics refer to the attributes which a particular firm possesses that defines its activities. Firm characteristics are those variables that relatively affect the firm's decision both internally and externally (Shehu, 2012; Kwaltommai, Enemali, Duna & Ahmed, 2019). Prior literatures examine how financial and non-financial specific such as leverage, liquidity, size, age and diversification have impact on the firm financial performance and growth. These specific can easily measured by using available data on insurance companies as this current study intends. Firm size is one of the firm specifics that have been applied in past studies. Mehari and Aemiro, (2013) showed a summary and overview of the importance of firm size in this regard. Also, firm size had been shown to be related to industry-sunk costs, concentration, vertical integration and overall industry profitability. Larger insurance companies are more likely to have more layers of management, greater number of departments, increased specialization of skills and functions, greater centralization and greater bureaucracy than smaller insurance companies (Memon, Bhutto & Abbas, 2012; Shehu, 2012). Past research has found an association between firm size and inertia defined as slow adaptation to change or resistance to fundamental changes in conducting business (Symeou, 2012; Meyer and Zuker, 1989). Further, Starbuck (1985) argues that inertia can make change more costly and harder to achieve and maintain. However, larger insurance companies may also find it more difficult to maintain an atmosphere of continuous change than smaller insurance companies. Firm diversification is a corporate strategy to increase sales volume from new products and new markets. Many researchers have studied the relationship between firm diversification and performance. Evans (1987) and Agnes, (2013), provide excellent surveys, analyses and critiques of previous findings. The observation is that there does not seem to be any consistent or conclusive findings between firm diversification and performance. Since firm size and diversification are positively correlated, thus inertia and constraints on action related to firm size could also apply to diversification.

Concept of Firm Size and Profitability

Kwaltommai, Enemali, Duna and Ahmed, (2019) decried that the nature of the relationship between firm size and financial performance has been given a considerable attention in the literature and has motivated strong debate. According to the authors, several arguments favor larger firm size in attaining higher performance. Large firms are more likely to exploit economies of scale and enjoy higher negotiation power over their clients and suppliers (Serrasqueiro & Nunes, 2008). In past literature on firm specific significant attention has been paid to the effect of firm´s size on performance. Most of studies have

proved that larger firms generate higher profits and thus showed positive relation between size and performance (Asimakopoulus, Samitas & Papadogonas, (2009).; Nunes et al., 2009; Pratheepan, 2014; Nakatani, 2019). On the other hand Goddard, Tavakoli and Wilson, (2005) found evidence of a negative size-profitability relationship. This finding can be attributed also to changes in the ways and forms of conducting business activities. While in the past the emphasis on the business size was important, today its participation within networking activities predominates (Havierniková & Machová, 2017). There is a positive significant relationship between size and profitability (Akhavein, Berger & Humphrey 1997 and Smirlock, 1985)

Concept of Leverage and Profitability

Financial leverage can be described as the extent to which a business or investor is using borrowed money (Kwaltommai, Enemali, Duna & Ahmed, 2019). Firm leverage is the degree to which a company uses fixed-income securities, such as debt and preferred equity. With a high degree of financial leverage come high interest payments. However, financial leverage is a measure of how much firm uses equity and debt to finance its assets. In finance, as debt increases, financial leverage also increases. Prior, studies have shown that financial leverage has relationship with financial performance (Abor, 2005). Another frequently studied factor is leverage. Most empirical findings have confirmed the existence of an inverse leverage – profitability relationship, indicating that lucrative firms are less dependent on leverage (Asimakopoulus et al., 2009; Nunes et al., 2009; Khaled and Samman, 2015; Nanda and Panda, 2018; Blažková and Dvouletý, 2019). Chatzoglou et al., (2018) sumps up that business performance is directly positively influenced by its strategic orientation and indirectly also by its organizational structure and its different financial capabilities. The leverage is positively correlated with tangibility and it also emphasizes that leverage should increase with liquidation value (Williamson, 1988; Harris & Raviv, 1990) and in US firms (Friend & Larry, 1988; Titman & Wessels, 1988). Leverage is negatively related to profitability in both the US and Japan (Kester, 1998). Some of these findings were observed in developing countries (Booth, Aivazian, Demirguc-Kunt & Maksmivoc, 2001; Wiwattanakantang, 1999). Also, leverage is insignificantly positively related to profitability (Long & Maltiz, 1985). However, profitability has the prime effect on debt over asset ratios (John, 1999; Booth, Aivazian, Demirguc-Kunt and Maksmivoc, 2001). Leverage is positively related to tangibility and is negatively related to profitability because profitability has negative relationship with tangibility. The trade-off between agency costs of debt and equity (Jensen and Meekling, 1976); the limited liability effect of debt and the disciplining effect of debt (Jensen, 1986) all suggest a positive effect of leverage on performance, (Bolton and Scharfstein; Dasgupta and Titman, 1998), suggest that coverage opens up opportunities for rivalry predation in concentrated product markets, thus conditioning the performance effect of leverage on the degree of competition in the insurance industry. Insurance Companies that are highly leveraged may be at risk of bankruptcy if they are unable to make payments on their debt; they may also be unable to find new lenders in the future. Leverage is not always bad, however; it can increase the shareholders return on their investment and make good use of the tax advantages associated with borrowing.

Concept of Firm Age and Profitability

Aging is a process associated with a general decline in the physical functioning of the human body and also to living and non-living things, such as the ability to remember, react, move and hear. By analogy, firms should weaken over time and lose their ability to compete. The age of the firm is an important variable in determining its financial performance (Kwaltommai, Enemali, Duna & Ahmed, 2019). In most cases, when a firm becomes older, it enjoys economies of scale. In other words, the firm can produce products at lower costs and this will cause an increase in revenue and profits. However, when a firm gets older, it can also enjoy a superior level of performance compared to newly established companies. Bu, if the older firms do not change their systems to cope with the new environmental conditions, innovation and advancement, their current financial performance would be worse (Williamson, 1998). Similarly, age of the firm has bi-directional impact on the firm performance, as it was proved in the study by Coad et al. (2013). The authors found evidence of ageing firms to have ever-increasing productivity levels accompanied by higher profits and equity ratios, as well as lower debt ratios. On the other hand, they also detected that in some case business performance retrogrades with age. Older firms usually have lower anticipated sales growth rates. Similarly, Blažková and Dvouletý (2019) found ageing of firms to be associated with the increase of profitability indicators on one hand, but Cowling et al., (2018) concluded that negative firm age-growth relationship still holds, on the other hand. Firm age (measured as the number of years a company is operating in the market since it was founded) is an important determinant of firm dynamics. Past research shows that the probability of firm growth, firm failure, and the variability of firm growth decrease as firms age (Evans, 1987; Yasuda, 2005). According to the life cycle effect, younger companies are more dynamic and more volatile in their growth experience than older companies (Evans, 1987).

Concept of Liquidity and Profitability

An important part of firm-specific factors are indicators of financial health and credibility of a firm includes a liquidity ratio. Liquidity has been shown to increase profitability in the medium to long term (Goddard et al., 2005; Nanda and Panda, 2018; Yameen, Farhan & Tabash, 2019), however also none (Zainudin, Mahdzan, & Leong (2018) or a negative relationship between liquidity and profitability has been detected in the short term. In general, this reduced profitability is explained by high opportunity and maintenance costs connected with holding excess liquidity (Ross et al., 2016). Current ratio is the most commonly used measure of liquidity and is an indication of a company's ability to meet its short-term debt obligations (Brigham & Gapenski, 1988). It is computed by dividing current assets by current liabilities. The higher the ratio, the more liquid the company is. If

current liabilities exceed current assets, then the company may have problems meeting its short-term obligations. If a company is getting into financial difficulty it begins paying its bill more slowly, building up bank loans.

Concept of Profitability

Profit is an excess of revenue over associated expenses for an activity over a period of time. Terms with similar meanings include „earnings", „income", and „margin". Lord Keynes concludes that, Profit is the engine that drives the business enterprise". Every business should earn sufficient profits to survive and grow a long period of time. It is the index to the economic progress, improved national income and rising standard of living. No doubt, profit is the legitimate object, but it should be over emphasized management should try to maximize its profit keeping in mind the welfare of the society. Thus, profit is not just the reward to owners but it is also related with the interest of other segments of the society. Profit is the yardstick for judging not just the economic, but the managerial efficiency and social objectives also (Owolabi & Obida, 2012). Profitability means ability to make profit from all the business activities of an organization, company, firm, or an enterprise. It shows how efficiently the management can make profit by using all the resources available in the market. According to Harward & Upton, "profitability is the „the ability of a given investment to earn a return from its use." However, the term, profitability" is not synonymous the term, "Efficiency". Profitability is an index of efficiency; and is regarded as a measure of efficiency and management guide to greater efficiency. Measure of profitability is by gross profit margin; the amount of money made after direct costs of sales have been taken into account, operating margin; between the gross and net measures of profitability and net profit margin; takes all cost into account. The performance of the insurance companies will be measured by return on assets (ROA). The ROA is defined as the net income divided by total assets, reflects how well a company management is using the company real investment resources to generate profits. ROA is widely used to compare the efficiency and operational performance of a company as it looks at the returns generated from the assets financed by the company. It indicates how effectively the management of the enterprise is able to turn shareholder's funds into net profit. It is the rate of return flowing to the company's shareholder. The higher ROA reflects higher managerial efficiency of the company, (Botoe, 2012).

Theoretical Framework

Agency Theory and Signaling Theory

This study adopt: Agency Theory and Signaling Theory. Agency theory explains the relationship between board size and composition, and corporate performance. While Signaling theory explains qualities of firms characteristics i.e. firm's size, leverage, age, liquidity) of firm that promotes its performance. Signaling theory, Jensen and Meckling (1976) mention that the agency is caused from conflicts of interest between shareholders and managers of the company. Agency costs are defined as the sum of monitoring costs, bonding costs, and residual loss. Agency theory states that between management and owners have different interests (Jensen and Meckling, 1976). Companies that separate the functions of management and ownership will be susceptible to agency conflicts (Lambert, 2001). In the model, agency designed a system that involves both parties, so that the necessary labour contract between the owner (principal) and management (agent). Jensen and Meckling (1976) declare that the agency relationship is a contract between managers (agent) to the investor (principal). Conflicts of interest between owners and agents occur due to possible agents do not always correspond with the interests of the principal, thus triggering the agency cost (agency cost). On the other hand, good quality companies would give a signal to the market, so the market is expected to differentiate good and bad, quality, In order for the signal to be effective, it should be caught and perceived good market, and not easily imitated by the company were of poor quality (Megginson, 2008). This signaling theory of Michael Spence (1973) is based on the assumption that the managers and owners of companies differ in the completeness of information access. Signaling theory in this study is expected to clarify the effect of profitability, firm age, leverage and growth companies on the corporate governance quality. Based on signaling theory, companies that have demonstrated high levels of liquidity are good information for the company, it would affect the company to submit the report on time because it will make a positive market reaction to the company.

Empirical Studies

Bhutta and Hasan, (2013) explores the impact of firm specific factors on profitability of companies listed in food sector of Karachi stock market, 2002-2006. The firm specific factors include debt to equity, tangibility, growth and size and macroeconomic factor include food inflation. Findings of study reveal the presence of significant negative relationship between size and profitability. However, tangibility, growth of the firm and food inflation are found insignificantly positively related to profitability. Similarly, an insignificant negative relationship is observed between debt to equity ratio of firm and its profitability. Empirical results provide evidence that the profitability of food sector is shaped by firm specific factors and not macroeconomic variables.

Kwaltommai, Enemali, Duna and Ahmed, (2019) examine the impact of firm characteristics and financial performance of 5 consumer good firms in Nigeria applying both financial and non-financial data from annual reports, 2007-2016. The study tests the effects of firm size, firm age and leverage on financial performance (return on equity), using descriptive statistics, Pearson correlation and multiple regressions. The result shows that the firm size has a positive relationship with financial performance, age also has a positive relationship with financial performance and leverage too has a positive relationship with financial performance.

Almajali, Alamro and AJ-Soub (2012) examined the factors that mostly affect financial performance. of Jordanian Insurance Companies The findings revealed that Leverage, liquidity. Size, Management competence index have a positive statistical effect on the financial performance.

Velnampy and Nimalathasan (2010) studied the effect of firm size on profitability of virtually all the branches of Bank of Ceylon (BOC) and Commercial Bank of Ceylon Ltd (CBC) for 10 years. The correlation analysis conducted on the secondary data indicates a positive relationship between Firm size and Profitability.

Bashir, Abbas, Manzoor and Akram (2013) identities the factors significantly affecting the firm performance in food sector of Pakistan using one-way fixed effect model due to the presence of cross-sectional fixed effect. In the sector, long term leverage, size, risk, tangibility and non-debt tax shield were found to be the factors significantly affecting the firm's financial performance.

Chandrapala and KnapKova (2013), examine the impact of firm specific factors on company financial performance of 974 firms in the Czech Republic, 2005 to 2008, using data in the Albertina database. They found that the firm size, sales growth and capital turnover are having significant positive impact on financial performance of firms, while debt ratio and inventory reflect significant negative impact on financial performance of firms.

An investigation into the impact of capital structure on the financial performance of companies listed in the Tehran Stock Exchange was carried out by Pouraghajan, Malekian, Lotfollahpour and Bagheri (2012).They tested a sample of 400 firms among the companies listed in the Tehran Stock Exchange, Results suggest that there is a significant negative relationship between debt ratio and financial performance of companies, and a significant positive relationship between asset turnover, firm size, asset tangibility ratio, and growth opportunities with financial performance measures; while ROA and ROE measures with the firm age is not significant.

Memon, Bhutto and Abbas (2012) investigated the impact of capital structure on firm financial performance in textile sector of Pakistan using 141 textile 2004-2009. The results indicate that all the determinants of capital structure such as size, tangibility, debt to equity ratio, amount of annual tax, growth of firm and risk associated with business entity were significant.

The impact of firm level characteristics (size, leverage, tangibility, Loss ratio (risk), growth in Writing premium, liquidity and age) on performance of insurance companies in Ethiopia was examined by Mehari and Aemiro (2013), The results of regression analysis reveal that insurers' size, tangibility and leverage are statistically significant and positively related with return on total asset; however, loss ratio (risk) is statistically significant and negatively related with ROA.

Raluca-Georgiana (2013) study the association between firm performance or firm financial performance and board size and board composition for companies quoted on Bucharest Stock Exchange. The study also investigated the impact of firm size or debt to equity ratio on the relationship firm performance and aforementioned board characteristics. The study found out that board size has a positive relationship with firm performance; a negative association between non-executives directors and firm performance; a positive and significant association on firm performance.

Agnes (2013) determines the relationship between firm characteristics (size, diversification, leverage, liquidity, age, premiums growth and claim experience) and financial performance of life insurance using 17 life insurance companies, 2008-2012. Data collected was analyzed using Regression analyses and the findings indicate that the variables are statistically significant, positive and strong on financial performance.

Methodology

This study employed quantitative research design by using secondary data rather and ex-post facto research design to determine the effect of the independent variables and the dependent variable.

The population of this study is all the quoted insurance companies in the Nigerian stock exchange.

The study used purposive sampling techniques and 10 insurance firms that have complete detailed annual reports from 2014 to 2019 made available to the public, were selected as found in NSE Fact Book, 2020.

Model Specification and Justification

Prior works shows that financial performance implies that different models or patterns of relationship between firm profitability and its determinants will emerge to demonstrate the various sets of relationships between dependent and independent variables in the estimated models (Ostroff and Schmitt, 1993).

Our criterion variable profitability is proxy by return on assets (ROA). Return on assets is calculated as the profit after taxes in relation to total assets i.e. return on asset in percentage is computed as profit after tax divided Total asset. Similar computation of the return on assets and profit margin as measures for business performance, was used by Nakatani, (2019); Nanda and Panda (2018) as well as Pervan et al. (2018) in their research. Independent variables Firm Specific applied the following indicators: Liquidity ratio (Lq) in form of current ratio calculated by dividing current assets by current liabilities, similarly as in the work of Nanda and Panda (2018). As the proxy for firm size measurement used the logarithm of total assets (l Assets) was used as in the study by Nakatani (2019). The age (Age) represents the number of years from the establishing the firm including legal succession. Lee (2012) proxy the maturity stage of a firm with the variable age. Schmiele (2012) used the variables age, location and industry as the main characteristics of a firm; while leverage is as in the works of (Asimakopoulus et al., 2009; Nunes et al., 2009) calculated as total liability divided by total asset Leverage, LEV=Total Debt/Total Equity.

Functional linear equations Model:

Firm specific factors and firm profitability model is to verify the effect of firm specific factors (firm's size, Age, premium growth, net claim expenses, leverage, and liquidity) on profitability as measured by ROA of listed insurance companies in Nigeria. We modify the model by specifying a multi-variate regression equation made up of firm profitability (ROA) as a function of the independent variables (firm's size, Age, leverage and liquidity).

The model is specified as OLS Model:

ROA= (FSSIZE+FFAGE+ FSLEV+SFLIQ)…………………………… (1)

Where: Profitability is ROA= Return on Assets; Firm Specific Size; FSAGE=Firm Specific Age

FSLEV= Firm Specific Leverage; FLIQ=Firm Specific Liquidity

Given the above evaluation, we have the mathematical equation expressed as below:

$ROA_{it} = \beta_0 it + \beta_1 FSSIZE_{it} + \beta_2 FSAGE_{it} + \beta_3 + FSLEV_{it} + \beta_4 FSLIQ_{it} + U_{it}$……..(2)

β_0 is the intercept parameter or constant factor, β_1- β_4, are coefficient of the variables, Ui is the stochastic disturbances or error term. The parameter β_0 i.e. intercept signifies that even without the impact of other variables profitability (ROA) will still be growing since it is not equal to 0.

The parameter β_1- β_4 are coefficient of the variables denote the degree of change of the dependent variables (ROA) as a result of a unit change of other independent variables, (FSSIZE, FSAGE, FSLEV, and FSLIQ). The error term (Uit) which is used to capture the impact of other variables that are not included in the model.

The study analysis applied: Descriptive statistics; Correlation matrix analysis and
Ordinary lest square regression (OLS).

Data Presentation, Analysis, Discussions and Summary of Findings

Data Presentation

Table 1: Descriptive Statistics

	ROA	FSAGE	FSSIZE	FSLEV	FLLIQ
Mean	2.01940	14.1000	16.4232	0.81540	1.30080
Median	0.62000	9.50000	17.5800	0.75000	1.07500
Maximum	35.5000	28.0000	27.9200	1.95000	2.31000
Minimum	0.09000	5.00000	6.60000	0.27000	0.56000
Std. Dev.	6.90961	8.38426	6.50705	0.34952	0.54304
Skewness	4.68152	0.61147	-0.1473	0.87400	0.56989
Kurtosis	22.9617	1.65680	1.94028	3.89104	1.87425
Jarque-Bera	1012.78	6.87452	2.52053	8.01980	5.34666
Probability	0.00000	0.03215	0.28357	0.01813	0.06902
Sum	100.970	705.000	821.160	40.7700	65.0400
Sum Sq. Dev.	2339.39	3444.50	2074.74	5.98604	14.4499
Observations	50	50	50	50	50

Source: Author's computation (2021).

On the average, all the polled firms have a positive return on asset (ROA) during the period. The maximum value is 35.5000 while the minimum value is 0.0900. The (FSSIZE) is 16.423, a maximum value of 27.920 and minimum value of 6.6000. This implies that about 16.4% of the sampled firms hard a large firm size. The (FSAGE) is 16 years, the oldest FSAGE 28 years and the minimum is 5years. Similarly, on the average, that firm specific leverage (FSLEV) and Firm Specific liquidity(FSLIQ) is 0.81540 and 1.30008 respectively, and both have maximum and minimum values stood at 1.950;0.2700 and 2.3100; 0.5600 respectively.

Then, the Jarque-Bera (JB) test for normality/ the existence of outlier/ extreme values among the variables indicates that apart from FSSIZE, the variables are normally distributed at 1% (ROA) , 5%(FSAGE,FSLEV) and 10% (FSLIQ) levels of significance. Therefore with the outcome, OLS regression is applicable to the posited hypotheses. Finally, Kurtosis and Skewness shows that the explanatory variables of this study are normally distributed and fit to draw conclusions.

Pearson Correlation

Table 2:Pearson Correlation Matrix

	ROA	FSAGE	FSSIZE	FSLEV	FSLIQ
ROA	1.0000				
FSAGE	0.060	1.0000			
FSSIZE	-0.109	0.3218	1.0000		
FSLEV	-0.012	0.2087	0.2469	1.0000	
FSLIQ	0.1247	0.0324	-0.0788	0.1229	1.0000

Source: Author's Computation (2021)

The correlation matrix shows that only one explanatory variable FSAGE is positively correlated but the relation is weak with the dependent variable; while other explanatory variables have negative correlation with the dependent variable. In terms of relation of each of the explanatory variables with each other, they were positive but weakly related. As regards Multicollinearity, none of the explanatory variables were perfectly correlated with each other. With this the study assumes that the explanatory variables will not have a wrong signs or implausible magnitudes in the estimated model coefficient, and the bias of the standard errors of the

coefficients. Therefore we use Robust Least Square Regression Analysis and the regression result to test the posited hypotheses below.

Test of Hypotheses Formulated
Table 3: Robust Least Square Regression

```
--------------------------------------------------------------------------
   ROA|   Coef.  Std. Err.    t   P>|t|   [95% Conf. Interval]
------------+-------------------------------------------------------------
    fsage |  .08534  .09174   0.94  0.354   -.0985    .26699
   fssize | -.13835  .13774  -1.00  0.323   -.41559   .13927
    fslev | -.31121  1.5383  -0.22  0.835   -3.3993   2.7973
    fsliq |  1.4374  2.2420   0.63  0.537   -3.0783   5.9531
    _cons |1.4654   6.3645   0.24  0.815   -11.137   14.090
--------------------------------------------------------------------------
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R-squared	0.0342	Mean dependent var	2.1000
F-statistic	0.5233	S.D. dependent var	2.3506
Prob(F-statistic)	0.0348		
S.E. of regression	2.0417	Akaike info criterion	4.3916

Note: *1%, ** 5%, ***10% level of significance.
Source: Researchers computation (2021)

We test cause-effect relationship between the dependent and explanatory variables of Firm specific factor model using Robust Least Square (RLS) pooled regression. The results show that the R-squared value is 0.0342. The figure implies that all the independent variables jointly explain only about 3.42% of the systematic variations in the criterion variable firm profitability (ROA); while 96.58% were unexplained by the variables. More so, the F-statistics value is 0.5233 with a corresponding p-value of 0.0348, indicating the goodness of fit of the model and evident that the regression model is generally significant and well specified.

Test of Hypotheses and Discussion of Results
Ho1: Firm size does not have potential implication on profitability of insurance.
From the model: the coefficient value is **-0.13835; t-statistics value is -1.00; and p-value is 0.323.** This indicates a negative impact on (ROA) but this impact is not statistically significant since its p-values is more than 0.10 significance level. The study therefore accept the null hypothesis which states that firm size does not potentially impact firm profitability of quoted Insurance in Nigeria. Therefore FSSIZE has insignificant negative impact on profitability of the pooled firms for the period.

In the reviews, we found out that most of the studies have proved that larger firms generate higher profits and thus showed positive relation between size and performance (Asimakopoulus, Samitas & Papadogonas, (2009).; Nunes et al., 2009; Pratheepan, 2014; Nakatani, 2019) in contrast to our findings. Bhatta and Hasan, 2013, found significant negative in contrast to our findings; while negative significant was found by the followings: (Goddard et al., 2005; Akvavan et al., 1997; Smirlock, 1995), but these authors found positive significant in disagreement with our own result: (Kwaltommai, et al., 2019; Almajali, et al., 2012; Velnampy & Nimalathasan, 2010; Bashir et al., 2013; Chandrapala & Knapkova, 2013; Malenkien et al., 2012; Memon et al., 2012 and Mehari & Aemiro, 2013).

Ho2: Firm age does not have a potential implication on profitability of insurance.
From the model: **the coefficient value is 0.0853, t-statistics value is 0.94 and p-value is 0.35.** The result shows to have a positive impact on the (ROA), but this is not statistically significant as the p-values is greater than 0.10 significance level.. This therefore suggests that we should accept the null hypothesis **(Ho2)** which states that firm age does not potentially impact profitability of pooled Insurance firms in Nigeria. Thus FAGE is positively insignificant on profitability.

Past research from our literature findings however shows that the probability of firm growth, firm failure, and the variability of firm growth decrease as firms age (Evans, 1987; Yasuda, 2005) and according to the life cycle effect, younger companies are more dynamic and more volatile in their growth experience than older companies (Evans, 1987) in contrast to our study findings. Also, firm age was found to have significant relationship with profitability as found by (Blazkova & Dvoulety, 2019; Kwaltommai et al., 2019 and Agnes, 2013).

Ho3: Firm leverage does not have a potential implication on profitability of insurance.
From the model: **the coefficient value is -0.3121, t-statistics value is -0.22 and p-value is 0.835** and this is seen to have a negative impact on (ROA) but this impact is not statistically significant since its p-values is more than 0.10. Based on this fact, we accept **(Ho3)** which posited that firm leverage does not potentially impact profitability of pooled Insurance firms in Nigeria. Leverage is negatively insignificant on insurance profitability.

In the literature, leverage is negatively related to profitability; the trade-off between agency costs of debt and equity (Jensen and Meekling, 1976); the limited liability effect of debt and the disciplining effect of debt (Jensen, 1986) all suggest a positive effect of

leverage on performance in contrast to our findings. Bhatta and Hassan, 2013 found insignificant negative relationship in agreement with our findings, but Long and Maltiz, (1985), found insignificant positive relationship.

In the literature we found an inverse leverage – profitability relationship, indicating that lucrative firms are less dependent on leverage (Asimakopoulus et al., 2009; Nunes et al., 2009; Khaled and Samman, 2015; Nanda and Panda, 2018; Blažková and Dvouletý, 2019) in contrast to this findings. Further, the following works found that leverage has significant impact on profitability (Chatzoglou et al., 2018; Mehari & Aemiro, 2013; Kwaltommai, et al., 2019; Menon et al., 2012; Almajali, et al., 2012; Bashir et al., 2013; Agnes, 2013); while Malekian, et al., (2012), found significant negative in contrast to our findings.

Ho4: Firm liquidity does not have a potential implication on profitability of insurance.

Based on the model**: the coefficient value is 1.4654, t-statistics value is 0.63 and p-value is 0.537** seems to have a positive impact on (ROA) but this impact is not statistically significant because its p-values is greater than 0.10 level of significance. By this we accept the (Ho4) that firm liquidity does not potentially impact profitability of pooled Insurance firms in Nigeria. Thus Liquidity is positively insignificant on profitability of firms.

In contrast to this finding, literature indicated that, Liquidity has been shown to increase profitability in the medium to long term (Goddard et al., 2005; Nanda and Panda, 2018; Yameen, Farhan & Tabash, 2019), however also none (Zainudin, Mahdzan, & Leong (2018) or a negative relationship between liquidity and profitability has been detected in the short term; while Almajali et al., 2012 and Agnes, 2013 found significant relationship.

Summary Of Findings, Conclusion And Recommendations

Summary of Findings

This work determined the potential impact of firm specific factors on profitability of listed Insurance companies in Nigeria, 2015 to 2019. These firm specific factors (Firm Size, FSSIZE; Firm Age FSAGE; Firm Leverage FSLE; and Firm Liquidity FSLQ) were identified as the independent variables; while the dependent variable Profitability is proxy with Return on Asset ROA, were measured and the statistical techniques employed: Descriptive statistics; Pearson Correlation Matrix and Robust Least Square (RLS) Regression. The results show that the R-squared value is 0.0342. The figure implies that all the independent variables jointly explain only about 3.42% of the systematic variations in the criterion variable firm profitability (ROA); while 96.58% were unexplained by the variables. More so, the F-statistics value is 0.5233 with a corresponding p-value of 0.0348, indicating that the regression model is generally significant and well specified. The final findings indicated the followings: FSSIZE has insignificant negative impact on profitability; FSAGE is positively insignificant on profitability; FSLEV is negatively insignificant on profitability; FSAGE positively insignificant on profitability and FSLIQ are positively insignificant on profitability of insurance firms pooled for the period.

Conclusions

We conclude that Firm size and Firm Leverage are have insignificant negative impact on profitability; while FSAGE and FSLIQ are positively insignificant on profitability of insurance firms pooled for the period. The insignificant negative result of our study may be attributable to the lack of trust and averse of Nigerians as it relates to insurance cover. The Nigeria Law only compels citizens on vehicle licenses to engage on third party insurance which the earnings are insignificant to the growth of insurance in Nigeria and thus this contributes to the so much looses in the insurance reports during the periods understudied.

Recommendations

Our recommendations are that Insurance firms should increase their firm size; try to earn more premiums to sustain firm age and increase liquidity and possibly increase their leverage level in order to drive their performance high and have a better ROA

Contributions to Knowledge

We contribute with the findings depicting the true state of polled insurance companies in Nigeria, the modernized model and the rich literatures for academia

Implications of the Study

Management of insurance firms in increasing the firm size, campaigning for premium to increase earnings in order to drive profitability should remember that the law only mandated third party insurance and also Nigerians' hostile mind as it relates to insurance cover.

REFERENCES

Abdullahi Sadiq Kwaltommai, Martins Ilemona Enemali, Jude Duna & Ado Ahmed. (2019). The impact of firm characteristics and financial performance of consumer good firms in Nigeria. *Scholars Bulletin ISSN 2412-9771 (Print) |ISSN 2412-897X (Online) Scholars Middle East Publishers, Dubai, United Arab Emirates Journal homepage: http://scholarsbulletin.com/ DOI:10.36348/sb.2019.v05i12.008*

Abor, J. (2005). "The Effect of Capital Structure on Profitability: An Empirical Analysis of Listed Firm in Ghana," Journal of Risk Finance, Vol. 6, No. 5, 2005, p. 438. doi:10.1108/15265940510633505

Agnes W, K, (2013) Relationship between Firm Characteristics and Financial Performance of Life Insurance Companies in Kenya, A Research Project for the Award of Degree in Master of Science in Finance, University of Nairobi

Akhavein, J.D., Berger, A. N & Humphrey, D. B. (1997). The Effects of Megamergers on Efficiency and Prices: Evidence from a Bank Profit Function. Finance and Economic Discussion Series, Vol. 9, Board of Governors of the Federal Reserve System, 1997.

Almajali, A.Y., Alamro, S.A. & Al-Soub, Y.Z. (2012). Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange, Journal of Management Research, 4 (2).

Asimakopoulos, I, Samitas, A. & Papadogonas, T. (2009). Firm-Specific and Economy Wide Determinants of Firm Profitability: Greek Evidence Using Panel Data. Managerial Finance, 3,5(11), 930-939.

Athanasoglou, P.P., Brissimis, S.N. & Delis, M,D (2008). Bank Specific, Industry-Specific and Macroeconomic Determinants of Bank Profitability", Journal of International Financial Markets, Institutions and Money, 18 (2), 121-136.

Athanasoglou, P.P., Brissimis, S.N. & Delis, M. D. (2005) Bank-Specific, Industry-Specific and Macroeconomic Determinants of Bank Profitability," Bank of Greece Working Paper, No. 25, 2005.

Bashir, Z., Abbas, A., Manzoor, S. & Akram, M.N. (2013). "Empirical Investigation of Ihe Factors Affecting Firm's Performance; a Study Based on Food Sector of Pakistan", International SAMANM Journal of Finance and Accounting, 1(2): 11-23

Blažková I. & Dvouletý O. (2018). The causes of firm performance variation in the Czech food processing industry in the context of the outlier effect. Management Research Review, 41(8), 968-986.

Blažková I. & Dvouletý O. (2019). Investigating the differences in entrepreneurial success through the firm-specific factors: Microeconomic evidence from the Czech food industry. Journal of Entrepreneurship in Emerging Economies, 11(2), 154-176.

Bobenič Hintošová A., Bobenič T., Hajduová Z., Szajt M. (2020) The Influenc Of Firm-Specific Factors On Firms´ Performance June 2020Polish Journal of Management Studies 21(2):115-128 DOI: 10.17512/pjms.2020.21.2.09

Booth, L., V. Aivazian, Demirguc-Kunt, V. & Maksmivoc, V. (2001). Capital Structures in Developing Countries. *Journal of Finance, Vol. 56, No. 1, 2001, pp. 87-130. doi:10.1111/0022-1082.00320*

Botoe, C. (2012). The impact of liquidity on profitability of commercial banks in Liberia. Unpublished Thesis, University of Nairobi

Brigham, E.F. & Gapenski, L.C. (1988). Financial Management: Theory and practice Chicago: The Dryden Press.

Capon, N., Farley, J.U. & Hoenig, S. (1990). Determinants of financial performance: a meta-analysis", Management Science, (3-6), 10: 1143-1159.

Chandrapala, P. and Knapkova, A. (2013). "Firm-sped fi c factors and fi nancial performance of firms intheCzechRepublic".ActaUniversitatisAgriculturaeetSilviciilturaeMendelianaeBnmensi, 7: 2183-2190

Chatzoglou P., Chatzoudes D., Sarigiannidis L. & Theriou G., (2018). The role of firm-specific factors in the strategy-performance relationship: Revisiting the resource-based view of the firm and the VRIO framework. Management Research Review, 41(1), 46-73.

Cowling M., Liu W., Zhang N., (2018). Did firm age, experience, and access to finance count? SME performance after the global financial crisis. Journal of Evolutionary Economics, 28(1), 77-100.

Evans, D.S. (1987), "The relationship between firm growth, size, and age; estimates for 100 manufacturing industries", Journal 'of Industrial Economics, (35), 4: 567-581.

Friend I. & Larry, L.H.P. (1988). An Empirical Test of the Impact of Managerial Self-Interest on Corporate Capital Structure. *Journal of Finance, Vol. 43, No. 2, 1988, pp. 271-281. doi:10.1111/j.1540-6261.1988.tb03938.x*

Gillman, M., Harris, M. & Matyas, L. (2002). Inflation and Growth: Some Theory and Evidence. *10th International Conference on Panel Data, Berlin, July 2002, pp. 1-26.*

Goddard, J., Molyneux, P. & Wilson, J. O. S. (2004). The Profitability of European Banks: A Cross-Sectional and Dynamic Panel Analysis. *Manchester School, Vol. 72, No. 3, 2004, pp. 363-381. doi:10.1111/j.1467-9957.2004.00397.x*

Granger, C.W.J, (1969), "Investigating Causal Relations by Econometric Models and Crossspectral Methods", Econometrica, 37, 428-438.

Hardwick, P. (1997). "Measuring Cost Inefficiency in the UK Life Insurance Industry", Applied Financial Economics, 7, 37-44.

Harris, M & Raviv, A. (1990). Capital Structure and the Informational Role of Debt. *Journal of Finance, Vol. 45, No. 2, 1990, pp. 321-349. doi:10.1111/j.1540-6261.1990.tb03693.x*

Jensen, M.C., & Meckling, W. (1976), Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics No.3, pp 305-360.

Jensen, M.C. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics, 3(4), 305-360.*

John, W. K. (1999). How Firm Characteristics Affect Capital Structure: An International Comparison. *Journal of Financial Research, Vol. 22, No. 2, 1999, pp. 161-187.*

Kester, W.C. (1986). Capital and Ownership Structure: A Comparison of United States and Japanese Manufacturing Corporation. *Financial Management, Vol. 15, No. 1, 1986, pp. 5-16. doi:10.2307/3665273*

Long, M. & Maltiz, I. (1985). The Investment-Financing Nexus: Some Empirical Evidence. *Midland Corporate Finance Journal, Vol. 3, No. 3, 1985, pp. 53-59.*

Memon, F., Bhutto, N. A. & Abbas, G. (2012). Capital Structure and Firm Performance: A Case of Textile Sector-of Pakistan. *Asian Journal of Business and Management Sciences, 1(9): 9-15*

Myers, S. C. (1977). Determinants of Corporate Borrowing. *Journal of Financial Economics, Vol. 5, No. 2, 1977, pp. 147-175.* *doi:10.1016/0304-405X(77)90015-0*

Nousheen Tariq Bhutta & Arshad Hasan. (2013). Impact of Firm Specific Factors on Profitability of Firms in Food Sector. *Open Journal of Accounting, 2013, 2, 19-25 http://dx.doi.org/10.4236/ojacct.2013.22005 Published Online April 2013 (http://www.scirp.org/journal/ojacct)*

Owolabi, S.A & Obida, S. (2012). Liquidity Management and Corporate Profitability. A study of Selected Manufacturing companies in Nigeria Stock Exchange. *Business Management Dynamics Journal, Vol 2, 2, pp. 10-25*

Raluca-Georgians, M. (2013), The Relationship between Firm Performance and Board Characteristics in Romania. *International Journal of Academic. Research in Economics and Management Sciences, 2(1), 167-175*

Serrasqueiro, Z., Maria, N. & Paulo, M. (2007). The Explanatory Power of Capital Structure Theories: A Panel Data Analysis. *Icfai Journal of Applied Finance, Vol. 13, No. 7, 2007, pp. 23-38.*

Shehu, U. H (2012). Determinant of Capital Structure in the Nigerian listed insurance firms. International Journal of Chain-USA Business Review, 10(12): 81-89

Smirlock, M. (1985). Evidence on the (Non) Relationship between Concentration and Profitability in Banking. *Journal of Money, Credit, and Banking, Vol. 17, No. 1, 1985, pp. 69-83. doi:10.2307/1992507*

Subramaniam, N. , McManus, L. , & Zhang, J. (2009). Corporate governance, firm characteristics and risk management committee formation in Australian companies. *Managerial Auditing Journal , 24(4), 316–339. doi:10.1108/02686900910948170 [Crossref], [Google Scholar]*

Symeou, P.C. (2012). The firm size - performance relationship: an empirical examination of the role of the firm's growth potential. *Institute for Communication Economics, Department of Management, University of Munich (LMU); Judge Business School, University of Cambridge,*

Titman, S. & Wessels, R. (1988). (1988). The Determinants of Capital Structure Choice. *Journal of Finance, Vol. 43, No. 1, 1988, pp. 1-19. doi:10.1111/j.1540-6261.1988.tb02585.x*

Velnampy, T & Nimalathasan, B (2010). Firm Size on Profitability: A Comparative Study of Bank of Ceylon and Commercial Bank of Ceylon Ltd In Srilanka. *Global Journal of management and Business Research, Vol. 10 Issue 2; 96-103.*

Williamson, O. (1988). Corporate Finance and Corporate Governance," Journal of Finance, Vol. 43, No. 3, 1988, pp. 567-591. doi:10.1111/j.1540-6261.1988.tb04592.x

Wiwattanakantang, Y. (1999). An Empirical Study on the Determinants of the Capital Structure of Thai Firms. *Pacific-Basin Finance Journal, Vol. 7, No. 3-4, 1999, pp. 371-403. doi:10.1016/S0927-538X(99)00007-4*

Yasuda, T. (2005). Firm Growth, Size, Age and Behavior in Japanese Manufacturing *Small Business Economics, (24), 1: 1-15.*