

Corporate Physiognomies and Profitability of Quoted Insurance Companies: Evidence from Emerging Markets

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Abstract

This study investigates the effect of corporate physiognomies on profitability of quoted insurance companies-evidence from the emerging market (Nigeria) for the period of ten years (2012 to 2021). The population of the study consist of 28 listed insurance firms as at 31st December, 2021 out of which twenty-one (21) quoted insurance firms were employed as a sample using filter sampling technique. Secondary data was employed by using the annual reports and accounts of the selected firms. The study employs ex-post facto as the research design for the study with pooled panel data. Multiple regression technique was employed as technique for data analysis to test the hypotheses of the study. The findings of the study revealed that all the explanatory variables (corporate size, leverage, liquidity, corporate age and underwriting risk) have statistical significant impact on the profitability of quoted insurance companies in Nigeria. Therefore, it is recommended among others that management should strictly consider the return that could be generated from the usage of assets, ensure a consistent liquidity sufficiency, maintain a stable long-range solvency ratio, ensure a reasonable but consistent balance between the benefits paid and the quantum of net premium while justifying their corporate existence/participation and recognition in the insurance industry and the stock exchange respectively. Indeed, management of quoted insurance companies should strive at increasing their capacity to generate borrowings and other forms of deposits as this will empirically increase the profitability (ROA) of the quoted insurance companies in Nigeria.

Keywords: Corporate Physiognomies, Liquidity Preference, Credit Hypotheses, Emerging Market, Covid-19, Nigeria.

Introduction

Insurance industry provides unique financial services to the growth and development of every economy. Such specialized financial services range from the underwriting of risks inherent in economic entities and the mobilization of large amount of funds through premiums for long term investments. The risk absorption role of insurers promotes financial stability in the financial markets and provides a sense of peace to economic entities. A well- developed and evolved insurance industry is a boom for economic development as it provides long- term funds for development (Efuntade & Akinola, 2020; Fujianti, 2018; Charumati, 2012). The insurance firms' ability to cover risk in the economy hinges on their capacity to create profit or value for their shareholders. Insurance business policies are classified into two: general insurance policy and life insurance policy. The

functions of insurance firms include: providing indemnity services, loss prevention, job creation, life assurance policies amongst others (Kartiningasih & Daryanto, 2020).

Profitability shows how well a firm uses its asset from its primary mode of business to generate income (Fujianti, 2018). It is the overall efficiency of a company's ability to earn profit. It is seen as one of the main objectives of every firm as no firm is set up with the intention of incurring losses which may lead to eventual closure, they all try to work in line with the going concern principle which is the assumption that an entity will remain in business for the foreseeable future, as it will not be forced to halt operations and liquidate its asset in the near term. Financial performance has implications to organizations health and ultimately its survival.

The profitability of corporate entities can be affected by both internal and external corporate attributes. In particular, the Nigerian insurance sector has performed poorly over time as it contributes only 0.4% to the nation's (GDP), making it the poorest when compared to other countries within the continent. This poor profitability recorded over the years might not be unconnected with so many issues which comprise religious, cultural, low penetration, poor understanding and above all, nonpayment of claims by insurance companies which has led to good will reduction. The poor profitability of insurance companies as noted by Agabi, stemmed from several years of non-payment of claims by underwriting firms. The defaulting in claims by insurance firms in Nigeria resulted in goodwill reduction. However, on the issue of nonpayment of claims, certain companies have settled genuine claims amounting to billions of naira, from lowest amount being 2.8 billion to the highest amount of 4.9 billion, yet policy holders were still not satisfied. The pulling out of banks from insurance business by the Central Bank of Nigeria, made claims hard to be paid by insurance companies previously owned by banks.

Business entities are associated with certain corporate physiognomies which impact on their profitability either positively or negatively. Corporate physiognomies are those attributes or features such as corporate size, leverage, liquidity, capital, corporate age, dividend, market share, off-balance sheet engagements, operational expenses, among others, that could have effect on the operations of a corporate entity. This study therefore, exclusively considers certain corporate physiognomies of the Nigerian quoted insurance companies which include the size of the insurance companies, the liquidity, leverage, age and the underwriting risk. It was argued that insurance companies that are relatively larger in size with huge and quality assets base are more likely to record huge profit compared to their smaller counterparts. This is because smaller companies may have little number of employees; little turnover, branches and assets size hence, their profitability is more likely to be very low if compared to the bigger insurance companies.

Corporate liquidity measures the company's ability to meet its short-term obligations using its most liquid assets, for a continuous operation. It shows the ability to convert an asset to cash quickly. Liquidity improves companies' operational performance. Life insurance

companies with more liquid assets are less likely to fail because they can realize cash at the time of need thus, out-performing those with less liquid assets.

Leverage shows the degree to which a business is utilizing borrowed money. 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 because it can increase the shareholders' return on their investment and make good use of the tax advantages associated with borrowing. The degree of financial leverage reflects a company's ability to manage their economic exposure to unexpected losses. Leverage is measured by the ratio of total liabilities to total assets

Another physiognomy of insurance companies is underwriting risk which reflects the adequacy, or otherwise, of insurers' underwriting performance. Sound underwriting guidelines are pivotal to an insurer's profitability. The underwriting risk depends on the risk appetite of the insurers. The ratio of benefits incurred to net premium is a measure of underwriting risk (Adams & Buckle, 2003).

From the perspective of corporate age, business entities that have been in the market for a long period of time have acquired reputation, since they have proven their ability to fulfill long-term contract obligations and their financial stability. The company age can be calculated straightforwardly for all companies. Age of the company is one of the non-financial drivers in explaining and predicting the profitability of companies and it is measured by taking difference between observation and establishment year of the company and thereafter taking natural logarithm of the outcome (Malik, 2011). In a similar vein, older companies may also benefit from reputation effects which allow them to earn higher profit margin on sales (Almajali, 2012). The age element is scaled by considering the natural logarithm of company age.

Profitability is a vital concern to all groups of stakeholders who have a direct or indirect interest in the company. In spite of these vital roles that profit plays in the going concern of insurance companies, the profitability status of all the insurance companies operating in Nigeria is expected to have a strong causal relationship with companies' physiognomies. Hence, it is of interest to know the extent by which corporate physiognomies (corporate size, liquidity, leverage, underwriting risk and corporate age) affect the profitability of quoted insurance companies in Nigeria. The corporate physiognomies of the insurance companies are to be examined to provide valuable information in regards to their effects on their profitability. Ahmed, Naveed and Usman (2011) and Yuvaraj and Abate (2013) suggested that although there are different ways to measure profitability, it is better to use ROA instead of alternative measurements of profitability.

Considering the importance of corporate physiognomies, a lot of specialists have concentrated on the effect of corporate attributes on financial performance and they include: Abdullahi (2016), Kaseem (2015), Dogan (2013), Sumaira and Amjad (2013), Yuvaraj and Abate (2013), Charumathi (2012), Shiu (2012), Malik (2011), Oketoy, Osei and Genegah (2011) among others and they are not without variations in their findings. Theoretically,

while there are previous researches that studied corporate characteristics and financial performance such as Dogan (2013), Sumaira and Amjad (2013), Yuvaraj and Abate (2013), Charumathi (2012), Oketoy, Osei and Genegah (2011), Shiu (2004) these studies used various sectors in manufacturing industry within specific geographical areas such as Pakistan, Ethiopia, Ghana, India, Kenya, the United Kingdom.

This study specifically, is to investigate the impact of corporate physiognomies on profitability (ROA) of quoted insurance companies in emerging market by using Nigeria as a case scenario. Furthermore, with reference to Nigeria, extant studies such as Abdullahi (2016), Dogarawa and Maude (2015), Kaseem (2015) and Hassan and Farouk (2014) examined firm characteristics and financial performance. However, literatures have been grossly inconsistent and that empirical evidence has not been effectively tested by the previous studies. The earlier investigations provide no statistical evidence on the effect of corporate physiognomies on profitability especially on insurance companies in Nigeria as emerging market economy. Hence, this study attempts to examine the impact of corporate physiognomies on profitability of quoted insurance companies in emerging markets evidence from Nigeria for the period of ten (10) years spanning from (2012 – 2021).

From the practical point of view, in Nigeria as emerging market economy particularly in the insurance sector, the issue of corporate governance practices came into existence with the expanding pattern of frauds, financial scandals, insolvencies, non-settlement of claims, and other unscrupulous-based practices. These unethical scenarios hold influence in the business, resulting in loss of certainty, poor insurance patronage and stunted growth for insurance industry (Likali & Ejide, 2010; Ajemunigbohun, Elegunde & Titilope, 2020). Similarly, the Nigerian Insurers' Association (NIA) reported a total of 1,661 protest-induced claims due to the #Endsars protests, of which 143 substantiated claims worth #105.0m have been settled. Although, this would suggest greater expenses and discouraged profitability for insurers (Ajemunigbohun, Elegunde & Titilope, 2020).

Indeed, for the year 2020, sigma research had expected both non-life and life premiums to contract by 1.0% and 1.5% respectively akin to that of the Global Financial Crisis (GFC) in 2008 due to the effects of Covid-19 pandemic on the insurance. Again, lower premiums as a result of reduced-economic activities, coupled with lower investment income pressured the profitability of insurers in the financial year 2020. This was further exacerbated by increased expenses associated with remote working and business continuity plans as well as natural catastrophic and manmade losses estimated at \$89.0Billion in 2020 (Ajemunigbohun, Elegunde & Titilope, 2020). Consequently, most insurance firms held back on dividend payments and share repurchases.

From the methodological point of view, most of the prior studies such as Yuvaraj and Abate (2013), Charumathi (2012), Daniel and Tilahun (2012), Ahmed *et al* (2011) among others conducted studies in this area and employed Ordinary Least Square (OLS) regression technique. These techniques might seem to be deficient in terms of not reflecting the true picture of unobserved peculiarities, time variant and specific characteristics issues. Indeed,

measurement and content validities have not been given adequate considerations by most of the aforementioned studies.

It was formulated thus, what is the impact of corporate physiognomies (Corporate size, Leverage, Liquidity, Corporate age and Underwriting risk) on profitability of quoted insurance companies in Nigeria as emerging market economy? Based on the aforementioned research questions, the main objective of this study is to examine the impact of corporate physiognomies (Corporate size, Leverage, Liquidity, Corporate age and Underwriting risk) on profitability of quoted insurance companies in Nigeria. Hence, it was hypothesized in null form that corporate physiognomies proxied by (Corporate size, Leverage, Liquidity, Corporate age and Underwriting risk) have no significant impact on profitability of quoted insurance companies in emerging markets – Nigeria.

Therefore, the remaining part of this paper is organized as follows; section two deals with literature review and theoretical framework, section three deals with methodology and section four discusses the results and findings of the study while conclusion and recommendation will be discussed in the final section.

The study will also assist corporate managers in identifying the drivers that could positively or negatively influence the efficient and effective use of resources through the physiognomies of the quoted insurance companies. The regulatory agencies in Nigeria such as the Securities and Exchange Commission (SEC), the National Insurance Commission (NAICOM) and most importantly, the Nigerian Investment Promotion Commission (NIPC) can use the findings of this study for policy formulation and strategic decision making. The SEC can use the findings for stock market quotations and regulations as well as the determination of highly profitable insurance companies (top-gainers and top-losers) among others.

Indeed, the NAICOM can use the results for legal, statutory and regulatory framework, ensuring ethical and professional best practices in line with global best insurance practices and standards. The NIPC can also find the results of crucial relevance particularly in terms of the abundant opportunities available in the Nigerian insurance industry. This may give room for exploring other channels of promoting domestic investments in particular, and Foreign Direct Investment (FDI) at large.

Literature Review and Theoretical Explanations

Corporate Size and Profitability

In a study conducted by Efuntade and Akinola (2020), they examined the connection between corporate attributes and financial performance of quoted manufacturing firms in Nigeria. The explanatory variables employed were firm size, firm age, liquidity, leverage and sales growth. Indeed, stakeholders' and stewardship theory were used as the underpinning theories of the study. The result from the multiple regression technique shows that firm size has strong significant impact on financial performance of quoted firms in Nigeria.

Dogarawa and Maude (2015) assessed the effect of firm specific attributes on financial performance of Deposit Money Banks (DMBs) in Nigeria. The study formulates ten (10) hypotheses and applies panel data regression to analyze the extent to which market share, liquidity, credit risk, interest rate spread, leverage, efficiency, operating expenses, deposits, capital management, and bank size affect the financial performance of the banks. The study utilized secondary data extracted from the financial statements of the 13 banks listed on the Nigerian Stock Exchange (NSE) that have their financial statements available over the period 2005 to 2014. Due to absence of cross-sectional effect in the dataset as confirmed by the result of Breusch Pagan Lagrangian Multiplier test and presence of Heteroskedasticity, the study uses robust pooled panel regression result for analysis and interpretation. The result of the robust pooled regression model reveals that financial performance of banks in Nigeria is significantly affected by market share, liquidity, interest rate spread, leverage, and operating expenses. The result also reveals that default risk, efficiency, deposits, capital management and size have no significant effect on financial performance of DMBs.

Abdullahi (2016) examined firm characteristics and governance mechanisms on financial performance of listed building materials firms in Nigeria. The study formulated five hypotheses and used generalized least square multiple regression to analyze the secondary data extracted from the annual reports and accounts of the seven (7) sampled firms out of ten (10) as population for the period of 10 years ranging 2005 to 2014. The study found that leverage and firm size have significant impact on the financial performance of listed building materials firms in Nigeria. The study likewise found that liquidity, operating expenses and managerial shareholdings have no significant effect on the financial performance of the firms.

Liquidity and Profitability

In a study conducted by Efuntade and Akinola (2020), they examined the connection between corporate attributes and profitability of quoted manufacturing firms in Nigeria. The explanatory variables employed were firm size, firm age, liquidity, leverage and sales growth. Indeed, stakeholders' and stewardship theory were used as the underpinning theories of the study. The result from the multiple regression technique shows that liquidity has strong significant impact on financial performance of quoted firms in Nigeria.

Again, Kartiningasih and Daryanto (2020) have studied the effect of liquidity on the profitability of quoted food and beverages firms in Indonesia. The study was conducted for a five-year period (2014 - 2018) and resource-based theory was employed to underpin the study. The findings from the multiple linear regression technique reveals that liquidity have positive significant impact on the profitability of quoted food and beverages firms in Nigeria. Although, the measurement of profitability is not clearly stated and defined coupled with environmental variations which if properly captured, a different result could have been obtained.

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Underwriting Risk and Profitability

Burca and Batrinca (2014) studied the factors that influence the financial performance (return on total assets ratio) in the Romanian insurance market during the interval 2008-2012, tested 13 explanatory variables: insurance financial leverage, company size, number of years since the company operates in the Romanian market, growth of gross written premiums, equity, total market share, diversification, underwriting risk, investment ratio, reinsurance dependence, retained risk ratio, solvency margin and growth of GDP per capita. The study found that there is a positive relationship between size and financial performance, since larger firms have more resources, a better risk diversification, complex information systems and a better expenses management.

Mirie and Jane (2015) examined the determinants of financial performance in general insurance companies in Kenya. The study was therefore to establish the factors that affect the profitability of general insurers in Kenya. The study employed multiple linear

regression, with return on assets as the dependent variable, and considered all the general insurance companies in Kenya for the period 2009-2012. Profitability was positively related to leverage, equity capital, management competence index and negatively related to size and ownership structure. Charumathi, (2012) examined the determinants of profitability of Indian life insurers within the period of 2008-2010. For this purpose, firm specific characteristics such as leverage, size, premium growth, liquidity, underwriting risk and equity capital are regressed against Return on Assets. This study concludes that profitability of life insurers is positively and significantly influenced by the size (as explained by logarithm of net premium) and liquidity.

Corporate Age and Profitability

Accordingly, Kartiningsih and Daryanto (2020) have studied the effect of firm age on the profitability of quoted food and beverages firms in Indonesia. The study was conducted for a five-year period (2014 - 2018) and resource-based theory was employed to underpin the study. The findings from the multiple linear regression technique reveals that firm age have positive significant impact on the profitability of quoted food and beverages firms in Nigeria. Although, the measurement of profitability is not clearly stated and defined coupled with environmental variations which if properly captured, a different result could have been obtained.

In a study conducted by Efuntade and Akinola (2020), they examined the connection between corporate attributes and financial performance of quoted manufacturing firms in Nigeria. The explanatory variables employed were firm size, firm age, liquidity, leverage and sales growth. The result from the multiple regression technique shows that firm age has strong significant impact on financial performance of quoted firms in Nigeria.

Kaseem (2015) examined firm specific characteristics and financial performance of listed insurance firms in Nigeria. Secondary data was obtained from financial statement of the selected listed insurance firms in Nigeria. Multiple regression was employed as a tool of analysis as well as fixed and random effect model, the result shows that firm's size, loss ratio, liquidity and leverage have negative and significant impact on financial statements of listed insurance companies in Nigeria. While, firm's age and premium have positive but insignificant impacted on the financial performance of listed insurance companies in Nigeria.

Mirie and Jane (2015) examined the determinants of profitability in general insurance companies in Kenya. The study was therefore to establish the factors that affect the profitability of general insurers in Kenya. The study employed multiple linear regressions, with return on assets as the dependent variable, and considered all the general insurance companies in Kenya for the period 2009-2012. The study did not find a relationship between profitability and retention ratio, liquidity, underwriting risk and age.

From the theoretical underpinning theory perspective, the credit market hypotheses and liquidity preference theory were employed to provide theoretical explanations to the

variables of the study. Interestingly, the nexus between the size (assets), debt ratio (leverage), corporate age and the level of uncertainties (underwriting risk) of a corporate entity can be logically anchored under the auspices of the credit market theory. Meanwhile, corporate size, leverage, corporate age and underwriting risk can be effectively underpinned by the credit market theory. For the purpose of this study, the liquidity preference theory has been linked with the liquidity of the quoted insurance companies as supporting theory of the study.

Methodology and Model Specification

For the purpose of this study, correlational and ex-post facto research designs were employed for the purpose of this study. Correlational research design was employed in order to examine the statistical relationship between the variables of the study. Ex-post facto design on the other hand, was used in this study as it aids the collection of data through extraction from the annual reports and accounts (secondary source) of the quoted firms used in the study. Indeed, the population of the study consists of twenty-eight (28) quoted insurance companies in Nigeria on the floor of Nigerian Stock Exchange as at 31 December, 2021. The study employed twenty-one (21) quoted insurance companies as the domain of the study. This is based on the fact that the population was considered adequate and reliable to constitute the domain of the study and hence, to improve the statistical inferences of the study at large.

Indeed, a filter was used as sampling technique of the study. The use of filter sampling techniques in this study was to enable the elimination of any company with incomplete data needed for measuring the variables within the period of the study (2012 – 2021). Most importantly, multiple regression technique was employed because the study determines the causes and effect of the relationship of each variable. Finally, the study has conducted data diagnostic tests such as Hausman specification test, Heteroskedasticity test and Multicollinearity test in order to improve the validity and reliability of the statistical inferences derivable from the regression model of the study.

Table 3.1: Operationalization of Variables Measurement

S/N	Variables Name	Variable Type	Acronym	Measurements	Source(s)
1.	Return on Asset	Explained	ROA	Profit before interest and tax/ Total Assets,	Dogarawa and Maude (2015), Kaseem (2015), Sumaira and Amjad (2013).
2.	Corporate Size	Explanatory	CS	Natural log of Total Assets.	Abdullahi (2016), Hassan and Farouk (2014), Yuvaraj

					and Abate (2013), Daniel and Tilahun (2012).
3.	Liquidity	Explanatory	LQ	Current Assets/ Current liabilities	Abdullahi (2016), Dogarawa and Maude (2015), Hassan and Farouk (2014), Charumathi (2012), Ahmed <i>et al</i> , (2011), Shiu (2004).
4.	Leverage	Explanatory	LR	Total Debt/ Total Assets.	Sumaira and Amjad (2013), Ahmed <i>et al</i> , (2013), Mehari and Aemiro (2013), Kaseem (2015).
5.	Underwriting Risk	Explanatory	UR	Benefits paid/ Net premium.	Mirie and Jane (2015), Burca and Batrica (2015).
6.	Corporate Age	Explanatory	CA	Natural logarithm of year of listing or quotation in the Nigerian Stock Exchange (NSE).	Kaseem (2015), Sumaira and Amjad (2013).

Source: Compiled by the Author Based on Literature, (2022).

Hence, a multiple regression equation is adopted in order to examine the hypothesized relationships between the outcome or explained variable as well as the explanatory variables of the study. The econometric model of the study is depicted here under:

$$ROA_{it} = \alpha + \beta_1 CS_{it} + \beta_2 LQ_{it} + \beta_3 LV_{it} + \beta_4 UR_{it} + \beta_5 CA_{it} + \mu_{it}$$

Where

ROA = Return on Asset; α = Constant term; CS = Corporate Size; LQ = Liquidity; LR= Leverage; UR= Underwriting Risk; CA = Corporate Age; μ = Error Term; it = period i at time t (panel data).

$\beta_1 - \beta_5$ = Coefficients of the explanatory variables.

Results and Discussion

Table 4.1: Descriptive Statistics

Variable	Minimum	Maximum	Mean	Std. Dev	N
ROA	-0.4500	0.9800	0.1497	0.2051	210
CS	0.6577	4.0464	2.0819	0.4297	210
LV	0.5874	0.7642	2.0163	0.4000	210
LQ	0.0578	2.9882	1.9983	0.4677	210
CA	17	51	0.4816	0.2887	210
UR	0.6371	3.6269	2.0803	0.3642	210

Source: STATA Output (2021).

Table 4.1 shows that the proxy of profitability, return on assets (ROA) has a minimum value of -0.45 and 0.98 as maximum value respectively. The mean value of ROA 14.97% with a standard deviation of 20.51% indicates that on the average, for every N100 worth of the total assets of the sampled companies, N14.95K was earned as profit before tax during the study period and that there is a relatively high dispersion of the data from the mean because the standard deviation is higher than the mean. The minimum value of -0.45 is attributable to the losses suffered by the firms during the period of the study. The minimum and maximum value of ROA is -0.45 and 0.98 respectively. This means that for every one-hundred-naira worth of net investment, the industry had at worst made a loss of N45.0k and had at best earned a maximum of N98.0k.

Corporate size measured as the natural log of total assets recorded a minimum value of No.66 million and maximum value of N4.05 million implying that the insurance companies are of different sizes and maturity. This means that for firms to have a minimum return on assets they must have an assets size of No.66 million and for maximum return on assets, the companies must have assets size of N4.05 million. The mean value of N2.08 implies that, on the average, the insurance companies had N2.08 million representing the total assets for all insurance companies in Nigeria. The Standard Deviation of No.43 which was lower than the mean value implies that the deviation of the mean from actual value was far way.

The table 4.2 shows that leverage has minimum and maximum values of 0.587 and 2.964 respectively. This means that the minimum proportion of total debt is No.587 million for the insurance companies, while the maximum component of total debt to the total assets is 2.964 million. The average proportion of total debt to the total assets rose at about N2.016 million. This denotes that most of the insurance companies were financed through debts as source of financing their operation. The standard deviation of No.400 million shows that the average value recorded represents the true mean with a little deviation because the mean value is higher than standard deviation.

Similarly, the table shows the mean value of liquidity as 1.998 with standard deviation of 0.468. Indeed, liquidity recorded a minimum value of 0.058 and maximum value of 2.988. This implies that on the average, the liquidity position of quoted insurance companies is (approximately), within the benchmark ratio of 2:1 which indicates that despite the negative effect of covid-19 pandemic, the quoted insurance companies are liquid and healthy in view of the fact that current assets outweighs current liabilities within the study period.

The corporate age has minimum and maximum values of 17 and 51 respectively. The mean age is 0.482 while the standard deviation is 0.289 approximately. The average age of quoted insurance companies signifies those insurance companies with approximately 48 years in existence. The minimum age indicates 17 years while some insurance companies are up to 51 years of existence. However, the standard deviation of 29 years is implying that the age, measured in term of a number of years since incorporation is not widely dispersed away from the mean age.

Finally, the table shows the mean value of underwriter risk as 2.080 with standard deviation of 0.364. The underwriter risk has a minimum value of 0.637 and maximum value of 3.627. This implies that on the average, the underwriting risk of insurance firms helps to match the premium received with the claims paid considering the profitability of the firms within the study period.

Table 4.2: Correlation Matrix

Variables	ROA	CS	LQ	LV	UR	CA
ROA	1.0000					
CS	0.1828	1.0000				
LQ	0.5114	-0.1645	1.0000			
LV	0.3540	0.4198	0.1066	1.0000		
UR	0.4234	0.3443	0.1706	0.1485	1.0000	
CA	0.5720	0.0606	0.2957	0.2339	0.1263	1.0000

Source: STATA Output Results

Table 4.3 presents the results of the correlation between corporate physiognomies (corporate size, leverage, liquidity, corporate age and underwriting risk) and profitability; proxied by return on assets (ROA) of quoted insurance companies in Nigeria. The table 4.3 shows that there is positive relationship between all the explanatory variables and profitability of the quoted insurance companies in Nigeria. More specifically, corporate size

is positively related with return on assets from the coefficient value of 0.1828. The result suggests that corporate size move on the same direction (perfectly correlated) with return on asset (ROA) of the quoted insurance companies in Nigeria. In addition, the table also shows that ROA is positively correlated with liquidity and leverage from correlation values of 0.5114 and 0.3540 respectively. This denotes that liquidity and leverage have a direct relationship with return on assets (ROA) of the quoted insurance companies in Nigeria.

Similarly, underwriting risk is also found to be positively correlated with profitability (ROA) from the coefficient value of 0.4234. This indicates that the underwriting risk of the quoted insurance companies in Nigeria is perfectly correlated with profitability (ROA) and thus, is moving on the same magnitude. Finally, corporate age is found to be positively correlated with profitability (ROA) of the quoted insurance companies in Nigeria with a coefficient value of 0.5720. It needs to be stated at this point that the correlation coefficients of the explanatory variables did not exceed 50% which suggests the absence of multi-collinearity among the explanatory variables except for liquidity and corporate age which shows a coefficient value of 0.5114 and 0.5720 respectively. It is however, not safe to conclude that there is no multi-collinearity issue unless the variance inflation factor (VIF) and tolerance values are effectively analyzed.

Regression Results

The summary of the regression results obtained from the fixed effect model of the study; $(ROA = \beta_0 + \beta_1 FS_{it} + \beta_2 LV_{it} + \beta_3 LQ_{it} + \beta_4 FA_{it} + \beta_5 UR_{it} + e_{it})$ is presented in table 4.3 as follows:

Table 4.3: Summary of Regression Results

Variables	Beta Coefficients	T – Values	P – Values
Constant	-0.6926	-9.27	0.000
CS	0.0417	1.83	0.068
LV	0.0613	2.46	0.014
LQ	0.1229	6.22	0.000
CA	0.2660	8.01	0.000
UR	0.1254	5.08	0.000
R ² (Overall)			0.5798
Wald Chi ²			223.51
Prob > Chi ²			0.0000

Source: STATA Output Result

From the table 4.3, the cumulative R² which is the multiple coefficient of determination of 0.5798 shows the proportion of the total variation in the explained variable as predicted by the regressors jointly. Hence, it signifies that 58% (approximately) of the total changes in profitability (ROA) of quoted insurance companies in Nigeria is accounted by the proportion of corporate size, leverage, liquidity, corporate age and underwriting risk variables used in

the study. The Wald- χ^2 shows a value of 223.51 which is significant at one percent (1% level), signifying that the model is good, adequate and well-fitted and that the explanatory variables are properly selected, combined and used. The P-value of Wald- χ^2 test which is statistically significant at 0.0000 (1% level) for the model implies that there is 99.9 percent probability that the relationship among the variables were not merely accidental (that is by chance). Indeed, it implies that the explanatory variables (corporate size, leverage, liquidity, corporate age and underwriting risk), predict the explained variable; profitability (ROA) of the study.

Corporate Size and Profitability

From Table 4.3, it reveals that the t-value for corporate size (CS) was 1.83, while the coefficient value was 0.042 which is significant 5% level. This signifies that corporate size has a significant and positive effect on return on assets of quoted insurance companies in Nigeria. This also implies that for every unit increase in corporate size, the profitability of the company will increase by 4.17%. This may be as a result of the fact that management plough back part of their retained earnings into the company's assets. The result is in line with priory expectation because it is expected that total assets would increase profitability (ROA) of a company. This result therefore, produced an evidence of rejecting hypothesis one of the study. The finding is in tandem with the results documented by Hassan and Farouk (2014), Sumaira and Amjad (2013), Abdullahi (2016), Kaseem (2015), Yuvraj and Abate (2013), Daniel and Tilahun (2012), Charumati (2012), Malik (2011), Burca and Batrinca (2014), Ahmed et al., (2011), Mehari and Aemiro (2013), Mirie and Jane (2015) and Dogan (2013). However, the finding contradicted the study of Dogarawa and Maude (2015) among others.

Leverage and Profitability

Considering the hypothesis 2 which predicts higher debt components to total assets increases the profitability of quoted insurance companies, the result reveals that leverage is positively and significantly associated with profitability (ROA) of quoted insurance companies in Nigeria. From table 4.3, it shows that leverage has a positive beta coefficient of 0.061 and t- values of 2.46 which is significant at 5% level of significance. The result signifies that for every unit increase in the level of leverage of Nigerian insurance companies, the profitability of the company will increase by 6.13%. Moreover, the result is not surprising as employing more debt finance will favor return on assets when economic conditions are good but if otherwise, increase in debt finance may affect ROA. This result therefore, provides an evidence of rejecting hypothesis two of the study. Interestingly, the result supports the findings of Sumaira and Amjad (2013), Dogarawa and Maude (2015), Kaseem (2015), Abdullahi (2016), Yuvraj and Abate (2013), Daniel and Tilahun (2012), Charumathi (2012), Ahmed et al., (2011), Mehari and Aemiro (2013), Mirie and Jane (2015)

but contradicted the findings of Malik (2011) and Dogan (2015) among other reputable studies.

Liquidity and Profitability

Liquidity is also positively related with the profitability of the quoted insurance companies in Nigeria as indicated by a beta coefficient of 0.123 and a corresponding T-value of 6.22 which is statistically significant at 1% level of significance. This implies that insurance companies that are adequately liquid during the study period recorded a better profitability. The result implies that for every unit increase in liquidity position of the company, profitability given by (ROA) will increase by 12.30%. The result has provided sufficient evidence for the rejection of null hypothesis three which states that liquidity has no significant effect on profitability of quoted insurance companies in Nigeria. Thus, the study rejects hypothesis three. The result supports the findings of Sumaira and Amjad (2013), Ahmed et al., (2012) while contradicting the findings of Kaseem (2015), Abdullahi (2016), Yuvraj and Abate (2013), Daniel and Tilahun (2012), Mehari and Aemiro (2013) and Mirie and Jane (2015).

Corporate Age and Profitability

From table 4.3, the regression result reveals that corporate age measured by year of incorporation (existence) has a beta coefficient of 0.266 with a corresponding t-value of 8.01 which is positively and statistically significant at 1% level in explaining the profitability of quoted insurance companies in Nigeria. This signifies that the finding is significant at 1% level. The beta coefficient indicated that as the year of incorporation increases by eight years approximately, the proportion of profitability (Return on Asset) of a company also increases by 26.60%. This is interesting as insurance companies that have grown older in the stock exchange are those that have gathered momentum and potential growth opportunities. Therefore, this result provides sufficient evidence of rejecting the null hypothesis four of the study. Thus, the study reject hypothesis four. The result supports the findings of Burca and Batrinca (2014), Sumaira and Amjad (2013), Ahmed et al., (2011) and Dogan (2013) but contradicts the findings of Mirie and Jane (2015), Kaseem (2015), Yuvraj and Abate (2013), Daniel and Tilahun (2012), Malik (2011) and Mehari and Aemiro (2013).

Underwriter Risk and Profitability

From table 4.3, the beta coefficient value of underwriting risk is 0.1254 with the corresponding T and P values of 5.08 and 0.0000 respectively. This signifies that underwriting risk is statistically, positively and significantly influencing the profitability (ROA) of quoted insurance companies in Nigeria. This result therefore, implies that higher variability in net income increases the profitability (ROA) of the quoted insurance companies in Nigeria as emerging market. More specifically, for every unit increase in the level of underwriting risk, the profitability (ROA) of the quoted insurance companies in

emerging market economy particularly in Nigeria as a case scenario will increase 12.54%. Hence, the result provides sufficient evidence of rejecting the null hypothesis five. This result supports the findings of Akotey, Osei and Gamegah (2011), but contrary to the findings of Charumati (2012) and Mirie and Jane (2015) among other notable studies.

Conclusion and Recommendations

Based on the preceding analysis and discussions, the study concluded that all the explanatory variables (corporate size, leverage, liquidity, corporate age and underwriting risk) are positively and significantly related with profitability of quoted insurance companies in Nigeria as emerging market economy. In line with the findings of the study, the following recommendations are made:

- (a). The management of quoted insurance companies should be expanding their size through patronizing assets financing option and leases with a view to enhance their revenue generation capacity and ultimately, the overall profitability at large;
- (b). In raising finance, quoted insurance companies should strive and ensure that they have access to external finance (debt) for their operation because of the fact that internal sources such as equity and retained earnings may not be sufficient considering their activities which is risk-oriented by nature;
- (c). Securities and Exchange Commission should ensure close supervision and monitoring of insurance's level of liquidity with the aim of strengthening the investors' confidence in the economy. Managers of insurance companies should also make sure that they put in place proactive measures aimed at establishing a more realistic risk management policy that can help their liquidity potential to spur profitability;
- (d). The study recommends that regulators in the capital market and key players should emphasize on age of quoted insurance companies as a key determinant of profitability for their wealth maximization;
- (e). The management of quoted insurance companies should strive towards maintaining and producing sufficient cash flows by employing risk management experts aimed at reducing earnings volatility;
- (f). The National Insurance Commission (NAICOM) should put in place measures tailored at ensuring corporate accountability movement in the insurance industry through a well-framed compliance with the mandatory corporate reporting. This can be attained logically by having a good corporate code of governance to give direction.

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