

Size, Growth, Profitability and Capital Structure

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ABSTRAK. Penelitian ini bertujuan untuk memberikan bukti empiris mengenai peran profitabilitas, ukuran perusahaan serta pertumbuhan perusahaan dalam menjelaskan variabilitas struktur modal. Pengambilan sampel penelitian menggunakan metode *purposive sampling*. Sampel penelitian yang memenuhi kriteria berjumlah 34 perusahaan sektor industri barang konsumsi yang terdaftar di Bursa Efek Indonesia periode 2015-2018. Variabel independen terdiri dari profitabilitas, ukuran perusahaan serta pertumbuhan perusahaan. Dalam penelitian ini, pengujian hipotesis dilakukan dengan menggunakan regresi linear yang diolah melalui *software* SPSS. Nilai koefisien determinasi sebesar 98,58% artinya variabilitas struktur modal dipengaruhi oleh variabel profitabilitas, ukuran perusahaan dan pertumbuhan perusahaan. Berdasarkan hasil analisis regresi linier dengan tingkat signifikansi 5%, hasil penelitian memberikan bukti bahwa terdapat hubungan negatif dan signifikan antara profitabilitas dengan struktur modal serta terdapat hubungan positif dan signifikan antara pertumbuhan perusahaan dengan struktur modal. Penelitian ini juga memberikan bukti bahwa ukuran perusahaan tidak memiliki peran sebagai determinan struktur modal.

Kata kunci: pertumbuhan; profitabilitas; struktur modal; ukuran

ABSTRACT. This study aims to provide empirical evidence regarding the role of profitability, firm size and firm growth in explaining the variability of capital structure. The research sample was taken using purposive sampling method. The research sample that met the criteria was 34 companies in the consumer goods industry which were listed on the Indonesia Stock Exchange for the 2015-2018 period. The independent variables consist of profitability, company size and company growth. In this study, hypothesis testing was carried out using linear regression processed through SPSS software. The coefficient of determination is 98.58%, meaning that the variability of the capital structure is influenced by the variables of profitability, company size and company growth. Based on the results of linear regression analysis with a significance level of 5%, the results provide evidence that there is a negative and significant relationship between profitability and capital structure and there is a positive and significant relationship between company growth and capital structure. This study also provides evidence that firm size has no role as a determinant of capital structure.

Keyword: capital structure; growth; profitability; size

INTRODUCTION

Capital structure is a fundamental aspect of corporate financial decisions. Ayabe (2015) dan Ullah et al. (2020) define capital structure as a combination of debt and equity as a source of corporate financing. Another definition stated by Alipour et al. (2015) stated that capital structure is a critical financing decision for the company's financial welfare.

As one of the central finance issues, capital structure plays an essential role in financial decisions and company valuations (Le & Phan, 2017). The optimal capital structure is a capital structure that maximizes firm value and minimizes capital costs. Based on Bajaj et al. (2020) 's empirical study, a company's capital structure affects future sources of funds, risk characteristics, liquidity, cost of capital, investor returns, and company valuation. The capital structure represented by the proportion of debt and equity used shows the company's ability to meet stakeholder needs and as a tool to maintain the company's financial balance (Yildirim et al., 2018; Mangesti Rahayu et al., 2019). Determining the appropriate proportion of debt and equity can minimize the company's financial difficulties.

Wrong capital structure decisions will harm the company. The use of debt with a high proportion will increase the financial risk when the company cannot meet its obligations at maturity. When the company's condition earns low profits, a high proportion of debt use can increase the risk of financial difficulties (Mangesti Rahayu et al., 2019). A different opinion is stated by Jaisinghani & Kanjilal (2017) that the optimal level of debt use can minimize the overall cost of capital to increase the company's profitability.

Capital structure theory was first proposed by Modigliani & Miller (1958; 1963), who assumed that capital structure decisions could affect firm value by considering the tax element ((Buvanendra et al., 2017). Mangesti Rahayu et al. (2019) stated that when the company's profit or loss is low, companies with a higher proportion of equity are prone to face problems regarding cash flow, delayed dividend payments, and even experiencing dividend default. In the opposite condition, debt financing is more effective because it has a stable interest without being affected by an increase in profit. The right proportion between debt and equity will create an optimal capital structure for increasing firm value. In explaining the determinants of capital structure, the theoretical approaches used include trade-off theory and pecking order theory (Le & Phan (2017); Mishra & Dasgupta (2019); Orlova et al. (2020); Rani et al. (2019); Stamou et al. (2020)). Trade-off theory assumes that an optimal capital structure can maximize shareholder wealth, minimize bankruptcy risk, and increase firm value (Neves et al., 2020). Trade-off theory explains how companies determine the optimal proportion of debt to maximize the benefits of tax savings obtained by the company (Detthamrong et al., 2017). Pecking order theory theoretically assumes that in determining financial decisions, companies follow a hierarchical level in determining financial sources in order to minimize the problem of asymmetric information (Myer, 1984; Myers & Majluf, 1984).

The urgency of the determinants of capital structure is an interesting topic to debate in the financial literature. Much of the financial literature investigates determinants of capital structure such as profitability, firm size, and firm growth (Moradi & Paulet (2019); Matias & Serrasqueiro (2017)) but has not with consistent empirical evidence. Empirical studies conducted by Sofat & Singh (2017) dan Bolarinwa & Adegboye (2020) state a positive and significant relationship between profitability and capital structure. Judging from the trade-off theory, companies with relatively large profitability tend to have larger debt ratios because companies with enormous profitability have a low probability of bankruptcy. Another opinion expressed by Ahmed Sheikh et al. (2018), who

examined the determinants of capital structure in consumer goods sector companies listed on the Indonesia Stock Exchange from 2000 to 2009, stated that profitability proxied through return on assets (ROA) has a negative and significant relationship to capital structure. This opinion is in line with the results of research by Mangesti Rahayu et al. (2019), Lemma & Negash (2014), dan Saif-Alyousfi et al. (2020), which states that profitability has a negative and significant effect on capital structure. Pecking order theory assumes that there is a negative relationship between profitability and capital structure. Companies with a high level of profitability indicate a lower dependence on external funding so that the proportion of debt in the capital structure is relatively low (Mangesti Rahayu et al., 2019). Therefore, companies with enormous profitability will determine investment financing with retained earnings instead of using external financing. In this study, the first alternative hypothesis proposed is:

H1: Profitability has a negative and significant relationship to capital structure.

Based on an empirical study conducted by Sofat & Singh (2017) and Panda & Nanda (2020), firm size has a negative relationship to capital structure. These results are in line with the pecking order theory, which assumes that large companies have the advantage of being able to issue securities rather than using debt. Meanwhile, the results of research by Neves et al. (2020) stated that there is a positive relationship between firm size and capital structure. Meanwhile, an empirical study conducted by Lemma & Negash (2014) states that firm size has a significant positive relationship to capital structure. A trade-off theory strengthens the positive relationship between company size and capital structure decisions. Large companies are assumed to be more diversified and have relatively stable cash flows and higher profitability levels. A relatively large company has a relatively lower risk of bankruptcy, so that large companies tend to use high levels of debt. Thus, the second alternative hypothesis proposed in this study is:

H2: Firm size has a positive and significant relationship to capital structure.

The study of the determinants of capital structure was also disclosed by Daskalakis et al. (2014) and Bolarinwa & Adegboye (2020), which state a positive and significant relationship between company growth and capital structure. Another opinion expressed by Alipour et al. (2015) stated that company growth has a negative and significant relationship to capital structure. Panda & Nanda (2020) and Neves et al. (2020) state that company growth has a negative and significant effect on capital structure. Based on the trade-off theory, it shows a negative relationship between growth and debt. Higher company growth means more likely costs of financial difficulties.

On the other hand, according to the pecking order theory, growth positively impacts debt. Companies with substantial growth opportunities have access to external financing to meet their capital investment needs (Khémiri & Noubbigh, 2018). In this study, the third alternative hypothesis proposed is:

H3: Firm growth has a positive and significant relationship to capital structure.

Based on the results of the empirical study it shows inconsistent results. Therefore, further study regarding the determinants of capital structure is needed. The purpose of this study is to re-examine several differences in previous studies regarding the determinants of capital structure. Furthermore, this study extends previous research by combining three aspects: profitability, company characteristics, and company growth.

METHOD

This research belongs to the category of associative research. This type of associative research aims to identify the relationship between one variable and another (Setiawan, 2016). The study population consisted of all consumer goods sectors listed on the Indonesia Stock Exchange (IDX) in the 2015-2018 period. The research using a non-random sampling method with a purposive sampling technique. This sampling technique aims to obtain research samples according to the specified criteria. The sampling criteria are as follows: 1) All companies in the consumer goods sector listed on the IDX during the 2015-2018 period, respectively. 2) The company publishes audited financial statements or financial reports for the 2015-2018 period. 3) The company has completed financial data regarding profitability, firms' size, and firm growth during the 2015-2018 period. Based on these criteria, 34 companies were obtained as research samples.

The dependent variable in this study is the capital structure. Capital structure the optimal combination of the proportion of debt and company equity (Khémiri & Noubbigh, 2018). One of the essential indicators for proxies for the capital structure is debt to assets. Debt to an asset is a ratio that measures the percentage of debt to total assets. The higher the debt to asset value, the higher the business risk because asset funding uses more considerable debt (Sukamulja, 2019). In this study, capital structure is proxied using debt to assets (Alipour et al. (2015); Sofat & Singh (2017)). Debt to an asset is measured by comparing total debt to total assets.

The independent variables in this study are profitability, firm size, and firm growth. Profitability is an important determinant factor in capital structure decisions (Zhang & Liu, 2017). In this study, profitability is proxied by return on assets (Sofat & Singh (2017); Sohrabi & Movaghari (2020)). Return on assets shows the company's ability to generate net income using assets owned by the company. Return on assets can be defined as a comparison between net income and the company's total assets. Firm Size is a relevant factor in explaining the determinants of capital structure. Large company size will increase the company's capacity to use debt (Moradi & Paulet, 2019). In this study, firm size is measured through the natural logarithm of total assets (Neves et al. (2020); Panda & Nanda (2020)). Firm growth is an important aspect that must be considered in capital structure decisions (Sikveland & Zhang, 2020). In this study, firm growth is proxied using sales growth (Alipour et al. (2015); Pacheco & Tavares (2015)). Sales growth shows the development of performance from year to year. The company's performance is assumed to be reflected in the company's net sales value.

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The data used in this study are secondary provided by data providers, including debt to assets, return on assets, firm size, and sales growth. The secondary data was obtained through a review of financial reports published on the company website. The data collection technique is obtained through documentary studies that are sourced from relevant literature regarding capital structure. This research uses a linear regression analysis method, which is processed using SPSS software version 25. The regression model built is as follows:

$$DebtTA = \beta_0 + \beta_1ROA + \beta_2FSize + \beta_3FGrowth + \varepsilon$$

DebtTA	= Debt to Total Asset
β_0	= Intercept
β_{1-3}	= Regression coefficient
ROA	= Return on asset
FSize	= Firm Size
FGrowth	= Firm growth
ε	= Error

RESULT AND DISCUSSION

This study uses a robust standard error procedure to solve heteroscedasticity and autocorrelation in the regression model. The robust standard error is a valid procedure in regression analysis that aims to solve autocorrelation and heteroscedasticity without eliminating the presence of autocorrelation and heteroscedasticity in regression models (Gujarati and Porter, 2009). The robust standard error is used to correct or make adjustments to the regression model's standard errors so that statistical conclusions can still be made. The results of the regression model estimation are presented in the following table:

Table 1. Final Estimation of the Regression Model

Variable	Predictors	Coefficient	Standard Error	t value	P> t/
Profitabilitas (X1)	ROA	-7.7740	0.8677	-8.9598	0.000*
Firm size (X2)	Fsize	1.4194	0.7841	1.8101	0.0726
Firm growth (X3)	FGrowth	20.1174	4.2017	4.7880	0.000*
	Constant	7120.9189	980.5594	3.5954	0.005*
	Prob > F	0.0000			
	R ²	0.9858			

Source: Data processed by the author (2020)

Information: * means significant at the assumption of a significance level of 5%

Goodness of Fit Model Regresi Coefficient of Determination

Based on the results of the regression model estimation in table 2, the coefficient of determination is 0.9858 or 98.58%. So, it can be concluded that 98.58% of the determinants of capital structure can be explained through the variables of profitability, firm size and firm growth. Meanwhile, 1.42% capital structure is influenced by other variables outside the model.

Statistical Test F

From the results of data processing in the F Statistical Test, it is concluded that the variables of profitability, firm size, and firm growth simultaneously have an influence on the capital structure. This is evidenced by the value Prob> F (0.0000) lower than the significance level ($\alpha = 5\%$). Based on the results of the F statistical test, the regression model has been correctly specified.

Statistical Test t

Based on the results of the t statistical test, it proves that the profitability and firm growth variables have a significant effect on the capital structure. Meanwhile, the firm size variable is not proven to have a significant effect on capital structure. The following is a summary table of the results of the t statistical test:

Table 2. Summary of Statistical Test Results t

Variable	Predictors	t value	P> t/	information
Profitabilitas (X1)	ROA	-8.9598	0.000*	Significant
Firm size (X2)	Fsize	1.8101	0.0726	Not significant
Firm growth (X3)	FGrowth	4.7880	0.000*	Significant

Source: Data processed by the author (2020)

Information: * means significant at the assumption of a significance level of 5%

In a quantitative approach, t-test analysis analyzes the significance of the independent variables and considers the suitability of the hypothesis with the literature review. Based on the results of the t statistical estimation test, the analysis of alternative hypothesis testing can be explained as follows:

Hypothesis 1

In table 3, the t statistical test results show the value of $P > |t|$ the profitability variable is 0.0000 with the t value of -8.9598. The t value of -8.9598 indicates that the direction of the coefficient of the profitability variable is negative. P value $> |t|$ of 0.0000 < the assumption of significance level ($\alpha = 5\%$) means that the first hypothesis in this study is **accepted**. The results of the interpretation of the first hypothesis are **proven** that the profitability variable partially has a negative and significant relationship with the capital structure represented by debt to assets.

Hypothesis 2

In table 3, the t statistical test results show the value of $P > |t|$ the firm size variable is 0.0726 with a t-count value of 1.8101. The t value of 1.8101 states that the direction of the coefficient of the firm size variable is positive. At the value of $P > |t|$ The t statistical test shows the value of 0.0726 > the assumption of the significance level ($\alpha = 5\%$) means that the second hypothesis in this study is **rejected**. The results of the second hypothesis interpretation are **not proven** that the firm size variable partially has a positive and significant relationship to the capital structure variable.

Hypothesis 3

In table 3, the t statistical test results show the value of $P > |t|$ obtained from the firm growth variable of 0.0000 with a t value of 4.7880. The t value of 4.7880 states that the direction of the coefficient of the firm growth variable is positive. At the value of $P > |t|$ The t statistical test shows a value of 0.0000 < the assumption of significance level ($\alpha = 5\%$), meaning that the third hypothesis in this study is **accepted**. Meanwhile, the interpretation of the third hypothesis is **proven** that the independent variable firm growth partially has a positive and significant relationship with the company's capital structure.

Profitability and Capital Structure

The regression model estimation results and the T test results indicate that profitability and capital structure have a negative and significant relationship. This can be proven by the value of $P > |t|$ of 0.000 which indicates that it has a significant effect. The regression coefficient value of -7.7740 states that the profitability variable has a negative influence on the capital structure. significant relationship indicates that this study has sufficient evidence of profitability proxied through return on assets as a determinant of capital structure represented by debt to assets.

The results of this study are in line with the results of the study by Ahmed Sheikh et al. (2018) who analyzed the determinants of capital structure in consumer goods sector companies listed on the Indonesia Stock Exchange from 2000 to 2009 stated that profitability proxied through return on assets (ROA) has a negative and significant relationship to capital structure. This opinion is in line with the results of research by Mangesti Rahayu et al. (2019), Lemma & Negash (2014), and Saif-Alyousfi et al. (2020) stated that profitability has a negative and significant effect on capital structure. The negative relationship between profitability and capital structure is supported by the pecking order theory which assumes that companies with a high level of profitability indicate a lower dependence on external funding so that the proportion of debt in the capital structure is relatively low (Mangesti Rahayu et al., 2019). Therefore, companies with large profitability will determine investment financing with retained earnings instead of using external financing. Thus, the higher the company's profitability, the lower the proportion of debt use in the company's capital structure.

Firm Size and Capital Structure

The regression model estimation results and the T test results indicate that firm size and capital structure have a positive and insignificant relationship. This can be proven by the value of $P > |t|$ amounted to 0.0726 which indicates that it has an insignificant effect. The regression coefficient value of 1.4194 states that the firm size variable has a positive influence on the capital structure. The insignificant effect indicates that this study does not have sufficient evidence about firm size as a determinant of capital structure represented by debt to assets.

The positive and insignificant relationship between firm size and capital structure is not in line with the results of the empirical studies of Sofat & Singh (2017) and Panda & Nanda (2020) which state that firm size has a negative relationship to capital structure. The direction of the positive influence between firm size and capital structure is supported by the results of research by Neves et al. (2020) and Lemma & Negash (2014) which state that firm size has a positive influence on capital structure. According to Neves et al. (2020) large companies tend to tolerate the use of a high proportion of debt ratio. From the trade-off theory perspective, large companies are assumed to be more diversified and have relatively stable cash flows and higher levels of profitability. Large companies have higher credibility in the debt market so that the possibility of bankruptcy facing the company is lower (Bilgin & Dinc, 2019). Large companies tend to have a lower cost of debt than small companies so that companies tend to use more high levels of debt. Thus, the larger the company size, the greater the level of use of debt in the capital structure. Conversely, the smaller the size of the company, the relatively low use of debt in the capital structure.

Firm growth and Capital Structure

The regression model estimation results and the T test results indicate that firm growth and capital structure have a positive and significant relationship. This can be proven by the value of $P > |t|$ of 0.000 which indicates a significant effect. The regression coefficient value of 20,1174 states that the firm growth variable has a positive influence on the capital structure. A significant effect

indicates that this study has sufficient evidence about firm growth as a determinant of capital structure represented by debt to assets.

This positive relationship between firm growth and capital structure is in line with the results of a study conducted by Daskalakis et al. (2014) and Bolarinwa & Adegboye (2020) which state that there is a positive and significant relationship between company growth and capital structure. Daskalakis et al. (2014) stated that companies with high growth rates are more likely to spend internal funds and use debt as a good alternative in seeking additional capital. This is because increasing equity is relatively difficult and takes a relatively long time for small companies. This opinion is strengthened by the pecking order theory, which states that growth has a positive impact on debt. In fact, companies with strong growth opportunities have access to external financing to meet their capital investment needs (Khémiri & Noubbigh, 2018). Thus, the higher the company's growth rate will increase the proportion of debt use in the company's capital structure.

CONCLUSION

The results of this study provide empirical evidence about the effect of profitability and firm growth on capital structure, especially in the consumer goods industry sector. These results can be proven by the existence of a negative and significant estimate between profitability and capital structure and a significant positive estimate between firm growth and capital structure. This study also provides evidence that firm size does not have a role as one of the determinants of capital structure. However, This study only considers the aspects of profitability, firm size and firm growth as determinants of capital structure. Further research is suggested to consider the intervention aspect of economic conditions on capital structure decisions.

REFERENCES

- Ahmed Sheikh, N., et al. (2018). Article information : A dynamic approach. *Quarterly Review of Economics and Finance*, 31(1), 245–259. <https://doi.org/10.1016/j.qref.2018.07.001>
- Alipour, M., Mohammadi, M. farhad S., & Derakshan, H. (2015). Article information : Determinants of capital structure : an empirical study of firms in Iran. *International Journal of Law and Management*, 57(1), 53–83.
- Ayabe, D. K. T. E. (2015). Board composition and capital structure: Evidence from Kenya. *Management Research Review*, 38(2), 1–31. <https://doi.org/10.1108/MRR-08-2013-0185>
- Bajaj, Y., Kashiramka, S., & Singh, S. (2020). Application of capital structure theories: a systematic review. *Journal of Advances in Management Research*, 1, 1–27. <https://doi.org/10.1108/JAMR-01-2020-0017>
- Bilgin, R., & Dinc, Y. (2019). Factoring as a determinant of capital structure for large firms: Theoretical and empirical analysis. *Borsa Istanbul Review*, 19(3), 273–281. <https://doi.org/10.1016/j.bir.2019.05.001>
- Bolarinwa, S. T., & Adegboye, A. A. (2020). Re-examining the determinants of capital structure in Nigeria. *Journal of Economic and Administrative Sciences*, 1, 1–35. <https://doi.org/10.1108/jeas-06-2019-0057>
- Buvanendra, S., Sridharan, P., & Thiyagarajan, S. (2017). Firm characteristics, corporate governance and capital structure adjustments: A comparative study of listed firms in Sri Lanka and India. *IIMB Management Review*, 29(4), 245–258. <https://doi.org/10.1016/j.iimb.2017.10.002>
- Dao, B. T. T., & Ta, T. D. N. (2020). A meta-analysis: capital structure and firm performance. *Journal of Economics and Development*, 22(1), 111–129. <https://doi.org/10.1108/jed-12-2019-0072>

- Daskalakis, N., Eriotis, N., Thanou, E., & Vasiliou, D. (2014). Capital structure and size: new evidence across the broad spectrum of SMEs. *Managerial Finance*, 40(12), 1207–1222. <https://doi.org/10.1108/MF-11-2013-0325>
- Detthamrong, U., Chancharat, N., & Vithessonthi, C. (2017). Research in International Business and Finance Corporate Governance , Capital Structure and Firm Performance : Evidence from Thailand. *Research in International Business and Finance*, 42, 689–709. <https://doi.org/10.1016/j.ribaf.2017.07.011>
- Gujarati, D. N., & Porter, D. C. (2009). *Basic Econometrics* (5th ed.). McGraw-Hill/Irwin.
- Jaisinghani, D., & Kanjilal, K. (2017). Non-linear dynamics of size, capital structure and profitability: Empirical evidence from Indian manufacturing sector. *Asia Pacific Management Review*, 22(3), 159–165. <https://doi.org/10.1016/j.apmr.2016.12.003>
- Khémiri, W., & Noubbigh, H. (2018). Determinants of capital structure: Evidence from sub-Saharan African firms. *Quarterly Review of Economics and Finance*, 70, 150–159. <https://doi.org/10.1016/j.qref.2018.04.010>
- Le, T. P. V., & Phan, T. B. N. (2017). Capital structure and firm performance: Empirical evidence from a small transition country. *Research in International Business and Finance*, 42(October 2016), 710–726. <https://doi.org/10.1016/j.ribaf.2017.07.012>
- Lemma, T. T., & Negash, M. (2014). Determinants of the adjustment speed of capital structure: Evidence from developing economies. In *Journal of Applied Accounting Research* (Vol. 15, Issue 1). <https://doi.org/10.1108/JAAR-03-2012-0023>
- Mangesti Rahayu, S., Suhadak, & Saifi, M. (2019). The Reciprocal Relationship Between Profitability and Capital Structure and Its Impacts on The Torporate Values of Manufacturing Companies In Indonesia. *International Journal of Productivity and Performance Management*, 69(2), 236–251. <https://doi.org/10.1108/IJPPM-05-2018-0196>
- Matias, F., & Serrasqueiro, Z. (2017). Are there reliable determinant factors of capital structure decisions? Empirical study of SMEs in different regions of Portugal. *Research in International Business and Finance*, 40, 19–33. <https://doi.org/10.1016/j.ribaf.2016.09.014>
- Mishra, S., & Dasgupta, R. (2019). Cross-impact of leverage and firm performance: developed vs frontier bank-based economies. *Managerial Finance*, 45(8), 982–1000. <https://doi.org/10.1108/MF-09-2018-0435>
- Modigliani, F., & Miller, M. H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment: Reply. *The American Economic Review*, 55(3), 524–527.
- Modigliani, F., & Miller, M. H. (1963). Corporate Income Taxes and the Cost of Capital: A Correction. *The American Economic Review*, 53(3), 433–443.
- Moradi, A., & Paulet, E. (2019). The firm-specific determinants of capital structure – An empirical analysis of firms before and during the Euro Crisis. *Research in International Business and Finance*, 47, 150–161. <https://doi.org/10.1016/j.ribaf.2018.07.007>
- Myer, S. C. (1984). The Capital Structure Puzzle. *The Journal of Finance*, 39(3), 575–592.
- Myers, S. C., & Majluf, N. S. (1984). Corporate Financing and Investment Decisions When Firms Have Information The Investors Do Not Have. *Journal of Finance Economics*, 13(2), 187–221. [https://doi.org/10.1016/S0040-4039\(00\)91429-1](https://doi.org/10.1016/S0040-4039(00)91429-1)
- Neves, M. E., Serrasqueiro, Z., Dias, A., & Hermano, C. (2020). Capital structure decisions in a period of economic intervention: Empirical evidence of Portuguese companies with panel data. *International Journal of Accounting and Information Management*, 28(3), 465–495. <https://doi.org/10.1108/IJAIM-08-2019-0094>
- Orlova, S., Harper, J. T., & Sun, L. (2020). Determinants of capital structure complexity. *Journal of Economics and Business*, 110(August 2019), 105905. <https://doi.org/10.1016/j.jeconbus.2020.105905>
- Pacheco, L., & Tavares, F. (2015). Capital structure determinants of Portuguese footwear sector SMEs: Empirical evidence using a panel data. *Tékhné*, 13(2), 145–157. <https://doi.org/10.1016/j.tekhne.2016.04.002>

- Panda, A. K., & Nanda, S. (2020). Determinants of capital structure; a sector-level analysis for Indian manufacturing firms. *International Journal of Productivity and Performance Management*, 69(5), 1033–1060. <https://doi.org/10.1108/IJPPM-12-2018-0451>
- Rani, N., Yadav, S. S., & Tripathy, N. (2019). Capital structure dynamics of Indian corporates. *Journal of Advances in Management Research*, 17(2), 212–225. <https://doi.org/10.1108/JAMR-12-2017-0125>
- Saif-Alyousfi, A. Y. H., Md-Rus, R., Taufil-Mohd, K. N., Mohd Taib, H., & Shahar, H. K. (2020). Determinants of capital structure: evidence from Malaysian firms. *Asia-Pacific Journal of Business Administration*, 1, 1–44. <https://doi.org/10.1108/apjba-09-2019-0202>
- Setiawan, A. (2016). Pengaruh Corporate Governance Terhadap Kinerja Keuangan Perusahaan. *Jurnal SIKAP (Sistem Informasi, Keuangan, Auditing Dan Perpajakan)*, 1(1), 1–8. <https://doi.org/10.32897/sikap.v1i1.41>
- Sikveland, M., & Zhang, D. (2020). Determinants of capital structure in the Norwegian salmon aquaculture industry. *Marine Policy*, 119(May), 104061. <https://doi.org/10.1016/j.marpol.2020.104061>
- Sofat, R., & Singh, S. (2017). Determinants of capital structure: an empirical study of manufacturing firms in India. *International Journal of Law and Management*, 59(6), 1029–1045. <https://doi.org/10.1108/ijlma-05-2016-0051>
- Sohrabi, N., & Movaghari, H. (2020). Reliable factors of Capital structure: Stability selection approach. *Quarterly Review of Economics and Finance*, 77, 296–310. <https://doi.org/10.1016/j.qref.2019.11.001>
- Stamou, S. C., Huang, W., & Coakley, J. (2020). Serial SEOs and capital structure. *International Review of Financial Analysis*, 71(May), 101538. <https://doi.org/10.1016/j.irfa.2020.101538>
- Sukamulja, S. (2019). *Analisis Laporan Keuangan Sebagai Dasar Pengambilan Keputusan Investasi*. BPFE-Penerbit Andi.
- Ullah, A., Pinglu, C., Ullah, S., Zaman, M., & Hashmi, S. H. (2020). The nexus between capital structure, firm-specific factors, macroeconomic factors and financial performance in the textile sector of Pakistan. *Heliyon*, 6(8), e04741. <https://doi.org/10.1016/j.heliyon.2020.e04741>
- Yildirim, R., Masih, M., & Bacha, O. I. (2018). Determinants of capital structure: evidence from Shari’ah compliant and non-compliant firms. *Pacific Basin Finance Journal*, 51, 198–219. <https://doi.org/10.1016/j.pacfin.2018.06.008>
- Zhang, D., & Liu, D. (2017). Determinants of the capital structure of Chinese non-listed enterprises: Is TFP efficient? *Economic Systems*, 41(2), 179–202. <https://doi.org/10.1016/j.ecosys.2016.12.003>