

Concerning the Effects of Capital Structure on Performance of listed Non-Bank Financial Institutions under DSE: Empirical Evidence from Bangladesh

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Abstract

This study analyses some selected non-bank financial firms' capital structures and performance using panel data over the period of 13 years from 2011–2023. These firms are listed on the Dhaka Stock Exchange. The Corrected Standard Error Panel (PCSE) model is used to examine the impact of capital structure and financial performance. As dependent variables, this study employed ROE, ROA, EPS, P/E, and Tobin Q. Long-term debt, short-term debt, overall debt, size, and inflation were independent factors. ROE, ROA, EPS, P/E, and Tobin's Q were employed, along with LTD, STD, and TD. Inflation and measurements were used as macroeconomic variables. The regression study shows that TD's capital structure affects the company's EPS. The studies also show that ROE is adversely connected with TD's capital structure. ROE, EPS, STD, and LTD have no significant relationship. The study found no correlation between ROA, P/E ratios, and capital structure. Tobin's Q has a substantial unfavorable connection with STD & LTD. Tobin's Q is unrelated to TD. Firm size strongly affects ROE, Tobin Q, and P/E ratio, demonstrating that the variables are regulated. Other key findings include adaptable factors like ROA and EPS size. Inflation has a substantial positive influence on ROA, EPS, and P/E, but a moderate impact on ROE and Tobin Q. According to the Pecking Order Theory, a company's finance structure hinders its capacity to provide consistent results.

Keywords: Capital Structure, Firm performance, Panel data, PCSE, Non-Bank Financial Institutions.

1. Introduction

If a company's capital structure is set up well, it can add value and improve its performance. The capital structure selected reflects the use of many sources of funding. Using debt and equity financing are two of the many options available to you. Companies have different capital structures and make different financial decisions, so it's impossible to compare them. With the lowest costs and maximum market value, administrators face a challenging task in making capital structure decisions. On the other hand, managers try to get as much leverage as possible to set up the best capital structure possible. Various ideas have suggested a connection between corporate success and decisions on capital structure. These three theories are the most widely known: that of Modigliani and Miller; that of trade-offs; and finally that of Pecking Order (1984).

Franco Modigliani and Merton Miller came up with the Modigliani and Miller (1958) hypothesis, which is also called the capital structure insignificance rule. The capital structure has no influence on a company's value if the capital market is faultless, speculators' desires are uniform, the economy is tax-free, and there are no exchange expenses. Because of the spending shield, they have been able to successfully use 100% debt financing. An ideal capital structure was suggested by Modigliani and Miller's disavowal of traditional procedures in 1963 (1963).

Taking costs and interest into consideration, Miller's (1977) trade-off theory suggests that a corporation prefers how much debt financing and how much equity it will use. Consequently, if the firm has a high level of profitability, debt financing is preferable. Raising the company's debt level provides further tax benefits. Take-on debt increases the risk of a firm going bankrupt when profits are low. According to this idea, if a corporation is making money, it will utilize that money to invest in new projects that will boost shareholder value. The preferable method of raising money is through retained earnings, but if they aren't enough, debt financing or issuing stock may be necessary. Due to the low cost of these options, they are frequently chosen. Several ways have been used to look at how capital structure decisions affect how well a company does. Because the majority of the capital structure is made up of debt and equity. The company may have had confusing and inconsistent results because it has used more than one way to get money. As demonstrated by Ebaid, Jensen, and Meckling (1976), there are several ways in which the degree of leverage in a company's capital structure may affect managerial behavior and operational decisions. (2009). Sheikh and Wang (2011) say that it's important to keep knowledge gaps in mind when making decisions about capital structure. The ideal capital structure is determined by the dynamic nature of the environment and the competitive nature of the market.

2. Literature Review

The presentation of the company in its set is influenced by several components, and the capital structure is one of the important variables among them. Many empirical studies have been conducted to determine the existence of non-existent and non-existent (positive, negative or zero) between corporate unemployment and capital structure, and these studies have yielded varied results.

Majumdar and Chhibber et al. (1999) examine the link between capital structure uncertainty and Indian corporate unemployment. The idea considers positive associations; without embargo, the data indicates Indian enterprises' unfavorable ties. Suppose that India's capital market, where short- and long-term lending institutions are state property, explains this link and proves that the corporate government system in the West won't work. Credit capital isn't privatized in India. Rao, Al-Yahyaee and Syed et al. (2007) studied capital structure and financial performance. Omani enterprises want to justify their debt. This study found a negative link between debt and financial performance, contrary to structural capital exchange theory. High borrowing costs and Oman's undeveloped debt market are to blame. Tax savings from corporations employing debt aren't enough to cover hefty interest charges. Farah, and Rahman, et al (2012) investigate Bangladeshi NFIs' profitability. Operating Efficiency, Capital Structure, Fixed Payments and Income, and Liquidity Position determine a financial institution's profitability. Liquidity Status and Operational Efficiency are key independent factors for Non-Banking Sector Profit. By boosting its liquidity and efficiency, the industry may enhance its profitability. Salim and Yadav et al (2012) study capital structure and corporate performance. The survey included 237 Malaysian firms listed on the Malaysian Stock Exchange from 1995-2011. The results reveal that short-term debt (STD), long-term debt (LTD), and total debt (TD) have a negative association with corporate performance (ROA, ROE, EPS). All industries' growth and performance are positively correlated. Tobin's Q shows a positive association between STD and LTD (LTD). Similar to the previous research, it shows that total debt (DT) negatively affects corporate performance. Ahmad, Abdullah and Roslan et al (2012) analyzed the impact of structured capital on corporate performance and overall debt (DT). Size, asset growth, revenue growth, and productivity, which are control factors, affect a company's operating success. Only STDs and TDs demonstrated a substantial link to ROA, but ROE at each debt level. Analysis of lag values indicated no link between STD, TD, and LTD and performance. Javed, Younas and Imran et al (2014) studied the impact of capital structure on 63 Karachi Stock Exchange businesses. 2007-2011 data is included. The results reveal a relationship, but it's mixed. When return on assets (ROA) is the dependent variable, capital structure improves corporate performance. When ROE is a dependent variable, DTA has a positive impact, whereas EQA and LDA have a negative effect. DTA and EQA had a negative association with return on sales (ROS), whereas LDA did not. Capital structure impacts firm success, thus managers must be attentive when making judgments. Hasan, Ahsan, Rahaman and Alam et al (2014). The study looked at 36 Dhaka Stock Exchange businesses from 2007-2012. Using

consolidation panel data regression, we discovered EPS was favorably related to short-term debt and negatively related to long-term debt. Capital structure negatively affects ROA. ROE and Tobin Q have no statistically meaningful relationship with corporate success. Faruque and Uddin et al (2014) evaluated the link between Bangladeshi industry's capital structure and profitability using Dhaka Stock Exchange financial statements. This article uses statistical and connection analysis. Analyzing profit-leverage ratios. Capital structure and profitability were examined using a linear regression model. Exogenous forces drive enterprises in the same sector, resulting in a sectoral capital structure. Short-term debt and profitability, long-term debt and gains, and debt and profit are positively correlated. Both findings support static exchange. S. Amin and Jamil et al (2015) explore capital structure and company performance in Bangladesh. This study examined panel data from 2001 to 2015 for seven stock-listed cement businesses. This study uses short-term debt to total assets and long-term debt to total assets as capital structure and ROE and ROA as company performance measures. Random effect model used to estimate debt-performance link. This study shows a favorable association between debt/total assets and ROA and ROE. Akter, and Rab et al (2016) analyze whether capital structure affects the NBFIs sector's profitability and, if so, if its influence varies by firm profitability. Analytical methods included descriptive statistics, Pearson's correlation matrix, and multiple regression. All NBFIs sectors exhibit a negative association between short-term debt and debt-to-equity and a positive correlation with long-term debt. Due of inexpensive retail savings, the highly successful NBFIs has a small positive capital structure-profitability connection. Due to the trustworthiness of bank loans, NBFIs with low and moderate earnings have a negative capital structure to profitability ratio. Siddik, Alam, Kabiraj and Joghee et al (2017) investigate company performance and capital structure. Many research examine the link between capital structure and company performance, however these conclusions cannot be assumed. There are other empirical research on Bangladesh's capital structure and banking. This empirical study is significant for developing nations like Bangladesh because it requires concentrated banking management and debt reduction programs to create an optimal capital structure. Previous studies were used to review these results. Khatoon and Hossain et al (2017) study firm performance and capital structure. This article examines ROE, ROA, EPS, and net profit margins as dependent factors and SDTA, LDTA, TDTA, LTDCE, TDTQ (five capital structure ratios) as independent variables. This article incorporates panel data from 5 DSE-listed cement businesses from 1999-2011. Fixed effect model (FEM), short-term debt, and cash flow positively impacted profit factors. Long-term obligations, PPE, and liquidity have a negative influence on economic factors, except ROI. This article reveals Bangladeshi cement businesses' bad bookkeeping. This study implies that a generation of business leaders should avoid long-term debt since it hurts their performance. Musah, A. (2017) studied the influence of capital structure (short-term debt ratio, long-term debt ratio, and total debt ratio) on commercial bank profitability in Ghana. The study sampled 23 banks' yearly data from 2010–2015. Ghanaian banks were quite remarkable, with debt financing accounting for 84% of total capital. These banks have short-term loans despite increasing minimum capital. The results reveal that Ghanaian commercial banks rely on short-term funding (deposits) for diminishing bank income, thus they must adjust their funding strategy. The results encourage corporations to maximize bank earnings by combining short- and long-term loans. M.M.H. Chowdhury et al (2019) used financial data to evaluate such talks. This study presents empirical research on domestic and international banks' capital structures. Multi-version model assesses capital structure and bank performance. ROI, ROE, and EPS measure performance. Long-term, short-term, and total debt-to-equity ratios are capital structure factors. Results concur that capital structure determinants affect banking sector performance. Molla et al (2019) investigated listed banks in Bangladesh's capital structure and performance. This study employs the Corrected Standard Error Panel (PCSE) model to assess a bank's leverage ratio. The results suggest that long-term debt improves ROE and ROE. Long-term debt is linked to higher Bangladeshi bank interest rates. The regression results also demonstrate that the capital structure component of total debt has no statistically significant influence on return on assets, return on equity, or profits per share, but a substantial positive effect on banks' price-earnings ratio performance.

The empirical data above shows that the influence of capital structure on company performance is equivocal. Several explanations exist for the unclear outcomes. Researchers undertake investigations in diverse countries and time periods. Second, researchers may use alternative analytical models. Third, business internal policies on funding and legal systems differ between countries' capital structures. Unexplained issues may also affect the company's success. The earlier research evidence addressing the impact of leverage on a company's financial performance is not without some degree of doubt. Therefore, it opens the door for academics, researchers, and regulators to investigate how the capital structure affects the performance of non-banks financial institutions that are active in Bangladesh. In addition, there are a few studies that investigate the effect that the composition of a non-banks financial institution's capital has on the financial performance of all non-banks financial institutions that are listed on the Dhaka Stock Exchange. As a result of this, an effort has been made to fill the gap in the existing literature with a comprehensive study that makes use of the information provided by each and every non-banks financial institutions that is listed on the DSE, and this study anticipates the following results. Therefore, the purpose of this document is to determine the impact of the capital structure and performance of non-bank financial institutions in Bangladesh.

3. Methodology

3.1 Data

In order to study the impact of capital structure on the performance of non-bank financial institutions, the sample included 20 non-bank financial enterprises in Bangladesh that are listed on the Dhaka Stock Exchange Ltd. The 260 observations from the 2011-2023 panel data were used to follow up on these companies. The audited financial accounts provide all company-level information. The World Bank database was used to gather data on macroeconomic indicators.

3.2 Measurement of the variables

3.2.1 Dependent variables

Some of the selected financial ratios of non-bank financial institutions are used as dependent variables in this study. This study employed accounting performance (ROA, ROE, and EPS) and market performance (P/E and Tobin Q ratio) as dependent variables to assess non-bank financial firms' financial performance. Return on equity (ROA), return on equity (ROE), earnings per share (EPS), Tobin Q (TQ), and price-earnings ratio (P/E ratio) were the study's dependent variables. Table 1 shows the results of their measurements.

Table 1. Name and definition of dependent variables

Sl. No.	Name of the variables	Measurement (Proxy)	Variables indicator
i	Return on Assets	Net Income (Before tax) /Total Asset	ROA
ii	Return on Equity	Net Income (Before tax) /Total Equity	ROE
iii	Earnings per Share	Net Income / No. of Shares Outstanding	EPS
iv	Price earnings ratio	Market price per share / Earning per share	P/E Ratio
v	Tobin's Q	Value of stock market / Net worth	TQ

3.2.1 Independent Variables

This study looks at four factors that are unique to each firm: the short-term debt ratio, the long-term debt ratio, the overall debt ratio, and the size of the business. The performance of financial institutions is thought to be affected by factors like size that are unique to each firm. For this study, these factors are used as controlled variables. The size of a financial organization affects its ability to benefit from economies of scale. The profitability of a financial institution can be impacted by its size, since larger financial institutions are better equipped to deal with market fluctuations than smaller ones. So, adding the size variable may explain why the model can handle changes in the operational environment of the firm. Because they can make more money from investments, non-bank financial

companies are likely to have a positive effect on the performance ratio. As part of this study, inflation rates were used to figure out how the macroeconomic environment in Bangladesh affects financial institutions. Data on the number of independent variables and their measurements are summarized in Table 2.

Table 2. Name of independent variables and their definition

Sl. No.	Name of the variables	Variables indicator	Measurement (Proxy)
1	Long-term debt to total asset	LTD	Total long term debt / Total Assets
2	Total debt to total asset	TD	Total debt / Total Assets
3	Short term debt to total asset	STD	Short term debt / Total Assets
4	Firm's size	SIZE	Natural logarithm of total assets
5	Inflation rate	INF	The annual inflation rate

3.3 Model Specification

We created the following multiple regression models to assess the association between the firm's capital structure and its financial performance based on the variables discussed before.

$$ROA_{it} = \alpha_0 + \beta_1 LTD_{it} + \beta_2 STD_{it} + \beta_3 TD_{it} + \beta_4 SZ_{it} + \beta_5 INF_{it} + \epsilon_{it} \dots\dots\dots (1)$$

$$ROE_{it} = \alpha_0 + \beta_1 LTD_{it} + \beta_2 STD_{it} + \beta_3 TD_{it} + \beta_4 SZ_{it} + \beta_5 INF_{it} + \epsilon_{it} \dots\dots\dots (2)$$

$$EPS_{it} = \alpha_0 + \beta_1 LTD_{it} + \beta_2 STD_{it} + \beta_3 TD_{it} + \beta_4 SZ_{it} + \beta_5 INF_{it} + \epsilon_{it} \dots\dots\dots (3)$$

$$P/E \text{ Ratio}_{it} = \alpha_0 + \beta_1 LTD_{it} + \beta_2 STD_{it} + \beta_3 TD_{it} + \beta_4 SZ_{it} + \beta_5 INF_{it} + \epsilon_{it} \dots\dots\dots (4)$$

$$\text{Tobin's } Q_{it} = \alpha_0 + \beta_1 LTD_{it} + \beta_2 STD_{it} + \beta_3 TD_{it} + \beta_4 SZ_{it} + \beta_5 INF_{it} + \epsilon_{it} \dots\dots\dots (5)$$

Where,

The value α_0 denotes a constant. The regression coefficients for the leverage factors, LTD, STD, and TD, are 1, 2, and 3, respectively; the regression coefficient for firm-specific variables, SIZE, is 4, and the regression coefficient for macro-variables, INF, is 5. The letter I stands for the Individual Corporation or financial institution, while the letter t stands for the time period.

ROA = Return on assets, Dependent variable, Measurement of firm performance

ROE = Return on equity, Dependent variable, Measurement of firm performance

EPS = Earnings per share, Dependent variable, Measurement of firm performance

P/E Ratio = Price earnings ratio, Dependent variable, Measurement of firm performance

TQ Ratio = Tobin's Q ratio, Dependent variable, Measurement of firm performance

LTD = Long term debt to Total assets for firm i in year t

STD = Short term debt to Total assets for firm i in year t

TD = Total debt to Total asset for firm i in year t

SIZE = Logarithm of total assets for firm i in year

INF = the annual inflation rate

In this study, the influence of the capital structure on the financial performance of the financial institution was determined using the panel data technique. Unit root, multicollinearity, heteroscedasticity, and autocorrelation testing were employed to assess if the panel data matched the cardinal requirements of classical linear regression analysis. According to the results of these tests, the data contains heteroscedasticity and autocorrelation. PCSE analysis, which takes into account first-order autocorrelation and heteroscedasticity and gives the most accurate measurement of the variables, was used in this study to address these concerns about the link between capital structure and financial institution performance. To combine cross-sectional dependence, a sandwich assessor is used, and PCSE has become the standard method used by scientists because it protects the weighting of perceptions for

autocorrelation while calculating standard errors. An alternative to PCSE called Feasible Generalized Least Squares (FGLS) can be used, but this study's panel dataset has "large N and tiny T." FGLS is not the optimal answer because of this.

4. Empirical Findings

4.1 Descriptive Statistics

The impact of capital structure on non-bank financial institution financial performance was investigated using a balanced panel of 20 non-bank financial institutions during a nine-year period from 2011 to 2023. Table 3 shows a summary of descriptive data for the capital structure and financial performance metrics of non-bank financial institutions, as well as the control variables.

Table 3. Descriptive statistics

	ROA	ROE	EPS	P_E	TQ	STD	LTD	TD	SIZE	INF
Mean	0.071185	0.182582	5.031229	24.15234	2.131546	0.385025	0.366512	1.043758	16.53244	0.069000
Median	0.019450	0.098650	1.530000	15.50500	1.455000	0.355500	0.360350	0.787232	20.87500	0.066000
Maximum	4.215000	14.96000	154.2100	276.0000	13.20000	0.873800	0.907000	51.14000	25.80000	0.088000
Minimum	-	-	-	-	-	-	-	-	-	-
Std. Dev.	0.068600	1.695000	6.350000	49.34000	0.000000	0.000200	0.007300	0.008200	0.225800	0.054000
Skewness	10.43864	11.96764	6.628265	4.036805	2.490957	0.116179	0.273479	12.47274	0.338559	0.486097
Kurtosis	121.5513	149.1910	51.32593	24.78810	10.66821	1.791125	2.031195	157.0584	1.599457	1.785462
Sum	11.38967	29.21319	804.9967	3864.375	341.0473	61.60398	58.64192	167.0012	2645.190	11.04000
Sum Sq. Dev.	19.72359	226.1779	44692.66	188957.0	665.2707	9.122049	8.089333	2533.029	9445.608	0.023640
Obs.	180	180	180	180	180	180	180	180	180	180

However, factors like TD, STD, LTD, SIZE, and INF are considered independent. As shown in Table 3, all 20 samples were analyzed. There is a wide disparity between the average ROA (0.071185) and the average EPS (5.03129) among the accounting-based performance metrics; this means the banks in the sample earned just 0.071185 percent of total assets and only 0.182582 percent of total equity, respectively. ROA and ROE have standard deviations of 0.068600 and 1.692687, respectively, to account for the wide range of outcomes. Investors are willing to pay a high share price today because they expect higher growth opportunities in Bangladesh's non-bank financial institutions, with the highest value of 276.0000 and the lowest value of -49.34000, and a standard deviation of 34.47331, according to the market performance measurement of P/E ratio. With an average STD/LTD/TD ratio of 0.385025, a standard deviation of 0.225558, and a mean of 3.991366 for STD, LTD, and TD, the sampled financial institutions in this study employ short-term debt more than long-term debt. There are two more variables that have mean values of 16.53244 and 0.069000.

4.2. Multicollinearity Test

Multicollinearity may be a concern because we used cross-sectional panel data from 20 financial institutions over a 13-year period (2011–2023). We initially analyzed the correlation coefficients between the explanatory variables

and the explained variable, which is represented by a correlation matrix, in order to determine if the variables were collinear. As stated by Wooldridge (2015), if the correlation coefficient is greater than 0.7, there is multicollinearity. Table 4 shows that there isn't much of a link between the variables, which means that multicollinearity isn't a problem in the calculations.

The test results are shown in Table 4.

	ROA	ROE	EPS	P_E	TQ	STD	LTD	TD	SIZE	INF
ROA	1.000000									
ROE	0.016264	1.000000								
EPS	0.010141	0.715309	1.000000							
P_E	-0.064178	-0.022817	0.074074	1.000000						
TQ	-0.064972	-0.040242	-0.079764	-0.002652	1.000000					
STD	0.072019	-0.099374	-0.182723	0.011125	0.053111	1.000000				
LTD	0.020072	0.030168	0.097764	-0.016157	0.096690	-0.653364	1.000000			
TD	-0.010817	0.984420	0.705963	0.024887	-0.027422	-0.119327	0.051279	1.000000		
SIZE	0.152653	0.111384	0.050144	-0.164343	0.149673	0.161319	-0.004797	0.075172	1.000000	
INF	0.138052	0.132715	0.224757	0.155304	-0.018418	0.010365	-0.144036	0.116886	0.084146	1.000000

4.2. Regression results

Multiple regression analysis was used in this study to look into the relationship between capital structure and financial institution performance. Table 5 summarizes the results of the tests conducted on models 1 through 5.

Table-5. Regression results

Regression with Panel Corrected Standard Error (PCSE) model						
Particulars		Model -1	Model - 2	Model - 3	Model - 4	Model - 5
IV	Outcomes	ROA	ROE	EPS	P/E Ratio	TQ
STD	Coefficient.	.1948014	-.0018564	-5.884729	12.13864	-1.402365
	P- Value	(0.510)	(0.982)	(0.420)	(0.325)	(0.039)
LTD	Coefficient.	.2030588	-.0975064	2.218981	9.49915	-1.871394
	P- Value	(0.500)	(0.224)	(0.717)	(0.346)	(0.014)
TD	Coefficient.	-.0024855	-.2931793	2.842675	.2221705	-.0144289
	P- Value	(0.389)	(0.000)	(0.000)	(0.371)	(0.473)
SIZE	Coefficient.	.00555534	.0056584	.0006259	-.8697349	.0334647
	P- Value	(0.126)	(0.036)	(0.994)	(0.040)	(0.011)
INF	Coefficient.	4.288694	1.203642	207.3482	499.6753	.3831008
	P- Value	(0.033)	(0.197)	(0.000)	(0.007)	(0.961)
Cons.	Coefficient.	-.4633784	-.2635729	-10.80072	-4.333537	.3410844
	P- Value	(0.012)	(0.008)	(0.096)	(0.826)	(0.657)
Observations		260	260	260	260	260
R-squared		0.0515	0.8710	0.5299	0.0600	0.0483

Wald chi2	19.05	237426.26	48.45	16.33	20.35
Prob > chi2	0.0019	0.0000	0.0000	0.0006	0.0011
95% Conf. Interval					

Model 1: Shows the results of a correlation analysis of the capital structure evaluated by STD, LTD, and TD and the firm's execution estimated by ROA. The results demonstrate that no independent factors have a statistically significant correlation at a 95% confidence level. According to Tobin Q, the control variable has no substantial, significant impact on firm execution. The macroeconomic variable has a considerable impact on company execution, as measured by ROA, according to ROA. The corrected R-squared is low, implying 5.15 percent, verifying that the dependent variable is greater than 5.15 percent, which clarifies the firm's presentation as explained by ROA.

Model 2: Shows the results of examining the relationship between the capital structure assessed by STD, LTD, and TD and the firm's performance as measured by ROE. The results suggest that TD has a 95 percent statistically significant level of confidence. In addition, the control variable has a substantial, considerable impact on firm performance as measured by ROE. The macroeconomic variable has no bearing on the ROE-estimated company execution. The adjusted R-squared is 87.10 percent, indicating that the dependent variable is greater than or equal to 87.10 percent, as explained by ROE.

Model 3: Shows the results of a study that looked at the relationship between the capital structure measured by STD, LTD, and TD and the firm's execution estimated by EPS. The results suggest that TD has a 95 percent statistically significant level of confidence. Furthermore, as evaluated by EPS, the control variable has a substantial and significant impact on firm execution. According to EPS, macroeconomic conditions have little impact on corporate execution. The adjusted R-squared is relatively low, implying 52.99 percent, verifying that the dependent variable is greater than 52.99 percent, which clarifies the firm's exhibition explained by EPS.

Model 4: Shows the results of a study that looked at the relationship between the capital structure assessed by STD, LTD, and TD and the firm's success as measured by the P/E ratio. At a 95% confidence level, the results reveal that all independent factors have no meaningful impact. As measured by the P/E percentage, the control variable and macroeconomic variables have a substantial and significant impact on business execution. The adjusted R-squared is moderately low, implying that the dependent variable is greater than 6%, verifying that the dependent variable is greater than 6%, which clarifies the firm's presentation as stated by the P/E ratio.

Model 5: Shows the results of a study that looked at the relationship between the capital structure calculated by STD, LTD, and TD and the firm's execution estimated by Tobin's Q. The results demonstrate that, with the exception of TD, all free factors have a 95 percent level of statistical significance. According to Tobin Q, the control variable has a substantial, huge impact on firm execution. According to Tobin Q, the macroeconomic variable has no significant impact on firm execution. The result demonstrates that the changed R-squared is marginally unusually low, implying 54.83 percent, verifying that the dependent variable is greater than 54 percent, as Tobin Q explains.

After all, the regression analysis reveals that the capital structure component of total debt appears to have a positive, significant impact on financial institution performance as evaluated by EPS. The findings also show that the capital structure component of total debt appears to have a negative substantial impact on financial institution performance as evaluated by ROE, but no significant impact on ROA or price earnings ratio. The capital structure component of short-term debt and long-term debt appears to have a negative significant effect on the performance of financial institutions in the case of Tobin's Q. This conclusion could be explained by the fact that the financial institution's financial statement's higher number of total debt components indicates that the financial institution has acquired a big amount of funds in the form of debt, fixed deposits, short-term obligations, and accounts payable.

5. Conclusion

This analysis will use a sample of 20 non-bank financial organizations in Bangladesh as a case study to look at how capital structure affects the performance of an organization from 2011 to 2023. According to the findings of this investigation, the company's reporting of earnings per share (EPS) is intricately related to its capital structure. ROE shows a strong negative correlation between the company's financial performance and its capital structure, which TD defines as the ratio of equity to debt. There appears to be no correlation between ROA, P/E, and capital structure, even while ROE and EPS have no effect on STD or LTD. When it comes to Tobin's Q and the capital structure, however, there is a clear and quantifiable correlation. For example, Tobin's Q has a strong negative correlation with STD and LTD. Even while Tobin's Q has little influence on TD, it is obvious that the controllable variable, firm size, is detrimental to both ROE and Tobin's Q, as well as to the P/E ratio. In addition, many people believe that company size has minimal impact on ROA and EPS. Expansion has a substantial influence on ROA and EPS but a minimal impact on Tobin's Q, which is a macroeconomic variable that has a significant impact on ROE and Tobin's Q. Furthermore, we may infer that the company's capital structure has a detrimental influence on its presentation other than the positive association between EPS and TD. To put it another way, as a company's debt grows, so does the company's ability to market itself. As a result of Bangladesh's still-developing (long-term) value and obligation markets, this negative correlation can be explained by the countries higher obligation costs and more firmly established policies regarding the use of obligation. If everything else fails in an organization's capital structure, financial regulators should resort to contractual obligations. More regulated parameters, more cases, and longer data in the relapse model can yield the greatest findings from this research. There are also a variety of approaches and beliefs that may be employed.

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