



The impact of Capital Structure on Financial Performance in Capital Goods Companies Listed in CSE Sri Lanka

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ABSTRACT

This study aimed to establish; the impact of the capital structure on firms' financial performance of capital goods sector listed CSE in Sri Lanka. The study developed secondary data consisting of audited financial statements of 22 companies at the CSE, Totaling 33 firms for five years (2015 to 2019). The study was to examine the nature of the relationship between capital structure and financial performance of capital goods companies listed in CSE Sri Lanka from 2015 to 2019. Debt to Equity and Debt Ratio represented capital structure proxies; Gross Profit, Net profit, Return on Equity, and Return on Capital Employed represented financial performance. The study was attached to the positivism paradigm and guided by the following capital structure theories: static trade-off theory, pecking order theory and agency theory.

The study concern descriptive and inferential statistical methods to analyze the data and multiple regressions were applied to establish the extent of the impact of the capital structure on firms' financial performance of the capital goods sector. In contrast, correlation and multiple regression were used to analyze the relationship between capital structure and firm performance. The study concluded that it established a significant negative correlation between capital structures and financial performance indicators of GP, NP, and ROE and positively correlated with ROCE. The financial performance, it was recommended that firms invest in easily to re-locatable and quality. Future the studies to investigate other factors that account for variability in financial performance on the relationship between the capital structures of the capital goods sector in Sri Lanka

Keywords: agency theory, capital structure, Colombo stock exchange, financial performance, pecking order theory, static trade-off theory

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1. Introduction

The companies properly conduct their businesses by making decisions, such as Financing decisions, investing decisions and dividend decisions. The great pressure on domestic and international firms is balancing the risk and cost of capital structure. An organization's capital structure defined as an organization that can finance through equity and debt sources and the proportionate combination of equity and debt. (Sudharika et al., 2019). Capital structure is imperative for a firm's survival and growth, as it plays a primary

role in its financial performance to achieve its long-term goals and objectives. (Martis, 2013). According to Atseye (2013), in some continent, the financial support often by the government to allow to kick-start and sustain their day-to-day operation of the business firms. The Modigliani-Miller (MM) theorem accepted the capital structure theory because many researchers (Gupta et al, (2010), Morri et al, (2008), Javed et al (2014), and Riaz et al, (2015)) Used that theory. In the various assumption such as no taxes, rational investors, perfect competition, absence of bankruptcy costs and efficient market to operate beneath perfect market of the capital structure theories. Capital structure plays an important role in determining the risk level of the company, which is in particular the financial risk as such risk depends on the types of securities issued (Hamidon, et al 2015). The company's financial performance disclosed through the financial statements that the companies have issued for a certain accounting period. Further, the Miller and Modigliani suggestions are only binding in an assured theoretical context and have in research been found to have empirical support.

The financial ratio is the tool used to determine the level of efficiency and measure the level of profits achieved by the particular company in an accounting period. This study use the following four measures of financial performance: GP margin, NP, ROA, and ROCE. Gupta et al. (2010) pointed out that the impact of capital structure on firms' financial performance has continued to keep researchers pondering. Thus, capital structure is directly related with the financing decision of the company. Primarily, it consists of the debt and equity used to finance the firm.

Many researchers have found that a company's capital structure and its impact to performance, is highly dependent upon context-related issues, such as the company's industry, strategy, growth or country. (Arulvel et al, 2013; Hamidon, et al, 2015; Nirajini et al, 2013; Sudharika et al., 2019).

Research problem

This study examines the impact of a firm's capital structure on the financial performance in the case of the capital goods sector of CSE. The data collected from CSE listed capital goods companies were use in the study. This study enhances the knowledge of the optimal capital structure. It leads the companies to take efficient financial performance in growing situations—lack of studies in developing countries like Sri Lanka but many kinds of research already conducted in developed countries. Further, the deviation among those kinds of literature will be conducted and analyse in the topic.

Research questions

Base on the research problem the following research questions are raised for the study,

- I. What is the nature of relationship between capital structure and financial performance of capital goods companies listed in CSE Sri Lanka during the period from 2016 to 2020?
- II. What is the impact of capital structure on financial performance of capital goods companies listed in CSE Sri Lanka during the period from 2016 to 2020?

Objectives of the study

Based on the research questions raised above, the following objectives are formulated for the study,

- I. To examine the nature of relationship between capital structure and financial performance of capital goods companies listed in CSE Sri Lanka during the period from 2015 to 2019.
- II. To identify the impact of capital structure on financial performance of capital goods companies listed in CSE Sri Lanka during the period from 2015 to 2019.

Scope of the study

The purpose of this research is to identify the impact of the capital structure and firms' financial performance of capital goods companies listed in CSE Sri Lanka during the period from 2015 to 2019. Capital structure is the independent variable, financial performance is the dependent variable in this research. There are 30 capital goods companies' in CSE but researcher select 22 capital goods companies' in CSE. Research has been utilized secondary data based on availability with five years period on 2015 to 2019.

Significance of the study

The research is intended to identify the impact of the capital structure and firms' financial performance of capital goods companies listed in CSE Sri Lanka during the period from 2016 to 2020. Hence the research findings are encouraging the firms with problem in raising funds to implement finding to better financing decisions, and to put mechanisms in place to curtail problem associated with it. Help address issues of capital structure to boost investor and other stakeholder's confidence in the firms and to encourage investing in this sector. Help to find out on the statement that firms rely more on debt financing than equity financing in order to demonstrate due diligence and confidence to their stake holders, by putting in place appropriate controls in policy making and implementation. Serve as a source of evaluation for further research in to capital structure studies.

2. Literature Review

Capital Structure

Capital structure is the composition of equity and the company's debt used as the finance of the company. The decision about the composition of capital structure is very hard for the companies, and it is an important topic for the scholars of accounting and finance. The overall objective of the companies is to reduce the cost of capital when capital structure decision has taken into account, so that value maximizations of the companies. Many types of research define capital structure in different ways.

According to (Riaz & Khan 2015), the Capital structure is the strategy employed by a firm to finance its assets, growth and operations. Capital structure is the composite of total equity and total debt of firms. Firms can issue some securities to finance their assets; however, an appropriate combination of debt and equity (Optimal Capital Structure) is critical. It reduces the firm's cost of capital and maximizes its market worth and stock price. Firms can even attain competitive advantage if it has perfect capital structure.

The capital structure decision plays a key role in maximizing a firm's firm value and performance. The decision about capital structure occupies various sources of funds that a firm routine to finance its processes and for capital investments. These sources comprise short-term debt, long-term debt, preferred stock, and common stock or equity financing. However, all the firms do not use a uniform capital structure; they differ in their financial decisions. As a result, *Javed et al,(2014)* stated, when managers decide on the capital structure where risk and cost are minimized and can give more profits and increase shareholder wealth, it is difficult.

Further, Gharaibeh (2015) stated the Capital structure is a term used in corporate finance to describe the mix of a company's long-term debt, some short term debt, common and preferred equity. Thus, the capital structure refers to how a company finances its operations and its growth by using various accessible sources of funds (Kaplan, 2021).

Theories adopted in capital structure

Static Trade-off Theory

The Static Trade-off Theory introduced by Myers (1984) explains the rationale for using debt financing and highlighted that the decision to help borrow depends on the costs and benefits of this form of financing. According to Abor (2005), when the company can obtain optimal capital structure, financial distress costs are lower than the net tax advantage from debt financing. Furthermore, when an optimal debt-equity ratio is achieved, it can maximize shareholder wealth (Morri and Beretta, 2008). The theory also proposed that firm use more debt if debt tax advantage would enhance owners return (Amidu, 2007).

Agency Theory

Jensen and Meckling (1976) pointed out that the Agency Cost Theory can explain the capital structure decision. Their studies found out two types of conflicts that could affect the capital structure decision: between the firm's managers and shareholders and between debt and equity holders. These conflicts happen because the manager's actions are not in line with the firm's objectives, resulting in a loss in the firm's value (Kyereboah-Coleman, 2007). Thus, managers need to balance between using debt and equity as their source of financing to alleviate these conflicts.

The Pecking Order Theory

The capital structure decision explained by Pecking Order Theory instead of the Static Trade-off Theory (Myers and Majluf 1984). Sheikh and Wang (2011) states that the Pecking Order Theory applies assumptions. The first assumption is that the managers are well informed about the potential business opportunity for their firm than investors outside the firm. The manager's act on behalf of the existing shareholders to serve their best interest is the second assumption. Further, the theory explained that managers normally have a financing decision hierarchy in which they will use retained earnings before deciding to go for external financing. In deciding to go for external financing, managers will consider debt financing an alternative before equity financing (Eldomyaty, 2008). Abor (2007) point out the Equity financing is the last option since the cost of raising funds via new equity is relatively more expensive than issuing new debt.

Financial Performance

Financial performance is the ability to describe the firm's financial strength as well as reflect the firm's financial position. In management decisions based on the financial performance towards the accomplished profitability. The financial performance reflects the company's fundamental performance which will be measured by using data derived from financial statements. The statements of financial performance are made to describe the financial condition of the past and they are also used to predict the financial future. Financial performance measurement can be done with the assessment of financial ratio analysis (Nugroho, 2014). Financial ratio analysis is the basis for assessing and analyzing the achievements of the company's operations or company performance (Soelistyoningrum et al. 2011). The performance of firms can be measured in terms of growth of its size (total assets), profitability (return on assets, return on equity, earnings per share), and market-based proxies (market price per share) (Uwuigbe et al., 2018).

Empirical Studies

The previous studies found that the total debt to equity ratio has a statistically significant negative impact on return on capital employed, return on assets, earnings per share and Tobin's Q. (Sudharika et al., 2019). Pratheepkanth (2011) and Aruvel and Ajanthan (2013) point out an evidenced the relationship between capital structure, and firm performance is negative. Thamila and Aruvel (2013) researched the impact of the listed companies' capital structure and financial performance in the Colombo stock exchange using secondary data, 2007-2009. They selected 30 companies for the analysis. Net profit, return on capital employed and return on equity ratios were used as financial performance indicators. The study established a negative relationship between capital structure and financial performance.

3. Methodology

Research design

This study is an explanatory type of dissertation since there were conclusions was drawn and the degree and the nature of the relationship and impact between variables were explained.

Data sources and Collection techniques

The study collects secondary data from the company Annual reports, Interim financial reports, and Company announcements from 2015 - 2019 in CSE. The data was collected from 22 companies for five years, using data from those companies for five years. The unit of research is reported in the CSE annual report every year. Debt equity ratio, Debt to total assets ratio, Gross profit margin, Net profit margin, Return on Assets, and Return on capital employed company incorporate year extracted from the relevant annual reports.

Population and Sample

There were 30 listed companies in the capital goods Sector in CSE in Sri Lanka and the sample period of the study is five years from 2015 to 2016. From the 30 listed companies, 22 for companies have been selected considering the availability of annual reports for a five-year period.

Sampling techniques

The technique of Systematic sampling was used in this study. The sample of 22 companies was selected out of 30 companies listed in the CSE under the capital good sector.

Definition of Key terms, Concepts and Variables

Conceptual model

The Financial performance of the companies measured by the ratio analysis. The company financial statements information used to deliver methods for assessing the financial strengths and weaknesses of the firm's performance. The variables selection is primarily driven by previous studies and the data collected from the companies. The ratios of GPM, NPM, ROA and ROCE were used to measure the firm's financial performance. The capital structure as an independent variable measures the impact on a firm's performance used the ratio between DE and DT.

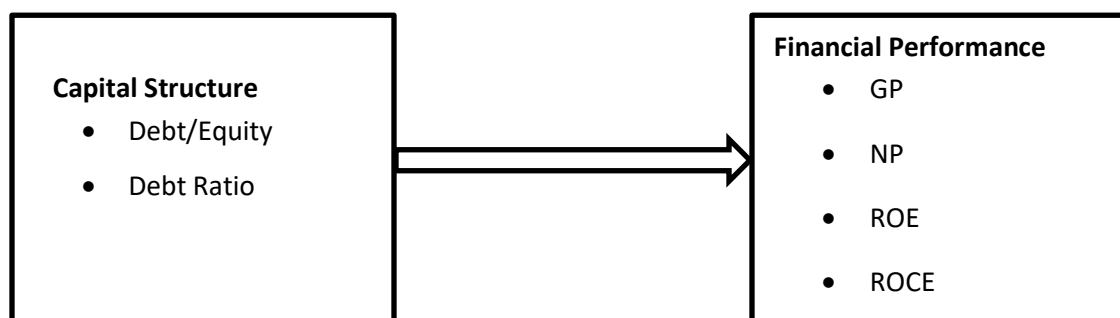


Figure 1: Author constructed

Data Analysis Tools

The study has been used "SPSS" statistical package to perform descriptive statistical analysis, correlation analysis and regression analysis for examine the relationship and the impact of capital structure on firms' performance. Descriptive analysis has been accomplished in order to deliver an overall interpretation on the data that analysed.

Table 1: Calculations of capital structure and financial performance ratios

Capital Structure	Financial Performance
$\text{Debt/Equity(DE)} = \frac{\text{Debt}}{\text{Equity}} \times 100$	$\text{Gross Profit Margin (GP)} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$
$\text{Debt Ratio (DR)} = \frac{\text{Total Debt}}{\text{Total Assets}} \times 100$	$\text{Net Profit Margin (NP)} = \frac{\text{Net Profit}}{\text{Sales}} \times 100$
	$\text{Return on Equity(ROE)} = \frac{\text{PAIT}}{\text{Total Assets}} \times 100$
	$\text{Return on Capital Employed(ROCE)} = \frac{(\text{PBT} + \text{Finance Expenses})}{(\text{Total Assets} - \text{Current Liabilities})} \times 100$

The study investigates the impact of capital structure on financial performance through performed multiple regression analysis and model is given below.

$$\text{Financial performance} = f(\text{GP}; \text{NP}; \text{ROE}; \text{ROCE}; \text{DE}; \text{and DR})$$

The impact of capital structure on financial performance measured by the following models.

$$\begin{aligned} \text{GP} &= \beta_0 + \beta_1 \text{D/E} + \beta_2 \text{DR} + e \\ \text{NP} &= \beta_0 + \beta_1 \text{D/E} + \beta_2 \text{DR} + e \\ \text{ROE} &= \beta_0 + \beta_1 \text{D/E} + \beta_2 \text{DR} + e \\ \text{ROCE} &= \beta_0 + \beta_1 \text{D/E} + \beta_2 \text{DR} + e \end{aligned}$$

Where,

- $\beta_0, \beta_1, \beta_2$ are the regression co-efficient
- GP – Gross profit
- NP – Net profit
- ROE – Return on equity
- ROCE – Return on capital employed

4. Data Analysis

Reliability and Validity of Data

Annual reports include financial data which are audited as fairly accurate and reliable. Therefore, the data considered as reliable for the study. Necessary checking and cross checking were done while scanning information and collecting from the secondary sources.

Dubin-Watson Test

The Durbin Watson statistic is a test statistic used in statistics to detect autocorrelation in the residuals from a regression analysis and the Durban Watson statistic will always assume a value between 0 and 4. A value close to 2 indicates non-autocorrelation; a value toward 0 indicates positive autocorrelation; a value toward 4

indicates negative autocorrelation. Based on the results of the study, it shows that the values of the residuals are independent since the statistics close to 2.

VIF And Tolerance

Tolerance is a tool for diagnosing multicollinearity, which happens when variables are too closely related and it is associated with each independent variable and ranges from 0 to 1. Allison (1999) notes that there isn't a strict cut off for tolerance, but suggests a tolerance of below .40 is cause for concern. Weisburd & Britt state that anything under .20 suggests serious multicollinearity in a model. This study shows that there is no multicollinearity since tolerance is 0.825.

The Variance Inflation Factor (VIF) measures the impact of collinearity among the variables in a regression model. The Variance Inflation Factor (VIF) is 1/Tolerance, it is always greater than or equal to 1. There is no formal VIF value for determining presence of multicollinearity. Values of VIF that exceed 10 are often regarded as indicating multicollinearity, but in weaker models values above 2.5 may be a cause for concern. The results of the study show that there is no multicollinearity in data since VIF is 1.212.

Results of the Descriptive Analysis

Table 2: Descriptive Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Debt Equity	110	.19	1938.47	114.586	194.553
Debt Ratio	110	.19	84.33	43.075	18.576
Gross Profit Margin	110	7.98	183.43	49.349	34.597
Net Profit Margin	110	-446.18	722.25	56.213	136.502
Return on Assets	110	-3.99	33.65	5.956	5.420
Return on Capital Employed	110	.00	90.11	13.593	11.379

The Table 2 shows that 114.59% average value for the debt equity ratio by indicating the capital goods companies are getting more of its financing by borrowing money, which subjects the company to potential risk if debt levels are too high. This is a challenge for the capital goods companies.

Average value of debt ratio is 43.08%. That is, capital goods companies have more assets than debt and it is a good sign of this sector. As per the maximum and minimum values it shows that more assets than debt in all the companies in this sample.

The average gross profit margin of the capital goods companies shows that they earn reasonable profit on sales since the value 49.34% and maximum value of 183.43% and this shows the ability of operational excellence in this sector.

The average net profit margin of the capital goods companies also shows that they earn healthy profit on income against the expenses of the company since the value is 56.21%. Investment and other income sources may be a reason for this higher net profit margin than the gross profit average. But it shows that there are some companies with negative margins by minimum value of the net profit margin.

Average values of the return on assets and return on capital employed shows that these companies are able to generate profits from its assets and capital in healthy way but it is not reasonable of the return on asset since its' average value is 5.96%. Return on capital employed is good enough since its average value is 13.59%.

Results of the Correlation Analysis

Correlation analysis is performed to find out the relationship between independent and dependent variables. Table 3 shows the results.

Table 3: Correlation Analysis

	Debt Equity Ratio	Debt Ratio	Gross Profit Margin	Net Profit Margin	Return on Assets	Return on Capital Employed
Debt Equity Ratio	1					
Debt Ratio	.418**	1				
Gross Profit Margin	-.043	-.160	1			
Net Profit Margin	-.092	-.241*	.291**	1		
Return on Assets	-.085	-.183	.051	.453**	1	
Return on Capital Employed	.207*	.363**	.020	.152	.565**	1

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

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

Results of the correlation analysis shows that there are negative relationships between debt equity ratio and all other financial performance measures (Gross profit margin, net profit margin, and return on assets) except return on capital employed. Debt ratio also represents the same relationship as debt equity ratio since all financial performance measures have negative relationships with debt ratio except with return on capital employed. Both debt and debt equity ratio have significant positive relationships with return on capital employed.

Results of the Regression Analysis

Multiple regression analysis was performed to investigate the impact of capital structure on financial performance which the model used for the study is given below.

Financial performance = f (GP; NP; ROE; ROCE; DE; and DR)

The following four models are formulated to measure the impact of capital structure on financial performance.

$$GP = \beta_0 + \beta_1 D/E + \beta_2 DR + e$$

$$NP = \beta_0 + \beta_1 D/E + \beta_2 DR + e$$

$$ROA = \beta_0 + \beta_1 D/E + \beta_2 DR + e$$

$$ROCE = \beta_0 + \beta_1 D/E + \beta_2 DR + e$$

The above table shows a comparison of the results of the regression analysis between the four models incorporated in this research study.

In these model R2 values of all four financial performances, reveal the ability of explaining the variation of each dependent variable by independent variable. That is, only 2.6% of variation in gross profit margin is explained by the debt equity ratio and debt ratio. 5.8%, 3.4% and 13.5% of variation in each financial performance measures (Net profit margin, return on assets, return on capital employed) explained by debt equity ratio and debt ratio. Rest of the percentage is not explained by the independent variables in the model since the remaining part of the variation in each financial performance is related to other variables which are not depicted in the model.

Table 4: Regression Analysis

Details	Gross Profit Margin	Net Profit Margin	Return on Assets	Return on Capital Employed
Debt Equity	.005 (.785)	.007 (.921)	.000 (.925)	.004 (.502)
Debt Ratio	-.321 (.104)	-1.802 (.019)	-.052 (.090)	.205 (.001)
Constant	62.579 (t=7.413, p=.000)	132.998 (t=4.060, p=.000)	8.239 (t=6.252, p=.000)	4.306 (t=1.646, p=.103)
R	.162	.241	.183	.368
R ²	.026	.058	.034	.135
Adjusted R ²	.008	.041	.016	.119
Durbin-Watson	1.378	1.692	1.849	1.907
F Value	1.447 (.240)	3.301 (.041)	1.862 (.160)	8.377 (.000)
Tolerance	.825	.825	.825	.825
VIF	1.212	1.212	1.212	1.212

Note: Figures in the parentheses indicate p values

An examination of the model summary in conjunction with ANOVA (F-value) indicates that the model explains the most possible combination of predictor variables that could contribute to the relationship with the dependent variables. The F values and respective p values of the model 2 and 4 shows statistically significant impact level at 5 percent level. But, in all the two models, only debt ratio has significant impact of net profit margin and return on capital employed since it is the only capital structure measure with both p values related to the net profit margin and return on capital employed are lower than 0.05. Rest of the model 1 and 4 Show that all of the corresponding F Value is insignificant in respect to their consequent P values. However, it should be noted here that there may be some other variables which can have an impact on financial performance, which need to be studied.

5. Conclusion

The impact of capital structure on financial performance of listed companies in Sri Lanka. The analysis of capital goods companies shows that DE and DT ratio is negatively correlated with the financial performance measures of Gross Profit (GP); Net Profit (NP); Return on Equity (ROE) and positively correlated with the Return on Capital Employed (ROCE).

The result of the study can contribute to identifying, how the financial performance of Sri Lankan capital goods companies be affected by their choice of capital structure, and that the management would give more importance in finding other factors that would affect the financial performance of such companies as the results exposed that other factor are affecting the financial performance of the company because of the enormous impenetrable portion by the capital structure models.

References

- Abor, J. (2005) 'The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana', *Journal of Risk Finance*, 6(5), pp. 438–445. doi: 10.1108/15265940510633505.
- Amidu, M. (2007) 'Determinants of capital structure of banks in Ghana: An empirical approach', *Baltic Journal of Management*, 2(1), pp. 67–79. doi: 10.1108/17465260710720255.
- Arulvel, K. and Ajanthan, A. (2013) 'Capital structure and financial performance: A study of listed trading companies in Sri Lanka', *ACADEMICIA: An International Multidisciplinary Research Journal*, 3(6), p. 1. doi: 10.5958/j.2249-7137.3.6.001.
- Dao, B. T. T. and Ta, T. D. N. (2020) 'A meta-analysis: capital structure and firm performance', *Journal of Economics and Development*, 22(1), pp. 111–129. doi: 10.1108/jed-12-2019-0072.

- Eldomiaty, T. I. and Azim, M. H. (2008) 'The dynamics of capital structure and heterogeneous systematic risk classes in Egypt', *International Journal of Emerging Markets*, 3(1), pp. 7–37. doi: 10.1108/17468800810849204.
- Gansuwan, P. and Önel, Y. C. (2020) 'The Influence of Capital Structure on Firm Performance: A quantitative study of Swedish listed firms', *ACADEMICIA: An International Multidisciplinary Research Journal*, 3(1), pp. 1–9. Available at: <https://doi.org/10.1080/1331677X.2019.1697720>.
- Hamidon, T.D.1* and Ranjani, R. P. C. . (2015) 'Capital Structure and Firm ' S Financial Performance : a Study of Sri Lankan Manufacturing', pp. 90–103.
- Huang, G. and Song, F. M. (2006) 'The determinants of capital structure: Evidence from China', *China Economic Review*, 17(1), pp. 14–36. doi: 10.1016/j.chieco.2005.02.007.
- Javed, T., Younas, W. and Imran, M. (2014) 'Impact of Capital Structure on Firm Performance: Evidence from Pakistani Firms', *International Journal of Academic Research in Economics and Management Sciences*, 3(5). doi: 10.6007/ijarems/v3-i5/1141.
- Jensen, M. and Meckling, W. (2012) 'Theory of the firm: Managerial behavior, agency costs, and ownership structure', *The Economic Nature of the Firm: A Reader, Third Edition*, pp. 283–303. doi: 10.1017/CBO9780511817410.023.
- Kyereboah-Coleman, A. (2007) 'The impact of capital structure on the performance of microfinance institutions', *Journal of Risk Finance*, 8(1), pp. 56–71. doi: 10.1108/15265940710721082.
- Mardones, J. G. and Cuneo, G. R. (2020) 'Capital structure and performance in Latin American companies', *Economic Research-Ekonomska Istrazivanja* , 33(1), pp. 2171–2188. doi: 10.1080/1331677X.2019.1697720.
- Martis, R.N. (2013) 'Capital Structure and Firm's Financial Performance - An Empirical Analysis of S&P500', *Master Of Finance Thesis, Van Tilburg University*.
- Martis, R N (2013) 'Capital Structure and Firm's Financial Performance - An Empirical Analysis of S&P500', *Master Of Finance Thesis, Van Tilburg University*.
- Morri, G. and Beretta, C. (2008) 'The capital structure determinants of REITs. Is it a peculiar industry?', *Journal of European Real Estate Research*, 1(1), pp. 6–57. doi: 10.1108/17539260810891488.
- Myers, S. C. (1984) 'The Capital Structure Puzzle', *The Journal of Finance*, 39(3), p. 575. doi: 10.2307/2327916.
- Myers, S. C. and Majluf, N. S. (1984) 'Corporate financing and investment decisions when firms have information that investors do not have', *Journal of Financial Economics*, 13(2), pp. 187–221. doi: 10.1016/0304-405X(84)90023-0.
- Nguyen, H. T. and Nguyen, A. H. (2020) 'The impact of capital structure on firm performance: Evidence from Vietnam', *Journal of Asian Finance, Economics and Business*, 7(4), pp. 97–105. doi: 10.13106/JAFEB.2020.VOL7.NO4.97.
- Nirajini, A., & Priya, K. B. (2013) 'Impact of Capital Structure on Financial Performance of the Listed Trading Companies in Sri Lanka', *International Journal of Scientific and Research Publications*, 3(5), pp. 1–9.
- Novyarni, N. and Ningsih, L. N. A. (2020) 'Comparative Analysis of Financial Ratios and Economic Value Added Methods in Assessing Company Financial Performance', *Advances in Economics, Business and Management Research, volume 127*, 127(Aicar 2019), pp. 137–142. doi: 10.2991/aebmr.k.200309.031.

- Obim, N., Anake, F. and Awara, F. (2018) 'Relationship between capital structure and firm ' s performance : a theoretical review Relationship between Capital Structure and Firm ' s Performance : Theoretical Review', *Journal of Economics and Sustainable Development*, 5(August), pp. 72–77.
- Pratheepkanth, P. (2011) 'Capital Structure and Financial Performance : Evidence From Selected Business Companies in Colombo Stock Exchange Sri Lanka', *Journal International refereed research*, 11(2), pp. 171–183.
- Riaz, S. (2015) (2015) 'Impact of Capital Structure on Firm ' s Financial Performance :', *International journal of Financial Research*, 10(1), pp. 78–87.
- Sheikh, J. *et al.* (2012) 'Pecking at Pecking Order Theory: Evidence from Pakistan's Non-financial Sector', *Journal of Competitiveness*, 4(4), pp. 86–95. doi: 10.7441/joc.2012.04.06.
- Soelistyoningrum, J. N. (2011) 'Pengaruh Pengungkapan Sustainability Report Terhadap Kinerja Keuangan (Studi Empiris Pada Perusahaan Yang Terdaftar Dalam Bursa Efek Indonesia)', *Diponegoro Journal of Accounting*, pp. 43–45.
- Sudharika, W. A. K. L. *et al.* (2019) 'The impact of capital s tructure on firms ' performance : E vidence from companies listed in the Hotels and Travels Sector of Colombo Stock Exchange', pp. 1–25.
- Tharmila, K. and Arulvel, K. K. (2013) 'The impact of the capital structure and financial performance : A study of the listed companies traded in Colombo stock exchange', *Merit Research Journal of Accounting, Auditing, Economics and Finance*, 1(5), pp. 106–117.
- Uwuigbe, U. *et al.* (2018) 'Sustainability reporting and firm performance: A bi-directional approach', *Academy of Strategic Management Journal*, 17(3), pp. 1–16.