

**UNITED INTERNATIONAL UNIVERSITY**



**A REPORT ON “IMPACT OF CAPITAL  
STRUCTURE ON PROFITABILITY”**

**SUBMITTED TO**

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**DATE OF SUBMISSION: June 23, 2019**

# LETTER OF TRANSMITAL

June 23, 2019

Prof. Dr. Mohammad Musa

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**Subject: Prayer for submission of the project work.**

Dear sir,

Here is the assignment that I have been assigned on the topic of the impact of capital structure on profitability. The assignment has been completed by the knowledge that I have gathered from primary and secondary resources.

I would be happy if you read the project carefully and I will be trying to answer all of the questions that you have regarding the project.

I have tried my level best to complete the project meaningfully and correctly, as much as possible. However, if you need any assistance in interpreting the project please contact with me. Here is my contact address. My cell number is +880177221026. You can also email me at mahamudulhasan230495@gmail.com.

Sincerely yours,

Md. Mahamudul Hasan Rupak

ID: 111 151 295

## **DECLARATION BY THE CANDIDATE**

I hereby declare that the project report entitled "Impact of capital structure on firm's performance" submitted by me for the purpose of partial fulfillment of an undergraduate degree in United International University, under the guidance of Prof. Dr. Mohammad Musa. I further declare that this report has not been submitted and will not be submitted, either in part or in full, for any other degree in this university or any other university.

Signature of applicant

**Name:**

**Date:**

## ACKNOWLEDGEMENT

Firstly, I would like to thank ALMIGHTY ALLAH who bless me sound health, abilities to complete this study in a successful manner and without the help of ALLAH, I would not able to accomplish my work.

I am also thankful to my parents who supported, encouraged and prayed for my great success. Their blessing and good wishes turn my work easier for me.

Now I would like to thank my supervisor **Prof. Dr. Mohammad Musa** who gave me an opportunity to work under him and I learned a great deal during this period of time. I also acknowledge my hearty feelings to those people who guided and assisted me when I needed help to complete my work.

## **EXECUTIVE SUMMARY**

This report provides information about the impact of capital structure on the financial performance of the firms. For this purpose, 30 listed companies of Dhaka stock exchange under textile industry was selected to represent the industry. This study collected secondary data from the annual report of these companies for 3 years period from 2016 to 2018. This study used total debt to total equity ratio and total debt to total asset ratio as a proxy for capital structure, and return on equity (ROE) as a proxy for the firm's performance. Since ROE is dependent on other than capital structure, the natural logarithm of the asset and age of the companies is also taken to control the dependent variables. This study found there is a weak positive correlation between ROE and debt-equity ratio and debt ratio from Pearson's correlation. Similarly, from the multiple regression analysis, this study found that ROE is sensitive to the capital structure variables.

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# INTRODUCTION

Capital structure is the process of financing a firm's asset through some combination of debt, equity and other hybrid securities. The capital structure decision is very much crucial for any firm. Capital structure decision is directly related to the maximization of shareholder's wealth. This also ensures firm's capacity to cope up with the competitive environment of the industry. Identifying the optimal capital structure of a firm can ensure the minimization of financing cost and ultimately increase the profitability of the firm.

A firm's capital structure influences a firm's financial performance. So, it is reasonable to imply that the firm's capital structure would affect the firm's overall condition and its probability of default. That is why this subject is widely considered to take decisions among the investors, managers and others related to the firm's performance. Variables that increase a firm's profitability is crucial for all the firms doing business around the world.

It is very much important for the investors to know the relationship between capital structure and the firm's profitability. Similarly, it is important to know the strength of the relationship for the any industries around the world. Different studies conducted around the world have tried to examine the application of different capital structure theories in the different industrial sector as well as other financial institutions. According to Kipesha and Moshi (2014), they have found diversity in the results.

The textile and garment industries of Bangladesh is the key source to the development of the economy. There are 54 listed companies in the Dhaka stock exchange under textile industry. Exports of textiles and garments products are the principal source of foreign currency income. In the calendar year of 2011, Bangladesh was the second largest readymade garments (RMG) manufacturer after the China. According to the IMF, the economy of Bangladesh is the second fastest growing economy of 2016 (Dec). It was found that the growth rate of Gross Domestic Product (GDP) is 7.11 percent whereas it was 6.12 percent in 2015. The contribution of this industry to the GDP is 28.1%. Since 2004, the average growth rate of Bangladesh GDP is 6.5%, which has mostly contributed by its exports of readymade garments. This paper investigates the impact of capital structure on the profitability of textile industry in Bangladesh. For this purpose, 30 randomly selected companies from textile industry listed in Dhaka stock exchange were selected and data were collected for period of 3 years from 2016 to 2018.

Previously, a lot of studies were conducted on different industries of Bangladesh to examine the relationship between capital structure and profitability of the firms. For example, Amin and Hossain 2013, Hasan et al 2014, Shabnaz and Taher 2015, but very few studies were conducted on the textile industry. This study will try to investigate whether there is any relationship between capital structure and firm's performance as well as in which direction based on the companies operating in the competitive market of Bangladesh.

# LITERATURE REVIEW

**D**uring 1958 Modigliani and Millar (MM or M & M) had a convincing argument that a firm cannot change the total value of its outstanding shares by changing the proportion of its capital structure. In other words, the value of the firm remains same under the different capital structure. So, no capital structure is better or worse than any other capital structures. This concept was explained under the assumption of no taxes, no transaction cost and individual and corporation can borrow at the same rate. But these assumptions are not true in the real world. Subsequently, in 1963 Modigliani and Millar considered corporate tax and explained the benefit of tax shield on the value of the firm. They mentioned that the value of the firm increases by the present value of the tax shield, although the cost of the equity rises with leverage because the risk of the equity rises with leverage. That is why many types of empirical research were undertaken on the concept developed by MM proposition.

Similarly, agency cost theory suggests that leverage forces managers to perform well in the organization. The use of debts in the capital structure forces managers to perform well so that the firm can pay interests and other debts and eventually avoid loss of employment as a result of bankruptcy. This means a positive association between debt level and performance of the firms.

Later in 1989 Durand criticized the MM proposition, and he suggested that several factors were ignored in MM proposition. He mentioned that market imperfections, transaction cost, institutional reactions and preference for the present income over the future, also affect the capital structure of the firms. These are the factors that were missing in MM proposition. There are also many capital structure theories that rejected the MM proposition. Among them some of the theories include, static trade-off theory, agency cost theory, pecking order theory, and signaling theory.

Static trade-off theory of capital structure suggests a company should choose the level of debt and the level of equity financing to balance the costs and benefits. According to the theory, a firm's optimal debt-equity ratio is achieved when the marginal present value of the tax shield is equal to the present value of the financial distress costs. So, this theory contradicted with the MM proposition that there is a positive relationship between the firm's leverage level and the performance of the firms.

According to the pecking order theory, there is a hierarchy in the firm's preference for financing its investments. This theory provides two suggestion for the firms. Suggestion 1 states that, use internal financing for the investment and then suggestion 2 states that issue safe securities first and then proceed for the riskier one. According to this theory, a firm should use its retained



earnings for the investment followed by debts before issuing equity shares. So, based on this argument, more profitable firms eventually generate higher earnings that can be used for self-financing. This gives them the opportunity not to go for debt financing. On the other hand, less profitable firms tend to have less earnings and forced them to take debt to finance their investment. Consequently, this theory provides a negative correlation between debt level and performance of the firm.

According to the signaling theory proposed by Ross in 1977, a firm with low level of anticipated earnings will likely take on a low level of debt. A small interest expense deduction will offset the firm's pretax earnings. Otherwise, too much debt would raise the financial distress cost for the firm. On the other hand, a successful firm would like to take more debt in their capital structure. This firm can use this extra interest expense to reduce the taxes from its greater earnings. After being financially secure, this firm will find that extra debt financing increases the financial distress cost only slightly. So, rational firms will increase the debt level when earnings are expected to increase. According to this theory, a rational investor will presume a higher firm value with a higher level of debt. So, according to this theory there is a positive correlation between debt level and profitability.

Around the world, many empirical studies were conducted to find out the correlation or relationship between the leverage and the profitability of the firms. Some of the studies found an empirically positive correlation between leverage and performance of the firms whereas some of the studies found a negative correlation.

In 2012 Soumadi and Hayajneh reviews the effect of capital structure on the financial performance of the public Jordanian firms that are listed in the Amman stock market. Multiple regression model represented by ordinary least squares (OLS) was used in that study as a technique to examine the effect of capital structure on the financial performance. In total 76 firms out of them, 53 were industrial firms and 23 were service corporation was used for the study. The time period for the study was from 2001 to 2006. This study found that capital structure associated negatively and statistically with firm performance. Not only that, this study found out that there was no significant difference to the impact of the financial leverage between high financial leverage firms and low financial leverage firms on their performance.

Pouraghajan et al., (2012) analyze the effect of leverage on the performance of the firms. In that study, they analyze the stocks and operating performances of the top ten Canadian oil & gas companies. They analyze for a ten-year period from 2004 to 2013), and found that leverage has a strong negative association with performance of the firms, for all three periods, that is the pre-crisis (2004-2006), crisis (2007-2009), and post-crisis recovery (2010-2013) periods. These results were set up for both univariate and cross-sectional data after controlling firm-specific variables.

There are some studies that found a positive relationship between capital structure and firm's performance. For example, Margaritis and Psillaki (2010) witnessed a significant positive relationship between leverage and firm's performance. In that study, they examined the relationship between capital structure, ownership structure and performance of firms. They used a sample of French manufacturing firms for the period of 2003 to 2005. They employed non-parametric data envelopment analysis (DEA) methods to empirically construct the industry's 'best practice' frontier to measure the firm's efficiency as the distance from that frontier.

Later Fosu (2013) investigated the relationship between capital structure and firm performance, and paid special attention to the degree of industry competitiveness. In that paper, he used panel data consisting of 257 South African firms for the period from 1998 to 2009. The results proposed that financial leverage has a positive and significant effect on the performance of the firms. It is also found that industry competitiveness enhances the performance effect of leverage.

There are also some studies conducted in Bangladesh. Among them, Chowdhury and Chowdhury (2010) examined the influence of debt-equity structure on the value of shares given different sizes, industries, and growth opportunities. The selected companies were listed in Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) of Bangladesh. In that study, samples were extracted from the four most dominant industry i.e. engineering, food & allied, fuel & power, and chemical & pharmaceutical to provide a comparative analysis. From the analysis, he found a strong positively correlated association.

But Later on, Alom (2013) testified a significant negative relation between profitability and leverage in Bangladeshi firms. In that study, he investigated a sample of 44-firms listed on the Dhaka Stock Exchange (DSE) during the period of 2004-2011. Rouf (2015) also studied the consequence of capital structure on the performance of the firms. For the study, he took manufacturing companies listed in Dhaka Stock Exchange (DSE) for the period of 2008 to 2011. He used multiple regression model in his analysis and found that the debt ratio and the debt-equity ratio have a significantly negative relation with ROA and return on sales (ROS).

Hasan et al., (2014) mainly analyzed the significance of capital structure on the firm's performance. In this paper, 36 Bangladeshi firms listed in Dhaka Stock Exchange (DSE) were taken for the period of 2007 to 2012. Four performance benchmarks; earnings per share (EPS), return on equity (ROE), return on asset (ROA) and Tobin's Q; as dependent variables and three capital structure ratios; short-term debt, long-term debt, and total debt ratios; as independent variables were used in that report. They used pooling panel data regression method and found that EPS is significantly positively correlated to short-term debt but significantly negatively correlated to long-term debt. They found a significant negative connection between ROA and the capital structure of the companies.

Similarly, in 1989 Haque found that capital structure of the firms significantly varies among industries and it had no significant impact on the firm's profitability in Bangladesh.

Recently in 2016 Hossain conducted a study on the effects of the capital structure of companies and managerial ownership on the profitability of the Bangladeshi companies. In this study, he used panel data of 81 manufacturing companies listed under 10 industries in Dhaka Stock Exchange (DSE) for the period of 2002 to 2014. He resolved that the capital structure of a firm negatively affects ROA but positively affects the ROE.

There are also several studies conducted in both developed and developing countries to show the impact of capital structure on banks performance. Because of the nature of the operation in the banking sector, the capital structure of this sector is unique as compared to other business firms. Amin and Hossain (2014) evaluated the impact of capital structure on 24 listed commercial bank's performance in Bangladesh. They collected data for the 6 years period from 2008 to 2013 and demonstrated a significant positive correlation between the capital structure and the profitability.

To investigate the relationship between the capital structure and the performance of the firms very few studies were conducted here in Bangladesh. Bangladesh is one of the emerging countries with great potential to succeed in the textile industry. Therefore, this study will enrich the quality of research by determining the impact of capital structure on the performance of the textile industry in Bangladesh.

## DATA AND METHODOLOGY

This study was conducted taking, 30 randomly selected companies from the textile industry listed in Dhaka stock exchange and data were collected for a period of 2016, 2017 and 2018. The secondary data were collected from the annual reports of these firms. This study is concentrated on examining the impact of capital structure on firms' performance. For this purpose, one performance indicator (ROE) has been used as dependent variables. The capital structure of the company is measured using total debt to total equity ratio and total debt to total asset ratio. These types of ratios were selected for different empirical studies conducted previously. To justify the impact of capital structure on profitability following hypothesis is selected.

***H<sub>0</sub>: Leverage has positive impact on the financial performance of the firms.***

To test the above hypothesis multiple regression analysis technique is used for this study. This technique develops an equation to examine the linear relationship between the dependent variables and independent variables. Since profitability of the company depends on the other variables rather than capital structure, natural logarithm of the total asset and age of the companies are also included into the model. Natural logarithm of the asset measures the size effect of the company. These variables are controlled variables of the regression model. Using multiple regression equation, we will be able to estimate the value of dependent variable Y based on the selected value of the independent variables  $X_1, X_2, \dots, X_n$ . The multiple regression model equation is given below: -

$$ROE_i = \alpha + b_1 X_{(TBTE)} + b_2 X_{(TBTA)} + b_3 X_{(LnTA)} + b_4 X_{(Age)}$$

Here,

- ROE<sub>i</sub> is the return on equity of i<sup>th</sup> company,
- $b_1, b_2, b_3,$  and  $b_4$  are the regression coefficients,
- TBTE is the total debt to total equity ratio,
- TBTA is the total debt to total asset ratio,
- Age is the total age of the firms, and
- LnTA is the natural logarithm of total asset.

# EMPIRICAL FINDINGS

## Descriptive analysis:

This descriptive statistical analysis measured the effect of capital structure on the financial performance of the textile industry. For this purpose, 30 companies were taken for 3 years period from 2016 to 2018. The following table displays the summary of descriptive statistics of the capital structure and profitability along with the control variables.

Variables	ROE	TBTE	TBTA	LnTA	Age
Mean	0.0769	1.1217	0.4373	21.8278	15.7667
Std Dev	0.0669	1.0106	0.2000	1.0138	11.2700
Min	(0.0214)	0.0389	0.0375	19.4760	3
Max	0.3156	3.8545	0.7605	23.4904	35

The return on equity is considered as a performance indicator for the textile industry. The mean return on equity is 7.69% means that these companies of the textile industry has a comparatively lower level of profit than other industry. This lower level of profitability justifies the standard deviation of 6.69%. The higher rate of return comes with higher risk means higher standard deviation. Since the average return on equity of the textile industry is low, it has a lower level of standard deviation. The highest return on equity is 31.56% and it comes from DSHGARME (Desh Garmants Ltd.). On the other hand, the lowest return on equity is negative (2.14) % which comes from SONARGAON (Sonargaon Textiles Ltd.).

The capital structure of the textile industry is measured with two types of variables, and these two variables are total debt to total equity ratio and total debt to total asset ratio. Average total debt to total equity ratio is 1.1217 means these companies have more debt than their equity level. Similarly, these industries have average 43.73% of debt compared to the total asset. These statistics suggest that this industry is highly levered. The higher amount of debt level gives higher tax shield or tax advantages. But the debt level of this industry has less effect on profitability. According to the signaling theory, it is important to mention that companies with less profitability

required less amount of tax shield to offset the pretax earnings. Higher debt level increase default risk for the firms.

The financial performance of the companies also affected by the variables other than capital structure. This is the reason why the natural logarithm of the asset to measure the size effect and age of the companies is considered. For the observed period, this industry has an average LnTA equal to 21.8278 with a standard deviation of 1.0138. The average age of these companies is relatively low equal to 15 years. Although there are some companies who has enough experience to survive than the others.

**Pearson’s correlation:**

Pearson's *r* (correlation coefficient) is a test to find out the association between variables. The value of Pearson's *r* falls between -1 to 1. This study also conducted as partial correlation test for the textile industry. The result is posted in the following table.

	ROE	Debt equity ratio	Debt ratio	Natural logarithm	Age
ROE	1				
Debt equity ratio	0.29	1			
Debt ratio	0.25	0.91	1		
Natural logarithm	-0.48	-0.53	-0.53	1	
Age	0.24	0.47	0.50	-0.47	1

ROE is positively correlated with the debt-equity ratio and debt ratio. The correlation between the debt-equity ratio and ROE is 0.29 and the correlation between debt ratio and ROE is 0.25. This strength of the association is weak. So it is not a bad idea to say that the debt level in the capital structure has a little positive effect on the profitability. There are tax advantages on the interest expense that offset the pretax earning. There is a negative correlation between the size of the company and return on equity. It is obvious that there is a positive correlation between the age of the company and the ROE. As time flows the surviving companies gather experience about the environment of the industry. This experience helps companies to earn more.

## Multiple regression:

Multiple regression analysis is used in many of the studies conducted previously. The following table shows the result of our regression analysis.

<i>Regression Statistics</i>	
Multiple R	0.4870
R Square	0.2371
Adjusted R Square	0.1151
Standard Error	0.0629
Observations	30

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	4	0.030745211	0.007686303	1.942831281	0.1345
Residual	25	0.098905949	0.003956238		
Total	29	0.12965116			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.7455	0.3272	2.2787	0.0315
Debt equity ratio	0.0143	0.0278	0.5137	0.6119
Debt ratio	-0.0680	0.1416	-0.4803	0.6352
Natural logarithm	-0.0301	0.0142	-2.1148	0.0446
Age	0.0002	0.0012	0.1338	0.8947

Starting with the top of the regression statistics table is the value of the “R Square” equal to 0.2371. This value explains the efficiency of the model. 23.71% variation in ROE is explained by independent variables debt-equity ratio, debt ratio, natural logarithm and age of the companies in this multiple regression model. The value of significance F is 0.1345 means this model is statistically significant at  $(1 - 0.1345)$  0.8655 or 86.55% confidence level.

If we look at the coefficients, there is a positive association between the ROE and debt-equity ratio. This is consistent with Pearson’s correlation. Debt level in the capital structure provides a tax shield that affects the profitability in a positive direction. But there is a negative association between the debt ratio and ROE. Similarly, there is a negative association between the size effect of the company and the ROE. Lastly, there is a positive association of the age of the company with the profitability of the company. When we look at the P value, these coefficients are not reliable. These P values suggest that there is further investigation required to accept the coefficient comfortably. But we can say that profitability means ROE is sensitive to the capital structure of the company.

## CONCLUSION

The objective of the study is to empirically investigate the impact of capital structure on the financial performance of the textile industry in Bangladesh. For this purpose, this study collected secondary data from the annual report of these companies. These data were taken for 3 years period from 2016 to 2018. This study used total debt to total equity ratio and total debt to total asset ratio as a proxy for capital structure, and return on equity (ROE) as a proxy for the firm's performance. Since ROE is dependent on many variables along with capital structure, the natural logarithm of the asset and age of the companies is also taken to control the dependent variables. This study found that there is a weak positive correlation between ROE and debt-equity ratio and debt ratio from Pearson's correlation. Similarly, from the multiple regression analysis, this study found an association between ROE and capital structure variables. So, we can conclude that the profitability of the textile industry is sensitive to the capital structure of the firms.



## RECOMMENDATION

This study used return on equity (ROE) as a proxy of profitability and debt-equity ratio and debt ratio as a proxy of capital structure. Since the profitability of the firm depends on many variables other than capital structure, this study used the natural logarithm of asset and age to control the dependent variables. This study found that this model explained only 23.71% variation in the dependent variables by the independent variables used in this study. To improve this number, it is highly recommended to add other independent variables like the volatility of the stocks, sales growth, etc. This study used data for the period of 3 years only. It is also recommended that data should be collected for a longer time period to properly represent the industry. There are 54 listed companies in the Dhaka stock exchange under the textile industry. This study considered only 30 companies to represent the industry due to the unavailability of data. So, it is highly advised to consider more companies to represent the textile industry of Bangladesh. Lastly, the P value found for coefficients is not acceptable for a study so it is highly recommended that further evidence is required to accept the result found in this study.

# REFERENCE

- 1) Annual reports of the listed companies in textile industry.
- 2) Kipesha E. and Moshi J., 2014. "Capital Structure and Firm Performance: Evidences from Commercial Banks in Tanzania", Research Journal of Finance and Accounting, ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol. 5, No. 14, 2014 [www.iiste.org](http://www.iiste.org)
- 3) Modigliani F. and Miller M., 1958. "The cost of capital, corporate finance and the theory of investment", The American Economic Review 48(3), 261-297.
- 4) Amin S. and Hossain M., 2013. "Capital Structure and Firm Performance: Evidence from Commercial Banks in Bangladesh". Journal of Finance and Banking, Vol. 11, No. 1 & 2.
- 5) Hasan M., Ahsan A., Rahaman M. and Alam M., 2014. "Influence of Capital Structure on Firm Performance: Evidence from Bangladesh, International Journal of Business and Management; Vol. 9, No. 5; 2014 ISSN 1833-3850 E-ISSN 1833-8119 Published by Canadian Center of Science and Education.
- 6) Durand D., 1989. "After thought on a controversy with MM, plus new thoughts on growth and the cost of capital", Financial Management 18, 12-18.
- 7) Ross S., 1977. "The Determination of Financial Structure: The Incentive Signaling Approach", Bell Journal of Economics 8: 23-40.
- 8) Soumadi M. and Hayajneh O., 2012. "Capital Structure and Corporate Performance: Empirical Study on the Public Jordanian Shareholdings Firms Listed in Amman Stock Market." European Scientific Journal October edition, Vol. 8, No. 22, ISSN: 1857 – 7881, (Print) e-ISSN 1857-7431
- 9) Pouraghajan A, Malekian. E, Emamgholipour M., Lotfollahpour V. and Bagheri M., 2012. "The Relationship between Capital Structure and Firm Performance Evaluation Measures: Evidence from the Tehran Stock Exchange". International Journal of Business and Commerce Vol. 1, No. 9: May 2012[166-181] (ISSN: 2225-2436).
- 10) Margaritis D. and Psillaki M., 2010. "Capital structure, equity ownership and firm performance", Journal of Banking & Finance, 34(3), 621–632. <http://dx.doi.org/10.1016/j.jbankfin.2009.08.023>
- 11) Fosu S., 2013. "Capital structure, product market competition and firm performance: Evidence from South Africa". The Quarterly Review of Economics and Finance, 53(2), 140–151. <http://dx.doi.org/10.1016/j.qref.2013.02.004>
- 12) Alom K, 2013. "Capital structure choice of Bangladeshi firms: An empirical investigation". Asian Journal of Finance & Accounting, 5(1), 320–333.

- 13)** Rouf A., 2015. "Capital Structure and Firm Performance of Listed Non-Financial Companies in Bangladesh", *The International Journal of Applied Economics and Finance* 9 (1): 25-32, 2015
- 14)** Haque Z., 1989. "Capital Structure Patterns: A Survey of Companies Listed on the Dhaka Stock Exchange Limited." The University Grants Commission of Bangladesh, Dhaka.
- 15)** Hossain I., 2016. "Effects of Capital Structure and Managerial Ownership on Profitability: Experience from Bangladesh", *International Journal of Business and Management*; Vol. 11, No. 9; 2016.
- 16)** Amin S. and Hossain M., 2013. "Capital Structure and Firm Performance: Evidence from Commercial Banks in Bangladesh". *Journal of Finance and Banking*, Vol. 11, No. 1 & 2.

# Appendix

Company	Dependent variable	Independent variable			
	ROE	Debt equity ratio	Debt ratio	Natural logarithm	Age
ACFL (Aman Cotton Fibrous Limited)	0.0892	0.3935	0.2824	22.1936	35
AL-HAJTEX (Al-Haj Textile Mills Limited)	0.0924	1.2688	0.5592	20.1268	35
ANLIMAYARN (Anlimayarn Deying Ltd.)	0.0669	1.2178	0.5491	19.9034	21
APEXSPINN (Apex Spinning & Knitting Mills Limited)	0.0655	2.1759	0.6851	21.0713	24
DSHGARME (Desh Garmants Ltd.)	0.3156	2.0758	0.6749	19.4760	29
DSSL (Dragon Sweater and Spinning Limited)	0.2149	0.2373	0.1918	21.6943	19
ENVOYTEX (Envoy Textiles Limited)	0.0553	1.1088	0.4221	23.4904	6
ESQUIRENIT (Esquire Knit Composite Limited)	0.0691	0.5677	0.3621	22.6976	29
ETL (Evince Textiles Limited)	0.0828	0.9315	0.4810	22.1518	19
FAMILYTEX (Familytex (BD) Limited)	0.0109	0.0389	0.0375	22.1888	5
GENNEXT (Generation Next Fashions Limited)	0.0543	0.2336	0.1893	22.5971	6
HFL (Hamid Fabrics Limited)	0.0330	0.4122	0.2921	22.3214	4
HRTEX (H.R.Textile Ltd.)	0.0992	3.1753	0.7605	21.1668	21
HWAWELLTEX (Hwa Well Textiles (BD) Limited)	0.0975	0.1980	0.1653	21.3629	4
MAKSONSPIN (Maksons Spinning Mills Limited)	0.0216	1.0135	0.5033	22.9156	9
MALEKSPIN (Malek Spinning Mills Ltd.)	0.1669	3.0407	0.7525	20.8388	8
MATINSPINN (Matin Spinning Mills Ltd.)	0.0692	0.6033	0.3763	22.6149	4
METROSPIN (Metro Spinning Ltd.)	0.0216	1.0135	0.5033	22.9156	16
RAHIMTEXT (Rahim Textile Mills Ltd.)	0.1669	3.0407	0.7525	20.8388	30
REGENTTEX (Regent Textile Mills Limited)	0.0445	0.5969	0.3738	22.4417	3
RNSPIN (R.N. Spinning Mills Limited)	0.0418	0.1795	0.1522	22.7457	8
SAFKOSPINN (Safko Spinning Mills Ltd.)	0.0197	1.5097	0.6015	20.9857	18
SAIHAMTEX (Saiham Textile Mills Ltd.)	0.0368	0.7385	0.4248	22.4937	30
SHASHADNIM (Shasha Denims Limited)	0.1024	0.9517	0.4871	23.1107	3
SIMTEX (Simtex Industries Limited)	0.1006	0.3437	0.2558	21.3893	3
SONARGAON (Sonargaon Textiles Ltd.)	(0.0214)	1.1698	0.5391	21.2402	23
SQUARETEXT (Square Textile Ltd.)	0.0727	0.4020	0.2861	23.0616	16
STYLECRAFT (Stylecraft Limited)	0.0421	3.8545	0.7372	21.0095	35
TOSRIFA (Tosrifa Industries Limited)	0.0433	0.4234	0.2975	21.8235	3
ZAHINTEX (Zahintex Industries Limited)	0.0326	0.7357	0.4239	21.9655	7