ISSN 2989-0705 (Online)|Vol 2|Issue 1|January 2024

Impact of Cost of Capital on Share Price: Evidence from Manufacturing Sector Companies Listed in the Colombo Stock Exchange

Gineshi Charuka Diwakara[1], Nalinda Nuwan[1*]

[1]School of Management, Business Management School (BMS), Sri Lanka

[*]nalinda.n@bms.ac.lk

Abstract

Accounting and finance researchers place great importance on capital market and behavioural studies. Investors are looking at these accounting-based capital market researches to observe and use accounting information using primary and secondary data to make investment decisions in the stock market. This study aims to outline important variables that affect share prices in the Colombo Stock Exchange (CSE). This study's primary goal is to ascertain the connection between the Cost of Capital (COC) and share prices of Sri Lankan manufacturing sector businesses in the Colombo Stock Exchange. The dependent variable in this study is the share price, whereas the independent variables are the firm's Cost of Equity (COE), Cost of Debt (COD), and Weighted Average Cost of Capital (WACC), which are all Cost of Capital components. Data was gathered from selected manufacturing sector firms, listed by the CSE. Descriptive, correlational, and regression analysis were employed and the findings showed that manufacturing businesses' Weighted Average Cost of Capital, Cost of Debt and Cost of Equity had a significant association with the share price. Therefore, investors should take these aspects into account before trading and investing funds in shares. The investors should consider the weighted average Cost of Capital and Cost of Equity of a manufacturing sector firm in predicting future trends in share prices in the capital market in order to make productive investment decisions.

Keywords: Cost of Capital, Share Price, Weighted Average Cost of Capital, Manufacturing Sector

1. Introduction

1.1 Background of the study

Financial performance is one of the measurement tools of management for directing a business. Mainly, financial management practices focus on four broader concepts: short-term investment, long-term investment, financing mix, and dividend policy. Companies can select and invest in the best alternative by considering short-term and long-term investment opportunities. Investors' perspectives always accept positive returns on the investment, in which they have already invested (Rasool & Ullah, 2020). To fulfil the above objectives of the two parties, any firm has to follow methods that maximize firm value, while minimizing the overall cost of the organization.

The capital structure shows the allocation of various long-term capital components. These choices have come to be seen as the most crucial ones that a company must make over time, because the firm's Cost of Capital, net profit, earnings per share, dividend pay-out ratio, and the liquidity situation are all impacted by the capital structure. These elements, together with several other variables, combine to influence a company's Share Price (SP). The weighted average of this return, which considers both the Cost of Debt and the Cost of Equity, is known as the COC. This COC is used by businesses as a standard for evaluating operations and placing values on investments (Baker & Wurgler, 2015). A reduced COC, similar to the COE, raises the current value of a business's future cash flows, which can lead to an increased SP. A company cannot continue if the rate of return is not greater than the COC; as a result, shareholders will move on to another company where they can reap greater rewards.

At present, there are small-scale, medium-scale, and large-scale businesses spread in the business world. The capitalization amount decides the capacity of the business, which can expand the business activities. The success of the business can be measured using the value

of the firm as a comparative figure. Most researchers have been investigating the factors which affect the SP of the firm. In general, financial costs are heavily associated with the financing mix of the company. Colombo Stock Exchange has ranked the listed companies giving priority to their market capitalization value. According to the Sri Lankan economy, higher capitalization means the company already financed their resources among various financing sources at an optimum level. Consequently, these companies can create some competition in the business environment. The idea of the SP reflects the strength to change investors' minds about whether to invest or remove the invested fund from the company. Therefore, the study is to examine the effect of COC on SP in Manufacturing Sector Companies (MSC).

1.2 Rationale

The current study will aid in identifying most of the influential factors by evaluating to what extent the COC of the firm influences the market value of the SP. This question should be answered by researching the current status of Manufacturing Sector Companies (MSC). These investigations have all been conducted in affluent nations with cutting-edge trading systems. This isn't the case in developing economies, if there is a high level of capital market imperfections (agency costs and informational asymmetries), inadequate access to internal financing, expensive financing, or inaccessibility to the capital markets. However, minimal attention has been given to this field in the Sri Lankan manufacturing sector. Furthermore, contemporary research in this area in the context of Sri Lanka has been more difficult to identify.

1.3 Research Aim & Objectives

The aim of this research is to examine the impact of the COC on Share Price with reference to the Manufacturing Sector Companies listed on the Colombo Stock Exchange.

These are the specific objectives of this study:

1. To identify the determinacies of COC and SP of a company.
2. To study the relationship between COC and Share price in the manufacturing sector.
3. To draw conclusions based on results and make relevant recommendations.

1.4 Scope

There are 289 companies listed in the CSE. 36 Manufacturing sector companies have been randomly selected for this study. The study's scope includes, how the COC's components of WACC, COE, and COD affect the SP in listed companies in the manufacturing sector.

2. Research Design

2.1 Theoretical Framework

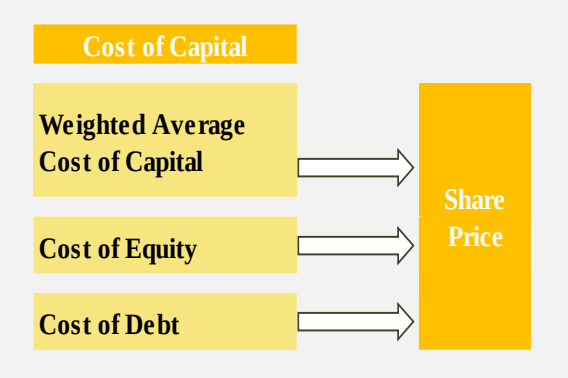

Figure 1. The Conceptual Framework.

WACC, COE, and COD of the firm are the independent variables in this study, and the dependent variable is the SP of the firm.

2.2 Hypothesis

According to Rashidirad, Soltani, and Syed (2013), the three main categories of hypotheses are positive pricing effect, negative price effect, and no-price effect. To accomplish the stated goals of the study, this research instead creates the following hypotheses based on the literature.

H1 – There exists an association between WACC and SP.

H2 – There exists an association between COE and SP.

H3 – There exists an association between COD and SP.

2.3 Methodology

2.3.1 Research Method

The quantitative mono method has been chosen as it best fits the nature of this investigation. The purpose of choosing the mono-method quantitative research method is to better understand the relationships, between the variables of this study. A survey is used as the research strategy.

2.3.2 Population and Sampling

The target population of the study is financial professionals (Finance, Accounting and Audit related staff employees) who are currently working in MSC in the listed companies in the CSE. MSC-listed companies were alphabetised and 12 companies were randomly selected. A minimum of 3 financial professionals from each company were selected from each company (including managers, executives, and staff employees). A survey requires a minimum of 30 responses in order to be valid, the data for this study was gathered using 36 responses from the listed manufacturing businesses.

2.3.3 Data Collection

A questionnaire was used to gather primary data, and the questionnaire was distributed among the randomly selected, listed manufacturing sector companies in the CSE.

2.3.4 Data Analysis

The statistical software for the research data analysis, SPSS and Microsoft Excel were used to analyse the information gathered from the sample of respondents.

2.3.5 Pilot Study

The researcher conducted a pilot survey with 16 employees of randomly selected companies. The pilot study was successful base on the respondents' feedback.

3. Analysis and Findings

3.1 Demographic Data

As shown in Table 1, most of the respondents were executives and associate analysts. 86% of the respondents were currently working in accounting or finance divisions. 39% of the respondents have an educational qualification of a Master's degree with more than 6 years of professional experience.

Table 1. Demographic Data

Demographic Characteristics		Response Frequency	As a percentage	Cumulative Percentage
Designation	Manager Level	6	16.7%	16.7%
	Executive Level	18	50.0%	66.7%
	Associate Analyst	9	25.0%	91.7%
	Assistant	3	8.3%	100.0%
Department	Finance	13	36.1%	36.1%
	Accounting	18	50.0%	86.1%
	Audit	5	13.9%	100.0%
	Supply chain	0	0.0%	0.0%
Year of Experience	0 - 2	4	11.1%	11.1%
	3-5	7	19.4%	30.5%
	6-10	12	33.3%	63.8%
	11-above	13	36.1%	100.0%
Highest Education Qualification	Masters	14	38.9%	38.9%
	Bachelors Degree	12	33.3%	72.2%
	Diploma / HND	2	5.6%	77.8%
	Charted Accounting	8	22.2%	100.0%

3.2 Overview of COC

Descriptive statistics were calculated for three independent variables and the study's dependent variable. Respondents were asked to indicate their answers on a 5-point Likert scale and the mean value and standard deviation were calculated.

3.3 Relationship between COC and SP

Correlation analysis was done to determine the relationship between the independent variables of WACC, COE and COD; and the dependent variable of SP. In this study, correlation analysis and bivariate analysis are conducted through SPSS 25 to measure the relationship between independent variables such as WACC, COE and COD, and the dependent variable, SP.

Table 2. Correlation Statistics

Correlations	WACC	COE	COD	SP
WACC	1			
COE	.384*	1		
COD	0.264473	.712**	1	
SP	.532**	.544**	.487**	1

**. Correlation is significant at the 0.05 level (2-tailed).*
***. Correlation is significant at the 0.01 level (2-tailed).*

According to Table 2, the Pearson Correlation of WACC is 0.532 which reveals a positive moderate relationship between share price and the WACC. COE shows a Pearson correlation of 0.544 which is also a moderate relationship between share price and COE. Accordingly, the Pearson correlation of COD reflects 0.487 which shows a positive moderate relationship between the COD and share price. However, the P value of the WACC and Share Price is 0.001 which reveals the relationship is significant. The P value of the COE and share price is 0.001 and the same reflects a significant relationship. Finally, the COD and share price also reflects a significant relationship as the P value is 0.003. The accepted level of P value to identify a relationship between two variables as significant is 0.05.

The results of the current study show a positive association between WACC and share price, which essentially suggests that a firm's WACC would positively affect the share price. The research results of Bhattarai (2015); Malhotra and Tandon (2013); Enow and Brijlal (2016); Sukhija (2014); Hossain, Ibrahim and Uddin, (2020) corroborate this conclusion. Additionally, the current study finds that WACC is a significant component in MS companies and findings from Geetha and Swaaminathan (2015); Sukhija (2014); Hossain, Ibrahim and Uddin, (2020) lend credence to this conclusion.

The findings suggest that the firm's COE will have a positive impact on the share price. The results of Bhattarai (2015); Malhotra and Tandon (2013); Arshad et al., (2015); Enow and Brijlal (2016); Sukhija (2014) are in favour of this conclusion. Additionally, their research indicates that the current study's COE is an important determinant. However, it was determined by Hossain, Ibrahim and Uddin, (2020) that the COE is not that significant to publicly traded companies.

This study found a positive association between COD and the share. This outcome suggests that the firm's COD will have a favourable impact on the share price. The findings of Bhattarai (2015); Valta (2012) corroborate this conclusion.

3.4 Impact of COC on SP

Regression analysis is used to evaluate the association among one or more independent variables and dependent variables (McLeod, 2019). Mainly regression analysis helps to identify the impact of WACC, COE, and COD on Share price.

Table 3. Model Summary

Model Summary[b]				
R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.663[a]	0.44	0.388	0.35124	1.39

a. Predictors: (Constant), COD, WACC, COE
b. Dependent Variable: SP

The hypothesis that the residuals are not linearly auto-correlated is tested using Durbin-Watson's and values should typically be 2 to demonstrate the absence of auto-correlation in the data. This study's Durbin-Watson value is not equal to 2, which means there is no auto-correlation.

The explanatory power of the regression analysis, or R-square value, shows how well the dependent variable is explained by the independent variables. R-square values below 0.2 are regarded as poor explanations, between 0.2 and 0.4 as moderate explanations, and over 0.4 as a strong justification. This study's R-square is 44%, which means SP is explained at 44% by the chosen 3 variables of COC.

Table 4. ANOVA table

ANOVA[a]	Sum of Squares		Mean Square		Sig.
Regression	3.104	3	1.035	8.387	.000[b]

a. Dependent Variable: SP
b. Predictors: (Constant), COD, WACC, COE

Table 4, indicates an overall < 0.05 significant level, which means it has an overall impact of WACC, COE, and COD on SP in the manufacturing sector listed companies. The second objective of this study is satisfied from this result but the past scholars stated that there is no association of COC and SP in the service sector (Sondakh, 2019; Michael, 2016; Al-Shawawreh, 2014).

Table 5. Coefficient statistics

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.378	0.71		0.532	0.598
WACC	0.403	0.151	0.381	2.662	**0.012**
COE	0.239	0.19	0.248	1.262	0.216
COD	0.233	0.209	0.21	1.114	0.274

a Dependent Variable: SP

According to Table 5, there is only one dimension that has a <0.05 significant value, which means only WACC has a relationship with SP since the significant value is 0.012. A association between WACC and SP has been proven by Jahfer and Mulafara (2016) and Asif, Arif and Akbar (2016) also supported this association from their empirical research conducted in the Pakistan stock exchange. Some past scholars Almumani, (2014); Vijitha and Nimalathasan, (2014) stated that there is no relationship between WACC and SP.

3.5 Hypothesis Testing

Table 6. Hypothesis test results

Variable	Test Value	Test Result
WACC	0.000	H_1 : Accepted
COE	0.000	H_2 : Accepted
COD	0.000	H_3 : Accepted

H_1; There is a relationship between WACC and SP

The Sig. value of the two variables is 0.000 and the relationship between the two variables is significant. Therefore, Hypothesis 1 is acceptable which means there is a relationship between WACC and SP. This outcome is supported by Renaldi, Pinem and Permadhy, (2020). Their study shows that a greater WACC can increase a firm's market worth. The cost of equity and the cost of debt are typically included in WACC. Some capital structure theories contend that WACC harms business value. But the point is that the majority of businesses get money through debt and equity. The demand for shares or any other securities increases, if the firm pays investors a higher value. Consequently, the company's SP rises on its own depending on the country's economy, industrial changes, organisation background and other external factors. The WACC results are in contradiction with the study by Al Salamat and Mustafa, (2016). which shows that the COC and the capital structure are adversely correlated with the SP.

H_2; There is a relationship between COE and SP

According to the analysis performed in this study, the Sig value is 0.000, which means Hypothesis 2 is acceptable. The higher the equity, the lower the firm's chance of insolvency, suggesting superior financial soundness. These results support Jahfer and Mulafara, (2016) findings, which showed that the COE was significantly positively related to

the SP. Investors utilise high equity capital to determine the overall indicator of a company's financial health, decide which companies to invest in, and arrive at investment decisions. As a result, SP will rise, however, the foreign exchange fluctuations, government rules and regulations regarding the tax, and political instability affect the Sri Lankan economy and have a significant impact on the SP in listed companies in CSE.

H_3; There is a relationship between COD and SP

According to the analysis performed in this study, the Sig value is 0.000, which means, Hypothesis 3 is acceptable.

4. Discussion & Conclusion

4.1 Discusion

The three primary theories in the field of financial management are COC, Capital structure, and SP. Numerous ideas and influences exist, and these theories serve as a basis for understanding or making the best attempts to attain an ideal capital structure. However, financial management's position is always evolving, and this makes money management tasks more significant than just being a fundraiser. The ultimate goal of financial management is to increase owners' wealth, which is represented by the company's market value.

Additionally, the data analysis results showed a favourable correlation between the firm's share price and its WACC, COE, and COD. This suggests that the variables are positively correlated and related to each other and WACC, COE and COD have a significant relationship with the SP in manufacturing sector listed companies. This study found that SP is mainly affected by the debt-to-equity ratio when considering the factors of WACC. Since the equity increases, the debt-to-equity ratio also increases, which will have a favourable impact on the firm’s equity capital and SP, COE and COD have a significant impact on SP. The arguments favour accepting Hypotheses 1, 2 and 3. Finally, it can be deduced that there is a positive association between the debt-to-equity ratio (WACC) and the share price of firms in the manufacturing sector listed companies in Sri Lanka.

Previous studies have discovered that elements other than financial management actions have a substantial impact on the firm's SP. Sound business decisions should essentially increase the SP value of the company. The 12 manufacturing companies that were listed on the Colombo Stock Exchange as of April 30, 2023, were used in the study to determine the behaviour of the association between WACC, COE, COD and SP. The data analysis results indicate a favourable correlation between independent factors and a company's share price. The majority of firms, according to the data gathered, have already given the WACC, COD, and COE some thought. As a result, some businesses must pay excessive costs for their financing sources.

The CSE has 289 companies representing 19 GICS industry groups as at 30th April 2023. Out of the total population of 32 manufacturing companies the researcher only obtained data from 12 companies’ financial professionals, this means that data for 20 companies was not used in the study. This might have an impact on the validity of general population-related study outcomes.

It was proposed that the current study may be expanded to include longer periods by future research, increase firm selection and increase independent variables. The linear relationships between the variables were the main emphasis of this study, however non-linear correlations between the variables might potentially be included in future research. Additionally, other multivariate statistical forecasting models might be used to confirm the findings in future studies.

4.2 Conclusion

Finance officers of publicly traded firms in the manufacturing sector should think about measures to boost a company's profitability by considering the weighted average cost of capital, since the study has found that there is a significant association between the debt-to-equity ratio and the firm’s share price. When the firm’s equity is getting high the debt-to-

equity ratios also become high which directly impacts the firm's equity capital according to this study's findings. The investors pay attention to this factor which directly impacts the company's SP increase.

Based on the results of this study, it is recommended that investors should consider the weighted average cost of capital and Cost of Equity of a manufacturing sector firm in predicting future trends in share prices in the capital market and making productive investment decisions. In addition to the firm's WACC and debt-to-equity ratio, investors should be aware of the book value of the share, dividend cover, return on assets, and return on equity, since investors may be assured of safer investments as a result.

Acknowledgements

I would like to extend my thanks to all the financial professionals from the manufacturing sector listed companies who provided valuable information.

References

Al Salamat, W. A., & Mustafa, H. H. (2016). The impact of capital structure on stock return: Empirical evidence from Amman Stock Exchange. *International journal of business and social science*, 7(9), 183-196.

Almumani, M. A. (2014). Determinants of equity share prices of the listed banks in Amman stock exchange: Quantitative approach. *International Journal of Business and Social Science*, 5(1).

Al-Shawawreh, F. K. (2014). The impact of dividend policy on share price volatility: Empirical evidence from Jordanian stock market. *European Journal of Business and Management*, 6(38), 133-143.

Asif, M., Arif, K., & Akbar, W. (2016). Impact of accounting information on share price: Empirical evidence from Pakistan stock exchange. *International Finance and Banking*, 3(1), 124-135.

Baker, M., & Wurgler, J. (2015). Do strict capital requirements raise the cost of capital? Bank regulation, capital structure, and the low-risk anomaly. *American Economic Review*, 105(5), 315-320.

Bhattarai, K. (2015). *Financial deepening and economic growth. Applied Economics*, 47(11), 1133-1150.

Enow, S., & Brijlal, P. (2016). *Determinants of share prices: the case of listed firms on Johannesburg Stock Exchange*.

Geetha, E., & Swaaminathan, T. M. (2015). A study on the factors influencing stock price A Comparative study of Automobile and Information Technology Industries stocks in India. *International Journal of Current Research and Academic Review*, 3(3), 97-109.

Hossain, M. M., Ibrahim, Y., & Uddin, M. M. (2020). Finance, financial literacy and small firm financial growth in Bangladesh: The effectiveness of government support. *Journal of Small Business & Entrepreneurship*, 1-26.

Jahfer, A., & Mulafara, A. (2016). Dividend policy and share price volatility: Evidence from Colombo stock market. *International Journal of Managerial and Financial Accounting*, 8(2), 97-108.

McLeod, S. (2019). *Qualitative vs Quantitative Research: Methods & Data Analysis.*

Michael, A. (2016, May). Financial impact of price volatility on the oilfield services sector of the petroleum industry. *In SPE/IAEE Hydrocarbon Economics and Evaluation Symposium*. OnePetro.

Rashidirad, M., Soltani, E., & Syed, J. (2013). Strategic alignment between competitive strategy and dynamic capability: Conceptual framework and hypothesis development. *Strategic change*, 22(3-4), 213-224.

Rasool, N., & Ullah, S. (2020). Financial literacy and behavioural biases of individual investors: empirical evidence of Pakistan stock exchange. *Journal of Economics, Finance and Administrative Science*, 25(50), 261-278.

Renaldi, J. Y., Pinem, D. B., & Permadhy, Y. T. (2020). Analysis of factors affecting the value of manufacturing industry companies in the Indonesian Stock Exchange (IDX). *European Journal of Business and Management Research*, 5(1).

Sondakh, R. (2019). The effect of dividend policy, liquidity, profitability and firm size on firm value in financial service sector industries listed in Indonesia stock exchange 2015-2018 period. *Accountability*, 8(2), 91-101.

Sukhija, S. (2014). An Explicit Model on Fundamental Factors Affecting Stock Prices of BSE Listed Companies in India: An Inter Industry Approach. *European Journal of Business and Management*, 6(37), 196-202.

Tandon, K., & Malhotra, N. (2013*)*. Determinants of stock prices: Empirical evidence from NSE 100 companies. *International Journal of Research in Management & Technology*, 3(3), 2249-9563.

Valta, P. (2012). Competition and the cost of debt. *Journal of financial economics*, 105(3), 661-682.

Vijitha, P., & Nimalathasan, B. (2014). Value relevance of accounting information and share price: A study of listed manufacturing companies in Sri Lanka. *Merit Research Journal of Business and Management*, 2(1), 1-6.