

An Empirical Investigation of Companies in an Emerging Economy of Financing Options for Non-Financial Companies in Relation to the Shareholder Value, The Case Study of Nigeria



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ABSTRACT: Purpose: In order to contribute to the discussion that there are major differences in the financing alternatives accessible in developed and developing economies, this paper examines the relationship between a firm's financing options and shareholders' value in the context of emerging markets.

Design/methodology/approach: This study analysed characteristics that could help determine how firms in Nigeria finance their operations and possibly generate value for shareholders by drawing on market timing theory and panel data regression estimation. For the years between 2007 and 2016, information from 87 non-financial companies listed on the Nigerian Stock Exchange was used (10 years).

Findings: We discover that businesses prefer equity-based financing because it increases shareholder value. The Hausman test result showed that the fixed-effects model was adequate, and the model's outcomes also closely matched those of the panel regression estimate to firmly support our findings.

1.0 INTRODUCTION

In today's business environment, financial managers in any corporate organisation have crucial and key tasks related to firms' financing decisions. In the world after COVID 19, this remains a crucial subject for discussion and research. In his article, Nwankwo (2014) stressed the importance of capital mix as a key factor in determining a company's value or shareholder value, which has implications for growth. According to Hogarth, et al (2018), Kashmiri and Mahajan (2017), and Fernandez (2001), businesses produce value for their shareholders in any economy when the shareholders' return surpasses the share-cost (i.e. value is created when the expected return on equity is higher than equity cost).

Any company's capacity to choose wisely among multiple financing options or decisions by putting together the ideal ratio of internally generated capital, fresh equity, and debt at its disposal will determine how long it can remain in operation (Ben, 2012 and Shim, 2010).

Shim (2010) and Ben (2012) made the case that a company's funding choices should have an effect on how well it performs. Ogbulu and Emeni (2012), Kashmiri and Mahajan (2017), and Hamrouni et al. (2019) stressed the importance of using a combination of internal and external financial resources for a company's financial and investing activities in order to increase the worth or value of its shareholders.

The choice of a company's capital structure, particularly its financing alternatives, may have an impact on the return and risk taking of its shareholders, which in turn affects the market value of the company (Miglietta et al. (2018), Shin and You (2017), Agliardi and Kousisi (2013). According to these viewpoints, the market price of a company's common stock, which is a result of the investment and finance decisions made by the business, accurately reflects the wealth of its owners (Bento et al (2017). Adesina et al. (2015) and Lehner et al. (2019) studies stressed that prospective investors in Nigerian banks, especially those that are publicly traded, should carefully review the capital structure before making decisions because the strength of a bank's capital mix determines the level of returns.

The goal of this study was to look at Nigerian company financing choices and shareholder value. Because of how quickly the market is expanding, developing nations' financial markets have recently grown in significance. These markets were more important today than they were a few decades ago. This was supported by O'Callaghan et al. (2018), who noted that businesses have shown a strong desire to maximise shareholder value. It is necessary to investigate these financing choices in the context of

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the Nigerian emergent market because there appear to be major disparities between the financing options accessible in established and developing nations.

There are numerous theories that can be used in both developed and emerging countries to define the capital structure of firms. However, it is up to the financial managers to choose which one to use and the best balance of debt and equity that will increase shareholders' wealth or values (Lemma and Negash 2014, Maina and Ishmail, 2014, Colicev et al., 2018). The urge to find a capital structure that optimises business or shareholder value has arisen as a result of this.

However, the composition of a corporation's financial mix of debt and equity, which may be traced to Modigliani and Miller (M-M), is linked to the firm financing alternatives and value generation for stakeholders (1958; 1961 & 1963). In addition, many hypotheses that have been developed in response to the works of M-M have been done by different researchers, either in agreement or disagreement. Numerous researchers talked about the elements of a firm's financial structure and how they affect the company's value. This will be investigated in this article.

This study looked at a thorough analysis of how Nigerian listed companies decide on their financing. Information asymmetry and insolvency risk still exist in emerging economies, according to Prasa and Murinde (2001), which suggests that the pecking order of finance has reversed. There is a strong need to understand and research how businesses in developing nations like Nigeria meet their financial needs because this finding has important implications for businesses when assessing their financing alternatives (See Alqatamin et al (2017). Due to the market's rapid expansion in recent years, the importance of the capital markets in developing nations has increased. Compared to a few decades before, they now have more authority or take on a more significant role.

This study aims to provide a thorough understanding of the financing behaviours of Nigerian enterprises in order to contribute to the ongoing discussion on capital-structure decisions.

In this field of study, a lot of articles have been made. The majority of them focused on topics like capital structure of businesses, business performance, dividend policy, and capital structure's effects on businesses, among others. To the best of our knowledge, the relationship between the capital structure and business financing alternatives is still largely unexplored in Nigeria, and firm financing options and shareholder value have not yet been the subject of a comprehensive research. This study aims to give a comprehensive picture of how businesses in Nigeria fund their operations. More importantly, this research will add to the body of knowledge about how capital structure influences shareholders' value and how firms can finance their operations.

In order to determine how Nigerian businesses finance their operations and perhaps generate value for shareholders, the article looked at variables from an empirical approach. In addition, this study will employ data from 87 of the 115 non-financial companies registered on the Nigerian Stock Exchange, and it will cover the years 2007 through 2016. (10 years). Given the unique characteristics of the African market, and Nigeria in particular, this study aims to examine current firm financing options in Nigeria. It focuses primarily on how corporate financing decisions among listed firms in Nigeria are connected to acceptable models and theoretical concepts, as well as how they affect shareholder value.

The remainder of this paper is structured as follows: The theoretical perspective was described in part 2, and the literature evaluation and study hypotheses are presented in section 3. The data and study methodology are introduced in Section 4. The results and discussion are presented in Section 5, and the conclusion and implications of the study are presented in Section 6.

2.0 THEORETICAL UNDERPINNING THE RESEARCH

The market timing theory serves as the foundation. According to this theoretical viewpoint, companies issue new stock when there is a chance that the share price would be inflated and buy back their shares when the share price is undervalued. As a result, the share price fluctuation will have an effect on the firm's financing, corporate finance choices, and its corporate capital structure (Elkelish and Hassan) (2015). Additionally, Mostafa and Boregowda (2014) focused on two variations of timing the equities market. The dynamic version is first. The rationality of managers and investors is at the centre of this. When there is favourable information based on reduced information asymmetry between the parties involved, i.e. the management of the firm and its shareholders, firms will issue stock (Elsayed and Elbardan) (2018). Share prices rise as a result (Myers and Majluf) (1984). The timing of the stock market comes in second. This stressed the need for management to raise equity at low equity costs. When a company's management tries to time interest rates and uses that knowledge to issue debt at a time when the market interest rate is relatively low, this is done (Graham and Harvey, 2001).

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3.0 ANALYSIS OF RELATED LITERATURE AND STUDY'S HYPOTHESIS

The relationship between business financing alternatives (i.e. capital structure) and shareholder value has been the topic of much debate in both theoretical and empirical study. According to Karpavicius and Yu (2019), Bedendo and Siming (2018), and Arowoshegbe and Emeni (2014), the debt and equity mix has an overall impact on the shareholders' earnings and risk, which has a direct impact on the cost of capital, as well as the firm's financial performance and, ultimately, the wealth of the company.

Many arguments have focussed on whether there is an optimal capital structure for an individual organisation, and whether the proportion of debt and equity mix, or utilisation, is immaterial to the value of the individual firm. Since Modigliani and Miller's foundational work in 1958 and their assertion that a firm's value is independent of its debt equity mix, the two major theories that appear to dominate capital structure literature are the Trade-off-Theory and the Pecking-Order-Theory (Ramjee and Gwatidzo, 2012).

According to Myers (2001), trade-off theory focuses on tax effects; corporations choose debt levels that allow them to balance the tax advantage of interest payments deduction against the prospective cost of financial difficulty, which is represented by the bankruptcy cost. When the firm's asset and investment arrangements are held constant, the trade-off hypothesis views the optimal debt proportion as a trade-off involving borrowing advantages and cost. The company must exchange debt for equity and equity for debt until its worth is maximised. The literature proposes two types of trade-off theory: dynamic trade-off theory and static trade-off theory.

Myers and Majluf's (1984) and Myers' (1984) pecking-order theory does not anticipate a well-defined goal debt-equity mix or capital structure. According to the theory, corporations can obtain the funds they require to finance their initiatives from a variety of sources, depending on the hierarchical ways of funding due to the cost of information. According to the pecking order theory, information asymmetry leads to a lack of confidence, which occurs when a company seeks external funding. Firms, on the other hand, prefer to finance their investments using internally generated cash rather than external capital, with debt and equity serving as a last alternative.

The capital structure literature tends to be dominated by studies on industrialised economies, with only a few studies on developing economies (Mbulawa, 2014). However, there has been little agreement on what factors influence financing alternatives or decision. This is owing to the fact that markets in developing economies operate under different conditions (Strike, 2014). According to Atkin and Glen (1992), corporations in developed countries create finance domestically, making them dominant. While enterprises in poor countries generate funds externally, such as equity and bank loans, it is extremely difficult for firms to achieve optimal capital levels.

In theory, capital structure decisions, as detailed in Atiyet, (2012), Chen, et al., influence a firm's financing possibilities (1998). They describe the impact of taxation on debt and equity as a critical factor to consider when studying the relationship between financing options and shareholder value. Leverage boosts a company's worth (Min and Smyth, 2016; Alicia and David, 2014). Firms in developing markets, such as Nigeria, are reported to have lower levels of leverage, equity, and fixed assets than those in developed countries (Haji and Mohd Ghazali (2018), Marimuthu (2017), Kalu and Gwatidzo, 2009).

Based on the foregoing, the following hypothesis is proposed in this study:

Hypothesis 1: In a developing economy, a company that uses an equity-based financing method increases the value of its stockholders.

In Nigeria, the country witnessed a massive economic boom in the 1970s, and most businesses relied on banking institutions as their primary source of money to finance their investments. Following the boom, in the late 1980s, the stock market's rate of return increased from 15% to over 60%. This growth enticed investors to visit the Nigerian stock exchange, which increased individual purchases of stocks and bonds listed on the exchange (Ogbulu and Emeni, 2012 and Temile et al, 2016).

Over the years, business financing decisions have been heavily influenced by predicted profit, which is why Velnampy and Niresh (2012) state that a firm's profitability is dependent on the financing decision (i.e. capital-structure decisions) of the firm, which will influence the firm's profitability. The successful selection and utilisation of capital is a critical component of the firm's financial strategy. The correlation between a firm's capital structure and its profitability is critical since a firm's profitability can be directly affected by its financing decisions.

The goal of selecting the appropriate capital structure for a corporation is to optimise its value, profitability, and shareholder wealth (Oseifuah & Gyekye (2017), Madhavi & Prasad (2015), Umar et al. 2012). Furthermore, the intended use of money influences the type of financing used, as Alam et al. (2017) assert that businesses in emerging markets rely on internal financing for R&D expenditures because underdeveloped institutions in such economies make external borrowing prohibitively expensive.

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Adedoyin (2014) discovers, using Nigerian data, that debt instruments play a substantial role in magnifying the value of Nigerian banking organisations, while equity plays a less significant role. He advises that both managers and regulators implement policies that encourage the use of leverage in order to maximise the firm's total worth. This demonstrates that the firm's financing decision (i.e. capital structure) is critical since it influences the firm's capital expenses and market value.

The firm's most important decision, however, pertains to the proportions of debt and equity it utilises to maximise the firm's value while also increasing the value of its shareholders by lowering the cost of capital (Wang and Lin, (2017), Agliardi and Kousisi, 2013, and Gersbach, 2013).

Following Modigliani and Miller's (1963) work, various hypotheses have been proposed to explain the factors that influence capital-structure or business financing option between debt and equity financing (Hovakinmian, et al. 2004).

According to Guerreiro (2016) and Saleem (2013), the optimal capital-structure of the firm is the best possible combination of debt and equity-share that can increase the shareholder's values or wealth.

A firm's capital structure (funding choices) is defined as the mix of equity and debt used to fund its operations. Furthermore, Saleem (2013) defines capital-structure as the firm's various funding choices. According to Umar (2012), the primary funding alternatives employed by enterprises are stock and debt. As a result, in order for any organisation to have an acceptable and sustainable financing choice, it must seek the most appropriate balance of debt and equity financing that can contribute to the firm's overall performance.

The following hypothesis is offered based on the foregoing:

Hypothesis 2: A high debt-to-total assets ratio will improve shareholder value because it is one of the more common financing choices for enterprises in a developing nation like Nigeria.

4.0 DATA AND METHODOLOGY

4.1 Data

The study relied on secondary data derived from annual reports of companies registered on the Nigerian Stock Exchange (NSE). The data used spans 10 years, from 2007 to 2016, and comes from 87 firms, for a total of 870 observations. One restriction is the lack of available or partial data; however, the study was able to obtain data from 87 (75.7%) of the 115 listed non-financial enterprises on the NSE. This is consistent with Efayena (2007), who claims that financial and non-financial enterprises should be evaluated separately to avoid misrepresentation.

The reasoning and industry breakdown of the sample firms are shown in Table 3.1 below.

Table 1. Sample Breakdown Based on Industry

S/N	SUBSECTOR	NUMBER OF COMPANIES	PERCENTAGE OF SAMPLE
1	Agriculture	5	5.75%
2	Conglomerate	5	5.75%
3	Construction & Real Estate	4	4.60%
4	Consumer Goods	18	20.69%
5	Health Service	7	8.05%
6	ICT	5	5.75%
7	Oil & Gas	9	10.34%
8	Industrial Goods	14	16.09%
9	Natural Resources	3	3.45%
10	Services	17	19.54%
TOTAL		87	100.00%

The above table shows that the majority of the enterprises are in the consumer goods, services, and industrial goods categories, with the natural resources category having the fewest.

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4.2 Estimation Model and Method

In order to estimate the study's model, econometric techniques are used. A panel data technique will be employed due to the nature of the data being studied. The 87 firms will be pooled together during a 10-year period, yielding a total of 870 observations. This method is based on the pioneering work of scholars such as Alam et al. (2017), Anwar (2012), Cortez and Susanto (2012), and Lim (2012).

Thus, the model for our analysis is specified thus:

$$SHV = \beta_0 + \beta_1 DBEQT + \beta_2 DBTA + \beta_3 LIQ + \beta_4 SIZE + \mu_t$$

Where:

β = the coefficient of the regression or the slope of the regression

SHV = Shareholders Value

DBEQT = Debt to Equity Ratio

DBTA = Debt to Total Assets Ratio

LIQ = Liquidity of firms

SIZE = Size of Firms' Assets

μ = Stochastic error term

Preliminary descriptive statistics and correlation coefficients were computed after pooling the data in a panel format. Following that, a panel data regression analysis was performed to establish whether the fixed effect model (FEM) or random effect model (REM) was consistent. According to Pandey (2004), the financial characteristics of enterprises from different sectors or industries differ, hence using a fixed effects or random effects model is appropriate. Similarly, Ezeoha (2008) used a panel fixed-effects regression approach in his work.

he Hausman test was used to find the best model. Because the chi-square (4) value of 37.76 with a p-value of 0.000 is consistent with the fixed-effects hypothesis, the fixed effects model was chosen, and the findings are displayed alongside our panel data regression estimates and discussed in the following section.

5.0 RESULTS AND DISCUSSION

The results of the model estimation will be given and discussed in this section. However, the section will begin with the following descriptive statistics:

Table 2. Descriptive Statistics

	SHV	DBEQT	DBTA	LIQ	SIZE
Mean	2.15 x10 ⁷	1.14196	0.8736433	13.55845	4.82 x10 ⁷
Maximum	4.53 x10 ⁹	754.3729	411.3715	6487.552	2.92 x10 ⁹
Minimum	-4.52 x10 ⁸	-1578.325	-247.2941	-110.67	0
Std. Dev.	1.64 x10 ⁸	67.17132	16.78625	233.8836	1.59 x10 ⁸
Observations	870	870	870	870	870

According to the following summary statistics, the average debt-to-equity ratio for the selected period under consideration is roughly 1.142, while the debt-to-total-assets ratio is 0.874, indicating that enterprises in Nigeria choose debt-to-equities financing over debt-to-total-assets financing. In contrast, Ezeoha (2008) discovered that debt-to-equity is unpopular among non-financial enterprises in Nigeria. The maximum and minimum values of the equities and total assets to debt ratios are 754.4 and -1578.3, respectively, implying that some of the sample companies have a healthy capital structure, while others have a very poor capital structure or rely heavily on loans as their primary source of financing.

The standard deviation results showed a very significant dispersion of the variables from their respective mean values, with the exception of the debt-to-total-assets variable, which had a standard deviation of 16.8, which was very small in comparison to the standard deviations of the other variables. Following the basic descriptive analysis, the investigation proceeds to the correlation matrix analysis described below.

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Table 3. Correlation Matrix

Included observations: 870					
Correlation	SHV	DBEQT	DBTA	LIQ	SIZE
Probability					
SHV	1.000000				
DBEQT	0.0002 (0.9953)	1.000000 -----			
DBTA	-0.0801* (0.0001)	-0.0005 (0.9873)	1.000000 -----		
LIQ	0.8479* (0.0000)	-0.0010 (0.9764)	0.2716* (0.0000)	1.000000 -----	
SIZE	0.2255* (0.0000)	-0.1410* (0.0000)	-0.0058 (0.8636)	-0.0097 (0.7745)	1.000000 -----

* - Significant at 5% level () – p-value

The correlation matrix, shown in the table above, depicts the interrelationship between the variables of the study. As can be observed from their associations with shareholder value, the majority of the relationships between the variables are positive. The lone exception is the negative association between shareholder value and debt-to-total-assets ratio. Except for the debt-to-equity ratio link with shareholder value, all factors are statistically significant at the 5% level of significance.

These relationships imply that increasing DBEQT, LIQ, and SIZE increases shareholder value, whereas increasing DBTA decreases shareholder value. The biggest positive association is that between LIQ and shareholder value, while the strongest negative correlation is that between SIZE and DBEQT. Another intriguing finding is that SIZE is negatively correlated with both debt-to-equities and debt-to-total assets ratios. This is consistent with the findings of Faulkender and Petersen (2006) and Bevan and Danbolt (2002), who both found a negative relationship between size and financial leverage ratios. This is because larger firms have greater access to equity funding than small firms.

Following the presentation and discussion of the summary statistics and correlation coefficients, the study will proceed to show and discuss the panel data regression estimations.

Panel Regression Analysis

The panel regression estimates for the previously computed model are shown below. Table 4.3 contains the regression estimates (I) as well as the fixed effects model estimates (II).

Table 4. Panel Regression (with Fixed-Effects Coefficients) - 2007 – 2016

Variables	Shareholders			Value			p-value
	Co-efficient	t-stat	p-value	Co-efficient	t-stat		
Intercept	3503972* (2036764)	1.72	0.086	7018862*** (1778116)	3.95	0.000	
DBEQT	84045.89*** (29213.18)	2.88	0.0040	52440.5** (25337.48)	2.07	0.039	
DBTA	-3260022*** (120249.5)	-27.11	0.0000	-3181912*** (107178.2)	-29.69	0.000	
LIQ	658798.7*** (8630.8)	76.33	0.0000	665447.9*** (7738.238)	85.99	0.000	
SIZE	0.2441551*** (0.0123156)	19.82	0.0000	0.1686966*** (0.0137416)	12.28	0.000	

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F-stat. (4, 865) = 1559.80	R-squared = 0.8782
Prob (F-stat.) = 0.0000	Adj. R-squared = 0.8777
Total Panel Observations = 870	Root MSE = 5.70×10^7

Standard errors in parenthesis.

Significance levels: * <0.10 , ** <0.05 , *** <0.01 .

A quick glance at the findings reveals that all of the coefficients in both models are statistically significant and have identical magnitudes and directions of impact. Another important finding from the results is that the coefficients of the variables agree with finance theories, confirming Temile (2016)'s discovery that some of the modern finance theories used in explaining capital structure determinants in developed economies are also applicable in emerging economies like Nigeria.

The study's first hypothesis asserts that in a developing economy, a corporation that uses an equity-based financing mechanism increases the value of its shareholders. The results are consistent with this premise, since the debt-to-equity ratio has a positive and considerable influence on shareholder value. This verifies the early findings from the summary statistics and the correlation matrix, but it varies from Ezeoha's (2008) findings that Nigerian companies do not prefer equity funding.

This link, however, is consistent with the findings of Arowoshegbe and Emeni, (2014); Akintoye, (2008); Rao et al. (2007) and Foo (2002), hence confirming the pecking order idea. They typically believe that a debt-equity mix boosts earnings-per-share (EPS) for a company with positive earnings, hence boosting shareholders' wealth (Gaio and Pinto, 2018).

Debt-to-total assets, on the other hand, has a negative and considerable influence on shareholder value. This contradicts our second hypothesis, which claims that a high debt-to-total assets ratio will improve shareholder value because it is one of the more common financing options for enterprises in a developing economy. This means that in a developing economy, a corporation that uses its complete assets as security for debt financing will end up decreasing the value of its owners. This is consistent with Cheong's (2015) conclusions that this sort of financing exerts a significant burden on shareholders and may result in the loss of critical organisational assets, decreasing shareholder value.

In the similar spirit, Djoutsa Wamba et al (2018) and Arowoshegbe and Emeni (2014) discovered that such debt ratio reduces shareholder wealth and was a proxy for return on equity.

Firm liquidity has a favourable and significant impact on the value of shareholders. The more liquid a company is, the more value it adds to its stockholders. Surprisingly, the magnitude of a firm's assets has a beneficial impact on shareholder value, lending credence to previous results that debt-to-total assets has a negative impact on shareholder value. However, from the standpoint of a shareholder, a company is better off increasing the amount of its assets than than utilising them as security to acquire funding. This contradicts the conclusions of studies such as Reddy and Venugopal (2016), which discovered that size had a negative impact on shareholder value.

The fixed effects model replicates the findings of our initial panel regression estimates, with the only small variation being that the debt-to-equities variable is statistically significant at 5% for the fixed effects model, but only at 1% for the panel regression estimate. The R-squared value indicates that the regression model explains around 88% of the systematic variations in shareholder value, while approximately 12% remain unexplained. However, when the model's combined significance (F-stat) is examined, it is revealed that the variables have a strong explanatory power on shareholder value, as the p-value exhibits statistical significance at the 1% level.

6.0 CONCLUDING REMARKS AND IMPLICATIONS

Given the apparent unique nature of corporate debt-equity profiles of publicly traded companies in Nigeria, this article tried to contribute to studies on firms' financing options as a means of producing value for shareholders from the perspective of a dominating rising market in the Sub-Sahara. This paper takes an unusual approach in that it evaluates both debt measurements (long-term debt to total equity and long-term debt to total assets) and how they affect shareholder value.

The study's key findings indicate that enterprises in Nigeria prefer equity-based financing, which is perceived to have a favourable and significant influence on shareholder value. As Cheong (2015) states, "the decision on the arrangement and combination of debt and equity used to finance a company's growth is dependent on a number of different business factors, particularly the availability of sources of funding, the respective industry in which the company operates, and the relevant banking requirements."

Based on the foregoing, this study recommends that, in order to continue adding value to its shareholders, firms must maintain impeccable networks and healthy relationships with financial institutions, as well as a very respectable image in the society in which they operate, regardless of whether they wish to issue equity or debt.

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REFERENCES

- 1) Alam, A., Uddin, M., and Yazdifar, H. (2017), "Financing behaviour of R&D investment in the emerging markets: *the role of alliance and financial system*", *R & D Management*, 1-12
- 2) Abel, E. E. (2008), "Firm size and corporate financial-leverage choice in a developing economy: Evidence from Nigeria", *The Journal of Risk Finance*, Vol. 9 Iss: 4 pp. 351 – 364
- 3) Adelegan, O.J. and Ariyo, N. (2008), "Capital market imperfection and corporate investment behaviour: A switching regression approach using panel data for Nigeria manufacturing firm", *Journal of money, investment and banking*, Vol. 2, pp.16-34.
- 4) Adesina, J. B et al. (2015), "Capital structure and financial performance in Nigeria", *International journal of business and social research*, Vol.5, Iss.2.
- 5) Agarwal, S. and Mohtadi H. (2004), "Financial Markets and the financing choice of firms: Evidence from developing countries", *Global financial Journal*, Vol. 15
- 6) Akhtar, S. and Oliver, B. (2009), "Determinants of capital structure for Japanese multinational and domestic corporations", *International review of finance*, Vol.9, pp.1-26.
- 7) Alicia M. R and David T. R. (2012), "The capital structure decisions of new firms", *Oxford University Press on behalf of the society for financial studies*.
- 8) Alicia M. R and David T. R. (2014), "The capital structure decisions of new firms", *Rev. finance stud.* Vol.27 (1): pp153-179.
- 9) Alves, P. and Francisco, P. (2013), "The impact of institutional environment in firms' capital structure during the recent financial crises",
- 10) Alves. P., Ferreira, M. (2011), "Capital structure and law around the world", *Journal of multinational financial management* Vol.21, p119-150.
- 11) Alqatamin, R., Aribi, Z. and Arun, T. (2017), "The effect of CEOs' characteristics on forward-looking information", *Journal of Applied Accounting Research*, Vol. 18 No. 4, pp. 402-424. <https://doi.org/10.1108/JAAR-03-2016-0027>
- 12) Ameer, R. (2013), "Financial liberalization and firms' capital structure adjustments evidence from Southeast Asia and South America: *Journal of economics and finance*", Vol. 37, pp.1-32.
- 13) Arowoshegbe, A.O and Emeni, F.K (2014), "Shareholders wealth and debt-equity mix of quoted company in Nigeria", *Journal of financial research*; Vol.5 no 1.
- 14) Atiyet, B. A (2012), "The impact of financing decision on the shareholder value creation", *Journal of business studies quarterly*, Vol. 4, no. 1, pp. 44-63.
- 15) Bevan, A. and Danbolt, J. (2002), "Capital structure and its determinants in the UK – a decompositional analysis", *Applied Financial Economics*, Vol. 12, pp. 159-70.
- 16) Bento, R., Mertins, F., and White, L., (2017), "Ideology and the Balanced Scorecard: An Empirical Exploration of the Tension Between Shareholder Value Maximization and Corporate Social Responsibility. *Journal of Business Ethics*", 142(4), pp.769–789. [10.1007/s10551-016-3053-6](https://doi.org/10.1007/s10551-016-3053-6).
- 17) Bedendo, M and Siming, L., (2018), "The mitigating effect of bank financing on shareholder value and firm policies following rating downgrades", *Journal of Corporate Finance*, 48(C), pp.94–108. [10.1016/j.jcorpfin.2017.10.019](https://doi.org/10.1016/j.jcorpfin.2017.10.019).
- 18) Bhole, L. M. and Mahakud, J. (2004), "Trends and determinants of corporate capital structure in India: *A panel data analysis*", *finance India*, Vol.18, pp. 37–55.
- 19) Booth, L. et al. (2001), "Capital structures in developing countries", *Journal of Finance*, Vol. 56 No.1, pp.87-130.
- 20) Chen, J.J. (2004), "Determinants of capital structure of Chinese-listed companies", *Journal of business research*, Vol.57, pp.1341-1351.
- 21) Cheong, F.C (2015), "Equity Financing and Debt Financing", Department of Management Accounting and Finance, School of Business, Macao Polytechnic Institute.
- 22) Crowther, D. and Lancaster, G. (2009), "Research methods, a concise introduction to research in management and business consultancy", 2nd edition: *Oxford Butterworth-Heinemann*.
- 23) Colicev, A. et al., (2018), "Improving Consumer Mindset Metrics and Shareholder Value through Social Media: The Different Roles of Owned and Earned Media", *Journal of Marketing*, 82(1), pp.37–56. [10.1509/jm.16.0055](https://doi.org/10.1509/jm.16.0055).
- 24) Davis, L.E., (2018), "Financialization and the non-financial corporation: An investigation of firm-level investment behavior in the United States", [online]. *Metroeconomica*, 69(1), pp.270–307. Available at: <http://search.proquest.com/docview/1983242615/>

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- 25) Deesomsak, et al. (2004), "The determinants of capital structure, evidence from the Asia Pacific region", *Journal of Multinational Financial Management*, Vol. 14, pp.387-405.
- 26) Djoutsa Wamba, L., Braune, E. and Hikkerova, L. (2018), "Does shareholder-oriented corporate governance reduce firm risk? Evidence from listed European companies", *Journal of Applied Accounting Research*, Vol. 19 No. 2, pp. 295-311. <https://doi.org/10.1108/JAAR-02-2017-0033>
- 27) Efayena, O. (2007), "The determinant of capital structure of business firms in Nigeria", *PhD thesis submitted to University of Benin: (unpublished)*.
- 28) Eriotis, N. et al. (2007), "How firm characteristics affect capital structure, an empirical study", *Managerial finance*. Vol.33, pp 321-331.
- 29) Elkelish, W. and Hassan, M. (2015), "Corporate governance disclosure and share price accuracy: Empirical evidence from the United Arab Emirates", *Journal of Applied Accounting Research*, Vol. 16 No. 2, pp. 265-286. <https://doi.org/10.1108/JAAR-02-2013-0015>
- 30) Elsayed, N. and Elbardan, H. (2018), "Investigating the associations between executive compensation and firm performance: Agency theory or tournament theory", *Journal of Applied Accounting Research*, Vol. 19 No. 2, pp. 245-270. <https://doi.org/10.1108/JAAR-03-2015-0027>
- 31) Ezeoha, A. E. (2008), "Firm size and corporate financial leverage choice in developing economy", *The Journal of risk finance*, Vol.9, pp.351-364.
- 32) Fama, E and Macbeth, J. (1973), "Risk return and equilibrium, empirical tests", *Journal of political economy*, Vol.81 pp.36-607.
- 33) Fama, E. and French, K. (2005), "Financial decisions, who issues stock", *Journal of financial economics*, Vol.76, pp.549-582.
- 34) Faulkender, M. and Petersen, M.A. (2006), "Does the source of capital affect capital structure?" *The Review of Financial Studies*, Vol. 19 No. 1, pp. 45-79.
- 35) Fernandez, P (2001), "A definition of shareholder value creation", *Working paper series, IESE business school*.
- 36) Gaio, C. and Pinto, I. (2018), "The role of state ownership on earnings quality: evidence across public and private European firms", *Journal of Applied Accounting Research*, Vol. 19 No. 2, pp. 312-332. <https://doi.org/10.1108/JAAR-07-2016-0067>
- 37) Gopalan, R. et al (2013), "Debt maturity structure and credit quality", *Journal of financial and quantitative analysis*, forthcoming.
- 38) Graham, J.R and Harvey C.R (2001), "The theory and practice of corporate finance: Evidence from the field", *Journal of financial economics*, 60(2), 187-243.
- 39) Guerreiro, A., (2016), "Impact of IS/IT Investments on Firm Performance: Does Stakeholder Orientation Matter?" *Electronic Journal of Information Systems Evaluation*, 19(2), pp.99–111.
- 40) Harris, M. and Raviv, A. (1991), "The theory of capital structure", *Journal of finance*, vol. 49, pp 297-385.
- 41) Haji, A. and Mohd Ghazali, N. (2018), "The role of intangible assets and liabilities in firm performance: empirical evidence", *Journal of Applied Accounting Research*, Vol. 19 No. 1, pp. 42-59. <https://doi.org/10.1108/JAAR-12-2015-0108>
- 42) Hovakinmian et al. (2004), "Determinants of target capital structure: The case of dual debt and equity issues", *Journal of financial economics* Vol. 71, pp.517-54.
- 43) Hogarth, K., Hutchinson, M., and Scaife, W., (2018), "Corporate Philanthropy, Reputation Risk Management and Shareholder Value: A Study of Australian Corporate giving", *Journal of Business Ethics*, 151(2), pp.375–390. [10.1007/s10551-016-3205-8](https://doi.org/10.1007/s10551-016-3205-8).
- 44) Karadeniz, E. et al. (2009), "Determinants of capital structure, evidence from Turkish lodging companies", *International journal of contemporary hospitality management*, Vol.21, pp.594-609.
- 45) Kashmiri, S and Mahajan, V., (2017), "Values that Shape Marketing Decisions: Influence of Chief Executive Officers' Political Ideologies on Innovation Propensity, Shareholder Value, and Risk", *Journal of Marketing Research*, 54(2), pp.260–278. [10.1509/jmr.14.0110](https://doi.org/10.1509/jmr.14.0110).
- 46) Lawal, A. I. (2014), "Capital structure and the value of the firm: Evidence from the Nigeria banking industry", *Journal of accounting and management*, Vol.4 no.1
- 47) Lemma, T. and Negash, M. (2014), "Determinants of the adjustment speed of capital structure", Evidence from developing economies", *Journal of Applied Accounting Research*, Vol. 15 No. 1, pp. 64-99. <https://doi.org/10.1108/JAAR-03-2012-0023>

An Empirical Investigation of Companies in an Emerging Economy of Financing Options for Non-Financial Companies in Relation to the Shareholder Value, The Case Study of Nigeria

- 48) Lehner, O., Harrer, T. and Quast, M. (2019), "Building institutional legitimacy in impact investing: Strategies and gaps in financial communication and discourse", *Journal of Applied Accounting Research*, Vol. 20 No. 4, pp. 416-438. <https://doi.org/10.1108/JAAR-01-2018-0001>
- 49) Madhavi, E. & Prasad, M., (2015), "Assessing Corporate Performance with Measures of Value Added as Key Drivers of Shareholder Wealth: An Empirical Study", *IUP Journal of Business Strategy*, 12(4), pp.19–34.
- 50) Marimuthu, M., (2017), "Ownership Structure and Firm Value: An Insider Ownership Effect", *Global Business and Management Research*, 9(1s), pp.658–665.
- 51) Maina, L. and Ishmail, M. (2014), "Capital structure and financial performance in Kenya: Evidence from firms listed at the Nairobi securities exchange", *International journal of social sciences and entrepreneurship*, 1 (11), 209-223.
- 52) Majuhid, M. and Akhtar, K (2014), "Impact of capital structure on firms' financial performance and shareholders wealth", Textile sector of Pakistan; *International journal of learning and development*, Vol. 4, no. 2.
- 53) Mbulawa, S (2014), "Determinant of capital structure choice in Zimbabwean corporate sector", *Revised new proposal submitted to the African research consortium*.
- 54) Mehta, A. M (2014), "Myth vs. Fact; Influence of Financial Leverage on Shareholder's Return: an empirical study of sugar sector of Pakistan", *Journal of finance and bank management*, Vol. 2, no. 2, pp. 105-114.
- 55) Modigliani, F. and Miller, M. (1963), "Corporate income taxes and the cost of capital, a correction", *American economic review*, Vol.53, pp. 43-433.
- 56) Mostafa, H.T and Boregowda, S (2014), "A brief review of capital structure theories", *Research Journal of recent sciences*, Vol 3(10), 113-118.
- 57) Miglietta, N., Battisti, E., and Garcia-Perez, A., (2018), "Shareholder value and open innovation: evidence from Dividend Champions", *Management Decision*, 56(6), pp.1384–1397. [10.1108/MD-04-2017-0408](https://doi.org/10.1108/MD-04-2017-0408).
- 58) Min, B.S. & Smyth, R., (2016), "How does leverage affect R&D intensity and how does R&D intensity impact on firm value in South Korea? ", *Applied Economics*, 48(58), pp.5667–5675.
- 59) Myres S.C and Majluf, N.(1984), "Corporate financing and investment decisions when firms have information that investors do not have, *Journal of financial Economics*", 13, 187-221.
- 60) Myers, S. C. (2001), "Capital structure", *The Journal of economic perspectives*, Vol.15 pp.81-102.
- 61) Ni, J. and Yu, M. (2008), "Testing pecking-order theory", *The Chinese economy*, Vol.41 pp.97-113.
- 62) Nosa, and Ose, (2010), "Capital structure and corporate performance in Nigeria: An empirical investigation", *Journal of management sciences*, Vol 1, Issue 1, 43-52.
- 63) Nwankwo, O (2014), "Effects of capital structure of Nigeria firms on economic growth: *Mediterranean journal of social sciences*, Vol. 5 no. 1.
- 64) Okoyezu, C. R. (2010), "The Financing Behaviour of Firms in a Developing Economy", *The Nigerian scenario. Euro Economica*, 26(3).
- 65) Öztekin, Ö. (2013), "Capital structure decisions around the world: Which factors are reliably important", *Journal of financial and quantitative analysis*, forthcoming.
- 66) Oseifuah, E. & Gyekye, A., (2017), "Working capital management and shareholders' wealth creation: evidence from non-financial firms listed on the Johannesburg Stock Exchange", *Investment Management & Financial Innovations*, 14(1), pp.80–88.
- 67) O'Callaghan, S., Ashton, J. and Hodgkinson, L. (2018), "Earnings management and managerial ownership in private firms", *Journal of Applied Accounting Research*, Vol. 19 No. 4, pp. 648-668. <https://doi.org/10.1108/JAAR-11-2017-0124>
- 68) Pandey, M. (2004), "Capital structure, profitability and market structure: evidence from Malaysia", *Asia Pacific Journal of Economics and Business*, Vol. 8 No. 2.
- 69) Prasad, S and Murinde, V (2001), "Corporate financial structure in developing economies: Evidence from a comparative analysis of Thai and Malay corporation", finance and development research programme, *working paper series*, no. 35.
- 70) Rajan, R. G. and Zingales, L. (1995), "What do we know about capital structure: Some evidence from international data", *Journal of finance*, Vol.50, pp.1421-1460.
- 71) Reddy, M.R., & Venugopal, M. (2016), "Impact of capital structure on firm's profitability and shareholder wealth maximization: A study of listed Indian cement companies", *IOSR Journal of Business and Management* 18(4), 21-27.
- 72) Saleem, F. and Rafique, B. (2013), "The determination of capital structure of oil and gas firms listed on Karachi stock exchange in Pakistan", *Interdisciplinary journal of contemporary research in business*, Vol. 9, pp 225-235.

An Empirical Investigation of Companies in an Emerging Economy of Financing Options for Non-Financial Companies in Relation to the Shareholder Value, The Case Study of Nigeria

- 73) Saunders, M., Lewis, P., & Thornhill, A. (2009), "Research methods for business students", 5th Edition, Ed Harlow: *Financial Times/Prentice-Hall*
- 74) Shin, T., and You, J., (2017), "Pay for Talk: How the Use of Shareholder-Value Language Affects CEO Compensation", [online]. *The Journal of Management Studies*, 54(1), pp.88–117. Available at: <http://search.proquest.com/docview/1845703600/>.
- 75) Karpavičius, S., and Yu, F., (2019), "Managerial risk incentives and a firm's financing policy", *Journal of Banking and Finance*, 100, pp.167–181. 10.1016/j.jbankfin.2019.01.013.
- 76) Temile, S.O., Dadang, P.J., and Osamuyimen, E. (2016), "Firms Financing Choice in an Emerging Economy: The Nigerian Context", *International Journal of Management and Commerce Innovations* 3(2), 263-274.
- 77) Umar, M. et al (2012), "Impact of capital structure on firms' financial performance: Evidence from Pakistan", *Research journal of finance and accounting*, Vol. 3 (9), pp 1-12.
- 78) Velnampy, T. and Niresh, J . A. (2012), "The relationship between capital structure and profitability", *Global journal of management and business research*, Vol.12 (13), no. 1.
- 79) Wafaa, S. (2010), "The determinant of capital structure: Evidence from GCC countries", *International research Journal of finance and economics*, ISSN 1450-2887, issue 47.
- 80) Wang, L. & Lin, P.T., (2017), "Who benefits from political connections? Minority investors or controlling shareholders", *Asia-Pacific Journal of Accounting & Economics*, 24(1-2), pp.1–22.
- 81) Zou, H. and Xiao, J. Z. (2006), "The financing behavior of listed Chinese firms", *The British accounting review*, Vol.38, pp.239-258.

APPENDIX

Descriptive Statistics

. summarize SHV DBEQT DBTA LIQ SIZE

Variable	Obs	Mean	Std. Dev.	Min	Max
SHV	870	2.15e+07	1.64e+08	-4.52e+08	4.53e+09
DBEQT	870	1.14196	67.17132	-1578.325	754.3729
DBTA	870	.8736433	16.78625	-247.2941	411.3715
LIQ	870	13.55845	233.8836	-110.67	6487.552
SIZE	870	4.82e+07	1.59e+08	0	2.92e+09

CORRELATION MATRIX

	SHV	DBEQT	DBTA	LIQ	SIZE
SHV	1.0000				
DBEQT	0.0002	1.0000			
	0.9953				
DBTA	-0.0801*	-0.0005	1.0000		
	0.0182	0.9873			
LIQ	0.8479*	-0.0010	0.2716*	1.0000	
	0.0000	0.9764	0.0000		
SIZE	0.2255*	-0.1410*	-0.0058	-0.0097	1.0000
	0.0000	0.0000	0.8636	0.7745	

. correlate SHV DBEQT DBTA LIQ SIZE
(obs=870)

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```
. xtset COYID YEAR, yearly
      panel variable: COYID (strongly balanced)
      time variable: YEAR, 2007 to 2016
      delta: 1 year
```

```
. regress SHV DBEQT DBTA LIQ SIZE
```

Source	SS	df	MS	Number of obs	=	870
Model	2.0462e+19	4	5.1155e+18	F(4, 865)	=	1559.80
Residual	2.8368e+18	865	3.2796e+15	Prob > F	=	0.0000
				R-squared	=	0.8782
				Adj R-squared	=	0.8777
Total	2.3299e+19	869	2.6811e+16	Root MSE	=	5.7e+07

SHV	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
DBEQT	84045.89	29213.18	2.88	0.004	26708.88	141382.9
DBTA	-3260022	120249.5	-27.11	0.000	-3496037	-3024007
LIQ	658798.7	8630.8	76.33	0.000	641858.9	675738.5
SIZE	.2441551	.0123156	19.82	0.000	.2199831	.2683272
_cons	3503972	2036764	1.72	0.086	-493605.9	7501550

PANEL REGRESSION

Hausman Test

Fixed Effects

```
. xtreg SHV DBEQT DBTA LIQ SIZE, fe
```

Fixed-effects (within) regression
Group variable: COYID

Number of obs = 870
Number of groups = 87

R-sq:

within = 0.9070
between = 0.6885
overall = 0.8727

Obs per group:

min = 10
avg = 10.0
max = 10

corr(u_i, Xb) = 0.0177

F(4,779) = 1899.73
Prob > F = 0.0000

SHV	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
DBEQT	52440.5	25337.48	2.07	0.039	2702.688	102178.3
DBTA	-3181912	107178.2	-29.69	0.000	-3392304	-2971520
LIQ	665447.9	7738.238	85.99	0.000	650257.6	680638.1
SIZE	.1686966	.0137416	12.28	0.000	.1417216	.1956715
_cons	7018862	1778116	3.95	0.000	3528396	1.05e+07
sigma_u	36366928					
sigma_e	48438464					
rho	.3604829	(fraction of variance due to u_i)				

F test that all u_i=0: F(86, 779) = 5.00 Prob > F = 0.0000

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RANDOM EFFECTS

```
. xtreg SHV DBEQT DBTA LIQ SIZE, re

Random-effects GLS regression           Number of obs   =           870
Group variable: COYID                   Number of groups =            87

R-sq:                                     Obs per group:
    within = 0.9065                       min =             10
    between = 0.7118                      avg =            10.0
    overall = 0.8760                      max =             10

Wald chi2(4) =           7620.00
corr(u_i, X) = 0 (assumed)               Prob > chi2      =           0.0000
```

SHV	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
DBEQT	62742.8	25567.15	2.45	0.014	12632.1	112853.5
DBTA	-3199415	107436	-29.78	0.000	-3409986	-2988844
LIQ	663640.3	7745.11	85.69	0.000	648460.2	678820.4
SIZE	.1958354	.0128458	15.25	0.000	.1706582	.2210126
_cons	5738774	3433958	1.67	0.095	-991660.1	1.25e+07
sigma_u	26925723					
sigma_e	48438464					
rho	.23605621 (fraction of variance due to u_i)					

HAUSMAN TEST

```
. hausman fe re
```

	Coefficients			
	(b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
DBEQT	52440.5	62742.8	-10302.29	.
DBTA	-3181912	-3199415	17502.99	.
LIQ	665447.9	663640.3	1807.582	.
SIZE	.1686966	.1958354	-.0271388	.0048804

b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

```
chi2(3) = (b-B)' [(V_b-V_B)^(-1)] (b-B)
          =           37.76
Prob>chi2 =           0.0000
(V_b-V_B is not positive definite)
```



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