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Financing decision, ownership type and financial performance of listed non-financial companies in Ghana

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Abstract: The study aims to investigate the nexus between financing decision, ownership type and financial performance of listed non-financial companies in Ghana. Data were selected from 22 listed non-financial companies on the Ghana Stock Exchange from the years 2010 to 2021. A non-parametric estimation technique-robust OLS (Driscoll-Kraay) was employed to test the variables of interest. Findings indicate that long-term debt funding directly affects ROA, ROE and TQ negatively. Again, total debt funding posits a positive link with ROE and TQ. Moreover, the direct relationship between ownership type, financing decision and accounting-based performance measure (ROE) was insignificant but significant with market-based performance measure (TQ). Subsequently, the interaction role propelled ownership (foreign and state) to be significant on the relation between financing decision and financial performance. Largely, foreign-owned companies play a strong positive role on the link between financing decision and financial performance. Further, state ownership negatively affects the association between financing decision and financial performance. The study contributes to knowledge by considering the multiplier effect of ownership type on the relationship between financing decision and financial performance in Ghana. For policy implication, regulators specifically of state interest entities should formulate balanced frameworks for welfare seeking in public service delivery and performance for sustainability.

Subjects: Economics; Finance; Business, Management and Accounting

Keywords: Financing decision; ownership type; financial performance; agency theory; listed non-financial companies; Ghana

1. Introduction

Financing decision of companies across the globe continues to play a vital role to the going concern of their operations. The sustainability and performance of companies become crucial to owners and other key interest parties in dynamic operational environment. Seeking the interest of owners and other key stakeholders can be realized through revenue and profit maximization, and cost minimization (Mrabure & Abhulimhen-Iyoha, 2020). In striving to fulfil the objectives of corporate organization (especially, financial performance and consequently shareholders wealth), managers entrusted with the mandate to efficiently run the corporate affairs should decide on the appropriate capital structure (financing decision) levels (Boateng et al., 2022; Pathak & Chandani, 2021). Capital structure or financing decisions are significant to corporate strategy in addressing corporate activities; however, the appropriate synthesis of long-term debt and equity (Saif-Alyousfi et al., 2020; Vo, 2017).

The blend of debt and equity that ensures the maximization of the firm's value through prudent investment undertakings and also enhances the financial and operational performance of every business is the optimal capital structure (Abor, 2005; Powers & Abor, 2007; Das & Swain, 2018; Kumar et al., 2017). Capital structure as extant literature has been studied in the financial and non-financial fields (see Doku et al., 2019; Mathur et al., 2021). Consequently, as companies with no exception to non-financial category endeavour to make and achieve the suitable financing decision in order to perform and meet owners' expectation, theories have come up in literature, including Modigliani and Miller (MM) theory, the agency theory, trade-off theory and pecking order theory (Abor, 2007; Detthamrong et al., 2017; Doku et al., 2019; Mathur et al., 2021; Thakolwiroj & Sithipolvanichgul, 2021)to aid address such issues.

In curbing agency challenges associated with the running of corporate institutions, ownership type becomes an essential component and therefore enhances the corporate status or performance (Alkurdi et al., 2021; Sun et al., 2016).

Existing studies have been conducted to assess the relationship between capital structure, ownership structure and the performance of companies (see Abor, 2005; Al-Thuneibat, 2018; Detthamrong et al., 2017; Din et al., 2021; Mathur et al., 2021; Mohammad & Bujang, 2020; Muhammad et al., 2021; Queiri et al., 2021; Rasyid & Linda, 2019). To the best of our knowledge none of these studies considered the multiplier (interact) effect of ownership type (foreign ownership and state ownership) in assessing the association between capital structure and financial performance among listed non-financial companies. However, due to differences and coverage in laws and regulations of countries, scholars (see Al-Thuneibat, 2018; Detthamrong et al., 2017; Mohammad & Bujang, 2020) advocated for perspective studies on the relationship between capital structure and financial performance or the association between capital structure, ownership structure and financial performance of corporate organizations. For instance, US laws and regulations ensure compliance at the state and federal levels, while Thailand companies comply with laws and regulations at the country level (Detthamrong et al., 2017). Generally, in Ghana companies also comply with the country-level legislative framework (like the Companies' Act).

Based on the above evidence, it is imperative to investigate the influence of ownership type in determining the relationship between financing decision and financial performance among the listed non-financial companies while achieving the following specific objectives:

(1) To assess the direct relationship between financing decision and financial performance of listed non-financial companies in Ghana.
(2) To determine the direct association between financing decision, ownership type and financial performance among listed non-financial companies in Ghana.
(3) To examine ownership type interaction influence on the relationship between financing decision and financial performance of listed non-financial companies in Ghana.

This study is significant because it adds pertinent knowledge to practice, policy and research. First, the study advances knowledge by considering the multiplier effect of ownership type (foreign ownership versus state ownership) on the relationship between financial performance in Ghana and financing decision. Second, it will support regulators in developing fair frameworks for welfare seeking in the provision of public services and performance for sustainability, particularly of state-owned entities. The study also hopes to educate owners and management about the importance of assessing their current finance or financing structure and selecting a customized solution that will best serve their operations' needs.

The remaining aspects of this paper are structured as follows: Section 2 considers the literature review comprising theoretical review and empirical review including hypotheses development.

Section 3 explains research methodology of the study. Empirical analysis and discussion of results are presented in Section 4. Section 5 looks at the study conclusion and implication.

2. Literature review

2.1. Theoretical review

2.1.1. Modigliani and Miller (MM) theory

This theory is seen as the forefront of influence for corporate capital structure or financing decision and was developed by Modigliani and Miller (1958). They were of the initial opinion that capital structure decision is irrelevant or unrelated and do not impact on the value of the company. When arguments were raised against their earlier assertion, Modigliani and Miller (1963) revised that and included corporate tax as a key factor in determining the capital structure of companies. The subsequent assertion suggests that companies will benefit from tax deductibility as a result of debt financing through savings in interest payment which will possibly lead to value maximization. Scholars (like Avci, 2016; Pandey & Sahu, 2017; Muhammad & Bujang, 2020; Mathur et al., 2021; Muhammad et al., 2021) used this theory as the foundation in determining a relationship between capital structure and corporate performance.

2.1.2. Trade-off theory

The probability of bankruptcy on the equilibrium between tax deductibility benefits ascertained from debt financing and higher interest cost from debt financing above certain level is considered under this theory. Trade-off theory was proposed by Myers (1977) as a build-up of Modigliani and Miller (1963) proposition to discover the determinant of appropriate capital structure in order to maximize the value of the company. This signifies how debt financing will be able to increase the value of businesses through tax shields making debt financing less costly compared to equity financing but the optimum level of debt should be the preferred. Researchers (including Avci, 2016; Detthamrong et al., 2017; Mohammad & Bujang, 2020; Mathur et al., 2021; Muhammad et al., 2021) adopted this theory in assessing the association between capital structure and financial performance of companies.

2.1.3. Pecking order theory

Pecking order theory was first developed by Donaldson (1961) and later advanced by Myers and Majluf (1984) and suggested as an option to trade off theory by dwelling on asymmetric information where relevant information is hidden by managers on the blind side of owners (shareholders). Pecking order theory of capital structure goes contrary to the general ways of firms having explicit synthesis of debt and equity structure of capital which decreases their cost of capital. Rather, this theory uses ranking of the various sources of finance to decide on the best financing decision. The order the theory predicts to ensure that optimal capital structure is attained comprises of first internal financing source, that is, retained earnings, followed by debt financing and finally, issuance of new equity. The motive behind this is that internal funding (retained earnings) is cheaper as compared to external funding (debt and new equity issuance) to maximize the value of the company. Authors (see Avci, 2016; Mohammad & Bujang, 2020; Mathur et al., 2021; Muhammad et al., 2021) applied this theory to investigate the link between capital structure and financial performance of companies.

2.1.4. Agency theory

This is the primary theory behind this study. It was propounded by Jensen and Meckling (1976) which gives account on the relation between the principals (corporate owners) and the agents (corporate managers) where the principals entrust the running of the corporate entities in the care of the agents. However, the agents are expected to employ the optimal financing decision that will maximize the benefits of the principals of companies. Consequently, the significance of ownership and control separation coupled with information asymmetry embedded in agency theory can be seen as a vital aspect when the best financing decision is made for companies to perform and subsequently reduce agency conflict and costs. Agency theory is expected to predict the relationship between financing decision, ownership type and financial performance of companies. Researchers (like Al-Thuneibat, 2018; Mathur et al., 2021; Pandey & Sahu, 2017; Rasyid & Linda,

2019) applied this theory to allude an association between capital structure and firm financial performance. Further, scholars (including Al-Thuneibat, 2018; Rasyid & Linda, 2019) employed the agency theory to predict a relationship between ownership structure, capital structure (financing decision) and financial performance of companies.

2.2. Empirical review

2.2.1. Financing decision and financial performance

Researchers (Das & Swain, 2018; Detthamrong et al., 2017; Mathur et al., 2021; Muhammad et al., 2021; Rasyid & Linda, 2019) have conducted studies on the relationship between financing decision and financial performance with mixed outcome. For instance, Detthamrong et al. (2017) used non-financial firms in Thailand to suggest a positive effect of capital structure on firm performance. Also, a negative relation was revealed by Muhammad et al. (2021) using Italian listed non-financial companies. In addition, Mathur et al. (2021) using Indian pharma firms of BSE 500 averred a negative relation between capital structure and financial performance. Therefore, this study posits the following hypothesis:

H_1: There is a significant direct relationship between financing decision and financial performance

2.2.2. Financing decision, ownership type and financial performance

Looking at current literature (Al-Thuneibat, 2018; Ciftci et al., 2019; Din et al., 2021; Laporsek et al., 2021; Queiri et al., 2021; Rashid, 2020), a direct relationship has been established between financing decision, ownership structure and firm performance with divers' results. For example, Al-Thuneibat (2018) alludes to a positive relationship between ownership type, financing decision and firm performance in Jordan. Also, Ciftci et al. (2019) researched using Turkey case and found a positive association between foreign ownership and firm performance. Further, Rashid (2020) suggests a positive association between foreign ownership and performance but a negative relation between state ownership and performance by employing listed companies in Bangladesh. Moreover, Din et al. (2021) using listed manufacturing companies in Pakistan found positive relationship between state ownership and financial performance whilst no association exist between foreign ownership and performance. Nonetheless, to the best of our knowledge, predicting the interaction's influence of ownership type (foreign and state) on the link between financing decision and financial performance is yet to be revealed in literature. Consequently, we propose the following hypotheses:

H_{2a}: There is a significant direct association between financing decision, ownership type and financial performance

H_{2b}: Ownership type interacts the link between financing decision and financial performance

3. Research methodology

3.1. Data source and selection

Research design selected for this study follows the quantitative approach. The data is secondary and sourced from Osiris database and the chosen firms' websites through the annual reports (including audited annual financial statements). The population for this study includes all listed non-financial companies on the Ghana Stock Exchange (GSE). The GSE has twenty-four (24) listed non-financial companies (Ghana Stock Exchange, 2022). Again, non-financial companies listed on the GSE were selected based on the fact that they play a significant part in economic growth and had a greater influence among the sectors operating within the Ghanaian economy. The sample of twenty-two (22) companies with eight (8) different sectors composed of: manufacturing (5), food and beverage (5), distribution (4), mining (3), information and communication technology (2), advertisements and

production (1), education (1) and agriculture (1). The sample (listed non-financial companies) chosen is based on ease to data access and quality of data and covers a wide period (2010–2021) which is in line with similar position used by scholars like Anarfo (2015) in supporting sample selection. Also, the twelve-year period span was motivated by Rashid (2020), who realized that undertaking research by using time dimensions of five to ten years within the data will possibly provide more robust results. The sample represents approximately 92% of the population. This research excludes financial companies listed on the GSE due to alternative robust operational framework instituted by their regulators. Previous studies authors (see Al-Thuneibat, 2018; Badawi et al., 2019; Bajaher et al., 2021) using non-financial sector data alluded to a similar position by stating that banking and other financial companies are governed by structures and supplementary requirements closely regulated by certain mandated institutions, and dealing with specific accounting items with alternative approach.

Moreover, firm-level panel data was employed by this study. Panel data is the synthesis of cross-sectional data and time series data and considered as more prominent compared to other data type. Using panel data has its advantages as it combines the cross-sectional and time elements. Scholars (including Baltagi, 2008; Gujarati, 2014) suggest panel data is more beneficial than standalone cross-sectional or time series data.

3.2. Model specification

To establish and test the association between financing decision, ownership type and financial performance of listed non-financial companies in Ghana in order to achieve the purpose of the study, a three-equational model is adapted by drawing motivation from Mathur et al. (2021).

Equation 1

$$FINP_{it} = \propto_0 + \propto_1 FD_{it} + \propto_2 C_{it} + \varepsilon_{it}$$

Equation 2

$$FINP_{it} = \beta_0 + \beta_1 FD_{it} + \beta_2 OT_{it} + \beta_3 C_{it} + \varepsilon_{it}$$

Equation 3

$$FINP_{it} = \lambda_0 + \lambda_1 FD_{it} + \lambda_2 OT_{it} + \lambda_3 (FD_{it} * OT_{it}) + \lambda_4 C_{it} + \varepsilon_{it}$$

Where:

$FINP_{it}$ = *Financial Performance*, FD_{it} = *Financing Decision*, OT_{it} = *Ownership Type*, $FD_{it} * OT_{it}$ = *Interaction influence*, C_{it} = *Controls*, $\propto_0$, β_0 and λ_0 = Intercept/Constant, $\propto, \beta$ *and* λ = *Coefficients*, ε_{it} = *Error term*, *it* = *cross sectional against time series dimensions*

Notes:

1. Financial performance indicators consist of ROA=return on assets, ROE = return on equity and TQ = Tobin's q.

2. Financing decision includes LTDTA= long-term debt funding and TDTA= total debt funding.

3. Ownership type comprises of FOROWN= foreign ownership type and STATEOWN= state ownership type.

4. Interaction influence includes LTDTA/TDTAxFOROWN= long-term debt funding or total debt funding interacting foreign ownership type and LTDTA/TDTAxSTATEOWN= long-term debt funding or total debt funding interacting state ownership type.

5. Controls consist of Size, LQT = Liquidity, Tangibility, SG = sales growth and Age.

3.3. Measurement of variables

Table 1 given below shows the Measurement of variables.

Table 1. Measurement of variables

Variable	Measurement	Reference
Dependent Variable		
Financial Performance (FINP) (1) Return on Assets (ROA) (2) Return on Equity (ROE) (3) Tobin's Q (TQ)	(1) This is net income scaled to total assets (2) Ratio of net income to total equity (3) Market value of equity added to book value of debt divided by the book value of total assets	(1) Al-Thuneibat (2018); Rashid (2020); Din et al. (2021) Coleman and Wu (2021); Muhammad et al. (2021); Ferriswara et al. (2022) (2) Rashid (2020); Din et al. (2021); Coleman and Wu (2021); Ferriswara et al. (2022); Ngatno et al. (2021) (3) Ciftci et al. (2019); Rashid (2020); Din et al. (2021); Coleman and Wu (2021); Queiri et al. (2021)
Independent Variable		
Financing Decision (FD) (1) Long-term debt funding (LTDTA) (2) Total debt (leverage) funding (TDTA)	(1) Long-term debt scaled to total assets (2) Ratio of total debt to total assets	(1) Power and Abor (2007); Mohammad and Bujang (2020); Mathur et al. (2021); Ferriswara et al. (2022) (2) Abor (2007); Mohammad and Bujang (2020); Detthamrong et al. (2017); Al-Thuneibat (2018); Din et al. (2021)
Ownership Type (OT) (1) Foreign Ownership (FOROWN) (2) State Ownership (STATEOWN)	(1) FOROWN is measured using dummy where 1 represents foreign ownership and 0 for non-foreign ownership (2) STATEOWN is defined using dummy where 1 represents state ownership and 0 for non-state ownership	(1) Boachie (2021) (2) Naseem et al. (2020)
Control variable		
Size	Natural log of total assets	Abor (2007); Rasyid and Linda (2019); Din et al. (2021); Mathur et al. (2021)
Liquidity	Ratio of current assets to current liabilities	Yatim et al. (2016); Rasyid and Linda (2019); Mathur et al. (2021); Muhammad et al. (2021)
Tangibility	The ratio of plant, property and equipment to total assets	Thakolwiroj and Sithipolvanichgul (2021); Queiri et al. (2021)
Sales Growth	Ratio of percentage change in sales ($Sales_t$-$Sales_{t-1}$/$Sales_{t-1}$)	Mathur et al. (2021); Queiri et al. (2021)
Age	Number of listing years of companies	Detthamrong et al. (2017)

3.4 Data estimation technique

The predictive relation between the outcome (dependent) variables and the explanatory (independent) variables were examined by employing regression analysis.

So, the observed relationship between the dependent and independent variables was estimated in panel data estimation approach through Driscoll and Kraay (1998) robust standard errors for linear panel

models, a non-parametric data estimation technique. This robust OLS (ordinary least square) for panel of Stata deals with both balanced and unbalanced panels as well as missing values. According to Hoechle (2007), Driscoll and Kraay estimation technique is able to consistently address issues like heteroscedasticity, autocorrelation and cross-sectional dependence. Scholars (see Al-Gamrh et al., 2020; Mazzotta & Ferraro, 2020; Queiri et al., 2021) adopted this estimation technique to establish association among variables of interest.

4. Empirical analysis and discussion of results

4.1. Descriptive analysis

Table 2 reveals the summary of descriptive statistics of the variables used in the study. The average returns (financial performance) in terms of accounting based measures (ROA, ROE) and market based measure (TQ) for all the listed non-financial companies in the sample are 1.14%, 9.38% and 155.61% respectively. The average value of TQ, which is above 100% (155.61%), implies that the mean of assets' book value is less than the mean of market value. Inconsistent performance can be seen from the sampled listed non-financial companies where profit and loss occurred in the course of their operations looking at the minimum (ROA = −13.97%; ROE = −40.79%) and maximum (ROA = 13.31%; ROE = 49.86%) return values. Again, mean value of TDTA (leverage) which is approximately 64.90% suggesting debt component as source of funding for most listed non-financial companies and the TDTA variation in terms of standard deviation is about 25.98% which can be deduced as being low. In addition, the mean liquidity (LQT) value is 1.3, implying that on the average, listed companies exceed meeting their short-term obligations as and when the need arises by 0.3. However, Table 2 presents that FOROWN (foreign ownership) average value is 44.39%, indicating a significant portion of foreign companies listed on the GSE. This can possibly be attributable to foreign companies' ease of meeting listing requirements. On the other hand, STATEOWN (state ownership) accounts for about 26.46% (from the mean value) of the observed companies on the stock market. Moreover, the average listing years of companies is 14.5, with minimum and maximum listing years of 4 and 26 respectively. Finally, sales growth yields an average value of 9.63% postulating low average sales, and this could have probably been part of the key factors that accounted for the low average returns (ROA and ROE).

4.2. Correlation and variance inflation factor analysis

From Table 3, a pairwise correlation was estimated among the variables as the initial step to estimating the regression function. This was done primarily to ascertain if there exists a high degree of correlation among the explanatory variables which gives rise to what is termed multi-collinearity and the consequent effect, spurious results. The correlation matrix results (see Table 3) show a low correlation coefficient, an indication of the absence of multicollinearity. The highest

Table 2. Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
ROA	223	0.0114	0.0874	−0.1397	0.1331
ROE	223	0.0938	0.2694	−0.4079	0.4986
TQ	223	1.5561	0.7601	0.7280	3.1296
Size	223	11.6598	2.5151	6.8596	16.6792
LTDTA	223	0.1864	0.1912	0.0068	0.5643
TDTA	223	0.6489	0.2598	0.2378	1.0818
LQT	223	1.3000	0.8974	0.3902	3.3818
Tangibility	223	0.4431	0.2305	0.1018	0.8261
SG	219	0.0963	0.2531	−0.3220	0.5286
Age	221	14.5430	7.4629	4	26
FOROWN	223	0.4439	0.4980	0	1
STATEOWN	223	0.2646	0.4421	0	1

correlation coefficient is approximately 0.71, which is still below the multicollinearity presence threshold (0.80 or more) suggested by scholars (Field, 2009; Hair et al., 2006). On the other hand, Liu et al. (2019) supported a correlation coefficient threshold of 0.70 or more to show multicollinearity presence.

To clear any doubt, variance inflation factor (refer to Table 4) test was conducted among the independent variables, and none of these variables VIF value exceeded the threshold (that is, not more than 10) alluded to by researchers (Chatterjee & Hadi, 2015; Field, 2009; Hair et al., 2006).

4.3. Regression analysis

4.3.1. Diagnostic tests

Diagnostic tests performed on the data suggest the presence of heteroscedasticity and autocorrelation. Breusch-Pagan/Cook-Weisberg test for heteroskedasticity was conducted using the explanatory variables and the p-value (0.0001) was highly significant showing a rejection of the null hypothesis (constant variance). This postulates the presence of heteroscedasticity. On the other hand, Wooldridge test for autocorrelation or serial correlation in panel data also reveals a strongly significant position against the null hypothesis (no first-order autocorrelation) from the p-value (0.0000), indicating the existence of autocorrelation. Therefore, the estimation executed using the Driscoll and Kraay (1998) robust standard errors for linear panel models.

4.3.2. Presentation and discussion of regression results

Six (6) estimations were performed using three (3) dependent variables: ROA, ROE and TQ. The accounting-based (ROA, ROE) and market-based (TQ) indicators are the financial performance measures as explained earlier. This part presents and interprets the empirical results obtained from Tables 5–10. Tables 5–7 consider the direct relation between financing decision, ownership type and financial performance, whilst Tables 8–10 report the indirect (interact/multiplier) relation between financing decision, ownership type and financial performance.

The R-Squared values which measure the extent of total variation in the dependent variable explained by the independent variables were presented. The R-squared values were different in respect of direct and indirect links. Table 5 (ROA-direct) reports R-squared values of 50.3%, 50.9% and 50.4% accordingly, and Table 8 (ROA-indirect) shows R-squared values of 53.9% and 51.5% accordingly. On the other hand, Table 6 (ROE-direct) presents R-squared values of 20.9%, 21.6% and 20.9%, respectively, whilst Table 9 (ROE-indirect) indicates R-squared values of 27.2% and 24.9% accordingly. Table 7 (TQ-direct) reports R-squared values of 13.9%, 32.4% and 22.7% accordingly, and Table 10 (TQ-indirect) shows R-squared values of 33% and 23.3% respectively. Largely, it can be observed that R-squared values improved when variables of interest were interacted.

With regard to the overall fitness of the regression models (Tables 5–10) which is measured by F-Statistics, the p-values are statistically significant at 1% (0.000) level. This indicates the validity and stability of the regression models.

Table 5 presents OLS and Robust OLS results on the direct relationship between financing decision, ownership type and financial performance measure, ROA. Both OLS and Robust OLS results report negative and statistically significant link between financing decision (LTDTA and TDTA) and ROA. This signifies that as debt (LTDTA and TDTA) increases, ROA decreases among listed non-financial companies in Ghana. But the level of ROA decrease associated with LTDTA is higher as compared to TDTA looking at their coefficient. This implies that long-term debt is more likely to reduce profit on assets' employment as against total debt (leverage). Scholars (see Abor 2007; Das & Swain, 2018; Mathur et al., 2021; Queiri et al., 2021) suggest similar position. The negative association between financing decision (LTDTA and TDTA) and ROA is in agreement with the pecking order theory proposed first by Donaldson (1961) and later advanced by Myers and Majluf (1984) which reveals that companies should consider internally generated funding before any other funding source because higher debt financing, for instance, can pose stability

Table 3. Correlation matrix

Variable	ROA	ROE	TQ	Size	LTDTA	TDTA	LQT	Tangibility	SG	Age	FOROWN	STATEOWN
ROA	1											
ROE	0.55*	1										
TQ	0.24*	0.26*	1									
Size	0.11*	−0.01	−0.13*	1								
LTDTA	−0.39*	−0.24*	−0.23*	0.43*	1							
TDTA	−0.41*	0.08	−0.15*	0.14*	0.40*	1						
LQT	0.34*	0.04	0.26*	−0.15*	−0.16*	−0.71*	1					
Tangibility	−0.27*	−0.27*	−0.20*	0.10	0.32*	−0.06	−0.25*	1				
SG	0.45*	0.23*	0.06	0.02	−0.20*	−0.09	0.07	−0.15*	1			
Age	0.12*	0.13*	0.09	0.16*	−0.10	0.13*	−0.31*	0.20*	0.03	1		
FOROWN	0.32*	0.11	0.30*	0.64*	0.13*	−0.16*	0.16*	−0.12*	0.07	0.26*	1	
STATEOWN	−0.20*	−0.05	−0.37*	0.01	0.16*	0.39*	−0.39*	0.27*	0.02	0.06	−0.54*	1

Note: * indicates correlation significance.

Table 4. Variance inflation factor

Variable	VIF	1/VIF
FOROWN	4.21	0.237320
TDTA	3.76	0.266276
Liquidity	3.03	0.330047
Size	2.93	0.341831
STATEOWN	2.38	0.420481
LTDTA	2.33	0.429395
Tangibility	1.97	0.508771
Age	1.55	0.645898
SG	1.08	0.922337
Mean VIF	2.58	

threat to the value or performance of companies. Size as predictor of ROA has a positive and significant association. This indicates that, on the average as companies grow in assets, ROA also grows and researchers (including Din et al., 2021) supported this finding. Moreover, tangibility reveals an inverse and significant correlation with ROA portraying that as tangible assets (property, plant and equipment) increase, ROA decreases and it is in line with findings of Detthamrong et al. (2017). With regard to sales growth, the relationship with ROA was positive and statistically significant postulating that, *ceteris paribus*, revenue increase propels profit increase (ROA) consistent with literature (Din et al., 2021; Queiri et al., 2021). Moreover, listing years (age) of companies largely impact their financial performance, especially foreign-owned companies. That is, holding all other factors constant, longer listing period positively affect return on assets of companies (like Mathur et al., 2021). Listing regulations could probably have rightly affected the companies over time to perform. On the contrary other studies (like Detthamrong et al., 2017) indicate a negative relation between listing years of companies and ROA. From the Robust OLS result (Table 5) foreign-owned non-financial companies listed on the GSE favourably influence ROA compared with other similar companies on the stock market in agreement with Ciftci et al. (2019). The ownership influence of foreign companies supports the agency theory that companies' better performance will help curb agency conflicts. So, foreign ownership has an effect on the association between financing decision and ROA of listed non-financial companies in Ghana.

Table 6 reports OLS and Robust OLS results on the direct relationship between financing decision, ownership type and financial performance measure ROE. From Table 6, a negative and statistically significant relationship exists between LTDTA and ROE of all results. This shows that as debt (LTDTA) increases, ROE decreases consistent with existing literature (like Das & Swain, 2018). On the other hand, the association between leverage (TDTA) and ROE is positive and statistically significant of all results. This suggests that leverage (total debt structure) is able to increase the return on shareholders' fund. Researchers (see Detthamrong et al., 2017; Mohammad & Bujang, 2020) indicate similar position (positive relation between TDTA and ROE) supporting trade-off theory that companies are able to benefit from tax deductibility when they employ debt financing and the resulting positive effect on the wealth of the shareholder. Again, referring to the Robust OLS results, largely, size has a positive significant association with ROE. This indicates that, *ceteris paribus*, as companies' assets increase, their ROE increases agreeing with literature (see Coleman & Wu, 2021). The positive relation between size and ROE implies greater investment in assets which possibly increases the return on the equity holders' fund. However, liquidity postulates a positive and significant association with ROE suggesting that listed non-financial companies are capable of increasing the return on the shareholders fund if they are able to consistently meet their immediate obligations as and when they fall due supporting similar findings in literature (like Mathur et al., 2021). Moreover, sales growth has a positive and statistically significant relation with ROE indicating that, *ceteris paribus*, revenue increase will cause profit increase on shareholders' investment agreeing with Mathur et al. (2021). From the Robust OLS results (Table 6), listing years of companies have a certain level of positive effect on their ROE. Holding all other factors constant, longer

Table 5. Direct relation between financing decision, ownership type and financial performance (ROA)

	OLS Results			Robust OLS Results (Driscoll-Kraay)		
Variable	**ROA(1)**	**ROA(2)**	**ROA(3)**	**ROA(1)**	**ROA(2)**	**ROA(3)**
Size	0.0100***	0.00747**	0.0101***	0.0100***	0.00747***	0.0101***
	(4.95)	(2.89)	(4.95)	(14.11)	(6.22)	(13.48)
LTDTA	−0.129***	−0.135***	−0.128***	−0.129***	−0.135***	−0.128***
	(−3.83)	(−3.98)	(−3.77)	(−5.12)	(−4.72)	(−5.04)
TDTA	−0.0842**	−0.0742*	−0.0886**	−0.0842*	−0.0742*	−0.0886*
	(−2.76)	(−2.39)	(−2.79)	(−2.74)	(−2.30)	(−2.55)
Liquidity	0.0113	0.00982	0.0114	0.0113	0.00982	0.0114
	(1.36)	(1.17)	(1.36)	(1.27)	(1.20)	(1.27)
Tangibility	−0.0634*	−0.0519*	−0.0674**	−0.0634***	−0.0519***	−0.0674***
	(−2.59)	(−2.04)	(−2.63)	(−6.06)	(−4.45)	(−5.37)
SG	0.115***	0.115***	0.114***	0.115***	0.115***	0.114***
	(6.62)	(6.65)	(6.51)	(9.98)	(10.64)	(10.68)
Age	0.00153*	0.00113	0.00156*	0.00153*	0.00113*	0.00156*
	(2.38)	(1.64)	(2.42)	(3.03)	(2.74)	(3.03)
FOROWN		0.0207			0.0207*	
		(1.58)			(2.71)	
STATEOWN			0.00577			0.00577
			(0.52)			(0.88)
Constant	−0.0479	−0.0302	−0.0458	−0.0479	−0.0302	−0.0458
	(−1.11)	(−0.68)	(−1.06)	(−1.51)	(−0.99)	(−1.35)
Observation	218	218	218	218	218	218
Prob (F-Statistic)	0.000	0.000	0.000	0.000	0.000	0.000
R-squared	0.503	0.509	0.504	0.503	0.509	0.504

Note: *,** and *** indicate 10%, 5% and 1% significant levels respectively. t-statistics in parentheses.

listing period positively affect ROE in consonance with weak/insignificant results of Mathur et al. (2021). Implying that listing regulations could probably have rightly affected the companies over time to perform. Finally, the role of ownership was insignificant on the relationship between financing decision and ROE.

Table 7 represents OLS and Robust OLS results on the direct relationship between financing decision, ownership type and financial performance measure TQ. A negative and statistically significant relationship between LTDTA and TQ of all results. This shows that as long-term debt increases, the market performance or value of listed non-financial companies decreases, signifying the adverse effect on companies consistent with literature (like Powers & Abor, 2007; Mathur et al., 2021). A possible negative signal as a result of market performance decline and the subsequent extension in creating agency problems. On the other hand, the association between TDTA and TQ is positive and largely, statistically significant (see Mathur et al., 2021; Din et al., 2021-weak), suggesting that leverage (total debt structure) is able to increase the market performance of listed non-financial companies and expected increase in returns of shareholders investment. This supports agency theory by enhancing agency relationship as favourable signal will be out there when market value or performance is improved. Regarding size, the relationship with TQ is negative and statistically significant (with OLS Results TQ (2) and Robust OLS Results TQ (2)). This indicates that, *ceteris paribus*, as assets increase, TQ decreases, asserting that market value or performance of listed non-financial companies declines when there is an increase in assets. The

Table 6. Direct relation between financing decision, ownership type and financial performance (ROE)

	OLS Results			Robust OLS Results (Driscoll-Kraay)		
Variable	**ROE(1)**	**ROE(2)**	**ROE(3)**	**ROE(1)**	**ROE(2)**	**ROE(3)**
Size	0.0143	0.00557	0.0142	0.0143*	0.00557	0.0142*
	(1.82)	(0.56)	(1.80)	(2.55)	(0.59)	(2.51)
LTDTA	−0.518***	−0.536***	−0.523***	−0.518***	−0.536***	−0.523***
	(−3.97)	(−4.10)	(−3.98)	(−6.85)	(−9.16)	(−8.36)
TDTA	0.423***	0.457***	0.436***	0.423***	0.457***	0.436***
	(3.59)	(3.80)	(3.55)	(5.11)	(7.18)	(8.01)
Liquidity	0.0795*	0.0745*	0.0793*	0.0795***	0.0745**	0.0793***
	(2.47)	(2.30)	(2.46)	(6.00)	(4.32)	(5.76)
Tangibility	−0.0747	−0.0354	−0.0630	−0.0747	−0.0354	−0.0630
	(−0.79)	(−0.36)	(−0.63)	(−0.58)	(−0.34)	(−0.62)
SG	0.178**	0.178**	0.181**	0.178**	0.178**	0.181**
	(2.65)	(2.67)	(2.68)	(4.28)	(4.08)	(3.90)
Age	0.00359	0.00222	0.00351	0.00359	0.00222*	0.00351*
	(1.45)	(0.83)	(1.40)	(2.07)	(2.37)	(2.41)
FOROWN		0.0705			0.0705	
		(1.39)			(1.71)	
STATEOWN			−0.0170			−0.0170
			(−0.39)			(−0.42)
Constant	−0.391*	−0.331	−0.397*	−0.391*	−0.331	−0.397*
	(−2.35)	(−1.93)	(−2.37)	(−2.74)	(−1.90)	(−3.09)
Observation	218	218	218	218	218	218
Prob (F-Statistic)	0.000	0.000	0.000	0.000	0.000	0.000
R-squared	0.209	0.216	0.209	0.209	0.216	0.209

Note: *,** and *** indicate 10%, 5% and 1% significant levels respectively. t-statistics in parentheses.

negative link between size and TQ is in line with similar findings of Alkurdi et al. (2021). With regard to liquidity, a positive and significant association was found with TQ showing that listed non-financial companies are capable of increasing market value or performance if they are able to consistently meet their immediate obligations as and when they fall due which is in line with other studies (like Yeh, 2018). From Table 7 results foreign-owned non-financial companies listed on the GSE positively and significantly influence TQ supported by Rashid (2020), whilst state-owned non-financial companies listed on the GSE negatively and significantly influence TQ in agreement with Din et al. (2021).

Table 8 depicts OLS and Robust OLS results on the indirect relation between financing decision, ownership type and financial performance measure ROA, specifically multiplying financing decision and ownership type and the effect on ROA. From Table 8, an inverse and statistically significant association was found between financing decision (LTDTA and TDTA) and ROA, same as the direct relations finding. Largely, the role of ownership type on the relationship between financing decision and ROA was strengthened with the interaction (though somehow weakened by the OLS state ownership interaction standalone results). Foreign-owned companies' impact on ROA was positive and highly significant when financing decision interacted with foreign ownership. The positive and strongly significant link between foreign-owned companies and ROA is consistent with literature (like Ciftci et al., 2019; Rashid, 2020). This implies that foreign listed non-financial companies are able to manage their debt portfolio well in order to be profitable compared with

Table 7. Direct relation between financing decision, ownership type and financial performance (TQ)

	OLS Results			Robust OLS Results(Driscoll-Kraay)		
Variable	**TQ(1)**	**TQ(2)**	**TQ(3)**	**TQ(1)**	**TQ(2)**	**TQ(3)**
Size	−0.00387	−0.126***	−0.00672	−0.00387	−0.126***	−0.00672
	(−0.17)	(−4.87)	(−0.31)	(−0.55)	(−7.73)	(−0.74)
LTDTA	−0.892*	−1.141***	−1.038**	−0.892**	−1.141**	−1.038*
	(−2.36)	(−3.38)	(−2.88)	(−3.80)	(−3.60)	(−2.59)
TDTA	0.545	1.021**	0.993**	0.545*	1.021**	0.993**
	(1.60)	(3.30)	(2.95)	(2.70)	(4.41)	(3.81)
Liquidity	0.294**	0.223**	0.287**	0.294***	0.223***	0.287***
	(3.15)	(2.68)	(3.24)	(5.25)	(8.71)	(6.88)
Tangibility	−0.186	0.365	0.212	−0.186*	0.365	0.212
	(−0.68)	(1.44)	(0.78)	(−2.33)	(2.07)	(1.06)
SG	−0.0115	−0.00243	0.0831	−0.0115	−0.00243	0.0831
	(−0.06)	(−0.01)	(0.45)	(−0.09)	(−0.02)	(0.73)
Age	0.0178*	−0.00149	0.0150*	0.0178	−0.00149	0.0150
	(2.48)	(−0.22)	(2.18)	(1.52)	(−0.23)	(1.98)
FOROWN		0.988***			0.988***	
		(7.55)			(6.30)	
STATEOWN			−0.577***			−0.577***
			(−4.88)			(−4.61)
Constant	0.835	1.678***	0.621	0.835*	1.678***	0.621
	(1.74)	(3.80)	(1.35)	(2.98)	(9.29)	(2.13)
Observation	218	218	218	218	218	218
Prob (F-Statistic)	0.000	0.000	0.000	0.000	0.000	0.000
R-squared	0.139	0.324	0.227	0.139	0.324	0.227

Note: *,** and *** indicate 10%, 5% and 1% significant levels respectively. t-statistics in parentheses.

non-foreign listed non-financial companies. For instance, the negative co-efficient of LTDTA and TDTA is lower for foreign-owned companies in relation to state-owned companies. So, on the average, the cost of debt financing is lower for foreign interest entities as against state interest entities and vice versa. On the other hand, a negative and statistically significant relation was found between state-owned companies on the stock market and their ROA when LTDTA and TDTA interacted with state ownership. The inverse association between state-owned companies and ROA agrees with researchers (see Laporsek et al., 2021; Queiri et al., 2021; Rashid, 2020). This postulates that, *ceteris paribus*, sampled state interest listed companies are not capable of using debt financing to enhance return on assets compared with non-state interest listed companies. Similarly, the focus of state-owned companies will probably be more on seeking the welfare of the people than concentrating and executing strategies to be more profitable. Consequently, ownership type interaction with financing decision has a significant influence on the association between financing decision and financing performance (ROA) of listed non-financing companies in Ghana.

Table 9 presents OLS and Robust OLS results on the indirect relation between financing decision, ownership type and financial performance measure ROE. So, Table 9 looks at the interaction of financing decision (LTDTA and TDTA) and ownership type (FOROWN and STATEOWN) and the implication on financial performance (ROE). From Table 9, an inverse and statistically significant association was found between LTDTA and ROE, indicating that, as long-term debt increases, returns on equity holders' investment decreases whether foreign-owned non-financial entities or state-owned non-financial

Table 8. Indirect relation between financing decision, ownership type and financial performance (ROA)

	OLS Results		Robust OLS Results (Driscoll-Kraay)	
Variable	**ROA(1)**	**ROA(2)**	**ROA(1)**	**ROA(2)**
Size	0.00718**	0.0106***	0.00718***	0.0106***
	(2.84)	(4.86)	(6.56)	(9.08)
LTDTA	−0.0671	−0.141***	−0.0671*	−0.141**
	(−1.47)	(−3.53)	(−2.34)	(−9.83)
TDTA	−0.0638*	−0.123***	−0.0638	−0.123**
	(−2.00)	(−3.40)	(−1.98)	(−4.59)
Liquidity	−0.000476	0.00415	−0.000476	0.00415
	(−0.06)	(0.46)	(−0.05)	(0.54)
Tangibility	−0.0858**	−0.0848**	−0.0858***	−0.0848***
	(−3.19)	(−3.17)	(−4.65)	(−6.01)
SG	0.105***	0.114***	0.105***	0.114***
	(6.16)	(6.55)	(11.98)	(11.17)
Age	0.000466	0.00132	0.000466	0.00132
	(0.64)	(1.93)	(0.64)	(1.92)
FOROWN	0.103***		0.103***	
	(3.89)		(7.22)	
LTDTAxFOROWN	−0.0702		−0.0702**	
	(−1.23)		(−3.33)	
TDTAxFOROWN	−0.108**		−0.108**	
	(−2.81)		(−3.79)	
STATEOWN		−0.0728		−0.0728**
		(−1.69)		(−3.25)
LTDTAxSTATEOWN		0.0418		0.0418
		(0.63)		(1.14)
TDTAxSTATEOWN		0.0915		0.0915*
		(1.51)		(2.78)
Constant	−0.00830	−0.00831	−0.00830	−0.00831
	(−0.19)	(−0.18)	(−0.19)	(−0.30)
Observation	218	218	218	218
Prob(F-Statistic)	0.000	0.000	0.000	0.000
R-squared	0.539	0.515	0.539	0.515

Note: *,** and *** indicate 10%, 5% and 1% significant levels respectively. t-statistics in parentheses.

entities. In respect of TDTA, a largely significant positive relation exists with ROE, revealing that, as leverage (total debt) increases, returns to shareholders respond in the same direction. These assertions are generally consistent with the direct relationship between financing decision (LTDTA and TDTA) and ROE. In addition, the significant influence of ownership type on the relationship between financing decision and ROE was strengthened with the interaction (though weakened by the state ownership interaction standalone results). The effect of ROE on foreign-owned companies was positive and highly significant when financing decision interacted with foreign ownership. The positive and highly significant relationship between foreign ownership and ROE is consistent with literature (like Din et al., 2021; Rashid, 2020). This signifies that foreign-owned listed non-financial companies are probably having a robust debt management framework and are taking advantage of that to advance benefits to equity holders as against non-foreign-owned listed non-financial companies. For example, the negative co-efficient of

Table 9. Indirect relation between financing decision, ownership type and financial performance (ROE)

	OLS Results		Robust OLS Results(Driscoll-Kraay)	
Variable	**ROE(1)**	**ROE(2)**	**ROE(1)**	**ROE(2)**
Size	0.00441	0.0187*	0.00441	0.0187**
	(0.45)	(2.24)	(0.50)	(3.71)
LTDTA	−0.244	−0.632***	−0.244	−0.632***
	(−1.39)	(−4.16)	(−2.12)	(−11.45)
TDTA	0.497***	0.255	0.497***	0.255***
	(4.04)	(1.84)	(4.91)	(5.26)
Liquidity	0.0310	0.0401	0.0310*	0.0401*
	(0.93)	(1.17)	(2.27)	(3.06)
Tangibility	−0.180	−0.165	−0.180*	−0.165
	(−1.73)	(−1.62)	(−2.38)	(−1.56)
SG	0.137*	0.180**	0.137*	0.180**
	(2.09)	(2.73)	(2.33)	(3.45)
Age	−0.000644	0.00176	−0.000644	0.00176
	(−0.23)	(0.67)	(−0.22)	(1.16)
FOROWN	0.415***		0.415**	
	(4.07)		(4.27)	
LTDTAxFOROWN	−0.314		−0.314	
	(−1.43)		(−1.97)	
TDTAxFOROWN	−0.444**		−0.444*	
	(−3.01)		(−2.41)	
STATEOWN		−0.423*		−0.423*
		(−2.57)		(−2.58)
LTDTAxSTATEOWN		0.352		0.352
		(1.39)		(1.85)
TDTAxSTATEOWN		0.439		0.439
		(1.90)		(1.55)
Constant	−0.236	−0.200	−0.236	−0.200
	(−1.39)	(−1.12)	(−1.44)	(−1.84)
Observation	218	218	218	218
Prob(F-Statistic)	0.000	0.000	0.000	0.000
R-squared	0.272	0.249	0.272	0.249

Note: *,** and *** indicate 10%, 5% and 1% significant levels respectively. t-statistics in parentheses.

LTDTA is lower (though weak) for foreign-owned companies in relation to state-owned companies. Also, the positive co-efficient of TDTA is higher for foreign-owned companies in relation to state-owned companies. However, *ceteris paribus*, the cost (benefit) of debt financing is lower (higher) for foreign interest entities as against state interest entities and vice versa. On the other hand, a negative and statistically significant association was found between state-owned companies and ROE when LTDTA and TDTA multiplied state ownership. This shows that, *ceteris paribus*, sampled state interest listed companies are not able to take advantage of debt financing (especially, long-term debt) to improve returns on shareholders' investment compared with non-state interest listed companies. Therefore, ownership type's interaction with financing decision has a role on the link between financing decision and financial performance (ROE) of listed non-financial companies in Ghana.

Table 10. Indirect relation between financing decision, ownership type and financial performance (TQ)

	OLS Results		Robust OLS Results(Driscoll-Kraay)	
Variable	**TQ(1)**	**TQ(2)**	**TQ(1)**	**TQ(2)**
Size	−0.124***	0.000249	−0.124***	0.000249
	(−4.77)	(0.01)	(−7.39)	(0.03)
LTDTA	−0.701	−1.211**	−0.701	−1.211**
	(−1.50)	(−2.85)	(−1.17)	(−3.34)
TDTA	0.916**	0.849*	0.916*	0.849*
	(2.80)	(2.19)	(2.81)	(2.32)
Liquidity	0.195*	0.253**	0.195**	0.253**
	(2.20)	(2.63)	(4.37)	(4.19)
Tangibility	0.242	0.108	0.242	0.108
	(0.88)	(0.38)	(0.97)	(0.45)
SG	−0.0300	0.0840	−0.0300	0.0840
	(−0.17)	(0.45)	(−0.27)	(0.76)
Age	−0.00534	0.0126	−0.00534	0.0126
	(−0.72)	(1.71)	(−0.58)	(1.48)
FOROWN	1.071***		1.071***	
	(3.94)		(8.25)	
LTDTAxFOROWN	−0.788		−0.788	
	(−1.35)		(−1.35)	
TDTAxFOROWN	0.106		0.106	
	(0.27)		(0.78)	
STATEOWN		−0.891		−0.891***
		(−1.93)		(−5.59)
LTDTAxSTATEOWN		0.553		0.553**
		(0.78)		(4.42)
TDTAxSTATEOWN		0.268		0.268
		(0.42)		(0.96)
Constant	1.801***	0.781	1.801***	0.781
	(3.99)	(1.55)	(6.23)	(2.03)
Observation	218	218	218	218
Prob(F-Statistic)	0.000	0.000	0.000	0.000
R-squared	0.330	0.233	0.330	0.233

Note: *,** and *** indicate 10%, 5% and 1% significant levels respectively. t-statistics in parentheses.

Table 10 represents OLS and Robust OLS results on the indirect relation between financing decision, ownership type and financial performance measure TQ. Explicitly, interacting financing decision (LTDTA and TDTA) and ownership type (FOROWN and STATEOWN) and the implication on TQ. Looking at Table 10, an inverse and statistically significant association was found between LTDTA and TQ with only state-owned listed non-financial companies. It discloses that long-term debt increase will reduce the market performance (TQ) of state-owned listed non-financial entities. With regard to TDTA, the relationship with TQ is positive and statistically significant with both foreign-owned and state-owned listed non-financial companies, indicating that, as debt capital (leverage) increases, market value or performance of the companies increases and the consequent progressive effect on the shareholders' investment. These suggestions are largely consistent with the direct relationship between financing decision (LTDTA and TDTA) and TQ. However, the effect of ownership type on the association between financing decision and

TQ was strengthened with the interaction (though weakened by the OLS foreign and state ownership interaction standalone results, and Robust OLS foreign ownership interaction standalone results). With reference to Table 10, foreign-owned companies' influence on TQ was positive and highly significant when financing decision multiplied foreign ownership. The positive and highly significant link between foreign-owned companies and TQ agrees with assertion by scholars (like Ciftci et al., 2019; Rashid, 2020). On the contrary, state-owned companies' role on TQ was negative and statistically significant when financing decision multiplied state ownership. The inverse association between state ownership and TQ supported similar position by researchers (Din et al., 2021; Queiri et al., 2021). This suggests that foreign-owned listed non-financial companies are possibly having a robust debt management framework and are leveraging on that to maximize their market value as against non-foreign-owned listed non-financial companies. For instance, the negative coefficient of LTDTA is lower (though weak) for foreign-owned companies compared with state-owned companies. Again, the positive coefficient of TDTA is higher for foreign-owned companies in relation to state-owned companies. Consequently, *ceteris paribus*, the cost (benefit) of debt financing is lower (higher) for foreign interest entities in relation to state interest entities and vice versa. This will help enhance the market performance for foreign-owned listed non-financial companies compared to state-owned listed non-financial companies. Similarly, the focus of state-owned companies will probably be more on seeking the welfare of the people than concentrating and executing strategies to be more profitable. In sum, ownership type interaction with financing decision has an effect on the relationship between financing decision and financial performance (TQ) of listed non-financial companies in Ghana.

5. Conclusion and implication

The study investigated the association between financing decision, ownership type and financial performance of 22 non-financial companies listed on the Ghana Stock Exchange (GSE) from the years 2010–2021 using Robust OLS (Driscoll-Kraay). The key focus of this study was to examine the interaction (indirect) role of ownership type on the relationship between financing decision and financial performance. The results show that long-term debt funding directly affect ROA, ROE and TQ negatively supporting the pecking order theory of choosing internal funding source before any other. Also, total debt (leverage) funding posits a positive relation with ROE and TQ agreeing with the trade-off theory of tax deductibility benefits on an acceptable level of debt financing. Generally, standalone ownership's (foreign or state) influence on the association between financing decision and accounting-based performance measure (ROE) was insignificant but significant with market-based performance measure (TQ).

Subsequently, the interaction role propelled ownership (foreign and state) to be significant on the link between financing decision and financial performance. Largely, foreign-owned companies play a strong positive role on the relation between financing decision and financial performance. This implies that foreign listed non-financial companies are able to manage their debt portfolio well in order to be profitable compared with non-foreign listed non-financial companies. The ownership influence of foreign companies supports the agency theory that companies' better performance will help curb agency conflicts. On the other hand, state ownership negatively affects the association between financing decision and financial performance, indicating that state interest listed companies possibly do not have the required capability or are unwilling to use debt financing to gain returns. Similarly, their key motive will probably be more on seeking the welfare of the people than concentrating and executing strategies to be more profitable.

The study contributes to knowledge by considering the multiplier effect of ownership type (foreign ownership and state ownership) on the relationship between financing decision and financial performance in Ghana. For policy implication, it will aid regulators specifically of state interest entities in formulating balanced frameworks for welfare seeking in public service delivery and performance for sustainability. Moreover, the study seeks to create awareness for owners and management in appraising the current funding structure and decide on tailored option that will best fit their operations to perform.

Nevertheless, the study is confronted with two (2) main limitations which provide opportunity for advanced study. First, the concentration on listed non-financial companies and ignoring the

financial category. Further studies could include financial companies (listed and unlisted). On the other hand, sectorial study can be conducted using non-financial firms or financial firms or both (for listed and unlisted). Second, the study focused on firm-level variables, and future research should consider country-level variables which could possibly have an implication on establishing the relationship between financing decision, ownership type and financial performance.

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