An Empirical Study of the Impact of Management Behaviour on Capital Structure:
Evidence from Dhaka Stock Exchange Ltd

By

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Under the supervision of

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Department of Finance

University of Dhaka

Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Philosophy (Finance)

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ABSTRACT

Capital Structure plays an important role in maximizing the value of a corporation. The determination of capital structure is a complex issue because diverse factors influence the capital structure of a corporation. Different theories have been developed under different theoretical assumptions and the determination of optimum capital structure is still an unresolved issue. An additional dimension of capital structure has evolved with the development of management behaviour on capital structure decision. Studies related to management behaviour on capital structure have been tested in developed countries using different methodologies. However, the study related to managerial influence on capital structure for developing countries is very small. With this background in mind, this study was undertaken to explore the determinants of capital structure focusing on managerial behaviour in the context of Bangladesh.

The purpose of this study is to examine the impact of management behaviour on capital structure decisions in the context of Bangladesh. To find out the behavioural aspects of managers, three variables have been used i.e., overconfidence, optimism and risk aversion. Along with these behaviour-related variables, some demographic variables such as age, gender, tenure, educational level and work experience of managers were considered. Data were collected through a survey method using a structured questionnaire. The survey consists of 70 respondents from the listed

companies of Dhaka Stock Exchange Limited. Moreover, other company related variables have been used as control variables. The relevant data were collected from the publicly available financial statements of these companies for the period 2016 to 2020.

This study also attempted to focus on the existing theories of capital structure and previous studies to materialize the objective of the study. Feasible Generalized Least Squared Regression (FGLSR) was used to find out the impact of management behaviour on capital structure decisions of Bangladeshi firms. The study reveals that overconfidence, optimism and risk aversion do not have any significant influence on the capital structure of Bangladeshi firms. As for the parameter estimates, out of thirteen variables, six variables were found significant. These variables are age and gender of the manager and profitability, tangibility, size and type of the firm. Thus, these results provide empirical support for the theoretical relationship in determining the capital structure for Bangladeshi firms. It may be mentioned that this study for the first time tested and documented the relationship between management behaviour and the capital structure of Bangladeshi firms.

Certification

This is to certify that Tanzida Akter, M.Phil. student of the Department of Finance, University of Dhaka has completed her thesis titled "An Empirical Study of the Impact of Management Behaviour on Capital Structure: Evidence from Dhaka Stock Exchange Ltd" under my supervision. I certify that this thesis is her original work and has not been presented for an award of any degree in any University or other similar purposes.

Dr. A.A. Mahboob Uddin Chowdhury
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Declaration

I declare that this research work titled "An Empirical Study of the Impact of Management Behaviour on Capital Structure: Evidence from Dhaka Stock Exchange Ltd" submitted to the Department of Finance, University of Dhaka in requirements for the degree of Master of Philosophy (M.Phil.) has been prepared by me under the supervision of Dr. A.A. Mahboob Uddin Chowdhury, Professor and former Chairman, Department of Finance, University of Dhaka, Dhaka-1000, Bangladesh. This thesis is my original work and has not been presented for an award of any degree in any University or other similar purposes. Moreover, due acknowledgement has been made in the thesis to all other materials used.

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I am greatly indebted to my parents, especially my late mother for her encouraging words, which helped me to stick to my dream of pursuing the degree. I also recognize the patience of my son Md. Tazim Hossain Ramin, who realized my work pressure and remained supportive throughout. I would like to express my gratitude to my husband, immediate elder sister, mother-in-law and other relatives.

Special thanks are due to the officials, and executives of different organizations for helping me in collecting the required data for the thesis work.

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Abbreviation

AGM- Annual General Meeting

BB-Bangladesh Bank

BSEC- Bangladesh Securities and Exchange Commission

BBA- Bachelor of Business Administration

CEO- Chief Executive Officer

CFO- Chief Financial Officer

CSE- Chittagong Stock Exchange

DSE-Dhaka Stock Exchange

EPS- Earnings Per Share

FGLSR- Feasible Generalized Least Squared Regression

IDRA- Insurance Development and Regulatory Authority

MBA- Master of Business Administration

NBFIs- Non-Bank Financial Institutions

REPOS- Repurchase Agreements

ROA- Return On Assets

ROE- Return On Equity

SME- Small and Medium-sized Enterprises

US- United States

Chapter-1

Introduction

In taking most of the financial decisions financing and investment are the two crucial decisions for a corporation that determine the value of the firm. There are different ways of financing the corporation. The major sources of financing are the use of debt and equity. However, the optimum debt-equity mix in the capital structure is still an unresolved issue. Different theories have been developed under different assumptions and tested in different countries. The results of the empirical studies are diverse in nature. Chung et al. (2013) observed that a firm with an optimal level of capital structure has a higher chance of survival than a firm with a capital structure that is far from the optimal level. It is evident from the study of Allen (2005) that firms behave differently while taking capital structure decisions under different financial environment and opportunities.

Additional dimension of capital structure has emerged with the inclusion of the impact of managerial behaviour on the capital structure decision. Considering the importance of analyzing the personal traits of managers for corporate decisions making issues, behavioural finance theory has evolved. Behavioural finance theory deals with the effects of behaviour of executives and other concerned on corporate decision making process. Study related to this area is not very extensive and is yet to be explored in different countries with different methodologies.

According to Nofsinger (2005), managers' capacity to meet a firm's financial goals of the corporation depends on their emotional and cognitive skills. In order to make

realistic projections of future consequences of corporate decisions, it is important to focus on manager's education, aptitudes, personal characteristics, and qualities. Different studies found that managers' attitudes, qualities, biases and other related features have significant impact on the corporate decisions of a firm. Malmendier and Tate (2005) explored the links between agent's behaviour (i.e., optimism, overconfidence, and risk attitude) and capital budgeting and other corporate decisions. They further argued that manager's personality has important influence on the above mentioned corporate decisions. It is also observed that the characteristics and qualities of managers have an impact on corporate performance, capital structure and other financial decisions.

Available literature suggests that most of the studies focusing on the impact of management behaviour on capital structure have been conducted in developed countries and little research has been done in the context of developing countries.

In Bangladesh previous studies on capital structure focused on the firm related determinants of the capital structure. Studies related to the managerial behavioural impact on capital structure decision are yet to be started in Bangladesh. Over the years researchers have investigated the determinants of capital structure of Bangladeshi firms. Several academics had tried to find out the optimal capital structure mix and the determinants which significantly influence a company's capital structure.

Haque (1989) found that capital structure of Bangladeshi firms varies among industries and it has no significant impact on firm's profitability. Chowdhury (1993) observed that corporate governance and monitoring by institutional

shareholders have some role in reducing agency problem in the U.K and Bangladesh. Chowdhury (2004) documented the cross-sectional variations in debt ratio of Bangladeshi and Japanese companies using agency cost model. He observed that profitability, agency cost of debt, growth rate and bankruptcy risk have a significant impact on debt ratio in both Japanese and Bangladeshi companies. Moreover, he documented the institutional and corporate governance differences between these two countries and concluded that strong corporate governance in Japan can mitigate the agency problems in Japan compared to Bangladesh. Sayeed (2011) and Siddiqui (2012) hold that debt equity choices are affected by tangibility, growth rate, operating leverage, debt servicing capability, management control and size of the company. Hossain and Hossain (2015) hold that a properly structured capital structure ensures a company's long-term viability, profitability, and attainment of its strategic objectives. None of the earlier studies in Bangladesh has included management behaviours to examine their impacts on the capital structure of Bangladeshi firms. Keeping in view of the above-mentioned issues in mind this research has been undertaken to identify the impact of management behaviour on the capital structure decisions for Bangladeshi firms.

1.1 Justification of the Study

This study has been undertaken bearing in mind that more precise research can be conducted to identify the influence of management behaviour on capital structure in developing countries and particularly in Bangladesh. This is because previous studies on capital structure hardly focused on the behavioural factors of corporate decisions and especially capital structure decision. This study will make an attempt

to shed light on the of managers' behavioural influence, and the impact of managers' qualities, and other factors in determining the capital structure choices of Bangladeshi firms.

1.2 Scope and Objectives of the Study

Studies related to capital structure and management behaviour is very wide and extensive. This is because maintaining an optimum level of capital structure is a complex issue for financial managers. Capital structure covers debt-equity, cost of financing, agency and bankruptcy costs and other related issues. Thus, this study covers a broad spectrum. Keeping in view of the above issues the objectives of the study are as follows:

1. To give an overview of the theoretical development and previous studies of Capital Structure

2. To provide an insight into the Financial Markets of Bangladesh.

3. To discuss the research design of the study.

4. To analyze the empirical results and to find out the impact of management behaviour on capital structure of Bangladeshi firms.

5. To provide the summary and conclusion of the study.

1.3 Methodology

This study is based on a combination of the primary and secondary information. The relevant primary data were collected from the questionnaire survey where managers and top executives of the corporation were the participants and secondary data were

collected from the publicly available sources and the annual report of the listed companies of Dhaka Stock Exchange Limited. The study covers a time frame of 2015 to 2020. Different mathematical and statistical tools have been applied to materialize the objectives of the study.

1.4 Limitation of the Study

Like any other studies this study has some shortcomings. It was difficult to get the response from all the selected respondents. Due to the COVID-19 pandemic it was difficult to reach the respondents.

1.5 Organization of the Study

This study is composed of six chapters.

1. Chapter-1 gives an introduction containing an overview and background of the study. It also provides scope, objectives, methodology and limitations of the study.
2. Chapter-2 provides the theoretical development and previous studies of capital structure.
3. Chapter-3 is an overview of the Financial Markets of Bangladesh.
4. Chapter-4 deals with the research design for the study. It includes the specification of the model and the measurement issues.
5. Chapter-5 provides the empirical findings of the study. It includes descriptive analysis, correlation matrix and other relevant results and analysis.
6. Chapter-6 provides the summary and conclusion of the study.

Chapter-2

Theoretical Development and Previous Studies

Over the years, diverse capital structure theories have been developed and tested in different countries applying various methodologies to find out optimum capital structure. The following part will make an attempt to describe those theories in sequential manner.

2.1 Theories of Capital Structure

2.1.1 Modigliani and Miller (MM) Theorem

Capital Structure without Corporate Tax (1958)

Modigliani and Miller (MM) hold that the market value of a corporation is determined by the net operating income and risk of the firm. It is not influenced by the form of financing. MM hypothesis considers the following assumptions:

i) Perfect capital market

ii) No tax and transaction cost

ii) No brokerage fees

iv) No bankruptcy

v) Free flow of information and cost-free information

Proposition-I

Based on the above assumptions MM's first proposition holds that for firms in the same risk level, the total market value of the corporation is independent of the financing mix and depends on the net operating income of the corporation. It can be shown in the following equation.

$$V_l = V_u \qquad \text{(Equation-1)}$$

That is values of a corporation will be the same irrespective of the funding choices. It is shown in Figure-2.1.

Figure-2.1

The Effect of Leverage on Firm Value
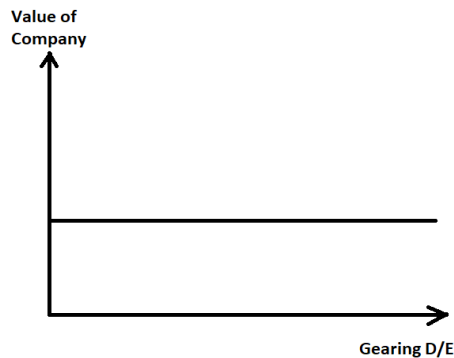
Proposition-II

In proposition–II MM explain the effect of the financial leverage on the firm. They hold that cost of equity of a levered firm is equal to the cost of equity of an unlevered firm plus a risk premium depending on the financial leverage of the firm. It can be shown in the following equation-2.

$$K_{el}=K_{eu} + \text{risk premium} \qquad \text{(Equation-2)}$$

$$K_{el}=K_{eu} + (K_{eu} - K_d)\left(\frac{D}{S}\right)$$

Proposition- III

MM proposition III states that a firm in a given risk class acting in the best interest of the shareholders will undertake an investment proposal if and only if the rate of return exceeds the capitalization rate.

Capital Structure with Corporate Tax (1963)

Modigliani and Miller (MM) modified their earlier model (1958) by relaxing the assumption of no taxes (Modigliani and Miller, 1963). They considered the impact of the tax in their model.

Proposition-I

Under the existence of corporate tax Proposition – I, the value of a levered firm can be shown in Equation-3 and Figure-2.2.

$$V_l = V_u + t_d \qquad\qquad \text{(Equation-3)}$$

It holds that the value of levered will be greater than that of an unlevered firm by the benefit of debt for the corporation.

Figure 2.2
Effect of Leverage on Firm Value
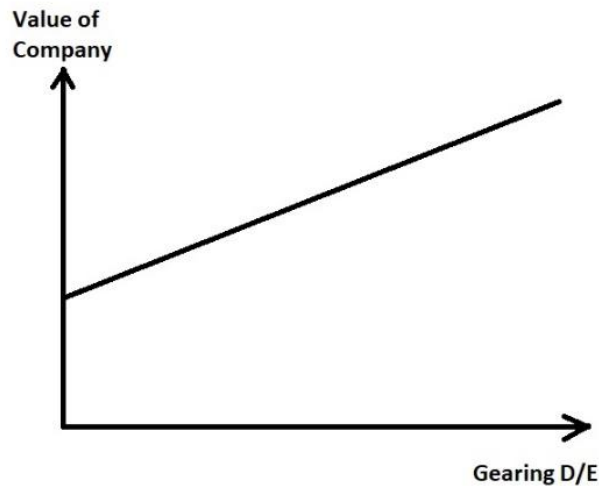
Proposition –II

Under this proposition equity cost of a levered firm is equal to the equity cost of the unlevered firm plus the added premium for the use of leverage. It can be shown in the following equation-4 and Figure-2.3.

$$K_{el} = K_{eu} + (K_{eu} - K_d)(1 - t) / \left(\frac{D}{S}\right) \qquad\qquad \text{(Equation-4)}$$

Figure-2.3
Effect of Capital Structure on Cost of Capital
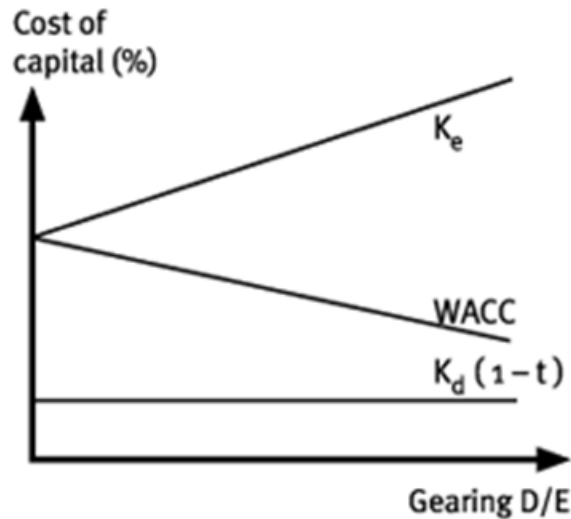
Under the existence of corporate tax, MM suggested 100% debt for the corporation.

2.1.2 Static Trade-off Theory

This theory suggests that the optimum debt ratio is considered as a trade-off between the cost and benefit of borrowing. The firm is portrayed as balancing the value of interest tax-shields against various cost of bankruptcy or financial distress. The trade-off theory of capital structure suggests that target debt ratio may vary from firm to firm. While companies with safe, tangible assets and plenty of taxable income to shield ought to have high target ratios, the unprofitable companies with risky, intangible assets ought to rely on equity financing. In the absence of the cost of adjustments, each firm should at its target debt ratios (Chowdhury, 1992).

Figure-2.4
Static Trade-off Theory
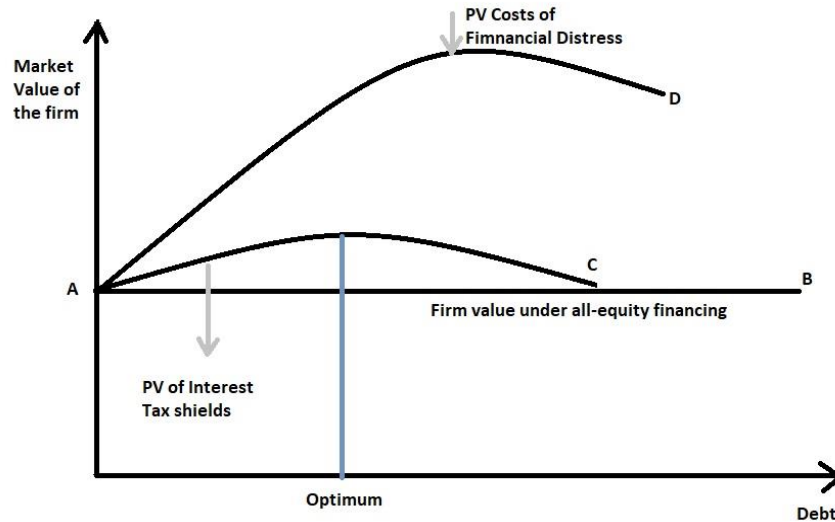
The Trade-off Theory is explained in Figure-2.4. The straight line AB in the Figure-2.4 depicts the value of a company with no debt and 100 percent equity financing. After financing from debt, a company has to pay its interest. Interest payments benefit the company through tax-shields.

As shown by curve AC, the value firm initially rises as it takes more debt. The firm's value begins to decline after the optimal level. The cost of debt exceeds the benefits of debt after a certain amount of debt is achieved. This is explained by curve AD which shows the impact of financial distress in debt levels. The firm's optimal market value can be obtained when the current value of the interest tax shield is at its peak, as shown in Figure-2.4.

2.1.3 Pecking Order Theory

Myers (1984) developed the pecking order theory. The pecking order theory is based on: a) a choice for internal funds b) sticky dividend policy c) an aversion to issuing equity. Myers (1984) showed the following pecking order for financing decision:

1. Preference for internal funds.

2. Firms follow sticky dividend policy

3. If external financing is required company will issue the safest security first.

4. The corporation starts with issuing debt, then preferred stock and finally equity as a last option.

In pecking order theory there is no target debt-equity ratio. There are two types of funds, internal and external, one being the first choice for new financing and other the last. Each corporation's debt-equity mix reflects its cumulative requirements for external financing. The Pecking Order Theory is explained in figure-2.5.

Figure-2.5
Pecking Order of Financial Hierarchy
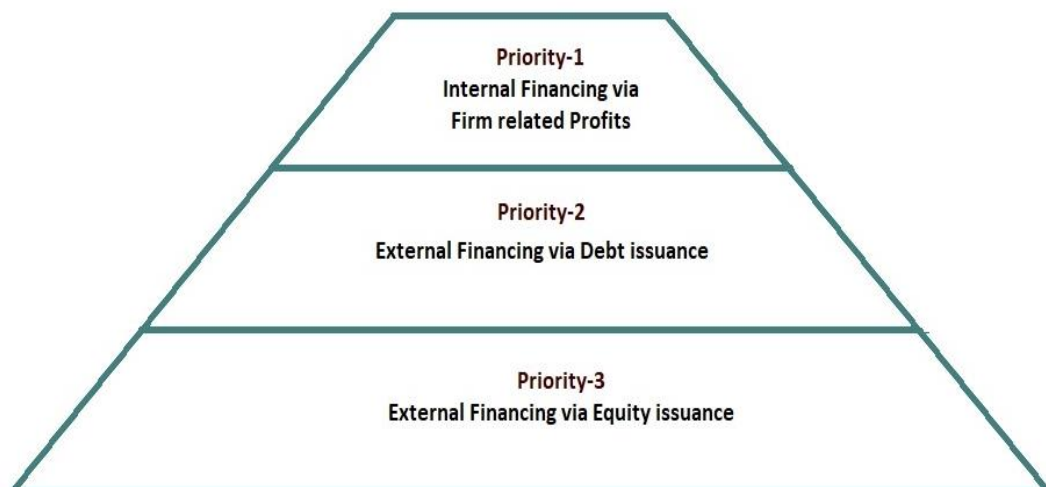
Myers and Majluf (1984) offer another interpretation for the pecking order based on asymmetric information. They hold that agents have better understanding of the company's prospect than that of the investors. This is because insiders are aware of the quality of a project of an organization.

2.1.4 Agency Costs Theory

Agency Cost Theory was developed by Jensen and Meckling (1976). Agency theory holds that managers of other people's money cannot be expected to look after their money with the same "anxious vigilance" with which they look after their own. This creates some conflicts of interest. There are three types of agency conflicts in the corporations i.e., i) conflict between shareholders and managers, ii) conflicts between debtholders and manager and iii) shareholders and debtholders. In addition we have observed different types of agency costs. There are different types of agency costs. These are i. Agency cost of Equity (AE); ii. Agency Cost of Debt (AD) and iii. Bankruptcy risk and cost (BR). Agency cost of equity is the cost of the relationship between managers and shareholders; this cost discourages the issuing of debts in the capital structure, agency cost of debt is the relationship between debtholders and managers, this cost discourages the issuing of debt in the capital structure. Whereas, the bankruptcy risk cost arises from the higher level of debt in the capital structure and it also suggests less amount of debts in the capital structure. Agency conflict can be minimized by different corporate mechanisms. The mechanisms are i) threat of firing ii) hostile takeover iii) monitoring by large shareholders and iv) increasing managerial packages through employee stock ownership plan.

.2.1.5 Signaling Theory

Like the capital structure theory, finance theorists have developed economic model of dividend payments as the value maximizing responses to information asymmetries between corporate managers and shareholders are referred to as signaling models. The Signaling idea is based on information gaps between shareholders and management. Ross (1977) shows the impact of debt on financially sound and weak corporations. This theory is based on the level of available information to the stakeholders. Ofer and Seigal (1987) provide evidence that analysts revise their earnings forecasts following the announcement of an unexpected dividend change by an amount positively related to the size of the unexpected dividend change. They also hold that these revisions are positively related to the change in equity value surrounding the announcement. Schipper and Smith (1986) analyzed the signaling theory and found that enterprises that announce new equity offers have their share prices drop by 3% on average. Following the announcement of a debt offering, however, there was only a little drop in share prices. Baker and Wurgler (2002) examined the link between corporate financing decisions and past market values of the equity.

2.2 Previous Studies

2.2.1 Studies on Management's Behavioural Impact on Capital Structure

Researchers have begun to study the psychological and behavioural issues of financial managers for different corporate decisions and especially financing i.e., capital structure decisions. In another study, Ben-David et al. (2007) observed that

there is an increased trend in research focusing on the managers' behavioural and personal qualities on business policies.

Graham et al. (2013) emphasized the importance of managers' behaviour and personal qualities in taking corporate policies decisions.

It is observed that optimism, overconfidence and risk aversion are the most common behavioural aspects that were studied in past research. Ali and Anis (2012) considered optimism as overestimating and anticipating sustainability of cash flow and future growth of firm, which is linked to the risk tolerance of the management.

Bertrand and Schoar (2003) showed the presence of a constant influence of managers in corporate financial decisions. They measured the manager's impact by collecting data on CEOs, COOs, and CFOs of the biggest 800 US corporations. Their study also documented that CEOs, who served the same company for at least two years, are efficient in taking a firm's policy and organizational strategy in a better way.

Borgia and Newman (2012) attempted to contribute to this field by examining the relationship between the psychologies of managers in making capital structure decisions in Chinese SMEs. They looked at the influence of management influence on external control as well as other individual traits of managers (education, work experience and managerial connections). They used both qualitative and quantitative methods for their studies. They observed that managerial attitude and qualities have a vital impact on capital structure decisions in Small and Medium Enterprises than in large enterprises.

Kaplan et al. (2012) studied the influence of managerial skills on business decision-making policies. They used data from 316 CEO from different companies and observed that manager's aptitude, interpersonal ability, competence, and language skills influence corporate financing and investment decision.

Bhagat et al. (2011), on the other hand, examined managers' capacity by gathering information on five aspects i.e., CEO cash compensation, CEO cash compensation / total assets, industry performance, tenure, and age. They found an inverse relationship with managers' decision making attitudes on different corporate policy issues.

Cronqvist et al. (2012) apply consistency theory to establish a connection between a manager's personal behaviour and firm leverage. They found no relationship between age and education in capital structure decisions. Antonczyk and Salozmann (2014) found that older CEOs are more likely to be risk-averse compared to younger CEOs. They used individualism as a proxy for manager overconfidence among 42 companies across 42 countries. They found that individualism has substantial influence on the financial structure of these companies. They also claimed that overconfidence could lead to an upward bias. Other studies suggest that financial managers were able to regulate the impact of business size, tangibility, growth, profitability and performance of a company and the institutional environment of different corporations.

Optimism is another important variable that influences corporate decisions. Optimism is defined as an overestimation of the probability of a positive event and

underestimating the possibility of an unexpected event to be occurred. Graham et al. (2013) used a sample of 1566 CFOs and CEOs for U.S based companies.

They used a questionnaire (psychometric test) to measure the managerial biases using different variables related to managers' attributes (age, gender, education from prestigious college, experience, height) and other variables related to firm features (operating segment, firm size, public and private firms, expected growth, and historical growth). They found a positive relationship between optimism and a manager's choice for internal financing for firms and an inverse relationship with capital growth. This study suggests that 9.8 percent of US CEOs have a low-risk tolerance for different corporate decisions.

Graham et al. (2013), examined two situations to assess management risk preferences for corporate decisions. For determining the degree of correlation between capital structure and manager traits, they utilized univariate correlation analysis (risk aversion). They used managerial behaviour variables and ordinary least square regression analysis to assess the influence of manager behaviour on the debt ratio and debt maturity and to find out the degree of   managers' decisions for taking other financial decisions.

From the above discussion, it is observed that optimistic managers are more likely to use internal financing first. When resources are scarce, an optimistic manager chooses to utilize less risky debt over riskier debt, and issue equity as the last alternative. This trend indicates that the optimistic manager shows a preference for the pecking order theory.

2.2.2 Studies on the Impact of Manager's Age on Capital Structure Decisions

Different studies observed that individual risk tolerance is influenced by demographic and socioeconomic factors and managers' individual risk-taking behaviour. It is argued that age can influence managers' capacity, and desire to take for corporate decisions and it also affects their financing decision. In publicly listed corporations, the framework of responsibility and the age of senior executives determine the hierarchy of decision-making authority, with the CEO typically being an elderly person at the top. Graham et al. (2010) found that when it comes to capital structure decisions, the CEO is the most influential among the board members. He has the authority to make the decision personally or to assign it to another executive, who is usually the CFO.

Niederle and Vesterlund (2007) also attempted to examine whether managers' capital structure decisions are influenced by managers' age. Their study found that younger managers like to work in a more competitive situation than senior managers.

Previous studies found that there was a strong association between capital structure, age and experience of top employees in their study. They also observed that companies with more experienced and qualified board of directors have lower leverage or debt ratio. In another research, Wen et al. (2002) and Abor (2007) found a positive correlation between qualified board members' age and the capital structure of the firms.

2.2.3 Studies on the Impact of Manager's Gender on Capital Structure Decisions

Gender variations in risk attitudes and risk-related behaviour, as well as their impact on capital structure, had been researched extensively in economics and psychology (Cadsby and Maynes, 2005) and (Francoeur et al. 2008). In recent years considerable growth in the number of women in business leadership positions has been noticed.

Researchers have started to look into the influence of gender on numerous corporate decisions, such as capital structure, mergers and acquisitions, and going public. In behavioural analysis laboratory tests are frequently employed to examine gender differences in individual business decision-making issues. Recent studies are taking initiatives to look into the impact of gender on corporate decision making process. Huang and Kingen (2008) studied how CFO gender differences influence various business choices. They found that the companies led by female CFOs expand at a slower rate than those led by male CFOs. Besides, female CFOs are less likely to undertake large acquisitions and are less likely to issue debt, and the capital structure adjusts at a slower rate under female executives' direction than under male executives' control.

2.2.4 Studies on the Impact of Manager's Education on Capital Structure Decisions

Higher education backed by years of experience can be important determinants of capital structure. CEOs having international degrees and more years of schooling are

more likely to take some informed decision. Now, the question is- is education really influence the level of risk or debt that managers incorporate in his capital structure decision? Several recent research has mostly focused on the influence of various managerial characteristics on capital structure decision-making behaviour. Agents who are biased towards the growth are more likely to overestimate the growth of future revenues created by their firm and subsequently perceive financing from external sources as unnecessarily costly (Hackbarth, 2007), for example, highly educated and overconfident managers are more likely to follow pecking order of financing decisions (Baker et al., 2004). When the debt-to-equity ratio is less than the industry's ratio, educated CEOs choose to issue new equity; educated CEOs are open to new sources and ignore conventional, readily available financing alternatives. They prioritize taking advantage of potential advantages over avoiding potential negative consequences, and they frequently issue additional stock while the share price is quite high (Graham et al 2001).

2.3 Studies with Respect to Bangladesh

Even though literature related to the manager's behavioural impact on capital structure is yet to be started in Bangladesh, some researchers have investigated the determinants of capital structure decisions. Haque (1989) found that capital structure of Bangladeshi firms varies among industries and it has no significant impact on firm's profitability. Chowdhury (1993) observed that corporate governance and monitoring by institutional shareholders have some role in reducing agency problem in the U.K and Bangladesh.

Chowdhury (2004) documented the cross-sectional variations in debt ratio of Bangladeshi and Japanese companies using agency cost model. He observed that profitability, agency cost of debt, growth rate and bankruptcy risk all have a significant impact on debt ratio in both Japanese and Bangladeshi firm's companies. In addition, the researcher also found that there are reasonable institutional variances between these two enterprises. This study documented those Japanese enterprises in particular have strong corporate governance policies; eventually leading to a more successful reduction of agency conflict compared to Bangladeshi enterprises.

Hasan et al. (2014) have studies the impact of capital structure on business activities in 36 Bangladeshi companies enlisted on the Dhaka Stock Exchange between 2007 and 2012. The study employed four performance indicators ROE, EPS and ROA and Tobin's Q and three ratios of debt mix as the in depended variables. They observed that EPS is connected to STDTA but negatively related to LTDTA, ROA and capital structure have a considerable negative relationship. Debt ratio, has no significant statistical relationship with business success as assessed by ROE and Tobin's Q.

Sayeed (2011) and Siddiqui (2012), on the contrary, asserted that debt equity choices are affected by tangibility, growth rate, operating leverage, debt servicing capability, management control and size of the company. They also came to the conclusion that agency cost theory and static trade-off theory are applicable to Bangladeshi businesses.

Chapter-3

An Overview of Financial Markets in Bangladesh

Financial markets of any country help the proper allocation of funds. It channelizes funds to deficit units by collecting funds from the surplus unit. Financial markets have operational and allocational efficiency. They provide a positive role in accelerating the economic wheel of a country. The Financial market operates through different segments and institutions. The structure of the Financial Markets of Bangladesh is given in Figure-3.1.

Figure-3.1

Overview of Financial Markets in Bangladesh


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                    ┌─────────────────────────────────┐
                    │  Financial Sectors in Bangladesh │
                    └─────────────────────────────────┘
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Money Market	Capital market	Microfinance

Securities market
- Bangladesh Securities and Exchange Commission
- Stock Exchanges: Dhaka Stock Exchange, Chittagong Stock Exchange

Insurance, Pension and Provident Fund
- Controller of Insurance
- General and Life Insurance Companies
- Government Pension Scheme
- Central Provident Funds (typically small)

- Bangladesh Bank
- All banks
- Non-bank Financial Institution
- Moneychangers
- Credit Rating Agencies

- Non-government Organizations
- Stock Exchanges: DSE, CSE
- Investment Corporation of Bangladesh
- Merchant Bank

Source: Bangladesh Bank

3.1 Money Market in Bangladesh

The money market provides liquidity to the market participants. Financial instruments which are highly liquid in nature and with relatively short maturity are exchanged in this market. Traders engage in this market to borrow and lend in the short term, spanning from a few days to less than a year. The money market instruments are Certificates of Deposit, Treasury Bills, Repurchase Agreements or REPOS, and Commercial Papers.

3.2 Capital Market in Bangladesh

Capital market provides long-term funds to the deficit economic units of a country. In the capital market funds are channelized through security and non-security segments. Banks and Stock Exchanges are the major participants in the capital market.

3.3 Institutions in the money Market and Capital Market of Bangladesh

3.3.1 Bangladesh Banking System

Banking system of Bangladesh has been designed in a way that different banks specialize in different types of lending. Different regulatory authorities are working for regulating public finance and private finance. Bangladesh Bank as the central bank and the Ministry of Finance are the key regulatory authorities that govern and oversee the operation of commercial banks and performance of financial institutions. Government financial institutions are owned and controlled by the government. Private finance is channelized by commercial banks. For NBFIs life and non-life

insurance companies, leasing companies are operating in Bangladesh. There are also Islamic banks operating in Bangladesh. Development institutions are prevailing in the financial market for accelerating the development wheel of the country.

3.3.2 Stock Exchanges

Stock Exchanges facilitate the transaction of outstanding securities. It increases the efficiency of financial markets. It helps the market participants to maintain their desired level of liquidity and provide a variety of services to the stakeholders i.e., listing and non-listing of securities, providing information and reducing information asymmetry, disciplining the market, protecting investors' interests and regulating the market. In Bangladesh we have two stock exchanges. In the following a brief overview is attempted.

Dhaka Stock Exchange Limited and Chittagong Stock Exchange Limited

Dhaka Stock Exchange (DSE) was established on April 28, 1954, and trading started in 1956. DSE continued its uninterrupted operation until 1971. After the liberation DSE trading was suspended. With the change of government economic policy trading on DSE resumed in 1976. The automated online trading system began on August 10, 1998. Chittagong stock exchange (CSE) was established in 1995. Automated trading has been introduced in both exchanges. Total trade, value and volume of DSE and CSE during the is depicted in Table-3.1.

Table- 3.1

Performance of DSE and CSE

Month end Data	DSE			CSE		
	December 2019	March 2020	June 2020	December 2019	March 2020	June 2020
Total Trade Volume	144316	26949	24223	10300	2301	1648
Total Transaction Value (Million)	5216.489	3481.387	5557.152	275	1120644964	2261654554
Total Volume	242701500	53809765	53408903	9252000	3661203	8615602

Source: DSE and CSE

Grouping of Listed Scripts

For regulatory purposes listed securities are categorized into "A", "B", "Z", "N" and "G" based on payment of dividend and profitability, commercial operation, holding of AGM, demand of securities and on capital status. This categorization helps investors to take proper investment decision.

Table- 3.2

Grouping of Listed Scripts

(Category of Companies)

Name of the category	Number of Companies FY 2005-2006	Number of Companies FY 2017-2018	Number of Companies FY 2018-2019	Number of Companies FY 2019-2020
1	2	3	4	5
"A" category	140	275	271	259
"B" category	36	19	36	48
"G" category	1	0	0	0
"N" category	-	- 3	7	2
"Z" category	92	46	41	51

3.3.3 Non-Bank Financial Institutions (NBFIs)

NBFIs play an important role in addressing the diversified financial needs of the economy and contributing to the country's economic growth of Bangladesh.

NBFIs are becoming more important as the economic development have been accelerating in the recent years. NBFIs are having their positive role in accumulating and allocating national resources to different competing economic units. NBFIs are working as an alternative source of funding in the financial market.

3.4 Regulatory Environments

Financial market regulations are important for the development and disciplining the financial market participants. Over the year different regulatory frameworks have been developed in Bangladesh to prohibit insider trading, and market manipulation and for ensuring the overall efficiency of a financial market that benefit the market participants and overall economy of the country. The institutions working for the regulations of Bangladesh Financial Markets are given below:

3.4.1 Bangladesh Bank (BB)

Bangladesh Bank (BB) is the central bank of the country. Its main function is to formulate the monetary policy and support the economic development of the country. Its regulatory and supervisory functions are aimed at maintaining market discipline and supporting the economic development activities of the country. It has ten branches throughout the Bangladesh.

3.4.2 Bangladesh Securities and Exchange Commission (BSEC)

BSEC was established on June 8, 1993, and is working for the development of the Capital market by supplying long-term capital funds to different economic units and for the overall economic development of the country. BSEC formulates a wide range of rules and regulations for disciplining the capital market. It governs the operations of stock exchanges and other securities markets, institutions and participants.

3.4.3 Insurance Development and Regulatory Authority of Bangladesh (IDRA)

IDRA was formed on 26th January, 2011. The Government enacted the Insurance Act 2010 for supervising insurance business and protecting the interests of policyholders. It has also been working for the smooth development and regulations of the insurance business. It also provides guidelines for the operation of the insurance business in Bangladesh.

Chapter-4

Research Design

Over the years, different theories have been developed to explain the impact of management's behaviour on Capital Structure. These theories are significant for the measurements of the factors that influence the management behaviour of capital structure choices. Here, this study has made an attempt to explore the impact of management behaviour on the capital structure of the Bangladeshi firms.

4.1. Research Question

Apparently, the predominant question of this research is "what is the effect of the managerial behaviour on the capital structure in Bangladesh"?

4.2 Hypothesis Development

The variation in debt-equity mix among the companies can be described by thirteen explanatory variables that were used in the used model. The following hypothesis have been tested in this study:

<u>Null Hypothesis:</u>

H_0: Overconfidence, Optimism, Risk Aversion, Age, Work Experience, Tenure, Education Level, Gender of Managers and Profitability, Market to Book Value Ratio, Tangibility, Firm Size and Type have no positive and significant impact on Capital structure of a firm.

Alternative Hypothesis

H_1: Overconfidence, Optimism, Risk Aversion, Age, Work Experience, Tenure, Education Level, Gender of Managers and Profitability, Market to Book Value Ratio, Tangibility, Firm Size and Type have positive and significant impact on Capital Structure of a firm.

4.3 Specification of the Model and Measurement Issues

This Study is based on the model developed by Abdeldayem and Sedeek (2018) to test the impact of Manager's behaviour on Capital Structure. The Model is outlined as follows:

FL = f (OC, OP, RA, A, WE, T, EL, G, PR, MB, TT, FS, FT)

Where,

FL= Financial Leverage

OC= Over Confidence

OP= Optimism

RA= Risk Aversion

A= Age of the Managers

WE= Work Experience

T= Tenure

EL= Education Level

G= Gender

PR= Profitability

MB= Market to Book Value Ratio

TT= Tangibility

FS= Firm Size

FT= Firm Type

As the manager's behaviour for capital structure decision for a firm cannot be determined directly, some control variables are used here as well. The Attitude of the managers has been determined by administering a survey and the values of other control variables are taken from the annual report of the companies used in the study. The definitions of the variables are given below:

Dependent Variable

The Dependent variable used in the Study as a proxy for Capital Structure is the Financial Leverage Ratio. It has been calculated by:

Financial Leverage = Total Long - Term and Short-Term debt / Total Book Value of Assets

This Variable has been used in some of the most renowned works on Capital Structure.

<u>Independent Variables</u>

In this study two sets of independent variables are used. The main focus of the study is the management attitude related variables. Some company specific variables are also used as control variables in this study.

Manager Specific Variables

Overconfidence

Confidence describes the management style to some extent. A manager who is highly confident usually likes to make the important decision of the company all by himself/herself. On the other hand, overconfidence is the overestimation of one's own abilities and outcomes with regard to ones' existing situation (Langer, 1975). Measurement of confidence is unfortunately an uncertain task, since there is no straightforward instrument of measuring it. Malmendier and Tate (2008) calculated the over confidence based on holding period of manager's stocks and stock option. Barros and Da Silveira (2007) used proxies for managerial optimism and overconfidence that mainly focused on entrepreneurial nature of the managers. They emphasized on the three factors: i) whether the manager is the founder or is a hired executive. ii) pattern of ownership of the company's shares by the manager was another predominant factor used by them, and iii) holding period of those shares in their portfolio. For deriving the confidence level of the managers, some questions have been used. The questions are as follows:

➢ Among the Management team, who has most of the input in the following policies? This question has been asked for the following policy decisions:

- Capital Structure

- Payout capital Investment

- Allocating Capital Across divisions

The answers are: Management makes all the decision by him/herself, shares with the team to take other decisions. Based on the answer which s/he gives, the level of confidence has been calculated. Menkhoff et al. (2006) used this variable in their study in determining whether capital structure can be caused by the overconfidence of the manager or not.

Optimism

Optimism or the manager's way of looking at the positive or negative prospects of the uncertain future also guides the capital structure decisions of a firm. The following questions are asked to the survey respondents to judge their optimism:

➢ In Uncertain Times, I usually expect the best

➢ It's easy for me to relax about what is going to happen in the near future

➢ I'm always optimistic about my future

The above mentioned and some other questions have been asked to the managers. Based on the answers, three answers have been found based on the scores i.e., Optimistic, Pessimistic, and Neutral. Graham et al. (2013), and Ali and Anis (2012) used Optimism as a variable in their study on Capital Structure.

Risk Aversion

The Level of risk a manager is ready to take directs the companies major Capital Structure and other important decisions. Some questions have been asked to each of

the managers of the companies included in this study, to determine their level of risk aversion. The questions are as follows;

➢ Suppose you are the only income earner in your family. Your doctor recommends that you move because of allergies. You have to choose between two possible jobs.

- 100% chance that the jobs pays your current income.

- 50% chance that the job pays twice your current income for life and 50% chance that the job pays 2/3 your current income for life.

➢ Which of the jobs you choose if the choices were as follows?

- 100% chance that the jobs pays your current income.

- 50% chance that the job pays twice your current income for life and 50% chance that the job pays 4/5 your current income for life.

➢ Which of the jobs you choose if the choices were as follows?

- 100% chance that the jobs pays your current income.

- 50% chance that the job pays twice your current income for life and 50% chance that the job pays 1/2 your current income for life.

Based on the answers to these questions, five Categories have been defined (Very Risk Averse, Moderate Risk Averse, Risk Neutral, Moderate Risk Seeker, and Very Risk Seeker). Graham et al. (2013) used two scenarios to determine whether a manager is risk averse or risk taker.

Age

Young Leaders are usually prone to taking challenges, taking risky decisions compared to the more experienced leaders. Age can determine a person's

willingness and ability to take risk. so Age is an important variable to determine capital Structure as well. Niederle and Vesterlund (2007), Wen et al. (2002) and Abor (2007) used Age as a variable in their studies.

Work Experience

Work experience in a particular industry enables a manager to understand the economy of the industry as a whole and have an insight which proves to be fruitful for any company the manager works in. So work experience can be a decisive factor in the capital structure decision of a firm.

Tenure

It takes time for a manager to understand the internal structure and sensitivities of a company. So a manager who has worked in the company for a considerable period of time knows the company better and can take decisions catered to the specific company. So tenure as a manager should lead to changes in capital structure decisions of a firm.

Education Level

The Current Business Education has changed quite a bit from the system that prevailed 30 years from now. The world is evolving and the contents taught today are very much practical based rather than purely theoretical. So the Managers who have done BBA and MBA degrees are much more equipped with the tools that are needed to embrace the challenges that are usually faced by the companies in this era. The managers who didn't do a BBA or MBA or did do a non-business Bachelors or Master's degree may lack the skills. And those who have done a Doctorate degree

on a certain Business topic, are more specialized in dealing with those issues. (Hackbarth, 2007), (Baker et al., 2004), and (Graham et al 2001) incorporated The Education Level of CEO's in their studies.

Gender

Gender variations in risk attitudes and risk-related behaviour, as well as their impact on capital structure, have been researched extensively in economics and psychology (Eckel and Grossman, 2004; Cadsby and Maynes, 2005; and Francoeur et al., 2008). There has been a considerable growth in the number of women in business leadership positions in recent years. As a result of this rise, researchers have begun to look into the impact of gender on numerous corporate decisions, such as capital structure, mergers and acquisitions, and going public (Huang and Kisgen, 2008).

<u>Firm related Variables</u>

Profitability

Profitability is a major determinant of Capital Structure. Firms which are high in profits can fund their projects with internal funds. And those which are low in profits fail to do so. This variable has been incorporated in this study believing that debt policy can be influenced by the fact that whether the company can pay off debt or fund its projects with internally generated cash flows or not. Chaplinsky (1983), and Titman and Wessels (1988) have a negative relationship between the firm's debt ratio and the earnings volatility.

Market-to-Book Value Ratio

Market-to-book value has been used as a proxy for investment or growth opportunities of a firm. The Higher growth ratios of a firm means the company will reinvest most of its earnings and will have lower amounts of funds available for further investment. So, technically higher growth means higher debt ratios. Toy et al. (1974), Van Horne (1983) used growth rates of assets in their studies. Higher growth ratios empirically show a positive relationship with debt ratios.

Tangibility

Tangibility variable shows the proportion of tangible assets a firm holds compared to its total assets. Higher tangibility ratio shows that the company can take higher amount of debt keeping the tangible assets as collateral. This means higher tangibility ratio of a firm should have higher debt proportions in its capital structure.

Firm Size

Firm size is a major determinant for capital structure study. A big firm or a firm with more assets should have the flexibility to take more debt to fund its future projects. So a firm with more assets compared to fewer assets should have more debt in its capital structure.

Firm Type

Firm type is considered as one of the important variables for capital structure studies. Keeping in mind of the above fact firm type in this study has also been used in this study. Based on the differences in the businesses, capital structure can be different. The calculations of the variables are shown in Table- 4.1.

Table-4.1

Definition of the Variables

Name of the Variable	Definition	Formula
Financial leverage	Debt to Asset ratio of the firm	(Total Long-term Debt+Total Short term Debt)/Total Assets
Overconfidence	Level of Self dependence a Manager shows	Directly used from the survey administered
Optimism	Anticipation about future	Directly used from the survey administered
Risk Aversion	Level of Risk a manager wants to take	Directly used from the survey administered
Age	Age of the Manager	Directly used from the survey administered
Work experience	Total work experience	Directly used from the survey administered
Education Level	Highest Degree Completed	Directly used from the survey administered
Tenure	Tenure as Manager in the company	Directly used from the survey administered
Gender	Gender of the Manager	Directly used from the survey administered
Profitability	Profitability	Total earnings before interest, tax and depreciation / total assets

		or operating income based profitability
Market to Book Value Ratio	Market to book value ratio as a proxy of growth or investment opportunity	(Market value of equity +book value of total debt)/book value of total assets
Tangibility	Tangibility	Property, plants, and equipment/total assets
Firm Size	Size of the firm	Log (Total Assets)
Firm Type	In which industry the firm belong	

4.4 Data Sources and Data Collection

There are two types of data sets used in this study i.e. Primary Data and Secondary Data. Relevant data of the Manager specific variables are collected from the survey administered. The data from this source is primary data. Data of the company specific variables have been collected from the annual reports of the company. The data from this source are secondary data. A panel data of 70 companies and 14 variables have been used for this study.

4.5 Industry Representation

A total of 70 Manufacturing companies have been selected from the Dhaka Stock Exchange. The representations of the Companies are shown in Table- 4.2

Table- 4.2
Industry Representation

Name of the Industry	Number of Companies
Pharmaceuticals	14
Cement	7
Ceramics	3
Power and Fuel	11
Food and Allied	9
Footwear	1
Engineering	7
Paper and Printing	1
Textile and Garments	17
Total	70

Chapter-5

Empirical Analysis

The influence of management behaviour for capital structure decision can be tested empirically. Diverse models have been developed for different financial environment and tested in various countries. However, there are a few studies related to developing countries. In this context this study is an attempt to find out the impact of management behaviour on capital structure for Bangladeshi Firms. This study is based on a Feasible Generalized Least Squared Regression Model to test the impact of management's behaviour on Capital Structure.

5.1 Hypothesis, Methodology, Sample Characteristics and Test of Statistical Assumptions

The variation in debt-equity mix among the companies can be described by thirteen explanatory variables that were used in the model. Moreover, the theory claims that overconfidence, risk aversion, age tenure, education level of managers and firm-debt and growth rates in assets will have positive impacts on capital structure while manager's optimism, work experience, gender and firm's profitability, market to book value ratio, tangibility, firm size and type will have negative impact on capital structure.

5.1.1 Regression Model

The variables used in the study are of two types. The First type consists of the Manager Related Variables and the values of which are taken from the survey administered. The variables which are qualitative in nature have been coded and

then the analysis is done. The second type of consist of Firm related variables. These are quantitative in nature. As it can be seen from the table above, some of the variables are right skewed and some are left skewed. And some of the variables have higher volatility than the others.

The Regression model of the analysis is as follows:

$$FL= \beta_0+ \beta_1{*}OC+ \beta_2{*}OP+ \beta_3{*}RA+ \beta_4{*}A+ \beta_5{*}WE+ \beta_6{*}T+ \beta_7{*}EL+ \beta_8{*}G+ \beta_9{*}PR+ \beta_{10}{*}MB+ \beta_{11}{*}TG+ \beta_{12}{*}FS+ \beta_{13}{*}FT +\varepsilon_t$$

Here,

$\beta_0 =$ The Constant Coefficient

$\beta_1 =$ Coefficient of Overconfidence (OC)

$\beta_2 =$ Coefficient of Optimism (OP)

$\beta_3 =$ Risk Aversion (RA)

$\beta_4 =$ Coefficient of Age (A)

$\beta_5 =$ Coefficient of Work Experience (WE)

$\beta_6 =$ Coefficient of Tenure (T)

$\beta_7 =$ Coefficient of Education Level (EL)

$\beta_8 =$ Coefficient of Gender (G)

$\beta_9 =$ Coefficient of Profitability (PR)

$\beta_{10} =$ Coefficient of Market to Book Value Ratio (MB)

β_{11} = Coefficient of Tangibility (TG)

β_{12} = Coefficient of Firm Size (FS)

β_{13} = Coefficient of Firm Size (FT)

ε_t = Error Term

In this study, Feasible Generalized Least Squared regression has been done. This specific model has been done to avoid autocorrelation and heteroscedasticity problems.

5.2 Analysis and Interpretation of Results

5.2.1 Summary Statistics

The Summary Statistics of the variables used in this study are shown below:

Table-5.1
Summary Statistics of the Variables

Variables	Mean	Standard Deviation	Skewness	Kurtosis
Financial Leverage Ratio	.548755	.234361	-.0761839	2.285681
Overconfidence	1.885714	.8213285	.2135859	1.517685
Optimism	1.828571	.8458804	.3327594	1.480636
Risk Aversion	2.628571	1.268659	.2725181	2.921304
Age	51.05714	5.309573	-.4920254	2.605514
Work Experience	16.65714	5.523811	.2725181	2.921304
Tenure	8.828571	3.841306	.2921119	2.867202
Education Level	1.771429	.70144	.8474452	4.135639
Gender	1.042857	.2028249	4.514212	21.37811
Profitability	.0856016	.1151731	1.632375	8.222036

Market to Book Value Ratio	3.500303	7.532142	4.550599	26.39496
Tangibility	.3751703	.2462261	1.056182	7.663547
Firm Size	21.18162	3.040542	-3.747599	26.47819
Firm Type	5.071429	3.690464	.4742004	1.808109

This study has included those managers in the questionnaire survey, who served the organization at least five years in the same position to make it certain that the given responses are suitable and have significant impact on managers' behaviour in deciding the capital structure. From the data it can be seen that the average age of managers is 51 years and mean tenure in the existing post is 8.82 years. Moreover, from the survey it was observed that around 38.57% of the respondents hold an MBA degree, whereas only 2.86% hold a bachelor degree. Hence, it can be observed that top management of these companies have been fulfilled by managers with a higher level of education than the bachelor degree; therefore, a better level of knowledge in the corporate decision making process is available in the context of Bangladesh.

Furthermore, around 58.57% managers are over-confident. This outcome conforms with the psychological researches where it was concluded that the prevalence of professional overconfidence is more compared to the individual overconfidence.

It is also evident that Bangladeshi firms depend more on debt financing compared to equity financing as the average financial leverage ratio is 0.548755. Fixed assets, on the other hand, represents total 37.51 % of the total assets. Moreover, firms average profitability is 0.0856 over the sample years.

5.2.2 Multicollinearity Test

For testing whether the variables have multicollinearity problem or not, correlation matrix has been used. The matrix is shown below:

Table-5.2

Correlation Matrix

	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
OC	1.00												
OP	0.50	1.00											
RA	-0.32	-0.28	1.00										
A	-0.03	-0.01	-0.11	1.00									
WE	-0.05	- 0.06	0.05	0.24	1.00								
T	-0.12	-0.11	-0.01	0.22	0.50	1.00							
EL	0.02	0.007	-0.14	-0.04	-0.35	-0.29	1.00						
G	0.12	0.042	0.006	-0.082	0.01	-0.008	-0.03	1.00					
PR	-0.25	-0.243	0.064	0.1085	0.09	0.071	-0.07	-0.04	1.00				
MB	-0.24	-0.216	0.073	-0.075	-0.007	0.03	-0.17	-0.04	0.11	1.00			
TT	0.09	0.111	0.036	-0.09	-0.15	-0.11	-0.02	-0.01	-0.11	-0.05	1.00		
FS	-0.01	-0.04	0.11	-0.08	-0.09	-0.08	0.08	0.1	0.18	-0.23	0.15	1.00	
FT	0.05	0.068	-0.07	-0.01	-0.04	0.016	0.17	-0.1	-0.29	-0.15	0.04	-0.02	1.00

It is observed from the Table 5.2 that most of the variables have very little correlation among themselves. And as all the values are less than or equal to 0.5, it can be said that there is no multicollinearity problem in this model.

5.2.3 Normality Test

For testing whether all the variables follow normal distribution or not, the Normality test has been conducted. The Shapiro Wilk W test has been run for testing Normality. The Hypotheses are as follows:

H_0: The Variables are not normally distributed

H_1: The Variables are normally distributed

The Results are shown in the Table 5.3.

Table-5.3

Shapiro Wilkin W Normality Test Results Summary

Variables	W	P Value
Financial Leverage Ratio	0.98052	0.00011*
Overconfidence	0.99854	0.00009*
Optimism	0.99719	0.00008*
Risk Aversion	0.98939	0.01212*
Age	0.97176	0.00000*
Work Experience	0.98585	0.00168*
Tenure	0.98728	0.00367*
Education Level	0.97369	0.00001*
Gender	0.88443	0.00000*
Profitability	0.84050	0.00000*
Market to Book Value Ratio	0.38925	0.00000*
Tangibility	0.92658	0.00000*
Firm Size	0.71594	0.00000*
Firm Type	0.96353	0.00000*

*Significant at 5% level

It can be seen from the Table-5.3 that all the variables are normally distributed

5.2.4 Regression Result and Interpretation

The regression results of the analysis are shown in Table- 5.4.

Table-5.4

Regression Results

Wald Chi^2 Statistic=156.46, P Value=0.00000				
Variables	Coefficient	Standard Error	Z	P- Value
Overconfidence	.0641292	.0521715	1.23	0.219
Optimism	-.0748196	.0491706	-1.52	0.128
Risk Aversion	.003609	.0091991	0.39	0.695
Age	.0056236	.0020748	2.71	0.007*
Work Experience	-.0053421	.0048093	-1.11	0.267
Tenure	.0073584	.0067146	1.10	0.273
Education Level	.010889	.0165805	0.66	0.511
Gender	-.1663658	.0540445	-3.08	0.002*
Profitability	-.268612	.101412	-2.65	0.008*
Market to Book Value Ratio	-.0018691	.0015157	-1.23	0.218
Tangibility	-.3002549	.0443344	-6.77	0.000*
Firm Size	-.0080616	.0037778	-2.13	0.033*
Firm Type	-.0260599	.003052	-8.54	0.000*
Constant	.8910988	.1609662	5.54	0.000

*Significant at the 5 percent level

It is evident from the Table-5.4 that Age, Gender, Profitability, Tangibility, Firm Size, and Firm type have significant relationship with Financial leverage. The overall model is also significant; this means all the variables taken together can determine Financial Leverage of firms. Additional explanations are given below:

Age

Age of the manager can influence the financial leverage ratio of a firm. The more experienced the manager of a firm is, s/he should acquire the knowledge requited to take good capital structure decisions. So a firm should hire people in the management posts who have relevant experience. Table-5.4 shows that the p value of age is 0.007 which suggest the result is highly significant. The table shows that for each unit increase in the variable age, firms leverage ratio would rise by .00534. This result contradicts with the results found by Morton (2002), who found that managers with higher age tend to lower the leverage ratio. However, Wen et al (2002) and Abor (2007) found a positive correlation between qualified board age and financial leverage, which comply with the outcome found in the Table-5.4

Gender

Gender of the manager of a firm can influence the capital structure of a firm. Male and female managers have different risk-taking tendencies which have been proven empirically. Table 5.4 represents that p value of gender is 0.002 which means this variable's result is highly significant. It can also be observed that female managers tend to take a pragmatic view to financial leverage than their male counterparts. This, outcome comply with the study found in Mian (2001).

Profitability

Profitability is found as an important determinant of capital structure decisions. A profitable firm can invest in new projects from internally generated cash flows which less profitable firms cannot. So, companies should take decisions of acquiring

capital based on the level of profitability of the firm. Table-5.4 shows that the p value of profitability is 0.008 which suggest the result is highly significant. Highly profitable companies tend to avoid using debt, because these firms are strong enough to finance its operating activities from internal fund. Less profitable firms tend to use more financial leverage.

Tangibility

Tangibility is taken in this study as the natural logarithm of the total assets of the firm. This means a firm with higher amount of assets can take debt keeping the assets as collateral. And empirically it has been proven that tangibility does have the power to explain capital structure related decisions. Table-5.4 shows that the p value of tangibility is 0.000 which suggest the result is very highly significant.

Firm Size

Since, the p value of Firm Size is 0.033 in the Table-5.4 that means this variable is found significant; hence, this variable can influence the capital structure decisions. That means, firms those are big in size, can depend on its own funds rather than depending on outside sources of funds. And if needed, bigger sized firms can collect capital from different sources because capital providers feel confident in providing capital to bigger firms compared to smaller firms.

Firm Type

The p value of Firm Type in the above table is 0.000 which is highly significant. Since, it is evident that Firm Type can influence the capital structure as well. Some

industries depend highly on debt and some depend on their own equity. So based on the type of industries, capital structure can be different.

Though overconfidence, optimism, risk aversion, age, tenure, education level, and market to book value have not been individually found significant in this study, these variables when taken together in the model influence the capital structure of the firm. Overconfidence, optimism, risk aversion are the traits that usually affect the behaviour of managers and eventually affect the performance of companies. In this study, it has been found that, the executives who are in their 40's ranks high in their overconfidence scale, are more optimistic and are more of a risk taker. And those who are in their 50's, are neutral or under confident, are risk averse, and a ranks a bit low in their optimism scale. This might have been caused by the amount of experience the older executives have gathered throughout the years working in a particular industry. But this doesn't make the younger executives wrong. As it is known that taking risks and taking on new challenges can result in higher profits for companies. The world is changing and with it the perception of the business world is also changing. So, if well informed young individuals can take calculated risks and can convert the risk into handsome profit, taking risks and being a bit overconfident should not hurt much.

Chapter-6

Summary and Conclusion

Optimum Capital Structure is one of the important factors which determine the success of the company and its ability to function well. Different theories have been developed and numerous studies have been conducted to find out the optimum level of capital structure. It has been observed that now-a-days researchers emphasized on the impact of behavioural issues on the capital structure. So this study has made an attempt to find out the answer to the question: What is the effect of the management behaviour on the Capital Structure of Bangladeshi firms?

The literature related to the capital structure is diverse in nature. It is observed that different theories suggest different propositions to ensure an optimum mix of debt and equity for a firm. The seminal work by Modigliani and Miller (1958) has spurred the debate on optimum capital structure in a perfect market situation. Over the years, other theories have been developed for the determination of capital structure. For example, pecking order theory, tradeoff theory, agency theory and bankruptcy theory. These theories have focused on diverse issues of capital structure determination and tested in different countries with different methodologies. Additional dimensions of capital structure have been provided by incorporating the managerial impact on the capital structure decision. Different researchers have studied the impact of individual characteristics and behaviours of managers and executives that may influence the capital structure decision of a firm. Ben-David et al. (2007) observed that there is an increased trend in research focusing on the

manager's psychological and behavioural issues. Graham et al. (2013) in their study used optimism, overconfidence and risk aversion and observed that capital structure decision is influenced by the above mentioned behavioural aspects. Abdeldayem and Sedeek (2018) used other personal characteristics of the managers to examine the impact of their behaviour on capital structure. In their study, they found that overconfidence is not a significant variable that can influence the capital structure decision. Risk aversion and optimism were found significant in their study. Cronqvist et al. (2012) used consistency theory to establish a connection between a manager's personal behaviour and firm leverage. They found no impact of age and education on the capital structure decision of a firm. In another study, Francoeur et al. (2008) observed the impact of gender on risk aversion and business decisions.

Financial market is an institutional framework for collecting and channelizing a country's scarce resources on favorable terms and conditions to different economic units of a country. They have a positive role in accelerating the economic wheel of a country. Financial market operates through different segments and institutions. Money market facilitates the transaction of short-term funds and the institutions involved in the money market are mainly commercial banks. On the other hand, the capital market deals with the transaction of long-term funds. Another dimension of the financial market is the stock exchanges. They facilitate the transaction of existing securities, protect investors' interests, and maintain market discipline. Moreover, different regulatory authorities are working in the financial market such as Bangladesh Bank, Bangladesh Securities and Exchange Commission and Insurance Development and Regulatory Authority.

This study also focuses on the empirical model, sampling, and sources of data, method of data collection, data analysis and methodology of the empirical study. Feasible Generalized Least Squared Regression (FGLSR) has been used to find out the impact of management behaviour on capital structure. The study has used structured questionnaire to identify the impact of management behaviour on capital structure of Bangladeshi firms. Moreover, other mathematical and statistical tools and techniques have been used to materialize the objectives of the study.

Few empirical studies of management behaviour on the capital structure were conducted in developing countries. Most of the research in this area focused on developed economies with different methodologies. Considering this fact in mind, this study has made an attempt to find out the impact of management behaviour on capital structure of Bangladeshi firms.

The variation in the debt-equity mix among the companies can be explained by thirteen explanatory variables that were used in the model. Among these variables, three variables were used to measure management behaviour. These variables are overconfidence, optimism and risk aversion. Managers' demographic characteristics such as age, education, tenure, work experience and gender are also included for a better understanding of their behavioural impact on capital structure decisions. Since previous studies have incorporated and proved that firm related variables are important in leverage decisions, this study has also incorporated these variables such as profitability, market-to-book-value ratio, tangibility, size and type of the firms. It is argued that overconfidence, risk aversion, age tenure, education level of managers and firm- debt and growth rates in assets will have positive impacts on the capital

structure while manager's optimism, work experience, gender and firm's profitability, market to book value ratio, tangibility, firm size and type will have negative impacts on capital structure.

The determinants of the capital structure of the firms can be explained by thirteen explanatory variables used in this model. As for the parameters estimates out of thirteen variables six were significant. These variables are age, gender, profitability, tangibility, firm size and firm type, which can explain the impact of management behaviour on the capital structure of Bangladeshi firms.

Studies suggest that overconfident managers are highly likely to underestimate the uncertainties associated with earnings and overestimate a firm's upcoming cash flows. However, this study has found that overconfidence is not significant in the context of Bangladeshi firms. Kruger and Burrus (2004) stated that optimistic managers tend to focus on their personal experiences in evaluating corporate decisions. This study found that optimism is not significant in the context of Bangladesh and this result contradicts the previous studies of Graham et al. (2013). This study has found that risk aversion does not have any significant impact on the leverage ratio of Bangladeshi firms. This outcome of the study supports the findings of Ali and Anis (2012) and Faccio et al. (2012), where they found that there is no difference between the capital structures of risk taking managers and risk averse managers. Overall, it can be concluded that overconfidence, optimism and risk aversion have no significant impact on the financial leverage of a firm in the context of Bangladesh.

The significant features and contributions of this study are as follows:

i.   Additional dimension on capital structure research has been provided by this study.

ii.   This study has combined behavioural issues and characteristics of managers along with some firm-related variables and showed their impact on capital structure decisions for the first time in the context of Bangladesh.

iii.   This study has documented the potential determinants of the capital structure of the Bangladeshi firms.

iv.   This study has attempted to determine whether managerial behaviour influence the capital structure of Bangladeshi firms.

v.   It has also been documented that age, gender, tangibility, firm size and firm type are the most significant variables which have impacts on the capital structure decision of Bangladeshi firms.

It is observed that capital structure is one of the central issues in finance study. Different theories have been developed and tested in different countries with different methodologies. Additional dimension on finance study has emerged with the development of managerial behaviour for corporate decision making process. Recently different studies have been undertaken on the impact of management behaviour on capital structure and other financial decision. It is evident that studies related to this field have confined to the developed countries and studies to the developing countries are very little. This study has also documented that this new development in finance area can be applied for Bangladesh. This study for the first time has undertaken to find out the influence of management behaviour on capital

structure of Bangladeshi firms. This study also documented that this model can be applied for the determination of capital structure for the Bangladeshi firms. New research can be undertaken in different countries and different financial environments with different methodologies to find out the impact of management behaviour on the capital structure and other financial decisions of the firms.

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Data Appendix

Table-1

Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2020	1	0.86486	3	3	2	47	20	10	1	1	-0.00393	3.129194	0.241141	19.46907	1
2019	1	0.856548	3	3	2	47	20	10	1	1	0.013033	2.628904	0.2708	19.58764	1
2018	1	0.861128	3	3	2	47	20	10	1	1	0.004425	2.884174	0.262724	19.67168	1
2017	1	0.865850	3	3	2	47	20	10	1	1	0.007355	3.009715	0.265518	19.67863	1
2016	1	0.858903	3	3	2	47	20	10	1	1	0.019475	3.152224	0.225469	19.6512	1
2020	2	0.335322	1	1	4	46	18	8	1	1	0.090014	0.551931	0.744477	23.88272	1
2019	2	0.380643	1	1	4	46	18	8	1	1	0.080746	0.626729	0.673938	23.77521	1
2018	2	0.355745	1	1	4	46	18	8	1	1	0.035261	0.632464	0.679357	23.57863	1
2017	2	0.264396	1	1	4	46	18	8	1	1	0.036827	0.561863	0.718002	23.46467	1
2016	2	0.259704	1	1	4	46	18	8	1	1	0.026163	0.582102	0.713858	23.21104	1
2020	3	0.651534	1	1	4	52	13	7	2	1	-0.00349	1.151307	0.24099	23.8675	1
2019	3	0.648526	1	1	4	52	13	7	2	1	0.038754	0.935745	0.242745	23.80497	1
2018	3	0.597644	1	1	4	52	13	7	2	1	0.053529	1.007323	0.260781	23.73493	1
2017	3	0.519803	1	1	4	52	13	7	2	1	0.045296	1.278936	0.291317	23.63048	1

Data Appendix

Table-1

Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2016	3	0.433861	1	1	4	52	13	7	2	1	0.137786	1.124619	0.312536	23.83714	1
2020	4	0.961453	1	1	3	57	24	12	1	1	0.309995	4.250369	0.000595	17.0213	1
2019	4	0.958886	1	1	3	57	24	12	1	1	0.314498	4.915037	0.000598	16.94267	1
2018	4	0.957132	1	1	3	57	24	12	1	1	0.320486	5.61047	0.000658	16.76258	1
2017	4	0.955575	1	1	3	57	24	12	1	1	0.329737	4.461627	0.000747	16.62762	1
2016	4	0.954895	1	1	3	57	24	12	1	1	0.194357	3.901377	0.000824	16.38466	1
2020	5	0.951238	1	1	3	59	20	12	1	1	0.094036	6.978282	0.055052	22.32516	1
2019	5	0.801869	1	1	3	59	20	12	1	1	0.323536	25.73707	0.213581	22.14061	1
2018	5	0.777907	1	1	3	59	20	12	1	1	0.250865	35.20227	0.228161	21.99356	1
2017	5	0.691267	1	1	3	59	20	12	1	1	0.378763	55.88876	0.256269	22.02335	1
2016	5	0.674447	1	1	3	59	20	12	1	1	0.335953	62.78481	0.209288	21.92522	1
2020	6	0.482883	1	1	3	58	27	13	1	1	0.165981	2.806807	0.583012	22.54647	1
2019	6	0.477352	1	1	3	58	27	13	1	1	0.159854	3.26981	0.59565	22.38415	1
2018	6	0.402391	1	1	3	58	27	13	1	1	0.190409	3.827414	0.623752	22.37072	1

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2017	6	0.491771	1	1	3	58	27	13	1	1	0.187059	4.095323	0.630887	22.4828	1
2016	6	0.490624	1	1	3	58	27	13	1	1	0.206429	4.514815	0.55991	22.32917	1
2020	7	0.681467	2	2	1	49	10	6	3	1	0.000447	0.926525	0.485302	19.41583	1
2019	7	0.637119	2	2	1	49	10	6	3	1	0.000468	0.921885	0.541365	19.33266	1
2018	7	0.584761	2	2	1	49	10	6	3	1	0.000493	0.864519	0.617186	19.09887	1
2017	7	0.586827	2	2	1	49	10	6	3	1	0.001701	0.870502	0.617352	19.06632	1
2016	7	0.55311	2	2	1	49	10	6	3	1	0.00867	0.854426	0.568354	20.42334	1
2020	8	0.612282	2	2	1	50	12	4	2	1	0.071814	1.632391	0.404956	20.51291	1
2019	8	0.615659	2	2	1	50	12	4	2	1	0.087672	1.650837	0.422355	20.4474	1
2018	8	0.622861	2	2	1	50	12	4	2	1	0.06502	1.646804	0.42542	20.35123	1
2017	8	0.632518	2	2	1	50	12	4	2	1	0.056278	1.650754	0.488084	20.33748	1
2016	8	0.659279	2	2	1	50	12	4	2	1	0.167519	1.652457	0.541597	20.40873	1
2020	9	0.055173	2	2	1	51	13	6	2	1	0.218245	0.96421	0.255117	24.69216	1
2019	9	0.059122	2	2	1	51	13	6	2	1	0.705054	1.090051	0.289052	24.65248	1

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2018	9	0.05641	2	2	1	51	13	6	2	1	0.748894	0.705369	0.33531	24.54945	1
2017	9	0.066691	2	2	1	51	13	6	2	1	0.242582	0.815611	0.36785	23.26825	1
2016	9	0.084614	2	2	1	51	13	6	2	1	0.246102	0.97642	0.425433	23.11233	1
2020	10	0.961453	1	1	3	52	14	8	2	1	0.309995	0.98728	0.000595	17.0213	1
2019	10	0.958886	1	1	3	52	14	8	2	1	0.314498	0.995477	0.000598	16.94267	1
2018	10	0.957132	1	1	3	52	14	8	2	1	0.320486	0.989283	0.000658	16.76258	1
2017	10	0.955575	1	1	3	52	14	8	2	1	0.329737	0.984451	0.000747	16.62762	1
2016	10	0.954895	1	1	3	52	14	8	2	1	0.194357	0.985115	0.000824	16.38466	1
2020	11	0.651534	3	3	5	53	17	10	2	2	-0.00349	0.658794	0.24099	23.8675	1
2019	11	0.648526	3	3	5	53	17	10	2	2	0.038754	0.656129	0.242745	23.80497	1
2018	11	0.597644	3	3	5	53	17	10	2	2	0.053529	0.605579	0.260781	23.73493	1
2017	11	0.519803	3	3	5	53	17	10	2	2	0.045296	0.528073	0.291317	23.63048	1
2016	11	0.433861	3	3	5	53	17	10	2	2	0.137786	0.443374	0.312536	23.83714	1
2020	12	0.863136	3	3	2	55	18	13	1	1	0.090859	1.611625	0.663318	23.96632	1

Data Appendix

Table-1

Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2019	12	0.87287	3	3	2	55	18	13	1	1	0.080746	1.681538	0.669779	23.7102	1
2018	12	0.854881	3	3	2	55	18	13	1	1	0.035261	1.778508	0.76389	23.89893	1
2017	12	0.822635	3	3	2	55	18	13	1	1	0.036827	1.981172	0.718002	23.89488	1
2016	12	0.810678	3	3	2	55	18	13	1	1	0.025867	2.073443	0.946701	23.8424	1
2020	13	0.508522	3	3	2	48	25	15	1	1	0.151042	0.513482	0.400454	22.09637	1
2019	13	0.521916	3	3	2	48	25	15	1	1	0.197094	0.516702	0.446479	22.29871	1
2018	13	0.521495	3	3	2	48	25	15	1	1	0.177573	0.503843	0.510956	22.08854	1
2017	13	0.476229	3	3	2	48	25	15	1	1	0.220593	0.510134	0.228708	22.01233	1
2016	13	0.468681	3	3	2	48	25	15	1	1	0.204116	0.468681	0.571656	21.36135	1
2020	14	0.9597	1	1	3	52	13	5	2	1	0.324097	0.98728	0.000595	17.0213	1
2019	14	0.959507	1	1	3	52	13	5	2	1	0.309754	0.995477	0.000598	16.94267	1
2018	14	0.959605	1	1	3	52	13	5	2	1	0.302	0.989283	0.000658	16.76258	1
2017	14	0.958596	1	1	3	52	13	5	2	1	0.307318	0.984451	0.000747	16.62762	1
2016	14	0.958435	1	1	3	52	13	5	2	1	0.179101	0.985115	0.000824	16.38466	1

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2020	15	0.630896	2	2	1	53	14	7	2	1	0.071814	0.861198	0.404956	20.51291	1
2019	15	0.619351	2	2	1	53	14	7	2	1	0.087672	0.826856	0.422355	20.4474	1
2018	15	0.621392	2	2	1	53	14	7	2	1	0.06502	0.872653	0.42542	20.35123	1
2017	15	0.625193	2	2	1	53	14	7	2	1	0.056278	0.778808	0.488084	20.33748	1
2016	15	0.626633	2	2	1	53	14	7	2	1	0.167519	0.819416	0.541597	20.40873	1
2020	16	0.756676	1	1	3	55	12	6	1	1	0.013641	0.756676	0.278749	23.07089	1
2019	16	0.730097	1	1	3	55	12	6	1	1	0.066321	0.730097	0.329272	23.20812	1
2018	16	0.664791	1	1	3	55	12	6	1	1	0.071645	0.664791	0.439454	23.03082	1
2017	16	0.655881	1	1	3	55	12	6	1	1	0.070352	0.655881	0.553645	22.95117	1
2016	16	0.742191	1	1	3	55	12	6	1	1	0.078676	0.742191	0.377569	22.85221	1
2020	17	0.944131	1	1	4	57	16	9	2	1	0.104857	1.046981	0.062538	22.32516	1
2019	17	0.841697	1	1	4	57	16	9	2	1	0.258499	1.144255	0.177348	22.14061	1
2018	17	0.789479	1	1	4	57	16	9	2	1	0.237747	1.251984	0.226688	21.99356	1
2017	17	0.713254	1	1	4	57	16	9	2	1	0.35178	1.323435	0.25226	22.02335	1

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2016	17	0.671768	1	1	4	57	16	9	2	1	0.338692	1.389172	0.219149	21.92522	1
2020	18	0.620359	3	3	5	56	18	7	2	1	-0.00357	0.658794	0.24099	23.8675	1
2019	18	0.648526	3	3	5	56	18	7	2	1	0.038754	0.656129	0.242745	23.80497	1
2018	18	0.597644	3	3	5	56	18	7	2	1	0.053529	0.605579	0.260781	23.73493	1
2017	18	0.519803	3	3	5	56	18	7	2	1	0.045296	0.528073	0.291317	23.63048	1
2016	18	0.433861	3	3	5	56	18	7	2	1	0.137786	0.443374	0.312536	23.83714	1
2020	19	0.569807	2	1	2	55	19	10	3	1	0.09121	1.900695	0.413073	23.07661	2
2019	19	0.615188	2	1	2	55	19	10	3	1	0.059194	1.817127	0.373492	23.20208	2
2018	19	0.552259	2	1	2	55	19	10	3	1	0.163586	2.033236	0.44705	23.1348	2
2017	19	0.570121	2	1	2	55	19	10	3	1	0.167239	1.944928	0.423172	23.00585	2
2016	19	0.649243	2	1	2	55	19	10	3	1	0.232506	1.837178	0.350765	23.08412	2
2020	20	0.513482	2	2	2	51	20	12	3	1	0.149517	1.896379	0.400454	22.09637	2
2019	20	0.516702	2	2	2	51	20	12	3	1	0.199244	1.851532	0.446479	22.29871	2
2018	20	0.503843	2	2	2	51	20	12	3	1	0.184123	1.761956	0.510956	22.08854	2

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2017	20	0.510134	2	2	2	51	20	12	3	1	0.206313	1.616907	0.228708	22.01233	2
2016	20	0.468681	2	2	2	51	20	12	3	1	0.204116	1.833758	0.571656	21.36135	2
2020	21	0.898797	1	1	4	52	21	10	1	1	0.148079	1.075064	0.10528	22.76568	2
2019	21	0.891134	1	1	4	52	21	10	1	1	0.015782	1.098304	0.137866	22.43406	2
2018	21	0.893493	1	1	4	52	21	10	1	1	0.012496	1.099114	0.105277	22.32888	2
2017	21	0.886474	1	1	4	52	21	10	1	1	0.014972	1.105584	0.113864	22.32106	2
2016	21	0.968913	1	1	4	52	21	10	1	1	0.014164	1.189879	0.13152	22.76568	2
2020	22	0.864092	3	3	2	56	23	12	1	1	-0.02015	0.974924	0.34155	0.34155	2
2019	22	0.99402	3	3	2	56	23	12	1	1	-0.03022	22.32888	0.18612	0.18612	2
2018	22	0.950439	3	3	2	56	23	12	1	1	-0.03226	22.32106	0.217489	0.217489	2
2017	22	0.892479	3	3	2	56	23	12	1	1	-0.01986	21.62791	0.265843	0.265843	2
2016	22	0.903117	3	3	2	56	23	12	1	1	0.012241	1.102556	0.2804	21.17684	2
2020	23	0.340589	2	1	2	49	22	10	1	2	0.108653	2.294005	0.636002	23.50966	2
2019	23	0.398342	2	1	2	49	22	10	1	2	0.099567	2.266078	0.613995	23.6047	2

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2018	23	0.420624	2	1	2	49	22	10	1	2	0.070021	2.269269	0.619792	23.53457	2
2017	23	0.291265	2	1	2	49	22	10	1	2	0.062913	2.608552	0.533615	23.10458	2
2016	23	0.286211	2	1	2	49	22	10	1	2	0.143292	2.697083	0.549046	23.0962	2
2020	24	0.639132	3	3	1	50	23	13	1	1	-0.00148	1.245275	0.393287	23.35344	2
2019	24	0.628567	3	3	1	50	23	13	1	1	0.022586	1.227867	0.417109	23.40623	2
2018	24	0.638613	3	3	1	50	23	13	1	1	0.020809	1.232194	0.395514	23.25373	2
2017	24	0.603905	3	3	1	50	23	13	1	1	0.047986	1.243669	0.262815	22.9682	2
2016	24	0.52507	3	3	1	50	23	13	1	1	0.069212	1.338906	0.288741	22.92233	2
2020	25	0.756676	1	1	4	48	15	10	2	1	0.013641	1.149493	0.278749	23.07089	2
2019	25	0.730097	1	1	4	48	15	10	2	1	0.066321	1.164759	0.329272	23.20812	2
2018	25	0.664791	1	1	4	48	15	10	2	1	0.071645	1.251609	0.439454	23.03082	2
2017	25	0.655881	1	1	4	48	15	10	2	1	0.070352	1.29331	0.553645	22.95117	2
2016	25	0.742191	1	1	4	48	15	10	2	1	0.078676	1.24983	0.377569	22.85221	2
2020	26	0.288894	1	1	3	47	14	12	2	1	0.064376	6.487079	0.307969	20.07619	3

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Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2019	26	0.231653	1	1	3	47	14	12	2	1	0.064017	8.402819	0.40218	20.41127	3
2018	26	0.305416	1	1	3	47	14	12	2	1	0.062226	9.228767	0.421051	20.04826	3
2017	26	0.288166	1	1	3	47	14	12	2	1	0.050885	9.815731	0.454783	19.97377	3
2016	26	0.185134	1	1	3	47	14	12	2	1	0.102909	1.23932	0.531414	20.5452	3
2020	27	0.296515	1	1	3	51	10	5	2	1	0.001254	31.08712	0.698871	20.57185	3
2019	27	0.295138	1	1	3	51	10	5	2	1	0.001022	29.5576	0.664269	20.52366	3
2018	27	0.253988	1	1	3	51	10	5	2	1	0.001544	29.62493	0.650261	20.44538	3
2017	27	0.257662	1	1	3	51	10	5	2	1	0.001152	30.27662	0.642152	20.35571	3
2016	27	0.241555	1	1	3	51	10	5	2	1	0.00354	30.22427	0.589267	20.44089	3
2020	28	0.883683	3	3	2	58	13	7	3	1	0.010259	1.040552	0.201197	21.69725	4
2019	28	0.721011	3	3	2	58	13	7	3	1	0.026807	0.879024	0.214058	21.4743	4
2018	28	0.803512	3	3	2	58	13	7	3	1	0.030721	1.07562	0.343414	21.99872	4
2017	28	0.677704	3	3	2	58	13	7	3	1	0.060256	1.2023	0.729709	21.97186	4
2016	28	0.716296	3	3	2	58	13	7	3	1	0.055259	1.246392	0.757217	21.80856	4

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Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2020	29	0.98165	2	2	1	59	20	10	1	1	0.09617	1.224697	0.080949	18.30705	4
2019	29	0.955887	2	2	1	59	20	10	1	1	0.122087	1.33846	0.10385	18.03449	4
2018	29	0.969021	2	2	1	59	20	10	1	1	-0.13505	1.369417	0.107385	17.81968	4
2017	29	0.535016	2	2	1	59	20	10	1	1	0.24349	1.15312	0.156801	17.54389	4
2016	29	0.473383	2	2	1	59	20	10	1	1	-0.12673	1.091041	0.469911	18.32418	4
2020	30	0.448043	1	1	4	38	14	8	2	1	0.024753	6.104709	0.49651	20.54611	4
2019	30	0.466594	1	1	4	38	14	8	2	1	0.024169	6.673101	0.736711	20.40807	4
2018	30	0.42952	1	1	4	38	14	8	2	1	0.033985	7.575423	0.731208	20.30895	4
2017	30	0.35842	1	1	4	38	14	8	2	1	-0.12135	7.521531	0.878032	17.83408	4
2016	30	0.268138	1	1	4	38	14	8	2	1	0.282349	6.166191	0.766892	20.95626	4
2020	31	0.73708	2	2	1	39	16	7	3	1	0.012111	1.603034	0.313291	22.18735	4
2019	31	0.719434	2	2	1	39	16	7	3	1	0.020087	1.688114	0.319288	22.17667	4
2018	31	0.684373	2	2	1	39	16	7	3	1	0.00704	1.915059	0.351712	24.21529	4
2017	31	0.687797	2	2	1	39	16	7	3	1	0.004857	2.005737	0.340631	24.24999	4

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Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2016	31	0.672492	2	2	1	39	16	7	3	1	0.013427	2.112408	0.316651	24.18557	4
2020	32	0.567514	1	1	3	41	18	10	1	1	0.017813	33.16443	0.018111	17.61131	4
2019	32	0.445972	1	1	3	41	18	10	1	1	0.094534	41.36788	0.023831	19.14031	4
2018	32	0.657598	1	1	3	41	18	10	1	1	0.051247	28.89827	0.016288	19.11011	4
2017	32	0.521176	1	1	3	41	18	10	1	1	0.060271	37.20706	0.020212	19.12059	4
2016	32	0.539219	1	1	3	41	18	10	1	1	0.208597	34.39542	0.017483	18.83181	4
2020	33	0.118655	3	3	5	45	20	10	1	1	0.058804	0.560831	0.502561	20.17819	4
2019	33	0.105614	3	3	5	45	20	10	1	1	0.062279	0.537464	0.494365	20.12092	4
2018	33	0.161738	3	3	5	45	20	10	1	1	0.044328	0.586441	0.50812	20.12529	4
2017	33	0.074235	3	3	5	45	20	10	1	1	0.05274	0.526645	0.579492	20.08248	4
2016	33	0.068734	3	3	5	45	20	10	1	1	0.054747	0.528775	0.629013	20.06404	4
2020	34	0.323652	1	1	4	46	21	13	1	1	0.210092	2.602068	0.427857	22.27325	4
2019	34	0.332354	1	1	4	46	21	13	1	1	0.24665	2.697291	0.471326	22.46082	4
2018	34	0.346981	1	1	4	46	21	13	1	1	0.236836	2.983036	0.503042	22.42075	4

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Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2017	34	0.381678	1	1	4	46	21	13	1	1	0.255087	3.418256	0.541418	22.321	4
2016	34	0.449472	1	1	4	46	21	13	1	1	0.238849	3.566926	0.550134	22.17502	4
2020	35	0.381914	3	3	2	48	22	10	1	1	0.105479	2.006032	0.413409	20.80257	4
2019	35	0.320095	3	3	2	48	22	10	1	1	0.10474	1.998687	0.402675	20.75839	4
2018	35	0.418912	3	3	2	48	22	10	1	1	0.117948	2.005244	0.348201	22.97339	4
2017	35	0.334368	3	3	2	48	22	10	1	1	0.125451	2.179977	0.313815	22.78591	4
2016	35	0.37586	3	3	2	48	22	10	1	1	0.096467	2.327017	0.3201	23.14905	4
2020	36	0.867832	2	1	2	51	23	14	2	1	0.04136	0.882649	0.014532	21.43748	4
2019	36	0.868391	2	1	2	51	23	14	2	1	0.032164	0.886	0.013506	21.45843	4
2018	36	0.878014	2	1	2	51	23	14	2	1	0.046342	0.894865	0.013336	21.55795	4
2017	36	0.874081	2	1	2	51	23	14	2	1	0.037886	0.894758	0.01564	21.43771	4
2016	36	0.875571	2	1	2	51	23	14	2	1	0.026767	0.898606	0.014985	21.53256	4
2020	37	0.83345	1	1	3	52	30	20	1	1	0.039129	1.080571	0.019188	21.49247	4
2019	37	0.915571	1	1	3	52	30	20	1	1	0.022925	1.053811	0.010613	21.7713	4

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Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2018	37	0.926666	1	1	3	52	30	20	1	1	0.02638	1.061611	0.01028	21.69242	4
2017	37	0.930263	1	1	3	52	30	20	1	1	0.018564	1.087172	0.011217	21.42612	4
2016	37	0.919677	1	1	3	52	30	20	1	1	0.022025	1.121693	0.012391	21.36391	4
2020	38	0.731222	3	3	2	53	14	6	2	1	0.016428	0.847605	0.488216	23.65396	4
2019	38	0.730539	3	3	2	53	14	6	2	1	0.017222	0.82032	0.587612	23.6015	4
2018	38	0.70069	3	3	2	53	14	6	2	1	0.012527	0.806057	0.653497	23.45448	4
2017	38	0.699516	3	3	2	53	14	6	2	1	0.01456	0.81291	0.586912	23.37428	4
2016	38	0.743139	3	3	2	53	14	6	2	1	0.016606	0.905156	0.61874	23.25093	4
2020	39	0.538205	2	2	1	54	17	8	2	1	0.048456	1.893287	0.19734	21.69452	5
2019	39	0.546333	2	2	1	54	17	8	2	1	0.055335	1.88119	0.232814	21.76065	5
2018	39	0.578672	2	2	1	54	17	8	2	1	0.04922	1.847876	0.274122	21.65485	5
2017	39	0.607807	2	2	1	54	17	8	2	1	0.049679	1.84798	0.32412	21.59051	5
2016	39	0.626903	2	2	1	54	17	8	2	1	0.046924	1.875199	0.373226	21.46117	5
2020	40	0.474886	1	1	4	55	19	10	1	1	0.325731	9.91896	0.456718	26.36191	5

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Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2019	40	0.397723	1	1	4	55	19	10	1	1	0.292846	10.69097	0.496918	26.32115	5
2018	40	0.477765	1	1	4	55	19	10	1	1	0.341585	4.161071	0.468378	26.17481	5
2017	40	0.502043	1	1	4	55	19	10	1	1	0.361084	5.005548	0.450617	26.04207	5
2016	40	0.465803	1	1	4	55	19	10	1	1	0.372596	6.143023	0.436009	25.83304	5
2020	41	0.730123	3	3	5	52	10	5	2	1	-0.12984	2.661608	0.78084	20.59908	5
2019	41	0.567084	3	3	5	52	10	5	2	1	0.050812	2.562335	0.772197	20.89797	5
2018	41	0.554441	3	3	5	52	10	5	2	1	0.050362	2.931161	0.797742	20.80544	5
2017	41	0.557556	3	3	5	52	10	5	2	1	0.03785	3.330981	0.769725	20.70883	5
2016	41	0.564976	3	3	5	52	10	5	2	1	0.065807	3.550152	0.741811	20.68176	5
2020	42	0.259014	2	2	1	58	16	8	2	1	0.015558	1.159641	0.327726	20.02059	5
2019	42	0.163082	2	2	1	58	16	8	2	1	0.038023	0.75638	0.40241	20.10053	5
2018	42	0.124955	2	2	1	58	16	8	2	1	0.047882	0.932612	0.506153	20.10135	5
2017	42	0.303579	2	2	1	58	16	8	2	1	0.052091	1.206951	0.53276	20.19017	5
2016	42	0.299077	2	2	1	58	16	8	2	1	0.077506	1.198011	0.350751	20.45814	5

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2020	43	0.573742	1	1	3	45	12	7	2	1	-0.01279	1.034114	0.05096	21.24517	5
2019	43	0.575083	1	1	3	45	12	7	2	1	0.023779	1.074273	0.058642	21.42925	5
2018	43	0.581467	1	1	3	45	12	7	2	1	0.018124	1.103832	0.036569	21.37672	5
2017	43	0.626772	1	1	3	45	12	7	2	1	0.015375	1.174799	1.794108	21.21965	5
2016	43	0.599253	1	1	3	45	12	7	2	1	0.006003	1.25306	1.782485	21.43226	5
2020	44	0.30171	2	2	1	49	14	7	2	1	0.17157	3.960831	0.267311	23.48927	5
2019	44	0.341409	2	2	1	49	14	7	2	1	0.170831	4.302894	0.251419	23.34312	5
2018	44	0.417193	2	2	1	49	14	7	2	1	0.16558	4.444823	0.207411	23.2827	5
2017	44	0.406506	2	2	1	49	14	7	2	1	0.180175	5.17462	0.209107	23.14723	5
2016	44	0.406961	2	2	1	49	14	7	2	1	0.212762	5.909587	0.218745	23.12429	5
2020	45	0.598764	3	3	5	50	19	5	1	1	0.021244	1.519416	0.049236	21.5046	6
2019	45	0.578509	3	3	5	50	19	5	1	1	0.022825	1.536923	0.052887	21.26132	6
2018	45	0.583861	3	3	5	50	19	5	1	1	0.018124	1.420558	0.055125	21.37672	6
2017	45	0.629126	3	3	5	50	19	5	1	1	0.015375	1.511481	0.064304	21.21965	6

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2016	45	0.599253	3	3	5	50	19	5	1	1	0.006003	1.60616	0.084959	21.43226	6
2020	46	0.650382	1	1	4	50	5	1	2	1	0.00106	0.842046	0.069323	21.38957	7
2019	46	0.568045	1	1	4	50	5	1	2	1	0.008828	0.79271	0.08718	21.77222	7
2018	46	0.483645	1	1	4	50	5	1	2	1	0.02958	0.872858	0.105108	21.93513	7
2017	46	0.4332	1	1	4	50	5	1	2	1	0.050931	0.864537	0.101571	22.03266	7
2016	46	0.46058	1	1	4	50	5	1	2	1	0.048476	0.895454	0.098516	22.07195	7
2020	47	0.148205	2	2	2	52	7	2	2	1	-0.00826	0.910438	0.744634	19.65472	7
2019	47	0.154799	2	2	2	52	7	2	2	1	-0.00583	0.898785	0.728548	19.71908	7
2018	47	0.14485	2	2	2	52	7	2	2	1	-0.00678	0.910186	0.727884	19.25051	7
2017	47	0.158325	2	2	2	52	7	2	2	1	-0.00581	0.934027	0.728424	19.20847	7
2016	47	0.195848	2	2	2	52	7	2	2	1	-0.00556	1.00873	0.638728	19.149	7
2020	48	0.695615	3	3	2	54	8	3	2	1	0.027151	1.343387	0.509216	24.10944	7
2019	48	0.701202	3	3	2	54	8	3	2	1	0.04179	1.366732	0.531417	24.70121	7
2018	48	0.71718	3	3	2	54	8	3	2	1	0.031924	1.472579	0.609203	24.42202	7

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2017	48	0.684971	3	3	2	54	8	3	2	1	0.034677	1.566918	0.679402	23.87845	7
2016	48	0.675026	3	3	2	54	8	3	2	1	0.0494	1.623661	0.416103	23.30355	7
2020	49	0.542889	1	1	4	39	9	4	2	1	0.04567	15.84804	0.579785	18.08981	7
2019	49	0.543992	1	1	4	39	9	4	2	1	0.119233	14.8115	0.578498	18.38663	7
2018	49	0.7601	1	1	4	39	9	4	2	1	0.108953	13.62866	0.641914	18.50889	7
2017	49	0.851999	1	1	4	39	9	4	2	1	0.062456	13.34729	0.670885	18.4347	7
2016	49	0.862427	1	1	4	39	9	4	2	1	0.05974	13.32571	0.698416	18.42227	7
2020	50	0.498803	3	3	2	42	10	3	2	1	0.028387	0.98207	0.33875	24.54585	7
2019	50	0.682453	3	3	2	42	10	3	2	1	0.035531	1.122342	0.351667	24.83513	7
2018	50	0.719598	3	3	2	42	10	3	2	1	0.050536	1.296449	0.209352	24.60049	7
2017	50	0.696543	3	3	2	42	10	3	2	1	0.051112	1.336916	0.229558	23.44803	7
2016	50	0.740461	3	3	2	42	10	3	2	1	0.048724	1.400229	0.231138	23.30792	7
2020	51	0.707035	2	1	2	43	5	1	2	1	0.01501	1.501861	0.102634	22.7739	7
2019	51	0.702473	2	1	2	43	5	1	2	1	0.04566	1.52039	0.08408	23.12274	7

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2018	51	0.702413	2	1	2	43	5	1	2	1	0.071292	1.616314	0.085754	23.43162	7
2017	51	0.729314	2	1	2	43	5	1	2	1	0.063826	1.902444	0.103837	23.04951	7
2016	51	0.738925	2	1	2	43	5	1	2	1	0.044933	2.106376	0.108473	22.6595	7
2020	52	0.322028	2	2	1	45	12	6	2	2	0.012337	2.275593	0.219478	21.02122	7
2019	52	0.319153	2	2	1	45	12	6	2	2	0.032302	2.326219	0.228703	21.17865	7
2018	52	0.270542	2	2	1	45	12	6	2	2	0.03459	2.51238	0.253988	21.23773	7
2017	52	0.272219	2	2	1	45	12	6	2	2	0.042187	3.05899	0.205354	18.80845	7
2016	52	0.773275	2	2	1	45	12	6	2	2	0.073244	5.57245	0.219616	20.47084	7
2020	53	0.730292	1	1	4	49	13	5	2	1	0.363402	0.853687	0.541263	25.5787	8
2019	53	0.74274	1	1	4	49	13	5	2	1	0.292556	0.866906	0.588413	25.467	8
2018	53	0.694571	1	1	4	49	13	5	2	1	0.400749	0.811385	0.50302	25.61235	8
2017	53	0.730292	1	1	4	49	13	5	2	1	0.363402	0.855761	0.541263	25.5787	8
2016	53	0.74274	1	1	4	49	13	5	2	1	0.292556	0.866906	0.588413	25.467	8
2020	54	0.444438	3	3	2	56	14	6	2	1	0.103045	0.973769	0.533701	21.63901	8

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2019	54	0.44028	3	3	2	56	14	6	2	1	0.068257	1.011049	0.601536	21.394	8
2018	54	0.436021	3	3	2	56	14	6	2	1	0.028165	1.068226	0.696531	21.06333	8
2017	54	0.39687	3	3	2	56	14	6	2	1	0.039096	1.05894	0.728721	20.75933	8
2016	54	0.378229	3	3	2	56	14	6	2	1	0.019844	1.10523	0.799609	20.24304	8
2020	55	0.646967	2	2	1	57	12	6	2	1	0.007724	1.669559	0.60967	19.97479	9
2019	55	0.624208	2	2	1	57	12	6	2	1	-0.00418	1.66339	0.669445	19.99761	9
2018	55	0.589938	2	2	1	57	12	6	2	1	-0.01166	1.63176	0.494923	19.45951	9
2017	55	0.531024	2	2	1	57	12	6	2	1	-0.01389	1.595316	0.536791	19.6478	9
2016	55	0.458831	2	2	1	57	12	6	2	1	-0.01138	1.607441	0.619892	19.42489	9
2020	56	0.154641	1	1	4	58	13	7	2	1	0.058163	2.21531	0.148416	20.12705	10
2019	56	0.115701	1	1	4	58	13	7	2	1	0.083756	2.176025	0.155396	20.21445	10
2018	56	0.168204	1	1	4	58	13	7	2	1	0.14145	2.070385	0.265076	20.35235	10
2017	56	0.244332	1	1	4	58	13	7	2	1	0.130257	2.088458	0.537219	20.2955	10
2016	56	0.215903	1	1	4	58	13	7	2	1	0.102613	2.332051	0.570682	20.1031	10

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Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2020	57	0.3365	3	3	1	43	14	8	2	1	0.025108	2.122654	0.384093	18.25746	10
2019	57	0.359623	3	3	1	43	14	8	2	1	0.023867	2.33262	0.373869	18.25628	10
2018	57	0.344575	3	3	1	43	14	8	2	1	0.027893	2.329806	0.33932	18.25515	10
2017	57	0.360826	3	3	1	43	14	8	2	1	0.029295	2.246131	0.299789	18.18695	10
2016	57	0.275539	3	3	1	43	14	8	2	1	0.027165	2.256481	0.29917	18.18592	10
2020	58	0.782993	2	2	1	60	20	12	2	1	-0.01387	3.052465	0.099772	18.35561	11
2019	58	0.763185	2	2	1	60	20	12	2	1	-0.04445	3.242514	0.114784	18.36338	11
2018	58	0.56698	2	2	1	60	20	12	2	1	0.022021	3.693577	0.200289	19.37559	11
2017	58	0.547295	2	2	1	60	20	12	2	1	0.069335	3.601613	0.188074	19.49666	11
2016	58	0.563295	2	2	1	60	20	12	2	1	0.059808	3.556359	0.222754	19.73422	11
2020	59	0.718068	1	1	4	52	22	12	4	1	0.029297	1.400833	0.160426	21.98418	11
2019	59	0.765373	1	1	4	52	22	12	4	1	0.030239	1.328901	0.135138	21.90458	11
2018	59	0.685018	1	1	4	52	22	12	4	1	0.04269	1.464145	0.171684	22.01351	11
2017	59	0.665528	1	1	4	52	22	12	4	1	0.035666	1.531932	0.22346	21.88815	11

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Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2016	59	0.703006	1	1	4	52	22	12	4	1	0.038325	1.469152	0.171489	22.18637	11
2020	60	0.313218	2	2	2	51	23	13	4	1	0.015862	0.554529	0.213473	20.79795	11
2019	60	0.310318	2	2	2	51	23	13	4	1	0.01529	0.550589	0.222373	20.79393	11
2018	60	0.321832	2	2	2	51	23	13	4	1	0.023884	0.583408	0.246455	21.02248	11
2017	60	0.223419	2	2	2	51	23	13	4	1	0.035994	0.562856	0.213517	21.23248	11
2016	60	0.750452	2	2	2	51	23	13	4	1	0.049166	1.356803	0.234957	21.23357	11
2020	61	0.125216	1	1	3	53	24	14	1	1	-0.03088	0.895067	0.254369	15.2186	11
2019	61	0.196103	1	1	3	53	24	14	1	1	-0.04938	0.931823	0.307121	18.92037	11
2018	61	0.282577	1	1	3	53	24	14	1	1	-0.08445	0.9959	0.301079	19.28534	11
2017	61	0.395978	1	1	3	53	24	14	1	1	-0.07488	1.08115	0.302639	19.32344	11
2016	61	0.416835	1	1	3	53	24	14	1	1	-0.05919	1.10619	0.301122	19.18513	11
2020	62	0.331997	2	2	2	55	23	15	2	1	0.2075	0.343452	0.434916	22.27325	11
2019	62	0.323513	2	2	2	55	23	15	2	1	0.249916	0.336008	0.464325	22.46082	11
2018	62	0.337305	2	2	2	55	23	15	2	1	0.240345	0.351286	0.525312	22.42075	11

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2017	62	0.371099	2	2	2	55	23	15	2	1	0.259451	0.387243	0.56779	22.321	11
2016	62	0.439789	2	2	2	55	23	15	2	1	0.24305	0.456653	0.577399	22.17502	11
2020	63	0.445663	1	1	3	57	32	17	1	1	0.02486	1.315514	0.495791	20.54611	11
2019	63	0.467366	1	1	3	57	32	17	1	1	0.024134	1.315106	0.731046	20.40807	11
2018	63	0.433906	1	1	3	57	32	17	1	1	0.033723	1.417549	0.725586	20.30895	11
2017	63	0.35956	1	1	3	57	32	17	1	1	-0.12113	1.422032	0.876472	17.83408	11
2016	63	0.270243	1	1	3	57	32	17	1	1	0.281537	1.137885	0.764686	20.95626	11
2020	64	0.68839	3	3	1	49	12	5	2	1	-0.01085	1.204316	0.364904	19.46289	11
2019	64	0.626285	3	3	1	49	12	5	2	1	-0.00135	1.184437	0.133633	19.67993	11
2018	64	0.43614	3	3	1	49	12	5	2	1	0.033601	1.256505	0.239297	20.32959	11
2017	64	0.153186	3	3	1	49	12	5	2	1	0.1216	1.428174	0.392295	20.86091	11
2016	64	0.162564	3	3	1	49	12	5	2	1	0.13711	1.541468	0.422288	20.78254	11
2020	65	0.479134	2	2	2	58	20	12	2	1	-0.01952	0.766415	-0.01952	20.98727	11
2019	65	0.515024	2	2	2	58	20	12	2	1	0.012772	0.887513	0.012772	21.25781	11

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2018	65	0.370618	2	2	2	58	20	12	2	1	0.016496	0.865642	0.016496	21.27225	11
2017	65	0.344537	2	2	2	58	20	12	2	1	0.017246	0.87724	0.017246	21.25506	11
2016	65	0.101803	2	2	2	58	20	12	2	1	0.029836	0.856719	0.029836	21.29513	11
2020	66	0.41904	1	1	4	46	21	13	1	1	-0.00676	1.315336	0.559259	21.82442	11
2019	66	0.392094	1	1	4	46	21	13	1	1	0.022477	1.363177	0.574474	21.87566	11
2018	66	0.467183	1	1	4	46	21	13	1	1	0.021433	1.928685	0.410956	21.81848	11
2017	66	0.412854	1	1	4	46	21	13	1	1	0.020006	2.013354	0.450591	21.63385	11
2016	66	0.380524	1	1	4	46	21	13	1	1	0.031449	2.112986	0.458299	21.63385	11
2020	67	0.42624	3	3	1	47	18	15	1	1	0.054701	0.972339	0.428951	22.58833	11
2019	67	0.440486	3	3	1	47	18	15	1	1	0.059623	1.021027	0.434172	22.59542	11
2018	67	0.444824	3	3	1	47	18	15	1	1	0.061495	1.057489	0.448197	22.53194	11
2017	67	0.509222	3	3	1	47	18	15	1	1	0.061106	1.1271	0.432762	22.5569	11
2016	67	0.478474	3	3	1	47	18	15	1	1	0.06821	1.178378	0.468591	22.45225	11
2020	68	0.515063	2	2	2	56	12	7	1	1	0.006352	1.315745	0.39353	22.97512	11

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Management Behavior and Capital Structure Data

Year	Panel Marker	FL	OC	OP	RA	A	WE	T	EL	G	PR	MB	TT	FS	FT
2019	68	0.442325	2	2	2	56	12	7	1	1	0.033649	1.351346	0.464169	22.9089	11
2018	68	0.428567	2	2	2	56	12	7	1	1	0.036926	1.618446	0.463561	22.57441	11
2017	68	0.274037	2	2	2	56	12	7	1	1	0.039619	1.693658	0.601046	22.33678	11
2016	68	0.162522	2	2	2	56	12	7	1	1	0.085728	1.624981	0.502429	22.33246	11
2020	69	0.610115	1	1	3	57	13	8	2	1	-0.05991	0.97565	0.408216	20.26269	11
2019	69	0.579959	1	1	3	57	13	8	2	1	0.016644	0.929877	0.396947	20.56793	11
2018	69	0.555934	1	1	3	57	13	8	2	1	-0.00577	0.895442	0.442994	20.49211	11
2017	69	0.53702	1	1	3	57	13	8	2	1	-0.01154	0.879322	0.474657	20.52554	11
2016	69	0.495323	1	1	3	57	13	8	2	1	-0.01655	0.886619	0.521453	20.29263	11
2020	70	0.208957	3	3	5	43	15	6	2	1	-0.30029	0.300999	0.560306	20.22665	11
2019	70	0.09465	3	3	5	43	15	6	2	1	0.05241	0.165032	0.484514	20.50067	11
2018	70	0.102252	3	3	5	43	15	6	2	1	0.092029	0.164786	0.465765	20.56967	11
2017	70	0.109594	3	3	5	43	15	6	2	1	0.103742	0.162756	0.404721	20.58291	11
2016	70	0.100952	3	3	5	43	15	6	2	1	0.14628	0.16822	0.383146	21.00715	11

Questionnaire Used for Conducting Survey to Measure Management Behaviour on Capital Structure Choices

This questionnaire is related to the study titled "**An Empirical Study of the Impact of Management Behaviour on Capital Structure: Evidence from Dhaka Stock Exchange Ltd.**" for the degree of Master of Philosophy in Finance, University of Dhaka.

I assure that the information collected through this survey will be kept confidential and used only for academic purposes. It will not be disclosed and shared to others and they will be anonymous.

I. DEMOGRAPHICS

1. Your job title: _____ (e.g., CEO, CFO and Chairman)

2. How long have you worked in your current position? _____ years

3. How long have you worked for your current firm? _____ years

4. Gender:

☐ Male

☐ Female

5. Graduate Degree:

☐ MBA

☐ Non-MBA Masters

☐ > Masters

☐ None

6. Are you the founder or heir of the firm?

☐ Yes

☐ No

II.   **LIFE ATTITUDES**

These questions are standard and are included for a specific purpose. Please answer according to your own feelings, rather than how you think "most people" would answer.

7. In uncertain times, I usually expect the best.

☐ I agree a lot

☐ I agree a little

☐ I neither agree nor disagree

☐ I disagree a little

☐ I disagree a lot

8. It's easy for me to relax.

☐ I agree a lot

☐ I agree a little

☐ I neither agree nor disagree

☐ I disagree a little

☐ I disagree a lot

9. If something can go wrong for me, it will.

☐ I agree a lot

☐ I agree a little

☐ I neither agree nor disagree

☐ I disagree a little

☐ I disagree a lot

10. I'm always optimistic about my future.

☐ I agree a lot

☐ I agree a little

☐ I neither agree nor disagree

☐ I disagree a little

☐ I disagree a lot

11. I enjoy my friends a lot.

- ☐ I agree a lot
- ☐ I agree a little
- ☐ I neither agree nor disagree
- ☐ I disagree a little
- ☐ I disagree a lot

12. It's important for me to keep busy.

- ☐ I agree a lot
- ☐ I agree a little
- ☐ I neither agree nor disagree
- ☐ I disagree a little
- ☐ I disagree a lot

13. I hardly ever expect things to go my way.

- ☐ I agree a lot
- ☐ I agree a little
- ☐ I neither agree nor disagree
- ☐ I disagree a little
- ☐ I disagree a lot

14. I don't get upset too easily.

☐ I agree a lot

☐ I agree a little

☐ I neither agree nor disagree

☐ I disagree a little

☐ I disagree a lot

15. I rarely count on good things happening to me.

☐ I agree a lot

☐ I agree a little

☐ I neither agree nor disagree

☐ I disagree a little

☐ I disagree a lot

16. Overall, I expect more good things to happen to me than bad

☐ I agree a lot

☐ I agree a little

☐ I neither agree nor disagree

☐ I disagree a little

☐ I disagree a lot

17a. Suppose you are the only income earner in your family. Your doctor recommends that you move because of allergies. You have to choose between two possible jobs (choose one).

☐ 100% chance that the job pays your current income for life (please answer 11b, ignore 11c)

☐ 50% chance that the job pays twice your current income for life and

☐ 50% chance that the job pays 2/3 your current income for life (please answer 11c, ignore 11b)

17b. Which job would you choose if the choices were instead:

☐ 100% chance that the job pays your current income for life

☐ 50% chance that the job pays twice your current income for life and

☐ 50% chance that the job pays 4/5 your current income for life

17c. Which job would you choose if the choices were instead:

☐ 100% chance that the job pays your current income for life

☐ 50% chance that the job pays twice your current income for life and

☐ 50% chance that the job pays 1/2 your current income for life

18. Would you rather win 10,000 TK now or win 13,000 TK a year from now?

☐ 10,000 now

☐ 13,000 a year from now

☐ Indifferent between the two

19. Would you rather lose 10,000 TK now or lose 13,000 TK a year from now?

☐ 10,000 now

☐ 13,000 a year from now

☐ Indifferent between the two

20. My age is: _____

III.   COMPANY RELATED

21. Amongst the management team, who has most of the input in the following policies?

Capital Structure

☐ I make decision without help from others

☐ Share decision equally with others

☐ Others make decision

Payout Capital Investment

- ☐ I make decision without help from others

- ☐ Share decision equally with others

- ☐ Others make decision

Allocating capital across divisions

- ☐ I make decision without help from others

- ☐ Share decision equally with others

- ☐ Others make decision

Mergers and Acquisitions

- ☐ I make decision without help from others

- ☐ Share decision equally with others

- ☐ Others make decision

22. Are you more aggressive in your personal or business investment decisions?

- ☐ Personal

- ☐ Same

- ☐ Business

23.   Your   Name: _____

24. Company Name: _____

25. Do you have any other comments?

_____

_____

_____

_____

_____

_____

26. Check if you would like to receive a copy of this study.

☐   Yes, I would like to receive a copy

(We need your email or postal address if you want a copy)

_____

_____

_____

_____.

Any queries? Please e-mail tanzida.akter@gmail.com

Thank you very much for your participation and feedback.