



The Impact of Firm Size on Financial Decision-Making: Evidence from Ghana

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Authors' contributions

This work was carried out in collaboration between both authors. Author SD designed the study, wrote the protocol, wrote the first draft of the manuscript, managed the literature searches and managed the analyses of the study. Author EB performed the statistical analysis and supervisory role. Both authors read and approved the final manuscript.

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ABSTRACT

The study's primary goal was to ascertain the influence firm size has on Ghanaian banks' financial decision-making. A quantitative technique was applied in the study. The study's secondary data came from the financial statements of five commercial banks. Ghana Commercial Bank, ADB Bank, SG-Ghana Bank, Zenith Bank, and Fidelity Bank. These commercial banks were chosen using a purposive sampling technique. A sample size of 50 was used to collect data for each bank from 2012 to 2021, yielding ten records for each bank. A double log panel regression model was used to analyze the relationship between financial decisions and some key financial performance indicators (KPIs), with the financial decision being the outcome variable while return on assets, leverage, total debt, total equity, firm size (Bank size) and time the predictor variables. The Hausmann test was then performed to select the most appropriate model for the banking panel data.

Based on the test result (chisq = 2.6279, df=3, p = 0.4526), the FEM was selected. The results showed that return on assets had no significant relationship with financial decision-making. Leverage was found to be significantly related to financial decisions, but the influence was minimal. Firm size had the most influence on financial decisions and by far the most significant influence

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regarding which capital structure to maintain as a bank. Total debt played a significant positive role in financial decisions. The higher the total debt, the more debt the banks tended to take on. As a response, the study proposes that Banks relying on internal funds to finance their operations must do so efficiently and effectively to derive the benefits associated with firm size. On the other hand, banks relying on debt financing must do so with caution since there is the risk of interest escalating in the current economic climate.

Keywords: Firm size; financial decision-making; KPIs; profitability.

1. INTRODUCTION

Firm size is vital in every business venture; the size of a manufacturing firm must be relatively more significant compared to a firm that deals in servicing products manufactured externally. In the financial sector, where banks and insurance companies are the actors, firm size determines the number of services and products these companies can engage in. In the financial sector, firm size determines an organization's performance, which can be positive or negative [1]. Firm size is capacity driven, aided by the number of staff in an organization. However, in many organizations, such as banks, poor decisions from organizational leaders often cause collapse, gross incompetence of staff, and small operational staff (firm size), which becomes inadequate to attend to customers' needs [2]. Poor decisions made by organizational leaders in banks can influence business performance and productivity in the areas of profitability, "Return on Capital Employed" (ROCE), "Return on Equity" (ROE), "Return on Assets" (ROA), and when these financial returns are poor, in addition to an incapable firm size, business performance plummets affecting business owners, investors and the financial sector as a whole [1,3,4].

On the African and Ghanaian front, studies have been conducted on firm size and its influences on firm performance [4-7], but none of these studies used firm size as a controlling variable to determine the impact of firm size on financial decisions. Also, in the Ghanaian financial sector, financial decision has become a significant concern, especially after the financial sector clean-up undertaken by the Government of Ghana in 2017 [8]. In the current dispensation, the Bank of Ghana (BoG) has reformed the banking industry, thereby collapsing all banks and savings and loan companies that cannot operate as financial institutions [9]. These banks collapsed because of poor financial decisions, which were influenced by factors ranging from greedy investments to firm size [9]. However, studies conducted in relation to the impact of firm

size on financial decision-making in the banking sector in Ghana still need to be completed, which creates a gap that needs attention.

Also, local banks have been opening branches all over the country [10], and the firm size will be determined by financial decision-making; hence, there is a need for a study to be conducted on the role firm size plays in the financial decision-making of such ventures. Therefore, this study seeks to provide empirical evidence concerning the impact of firm size on financial decision-making among Ghanaian banks and proffer recommendations that would reduce poor financial decisions made by bank owners and investors. Therefore, the researcher wishes to study the impact of firm size on financial decision-making using selected banks in Ghana. The study's main objective is to determine the impact firm size has on the financial decision-making of Ghanaian banks. However, specifically, the study seeks first to determine whether there is a significant relationship between firm size (total revenue) and financial decision-making, second to determine the relationship between total debt and financial decision-making, and lastly, to determine which variables had the most significant effect on financial decision making. Following this section is the literature review, methodology, result and discussion, and conclusion.

2. LITERATURE REVIEW

2.1 The Theoretical Review

Theories in the literature that explain business growth and decisions are the managerial, trade-off, and pecking order theories.

2.1.1 The pecking order theory

In order to comprehend the logic of business behavior, [11] established the pecking order theory. The firm needs help maximizing its performance, notwithstanding the limitations of information asymmetry. A business will therefore select internal finance over external financing.

The pecking order theory, made famous by Myers et al. [11], contends that businesses will choose internal financing to a riskier debt before issuing equity. Leverage and a company's size negatively correlate [12]. Compared to larger organizations, smaller and younger companies pay fewer dividends, take on more debt, and make more investments [13]. Due to their high reliance on bank loans to cover their financial needs, smaller businesses accrue more debt than larger ones. In order to comprehend the logic of business behavior, [11] established the pecking order theory. The firm needs help maximizing its performance, notwithstanding the limitations of information asymmetry. A business will therefore select internal finance over external financing.

The pecking order theory is supported by the findings of Meyer et al. [14], who revealed a negative relationship between indebtedness and firm size and performance in Australia.

2.1.2 Trade-off theory

According to [15], the specific costs of capital standards ignore risk and its effects on costs and equity value. The impact of a financing decision on the total cost of capital should be imitated, and the benchmark should be either minimizing the total cost of capital or maximizing the firm's value. Debt has a tax shield advantage since interest is tax deductible, which positively affects value and lowers the total cost of capital. However, it should be understood that a company cannot consistently use debt to reduce its overall cost of capital. Beyond a certain threshold or range, the cost of debt increases due to the increased risk of excessive debt to shareholders and creditors.

Rajan et al. [16] claim that when leverage increases, creditors become riskier and demand higher interest rates, which may make it difficult for the company to obtain credit if the debt has accumulated to a certain level. Additionally, using financial leverage excessively puts the position of the stockholders in danger. The cost of equity will rise as a result of this. Debt can thereby reduce the cost of capital overall up to a certain amount, but after that point, the cost of capital would start to rise, making future use of debt unfavorable. Debt and equity are used to optimize market value per share while lowering the firm's average cost of capital.

According to Guffey et al. [17], financial difficulty occurs when a company cannot pay its debts when they become due. Consistently failing to

pay debt holders may lead to the company's eventual insolvency. Higher debt makes financial distress worse for a given operating risk level. Financial trouble is significantly more likely when business risk and debt are higher. The level of operating leverage affects a company's level of business risk. The risk of operating in a highly competitive environment is higher for businesses, which is exacerbated if those businesses have a large proportion of fixed expenses and a high capital intensity. Less operating risk exists for mature businesses in generally stable market environments. Similar to how diverse companies with unconnected activities are more prepared to handle changing market situations [18].

2.1.3 The managerial theory

The complexity of the contemporary firm is highlighted by managerial theory. However, increasing sales or maximizing revenue rather than profit is one of the main goals of recruiting managers [19]. The core of the managerial theory is the manager's function as an agent for revenue maximization. According to the guiding concept, businesses should work to raise their output and take the largest market share, as doing so will result in higher sales and a more prominent firm.

3. METHODOLOGY

3.1 Research Design

A research design's primary goal is to "help introduce a systematic approach to the research operation, thereby guaranteeing that all aspects of the study will be addressed and they will be executed in the right sequence"[20]. Surveys, comparative studies, and case studies are some of the research designs frequently and consistently used by researchers; however, for this project, the researcher chose a quantitative survey study research design because the study was conducted in more than one unit (commercial banks in Accra). These banks could be owned locally or internationally.

According to Creswell et al. [21], a "survey study" is one in which researchers collect data from a large number of usually similar samples in their natural surroundings in order to make comparisons and distinctions. Data was gathered and evaluated based on observations and a review of the documents from the commercial banks, which were chosen for the study since it

is quantitative. According to the researcher, a descriptive cross-sectional survey study was ideal since it can be used to investigate how firm size affects the financial decision-making of banks in Ghana. McLeod et al. [22] argued that a cross-sectional survey study is one in which researchers collect data from numerous but generally similar samples in their natural settings to make comparisons and differences. The research is not experimental. Non-experimental research does not involve the researcher tampering with variables, as each development must occur or happen naturally [23].

A research strategy is a set of plans and procedures for a study that includes everything from broad hypotheses to specific methods for data collection, analysis, and interpretation [24]. In general, study design, methodologies, and a philosophical research approach could be used. The type of research strategy that can be used to effectively measure, analyze, interpret, and present data based on logic is known as a research design [24]. Research design is chosen as the research approach because the study's subject is a national issue that could impact anyone on an individual level. The three basic categories are quantitative, qualitative, and mixed methodology research approaches. Many academic publications have employed all three approaches; however, this study only used the quantitative strategy. Data collection for this study was done using a quantitative research approach.

By incorporating a wide range of components and giving significance to a research's findings and outcomes, the quantitative method of research adds more to a study, according to Kenton et al. [25]. When using the quantitative research approach, a researcher can use a variety of methodologies, approaches, concepts, or languages in a single study. Quantitative research can also provide logical and practical choices for a researcher to integrate, link, or blend data as needed during a study. Given that firm size is a topic that elicits a wide range of responses, particularly when it comes to its impact on financial decision-making in banks, treating the study with a quantitative approach, specifically through the gathering of secondary data, would be sufficient to determine the influence of firm size on financial decision using selected banks in Ghana. As a result, the quantitative approach was used, producing a more thorough and valuable study.

3.2 Population

According to Kenton et al. [25], a population is the entire pool from which a statistical sample is taken. A population can be a collection of individuals, objects, occasions, visits, or measurements that have been combined. The target population in this study was selected from a group of Accra-based local and internationally-owned commercial banks that provided information on the influence firm size has on financial decisions. Financial statements and documents containing such information were accessed. The entire group of units for which the research data are used to conclude is called the "target population" per definition [25]. The defined target population was chosen because these documents included details on the different firm sizes of the chosen banks and how this had affected financial decision-making over time. The researcher believes that using secondary data for the study gives a more realistic picture of how firm size affects the financial decision-making processes of banks in Ghana.

3.3 Sample Size and Sampling Technique

"Sampling is the process of selecting a sufficient number of elements from a population so that the study of the sample and an understanding of its properties or characteristics would allow researchers to generalize such properties or characteristics to the population elements," according to Kothari et al. [26]. Sampling is the process of "extracting or gathering a representative sample from a large population from which the researcher can investigate the smaller group and draw accurate conclusions about the larger group" [27].

The sampling method refers to the ability or instrument used to select specific items from a determined total population so that the chosen set can represent and do the work of the entire population [28]. In this investigation, non-probability Sampling was used as the sampling approach.

According to Parahoo et al. [27], non-probability Sampling is a quantitative sampling technique that chooses data channels based on their "relevance to the research issue" rather than necessarily aiming for representativeness. Quota sampling, purposeful Sampling, convenient, accidental, haphazard, snowball sampling, aberrant cases, sequential Sampling, simple random Sampling, and theoretical Sampling are

examples of non-probability sampling techniques [21]. Purposive Sampling was used in this research. Purposive Sampling is the deliberate selection of an informant based on their characteristics [29]. This non-random sampling technique does not require any underlying hypotheses or a predetermined quantity of informants. The commercial banks were chosen through the use of purposive Sampling, as this study was based on a time series analysis, and also because of their perceived information in the field of firm size and how it impacts financial decisions undertaken by the banks.

One of the most crucial factors is the sample size, which denotes the number of participants or objects a researcher chooses from a target group [24]. The data for the study were secondary data obtained from the financial statements of the various banks. Five (5) Accra-based commercial banks were chosen as the sample. Ghana Commercial Bank, ADB Bank, SG-Ghana Bank, Zenith Bank, and Fidelity Bank were the banks. Data was captured from 2012 to 2021 for each bank using a sample size of 50, resulting in 10 records for each bank.

3.4 Model Specification

In this study, panel data regression analysis was used. Since the data set includes annotations for various variables that span various periods, panel data analysis was performed. As a result, panel data consists of both cross-sectional and time-series data. This gives the analyst more freedom to account for behavioral variations between individuals and firms. It is suitable for this study because it can account for heterogeneity or independent impacts in cross-sectional data while providing more exciting and insightful data, making it a good fit. Each variable in the panel regression equation has a double subscript, unlike time series or cross-section regression. The panel data model's general structure is as follows:

$$[y_c]_{-}(t) = \alpha_c + \beta X_{c,t} + \varepsilon_{c,t} \quad (1)$$

The gerund c indicates the cross-sectional measurement, while the suffix t indicates the time-series measurement. The rear variable, y , represents the model's dependent variable, the Business's debt ratio. X is the set of variables used to explain the data in the estimation model; it is assumed to be constant over time (u) and unique for each cross-sectional unit (t).

3.5 Empirical Model

The study modifies the standard model used to determine how firm size affects performance. As a result, the empirical model used to investigate this influence is specified as follows:

$$\text{Log_Fin_D} = \beta_0 + \beta_1 \text{Log_Roa} + \beta_2 \text{Log_Lev} + \beta_3 \text{Log_TrSize} + \beta_4 \text{Log_TotDebt} + \beta_5 \text{Log_TotEqui} + U$$

Fin D = Financial Decision
 Roa = Return on Assets
 Lev = Leverage
 TrSize = Total Revenue (Firm Size)
 TotDebt = Total Debt
 TotEqui = Total Equity

3.6 Variable Description, Measurement, and Expected Signs

3.6.1 Dependent variable

3.6.1.1 Financial decision

The dependent variable was a financial decision calculated by dividing total debt by total assets. The decision to finance comes from two potential sources: the company's funds, such as share capital or retained earnings. The second source of capital comes from borrowing money from sources outside the company, such as debentures, loans, bonds, etc. The balance of an ideal capital structure is the goal of the financial decision. The most crucial decisions for corporate executives to make are financial ones. These are sensible choices that need to be made after careful thought. It decides when, where, and how the company will purchase the fund. Increased share value indicates business growth for the company and increases investor wealth.

3.6.2 Independent variables

3.6.2.1 Leverage

Leverage was calculated by dividing long-term liabilities by total equity. Financial leverage is the result of using borrowed money as a source of funding when making investments to increase a company's asset base and produce returns on risk capital. An investment strategy known as leverage involves using borrowed funds—specifically, different financial instruments or borrowed capital—to boost an investment's potential return.

3.6.2.2 Return on assets (ROA)

Profit (after taxes) was divided by the total assets to calculate the return on assets. Return on assets (ROA) measures how profitable a company is of the resources it uses, which are all of its assets. This ratio shows how effectively management uses the total assets at its disposal to generate profits. The ROA informs the Business of the returns on the capital invested (assets). The ROA varies between businesses and between industries.

3.6.2.3 Total debt

The sum of a company's short-term debt, long-term debt, and other fixed payment obligations (like capital leases) assumed during typical business cycles is the total amount of debt the company owes. Liabilities can be broken down into distinct groups using a debt schedule. Debt is not always considered to be current and non-current liabilities. Here are a few examples of what debt is and is not.

Regarded as debt:

- Drawn line-of-credit
- Notes payable (maturity within a year)
- Current portion of Long-Term Debt
- Notes payable (maturity more than a year)
- Bonds payable
- Long-Term Debt
- Capital lease obligations

Not considered debt:

- Accounts payable
- Accrued expenses
- Deferred revenues
- Dividends payable

3.6.2.4 Total equity

The total equity on a company's balance sheet represents the historical or book value of the owners' stake in the company if all debts were paid off. Total equity, equal to total assets minus total liabilities, comprises the cash investors have put into the company and any operating profits. Due to its lower debt burden, a company with a higher equity ratio than liabilities often has a lesser chance of bankruptcy.

3.7 Data Type and Source

Secondary data from the financial statements of the various banks served as the study's data

source. Data from the banks' annual reports for the years 2012 to 2021 were used in the study.

3.8 Estimation Strategies

The study used pooled panel data for regression. Additionally, panel data offers more helpful information, more significant variability, less cross-collinearity between the variables, and more degrees of freedom, all contributing to higher efficiency. One model with constant coefficients, referring to intercepts and slopes, is a pooled regression model.

Data were pooled and analyzed using this study's ordinary least squares (OLS) regression method. A statistical method of analysis known as ordinary least squares regression calculates the relationship between one or more independent variables and a dependent variable. The method calculates the relationship between the two variables by minimizing the sum of squares in the difference between the observed and predicted values of the dependent variable configured as a straight line.

The data panel was balanced because each bank had the same number of time observations (10). The fact that there were more time observations than cross-sectional units caused the data to be dispersed over a large panel. The best model was chosen using all functional forms of regression. However, the double-log model stood out as being very significant. Both the outcome and explanatory variables were log-transformed; hence, the double-log model was employed.

4. RESULTS AND DISCUSSION

4.1 Preliminary Analysis

Table 1 is a summary of the descriptive statistics of six financial variables. Namely, financial decisions, return on assets, leverage, total debt, total equity, and firm size. The data was collected from the audited financial statements of five (5) banks, including Ghana Commercial Bank, Agriculture Development Bank, SG Bank, Zenith Bank, and Fidelity Bank. The descriptive statistics results show that the mean score of financial decision-making (S.D. = 117.6613), return on assets, leverage, total debt (S.D. = 1553421890.2416), total equity, and firm size was 17.4792, 0.0334, 0.8320, 9799352 10.2800, 171141645.1000 and 7.6220 respectively. However, financial decision-making

Table 1. Descriptive statistics of financial decision, return on assets, leverage, total debt, total equity, and firm size

Variables	Min	Max	Mean	Median	Std. Dev	Skewness
Fin_D	0.0800	832.8300	17.4792	0.8500	117.6613	6.6524
ROA	-0.0400	0.3700	0.0334	0.0300	0.0522	5.2784
Lev	0.0100	14.4400	0.8320	0.3950	2.0387	5.9612
Total Debt	12124919.0000	5572474712.0000	979935210.2800	7780277.0000	1553421890.2416	1.3837
Total Equity	100424.0000	1028565337.0000	171141645.1000	1283678.5000	292492188.0433	1.5753
Firm Size	6.1200	9.7500	7.6220	6.9600	1.3383	0.5843

Source: Survey Data, 2022

Note: The descriptive Statistics are computed based on 50 observations for all variables obtained from five banks listed on the Ghana stock exchange. Total equity and Total Debt were adjusted to remove all exponents attached to the variable

Table 2. Fixed effect model adjusted for serial correlation

Effect	Estimate	SE	t-value	P	95% CI	
Constant	18.152	0.009062	-1.4163	0.16461	0.031163158	0.005494417
ROA	-0.0128344	0.007401	-5.0791	9.753e-06***	-0.05256294	-0.02262178
Leverage	-0.0375924	0.003976	252.372	<2.2e-16***	0.995319521	1.011402856
Total Debt	1.0033612	0.035485	-1.6823	0.10051	-0.13146987	0.012079271
Total Equity	-0.0596953	0.512002	-33.91	<2.2e-16***	-18.3976014	-16.3263564
Firm Size	-17.361979	0.010282	1.8607	0.07033.	-0.00166527	0.039929615
Time	0.0191322					
R ²	0.99322					
\bar{R}^2	0.99149					
F-Statistics	952.662	DF (39)		<2.22e-16		

Table 3. Random Effects (model 2)

Intercept	18.995013	0.35409	53.644	<2e-16***
Total Debt	0.992939	0.01533	64.7558	<2e-16***
ROA	-0.014182	0.01896	-0.7479	0.4545
Firm Size	-18.083	0.28668	-63.0778	<2e-16
R ²	0.9893			
R ²	0.9886			
Chisq	4251.48	DF(3)		<2.22e-16
Hausman Test				
Chisq	2.6279	Df=3		p = 0.4526

Table 4. Random effects (model 2)

Ho	Fixed Effect		
H1	One model is inconsistent		
LM Test (Breusch-Pagan)			
Chisq	0.53277	Df=1	P = 0.4654
Breusch-Pagan Test for cross-sectional dependence in panels			
Chisq	13.964	Df=10	P = 0.1746
Breusch Pagan Test for serial correlation			
Chisq	7.0269	Df=6	P = 0.3184

(S.D. = 117.6613), total debt (S.D. = 155342 1890.2416), and total equity (292492188.0433) showed large variability about their respective means. Deviations from their means were significant, as shown by their respective standard deviations. Except for firm size, which had a skewness of less than +1, indicating normality, financial decision, return on assets, leverage, total debt, and total equity were right-skewed.

4.2 Further Analysis

A double log panel regression model was used to analyze the relationship between financial decisions and some key financial performance indicators (KPIs), with the financial decision being the outcome variable and return on assets, leverage, total debt, total equity, firm size (Bank size) and time the predictor variables. Table 2 summarizes the result from two-panel regression models. Model 1 is the fixed effect model (FEM), and Model 2 is the random effect model (REM). The F-statistic and the Chi-square statistic for the FEM and the REM, respectively, were significant at less than the 1% level. Both models fit the data well. The FEM R^2 is 99.15%, while the REM R^2 is 98.86%. This indicates that 99.15% and 98.86% of the variations in the FEM and REM, respectively, are explained by the variables captured in them. The Hausmann test was then performed to select the most appropriate model for the banking panel data. Based on the test result (chisq = 2.6279, df = 3, p = 0.4526), the FEM was selected and tested for homoscedasticity, cross-sectional dependence in panels (Breusch-Pagan test), and serial correlation (Breusch-Godfrey Test). The analysis showed that the FEM residual was homoscedastic and did not suffer from cross-sectional dependence (That is, the residuals are not correlated across banks) in the panels, which could lead to bias in the results but were serially correlated, which means that the estimates through unbiased, consistent and asymptotically normally distributed, was not efficient (That is, minimum variance). To address this, the FEM was adjusted.

The study found an insignificant negative relationship between return on assets and leverage, on the one hand, and financial decision contrary to what is highlighted in the literature (Egyiyi, 2022). The explanatory power of the model was also found to be low (adjusted R^2 = 10.81) and inefficient (relatively more significant standard errors) (Appendix I). However, when total debt, equity, and time were added to the

model, its explanatory power (adjusted R^2 = 98.86) and efficiency (standard errors) improved significantly. The results from the new model (model...) showed that at the 5% significance level, return on assets (t (95) = -1.4163), p > 0.05), total equity (t (95) = -1.6823, p > 0.05) and time (t(95) = 1.8607, p > 0.05) did not impact financial decision significantly. On the contrary, leverage, total debt, and firm size were found to have a significant effect on the financial decisions of banks. As shown in Table 2, we find that leverage has a negative significant influence on financial decisions (t (95) = -5.0791, p < 0.001) consistent with (Egyiyi, 2022). Nonetheless, the effect was minimal (β = -0.0375924) relative to the effect size of the other significant variables. To put this in context, a 1% improvement in leverage will only reduce financial decisions by 0.03%. Total debt, on the other hand, was found to be positively related to financial decisions (t (95) = 252.3717, p < 0.001). Finally, the results showed that firm (Bank) size has by far the most significant impact on financial decisions (t (95) = -33.9100, p < 0.001).

4.3 Discussion

This study aimed to ascertain how firm size, leverage, and return on assets affected financial decisions. However, the model containing only these variables exhibited inadequate explanatory power and inefficiency. Thus, the study also incorporated total debt, total equity, and time to investigate their respective impacts on financial decisions, addressing model inadequacy and inefficiency. The analysis identified leverage, total debt, and firm size as the significant factors impacting financial decisions. However, the influence of leverage on financial decisions was found to be extremely small. It thus may carry little weight in determining whether to rely on internal or debt financing.

In contrast, however, firm size significantly impacted financial decisions. What this means is that the bigger banks (firm size), which is negatively related to financial decisions, tended to rely on internal funding rather than debt, as supported by the pecking order theory postulated by Myers et al. [11] and is consistent with the findings of Egyiyi et al. [30]. Nevertheless, in this study, the coefficient for firm size was much larger than that of Egyiyi's. This may be due to the different industries and countries in which the study was conducted. Our study concentrated on listed banks on the Ghana Stock Exchange, whereas Egyiyi's study focused on all listed

companies on the Nigerian Stock Exchange, regardless of industry. Also, firm size impacts decision-making in multiple and complex ways. For example, firm size determines how firms deal with international competition, the regularity of recreating and introducing products, promptly responding to customers' needs and requirements, and maintaining competitive cost and operating levels [31]. It must be noted, however, as articulated by [32], that though the size of firm matters in the decision-making processes, especially decisions about financial planning, firm size creates a situational problem for organizational leaders concerning decision-making; because, financial decisions to employ more people may not serve intended purposes which imply that, "Returns on Investments" (ROI) might not become possible. So, success in decision-making is determined by firm size and is heavily dependent on the effectiveness of decisions made by organizational leaders [33]. Thus, bad decisions by the leaders of organizations may spell doom for firms, even if they are significant.

Total debt was shown to have a significant positive relationship with financial decisions suggesting that as banks' total debt increases, they tend to take on more debt. However, such a strategy may pose severe risks to the Business because high debt levels make it difficult to cope with extreme situations such as financial challenges [34], as is currently happening in Ghana. High debt levels strip firms of financial flexibility, enabling them to handle better challenging situations such as increased interest payments on debts during a financial crisis. Hence, greater flexibility could be achieved by turning to internal financing. High debt levels discourage shareholders who are risk averse because in the event of a default or insolvency, the debt providers would be settled first, potentially putting shareholders' capital at risk. Potential shareholders may also avoid such highly indebted firms due to the lack of confidence brought on by the increased interest payments. For a given operational risk, as pointed out by Guffey et al. [17], financial distress may worsen as the debt level piles up.

However, the results suggest that return on assets, total equity, and time does not significantly influence financial decision-making. This was mainly an unexpected result concerning return on assets. This could be due to the degree of freedom problems occasioned by the lack of data.

5. CONCLUSION

This study aimed to look into the relationship between financial decision-making and return on assets, leverage, and firm size, as well as determine if other financial variables influence the financial decision-making of listed banks on the Ghana stock exchange. We included total debt and equity as the other financial variables in the panel regression model. The results show, surprisingly, that return on assets did not have a significant relationship with financial decision making as suggested by Egyiyi et al. [30]. Further findings indicate that even though leverage was statistically significantly related to financial decisions, practically, the influence was minimal. The findings from this study also suggest that firm size has the most significant influence on financial decisions. That is, firm size significantly influences deciding which capital structure to maintain as a bank. As a result of this significant effect, banks must note that firm size is necessary for making financial decisions, but more is needed. The banks also require their leaders to be influential in their decision-making [33] to avoid plunging their organizations into financial difficulty. This study further argued that total debt plays a significant positive role in financial decisions. The higher the total debt, the more debt the banks tended to take on.

This study provides crucial insights into the relationship between financial decision-making and the critical financial variables investigated here. First, for firm size to positively influence financial decisions, then decision-making at the leadership level must be effective. In other words, as the banks turn to internal financing, leadership decisions concerning resource use must be effective. Second, taking on more debt to deal with high total debt could impair the banks' ability to be agile or flexible in extreme financial challenges when interest escalates.

Even with the findings above, this study suffered from a degree of freedom problem due to the small sample size. As a result, it was impossible to investigate whether significant differences in financial decisions existed between the banks in this study. It may also explain why the return on assets was not significant. However, despite this limitation, the results from the study provide valuable insight into how the financial decision is influenced by total debt and firm size with caveats.

Finally, further studies to investigate the relationship between financial decisions and key financial variables will have to be undertaken to determine whether there are significant differences in financial decision-making between the banks listed on the Ghana stock exchange.

While the current study examined the relationship between financial decision and return on assets, leverage, total debt, total equity, and firm size using five (5) banks listed on the Ghana stock exchange, future research should increase the number of listed banks as well as non-listed banks to address the degree of freedom problem encountered by this study and expand the purview of any findings. Meanwhile, Banks relying on internal funds to finance their operations must do so efficiently and effectively to derive the benefits associated with firm size. On the other hand, banks relying on debt financing must do so with caution since there is the risk of interest escalating in the current economic climate.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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APPENDIX I

Variable	Estimate	Std Error	t-value	Pr(> t)
ROA	81.6808	326.5494	0.2501	0.803704
Lev	4.8394	8.2217	0.5886	0.559275
FirmSize	-94.8619	26.9391	-3.5213	0.001049**
R ²	0.23389			
Adjusted R ²	0.10621			
F-statistics	4.27425	DF (42)		0.010119

Significance. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

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