

# The Effect of Profitability, Liquidity, Asset Structure on Capital Structure with Company Size as a Moderation Variable in Manufacturing Companies on the Indonesia Stock Exchange 2019-2021

Dian Nova Fitriani<sup>1</sup>, Dewita Puspawati<sup>2</sup>

<sup>1,2</sup>Faculty of Economics and Business, Universitas Muhammadiyah Surakarta, Surakarta, Indonesia  
Email address: dianovafitriani@icloud.com, dp123@ums.ac.id\*

**Abstract**— This study aims to analyze the effect of profitability, liquidity, asset structure on capital structure with company size as a moderating variable in Manufacturing companies on the Indonesia Stock Exchange 2019-2021. The population in this study are Manufacturing companies on the Indonesia Stock Exchange 2019-2021 which have complete financial reports. Meanwhile, the sample in this study is a manufacturing company that has published financial reports for three years, namely 2019 to 2021. The analytical technique used is moderation of regression analysis. The results of this study indicate that Profitability, Liquidity and Asset Structure affect Capital Structure, and Company Size can moderate Profitability, Liquidity and Asset Structure on Capital Structure, with a contribution of 56.2% to Capital Structure.

**Keywords**— Profitability, Liquidity, Asset Structure, Company Size, Capital Structure.

## I. INTRODUCTION

The development of globalization today has changed the competition between businesses that do not have national borders but are connected with each other. Advances in information technology have successfully changed the way business is done (Mukaromah & Suwarti, 2022). Companies on a global scale have the power to dominate a country's market share. Increasing global competition forces business leaders to increase productivity and define business strategies to deal with global competition in order for businesses to achieve optimal profits (Mukaromah & Suwarti, 2022). The development and competition in today's business world are getting more and more intense. Businesses need much effort and a precise strategy to win the business competition. This competition requires companies to be able to operate better and produce good products (Dewi, 2018). This condition is a challenge that the company has to face in the process of carrying out its operational activities. Therefore, businesses need to be able to manage their finances to be able to continue to compete with other businesses (Dewi, 2018).

Capital mobility is essential to broader economic growth, which requires sustainable and successful business operations. Profitable companies that need additional capital are often funded by the owners (equity) of the company; however, companies often borrow funds from a variety of sources to finance short- and long-term projects. term. As a result, cash flows, reallocated from claimants to equity, divide cash flows by allocating relatively safer cash flows to creditors and riskier flows to creditors. shareholders. The combination of debt and equity in a firm's sources of capital is known as the firm's capital structure (Khaki

and Akin, 2020). External sources (external finance), i.e., funds from additional equity investments or new stock issuance, bond sales, and bank loans (Bambang, 2015:5 in Mukaromah and Suwarti, 2022). The right combination in choosing the selected capital source will be able to create an optimal capital structure, which can become a solid foundation for the company to conduct production and business activities and bring profits. optimal for the company and its shareholders. By optimal capital structure, we mean the capital structure that optimizes the balance between risk and return in order to maximize the stock price (Mukaromah and Suwarti, 2022). Capital structure is important in financing industrial operations. The size of the capital structure is highly dependent on the composition of the energy sources obtained from outside or the internal industry, in the form of debt and equity. The larger the capital deposited by the shareholders, the more freedom it has to manage its operating needs since there are no obligations to creditors. The components of equity or shareholder equity in the industry in the form of a limited liability company (PT) include contributed capital, share premium, retained earnings, and profit for the year. The desire to achieve maximum capital structure has been at the heart of scholars and experts (Nasar & Krisnando, 2020). According to Infantri (2016), capital needs are very important in the construction and sustainable development of the company, so financial managers must be very accurate and careful in determining the capital structure. The way managers can do this is to optimize the internal workings of the business and effectively seek additional external capital, which allows the business to reduce the cost of capital that it incurs. The company's internal capital (internal financing) is the capital that the company obtains from its operations in the form of retained earnings, while external sources (internal financing) are the source of the company's internal capital. principal provided by creditors or investors, so that these funds can be said to be corporate debt or foreign capital.

Factors that need to be considered by companies that affect capital structure, such as profitability, liquidity, and asset structure, with firm size as a moderating variable, The first factor affecting the capital structure is profitability. According to Mukaromah and Suwarti (2022), profitability represents the company's ability to profit from the results of its operations. Managers work efficiently and effectively to reduce the cost of capital and minimize risk, which can ultimately lead to increased profits. Businesses that generate large profits will depend on retained earnings to finance the business rather than using outside funds. This means that the

higher a company's profitability is, the more likely it is not to use debt to finance its operations. Therefore, companies prefer to use retained earnings. Meanwhile, according to Gill et al. (2020), The relationship between capital structure and profitability cannot be ignored because an increase in profitability is necessary for the long-term viability of a business. Since interest payments on debt are tax deductible, additional debt in the capital structure will increase the profits of the business. Therefore, it is important to examine the relationship between capital structure and company profitability in order to make the right capital structure decision.

The second factor affecting the capital structure is liquidity. According to Dewi and Fachrurrozie (2021), liquidity is the ability of a company to pay its obligations. This capacity is the ability of the company to continue operating when it has to repay its obligations, which will reduce the operating fund of the company. This is measured by the amount of liquid assets held. Companies with high liquidity will not use debt or issue new shares, but will use internal funds in 2020 and 2021. As a result, companies with high liquidity tend to finance their operations using their internal funds. Meanwhile, according to Salam and Sunarto (2022), liquidity is a ratio used as a benchmark to measure a company's ability to meet its short-term obligations. A high liquidity ratio indicates a better ability to meet the short-term obligations of the company. So investors are not afraid that the company will have difficulty fulfilling its obligations, and the company will gain the confidence of investors to invest money in the company. According to Mukaromah & Suwanti (2022), liquidity affects capital structure. This is because firms that are highly liquid have the ability to repay debt in the short term, so they tend to decrease total debt, thereby reducing capital structure. The higher a company's liquidity, the more likely it is to pay its debts.

The third factor that affects capital structure is asset structure. According to Nasar and Krisnando (2020), asset structure is the determination of the amount to be allocated to each component of an asset, both liquid and fixed assets. Companies with suitable assets as credit collateral tend to rely more heavily on debt. The measurement of asset structure can be done by looking at the ratio of a company's fixed assets to the total assets of the company as a whole. According to Mukaromah and Suwanti (2022), asset structure affects capital structure because if a company has financial difficulties in financing its business activities, the company's managers can overcome the financial difficulties. mutual support by using pledged fixed assets to borrow capital from third parties. The higher the asset structure, the more debt the company has to pay, so if the company's fixed assets increase, the debt utilization efficiency is also higher. Furthermore, the higher the level of security a company offers to its creditors, the greater the amount of debt that creditors can grant to the company.

The fourth factor affecting capital structure is firm size. Firm size is a moderately important variable in this study. Firm size is a moderately important variable in this study. According to Nasar and Krisnando (2020), firm size is the scale by which business size can be classified. Companies with large total assets indicate that the company has reached a stage of maturity; at this stage, the company's cash flow is positive and is considered to have good prospects for a relatively long time, and at the same time, its business performance is relatively better. more stable and capable of generating higher profits than firms with low total assets (Alber

and Youssef, 2020). In this case, firm size can be a moderating variable because the larger the firm, the more profitable it is compared to the previous year. This means that the company's profitability, liquidity, and asset structure increase. A business's high breakeven value will reduce its use of debt so that it holds less debt. Large companies have large assets, which means that they can finance their operations using more internal funding sources than external funding sources (Alber et al., Youssef, 2020).

## II. LITERATURE REVIEW

### Pecking Order Theory

The pecking order theory was discovered by Professor Donaldson in 1961. The pecking order theory was then proposed by Myers and Majluf in 1984. In a nutshell, pecking order theory is a business based on the funding decision hierarchy. Companies will tend to use internal funds first rather than external ones. If the company's internal funds are insufficient, it will use external funds as a source of financing. When a company's management needs financing, it will tend to prioritize internal funding or its own funds. If these options cannot be exercised, the company will resort to external financing, namely issuing debt, a convertible bond, and the final option that can be exercised, stock. popular vote (Dewi, 2018)

Meanwhile, according to Yildinm and Celik (2021), pecking order theory is one of the structural theories that have been tested in many different economies over the past 30 years. This theory predicts the existence of a financial hierarchy and states that a company will prioritize internal financial sources over external sources when funding is needed. In terms of pecking order theory, the firm's internal sources are preferred, or if external sources are needed to finance the firm's operations, debt is chosen before equity, so the order of financial resources is classified as retained earnings, debt, and equity (Myers, 1984; 2001 in Nhung et al., 2017). Powered by Albert and Youssef (2020). The pecking order theory explains why debt makes up the majority of external financing and why fewer loans will go to more profitable businesses. And according to Mohammadi et al. (2020), owners-managers prefer to use internal capital rather than external capital for investment purposes, regardless of the size of the company. When executives have more retained earnings than their investment needs, the debt is paid off just to prevent outside sources from using power over their business, even if In need of external funding, external equity should be the last resort after accounting for the effects of debt.

Based on the results of research conducted by several researchers, there are differences in research results between one researcher and another which is summarized in the Research Gap table.

NO	Variabel Independen	Variabel Dependen	Dewi & Fachrurrozie (2021)	Mukaromah & Suwanti (2022)	Nasar & Krisnando (2020)	Cahyani & Nyale (2022)	Sari & Samin (2018)
1	Profitabilitas	Struktur Modal	B	TB	B	-	B
2	Likuiditas		B	B	B	B	B
3	Struktur Aset		B	B	TB	B	B
4	UP*Profitabilitas		TM	TM	M	-	-
5	UP*likuiditas		M	TM	M	M	-
6	UP*Struktur Aset		TM	M	TM	TM	-

Source: Abstracted from various journals, 2022 Information:

B = Influential  
 TB = Not Affected  
 TM = Not Moderating  
 M = Moderate  
 - = Not Testing Variables

Based on the descriptions of previous studies, this researcher is interested in compiling a study with the title: "Effect of Profitability, Liquidity, Asset Structure on Capital Structure with Company Size as a Moderation Variable in Manufacturing Companies in the Indonesia Stock Exchange 2019-2021".

**Capital Structure**

According to Sartono (2012:225) in the state of Nasar & Krisnando (2020), capital structure is a balance between fixed short-term debt, long-term debt, preferred stock, and common stock. Meanwhile, according to Besley & Brigham (2012:205) in Nasar & Krisnando (2020), capital structure is measured by comparing total debt to total assets, reflecting the amount of debt financing, both short-term and long-term debt, relative to total assets.

**Profitability**

According to Mukaromah and Suwarti (2022), profitability represents the company's ability to profit from the results of its operations. Managers work efficiently and effectively to reduce the cost of capital and minimize risk, which can ultimately lead to increased profits. Businesses that generate substantial profits will depend on retained earnings to finance the business rather than using outside funds. This means that the higher a company's profitability is, the more likely it is not to use debt to finance its operations. Therefore, companies prefer to use retained earnings.

**Liquidity**

According to Dewi and Fachrurrozie (2021), liquidity is the ability of a company to pay its obligations; capacity is the ability of a company to continue operating when it is required to pay its obligations, which will reduce the operating fund of the company. current assets held Companies with high liquidity will not use debt or issue new shares but will use internal company funds. As a result, companies with high liquidity tend to finance their operations using their internal funds.

**Asset Structure**

According to Nasar and Krisnando (2020), asset structure is the determination of the amount to be allocated to each component of an asset, both liquid and fixed assets. Companies with suitable assets as credit collateral tend to rely more heavily on debt. The measurement of a company's asset structure is done by comparing its total long-term liabilities with the total assets owned by the company. The measurement of asset structure can be done by looking at the ratio of a company's fixed assets to the total assets of the company as a whole. Meanwhile, according to Panggabena et al. (2019), economic resources or assets held by a company, both in the form of physical objects and powers of attorney obtained in the past and expected to yield future benefits, are called assets. Asset structure describes the portion of total assets that can be used as collateral. In general, firms whose assets can be used as debt collateral tend to use relatively larger debt. Companies that have assets that can be used as collateral for loans tend to be more debt-dependent. General-purpose property that

can be used by many businesses can be good collateral, and vice versa for special-purpose property.

**Firm Size**

Firm size is a moderately important variable in this study. According to Nasar and Krisnando (2020), firm size is the scale by which business size can be classified. Company size is only divided into 3 types, which are: big companies, medium-sized companies, and small companies. Companies with large total assets indicate that the company has reached a stage of maturity; at this stage, the company's cash flow is positive and is considered to have good prospects for a relatively long time, while its business performance is relatively better. stable and more likely to generate profits than businesses with low total assets.

III. METHODOLOGY

This research uses a quantitative approach method. The population taken is all manufacturing companies listed on the Indonesian Stock Exchange (IDX) have published their financial statements for the years 2019–2021. The method used in taking samples is the purposive sampling method in accordance with the sample criteria. The sample criteria used are as follows: 1) Manufacturing companies listed on the Indonesian Stock Exchange for 2019–2021. 2) Manufacturing companies have submitted complete and continuous financial statements for 2019–2021. 3) Manufacturing companies have submitted financial reports in rupees for the year 2019–2021.

The data used in this study are the financial statements of the manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2019–2021. Financial statement data was obtained from www.idx.co.id through the Indonesia Stock Exchange office. The data sources used in this study are secondary. Secondary data is data obtained indirectly or through an intermediary (recorded and obtained from other parties). The type of secondary data in this study is external data.

This study uses the following measurements:

TABLE 1. Measurement of Operational.

Variables	Indicators	Source
Capital Structure (DER)	DER = Total Debt / Total Equity	(Nasar & Krisnando, 2020)
Profitability (ROA)	ROA = Net Profit / Total Assets	(Nasar & Krisnando, 2020)
Liquidity (CR)	Current Ratio (CR) = Current Assets / Current Liability	(Nasar & Krisnando, 2020)
Asset Structure	Asset Structure = Fixed Assets / Total Assets	(Nasar & Krisnando, 2020)
Firm Size (LN)	Size = LN (Total Assets)	(Nasar & Krisnando, 2020)

IV. RESULT AND DISCUSSION

TABLE 1. Descriptive Statistic

Variable	N	Min	Max	Mean	Standard Deviation
ROA	250	0.0004	0.4163	0.78977	0.0814186
CR	250	0.0032	1.6285	0.543390	0.3100813
Asset Structure	250	0.0006	0.7904	0.372301	0.2095256
LN	250	25.0488	33.5372	29.016017	1.7808490
DER	250	0.03020	3.37130	0.8417868	0.63221316
Valid N (listwise)	250				

Source: data processed, 2023

From table 1 above, it can be seen that the data analyzed

consisted of 255 – 5 samples of outlier data into 250 obtained from the financial reports of 85 Manufacturing Sector companies listed on the IDX for 3 years (2019-2021). Profitability has a minimum value of 0.0004, a maximum value of 0.4163, the average obtained is - 0.78977, and has a standard deviation of 0.0814186. Liquidity has a minimum value of 0.0032, a maximum value of 1.6285, an average of 0.543390, and has a standard deviation of 0.3100813. Asset structure has a minimum value of 0.0006, a maximum value of 0.7904, an average of 0.372301, and has a standard deviation of 0.2095256. Firm size has a minimum value of 25.0488, a maximum value of 33.5372, an average of 29.016017, and has a standard deviation of 1.7808490. Capital Structure has a minimum value of 0.03020, a maximum value of 3.37130, an average obtained of 0.8417868, and has a standard deviation of 0.63221316.

TABLE 2. Spearman rank heteroskedasticity Test

Variable	Sig.	Result
<b>Equality 1</b>		
Profitability	0.138	There is no Heteroskedasticity
Liquidity	0.872	There is no Heteroskedasticity
Asset Structure	0.103	There is no Heteroskedasticity
<b>Equality 2</b>		
Profitability	0.339	There is no Heteroskedasticity
Liquidity	0.980	There is no Heteroskedasticity
Asset Structure	0.409	There is no Heteroskedasticity
Firm Size	0.603	There is no Heteroskedasticity
Profitability*Firm Size	0.366	There is no Heteroskedasticity
Liquidity*Firm Size	0.908	There is no Heteroskedasticity
Asset Structure*Firm Size	0.473	There is no Heteroskedasticity

Source: data processed, 2023

In the test results table of Spearman rank heteroskedasticity, it can be seen that the calculation results of Equations 1 and 2 show that there is no heteroskedasticity, when there is no small significance value (sig.) more than 0.05 (< 0.05). Therefore, we can conclude that there is heteroskedasticity

TABLE 3. Multicollinearity Test

Variable	Tolerance	VIF
Profitability	0.973	1.027
Liquidity	0.812	1.231
Asset Structure	0.794	1.260

Source: data processed, 2023

Based on the results of the multicollinearity test, it shows that there is no multicollinearity because all the generated VIFs have values less than 10, and the tolerance value is greater than 0.10. The maximum VIF value is 1.260 and is always less than or equal to 10 > 0.10. From these numbers, it can be concluded that there is no multicollinearity, so the equation is usable.

TABLE 4. Autocorelation Durbin-Watson Test

Adverb	Durbin-Watson
Equality 1	2,060
Equality 2	2,074

Source: data processed, 2023

Based on Table 4, the results of the regression analysis in

Formula 1 obtained a Durbin Watson value of 2.060 and Formula 2 obtained a Durbin Watson value of 2.074. During this time, the DU value is 1,808. Thus, Equation 1 yields the value of DW = 2,060 between dU, ie 1.808 and 4 - dU, ie 4 - 1.808 = 2.192, ie 1,808 <; 2060<; 2.192 and Equation 2 the value of DW = 2,074 is between dU, which is 1.808, and 4 - dU, ie 4 - 1,808 = 2,192, which is 1,808 <; 2.074<; 2192. Thus, it shows that the regression model of equations 1 and 2 is in the non-autocorrelation region.

TABLE 5. Multiple Linear Regression Test Results - Equation I

Variable	Regression Coefficient	Sig.
Constant	0.467	0.000
Profitability	-1.166	0.001
Liquidity	1.604	0.000
Asset Structure	-1.088	0.000
Sig.F	0,000	
Adjst. R Square	0,508	

Source: data processed, 2023

Based on the results of multiple linear regression tests - equation 1, it can be concluded that the constant value is 0.467. The coefficient value of the profitability variable is 1.166. The coefficient value of the liquidity variable is 1.604. The coefficient value of the asset structure variable is 1.068.

TABLE 6. Moderate Regression Analysis (MRA) - Equation II

Variable	Regression Coefficient	Sig.
Constant	-2.057	0.067
Profitability	0.397	0.477
Liquidity	10.086	0.000
Asset Structure	-8.952	0.000
Firm Size	0.073	0.060
ROA.x.SIZE	-0.004	0.003
CR.x.SIZE	-0.295	0.000
SA.x.SIZE	0.270	0.001
Sig.F	0,000	
Adjst. R Square	0,508	

Source: data processed, 2023

Based on the results of the Moderate Regression Analysis (MRA) test - equation 2, it can be concluded that the firm size variable moderates the profitability variable with a regression coefficient of 0.004 with a negative value. The variable firm size moderates the liquidity variable with a regression coefficient of 0.295 with a negative value. The firm size variable moderates the asset structure variable with a positive regression coefficient of 0.270

TABLE 7. Simultaneous F Test – Equation I & 2

Adverb	F <sub>count</sub>	Sig.
Equality 1	86.704	0,000
Equality 2	46.599	0,000

Source: data processed, 2023

Based on table 7, the significance value of F calculated in equation 1 is 0.000 which is smaller than the significant level  $\alpha$  of 0.05. The conclusion is that Ho is rejected and Ha is accepted. This means that the variables Profitability, Liquidity, Asset Structure and Company Size, together affect the Capital Structure. As well as the significance value of F calculated by equation 2 of 0.000 which is smaller than the significant level  $\alpha$

of 0.05. The conclusion is that  $H_0$  is rejected and  $H_a$  is accepted. This means that the variables Profitability, Liquidity, Asset Structure, moderated by the variable Firm Size, together have an effect on Capital Structure.

TABLE 8. Determination Coefficient Test – Equations 1 and 2

Adverb	Adjusted R Square
Equality 1	0,508
Equality 2	0,562

Source: data processed, 2023

Based on table 8, the Adjusted R Square Equation 1 value is 0.508 (50.8%) which indicates that 50.8% of the Capital Structure variable can be explained by Profitability, Liquidity, Asset Structure and Company Size. While the remaining 49.2% is explained by other variables outside the research model. Meanwhile, the test results for the coefficient of determination in Equation 2 indicated by the adjusted R square are 0.562. This can be interpreted that the variable Company Size can moderate the variables Profitability, Liquidity and Asset Structure able to explain the Capital Structure of 56.2%, there is an increase of 5.4% from equation 1 of 50.8%, while the remaining 43.8% is explained by the variable which were not observed in this study.

TABLE 9. T Partial Test

Variable	T <sub>hitung</sub>	Sig.
Profitability	-3.332	0.001
Liquidity	15.947	0.000
Asset Structure	-7.224	0.000
Firm Size	1.889	0.060
ROA.x.SIZE	-3.022	0.003
CR.x.SIZE	-4.579	0.000
SA.x.SIZE	3.395	0.001

Source: data processed, 2023

In this research equation model is known at a significant level of 5% or 0.05. Based on Table 9, the first equation model above shows the results:

1. The statistical test results for the Profitability variable can be observed with a t value of 3.332 with a significance value of 0.001 < 0.05, so it can be proven that  $H_1$  is accepted. This means that the Profitability variable affects the Capital Structure variable.
2. The statistical test results for the Liquidity variable can be observed with a t value of 15.947 with a significance value of 0.000 < 0.05, so it can be proven that  $H_2$  is accepted. This means that the Liquidity variable affects the Capital Structure variable.
3. The statistical test results for the Asset Structure variable can be observed with a t value of 7.224 with a significance value of 0.000 < 0.05, so it can be proven that  $H_3$  is accepted. This means that the Asset Structure variable affects the Capital Structure variable.
4. The statistical test results for the Profitability variable can be observed with a t value of 3.022 with a significance value of 0.003 < 0.05, so it can be proven that  $H_4$  is accepted. This means that the variable Firm Size can moderate Profitability on Capital Structure.
5. The results of the statistical test for the Liquidity variable can be observed with a t value of 4.579 with a significance value of 0.000 < 0.05, so it can be proven that  $H_5$  is accepted.

This means that the variable Firm Size moderates the effect of Liquidity on Capital Structure.

6. The statistical test results for the Asset Structure variable can be observed with a t value of 3.395 with a significance value of 0.001 < 0.05, so it can be proven that  $H_6$  is accepted. This means that the variable Firm Size moderates the influence of Asset Structure on Capital Structure.

## V. CONCLUSION

Based on the results of data analysis, the following conclusion can be drawn

1. The results of the study state that the Profitability variable has an effect on Capital Structure. Significant for the variable Profitability on Capital Structure, amounting to 0.001, so that  $H_1$  is accepted. This means that Profitability affects Capital Structure.
2. The results of the study state that the Liquidity variable has an effect on Capital Structure. Significant for the variable Liquidity to Capital Structure, amounting to 0.000, so that  $H_2$  is accepted. This means that Liquidity affects the Capital Structure.
3. The results of the study state that the Asset Structure variable influences Capital Structure. Significant for the Asset Structure variable to Capital Structure, is 0.000, so  $H_3$  is accepted. This means that the Asset Structure affects the Capital Structure.
4. Company size can moderate the disclosure of Profitability on Capital Structure. Significant for the variable Profitability with Firm Size moderating Capital Structure, amounting to 0.003, so that  $H_4$  is accepted. This means that Company Size can moderate the disclosure of Profitability on Capital Structure.
5. Company size can moderate the disclosure of Liquidity on Capital Structure. Significant for the variable Liquidity with Firm Size moderating the Capital Structure, amounting to 0.000, so that  $H_5$  is accepted. This means that Company Size can moderate the disclosure of Liquidity on Capital Structure
6. Company size can moderate the disclosure of Asset Structure to Significant Capital Structure for the Asset Structure variable with Company Size moderating to Capital Structure, amounting to 0.001, so  $H_6$  is accepted. This means that Company Size can moderate the disclosure of Asset Structure to Capital Structure.

## REFERENCES

- [1] Alber, N., & Youssef, I. S. (2020). Capital Structure Determinants : A Cross-Country Analysis. *International Business Research*, 13(5), 95–112. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3669806](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3669806)
- [2] Ariyanto. (2020). Pengaruh profitabilitas, struktur aktiva dan ukuran perusahaan terhadap struktur modal pada perusahaan properti dan real estate yang terdaftar di BEI 2013-2017. *Entrepreneurship Bisnis Manajemen Akuntansi (E-BISMA)*, 1(1), 10–19. <https://ejournal.widyamataram.ac.id/index.php/j-mae/article/view/213>
- [3] Aslah, T. (2020). Pengaruh Profitabilitas, Likuiditas, Struktur Aset Dan Ukuran Perusahaan Terhadap Struktur Modal. *Jurnal Akuntansi & Perpajakan Jayakarta*, 2(1), 2714–5557. <http://journal.stiejayakarta.ac.id/index.php/JAPJayakarta/article/view/43>
- [4] Baidoo, D. A. (2022). Factors Influencing Capital Structure : An Empirical Evaluation of Major Oil and Gas Producing Companies Operating in Ghana. *International Journal of Finance Research*, 3(4), 294–311. <https://doi.org/https://doi.org/10.47747/ijfr.v3i4.937>
- [5] Cahyani, N., & Nyale, M. H. Y. (2022). Pengaruh Struktur Aset dan Likuiditas terhadap Struktur Modal dengan Ukuran Perusahaan sebagai Variabel Moderasi. *JiIP - Jurnal Ilmiah Ilmu Pendidikan*, 5(7), 2675–2686. <https://jiip.stkipyapisdompu.ac.id/jiip/index.php/JiIP/article/download/748/688>
- [6] Dewi, C. R., & Fachrurrozie, F. (2021). The Effect of Profitability, Liquidity, and Asset Structure on Capital Structure with Firm Size as Moderating Variable. *Accounting Analysis Journal*, 10(1), 32–38.

- <https://doi.org/10.15294/aj.v10i1.44516>
- [7] Fitria, D., & Irkhani, N. (2021). Ukuran Perusahaan Sebagai Pemoderasi Pengaruh Struktur Modal , Profitabilitas , dan Islamic Social Reporting Terhadap Nilai Perusahaan Pada Bank Umum Syariah. *Jurnal Ilmiah Ekonomi Islam*, 7(03), 1629–1643. <https://jurnal.stie-aas.ac.id/index.php/jei/article/download/3584/1640>
- [8] Ghozali, I. (2018). Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Badan Penerbit Universitas Diponegoro.
- [9] Gill, A., Biger, N., & Mathur, N. (2011). The Effect of Capital Structure on Profitability: Evidence from the United States. *International Journal of Management*, 28(4), 1. <https://search.proquest.com/openview/8c79ee684f821771a04c0fcd84e66e1/1?pq-origsite=gscholar&cbl=5703>
- [10] Hutauruk, F. N. (2020). Ukuran Perusahaan sebagai Pemoderasi dalam Hubungan Profitabilitas dan Likuiditas terhadap Struktur Modal Bank Umum Syariah. *EKONOMIKA SYARIAH: Journal of Economic Studies*, 4(2), 2614–8110. <http://ejournal.iainbukittinggi.ac.id/index.php/febi/search/authors/view?firstName=Fauziah&middleName=Nur&lastName=Hutauruk&affiliation=Institut Agama Islam Negeri Bukittinggi&country=ID>
- [11] Infantri, R. D., & Suwito. (2015). Pengaruh Likuiditas, Profitabilitas Terhadap Struktur Modal Perusahaan Otomotif Yang Terdaftar Di Bei. *Jurnal Ilmu Dan Riset Manajemen*, 4(7), 1–15. <http://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/3452>
- [12] Kalyani, S., & Mathur, N. (2017). Impact Of Capital Structure On Profitability : With Reference To Select Companies From Oil And Natural Gas Industry Of India. *Journal of Modern Management & Entrepreneurship (JMME)*, 7(3), 129–237. [https://www.researchgate.net/publication/323535038\\_IMPACT\\_OF\\_CAPITAL\\_STRUCTURE\\_ON\\_PROFITABILITY\\_WITH\\_REFERENCE\\_TO\\_SELECT\\_COMPANIES\\_FROM\\_OIL\\_AND\\_NATURAL\\_GAS\\_INDUSTRY\\_OF\\_INDIA](https://www.researchgate.net/publication/323535038_IMPACT_OF_CAPITAL_STRUCTURE_ON_PROFITABILITY_WITH_REFERENCE_TO_SELECT_COMPANIES_FROM_OIL_AND_NATURAL_GAS_INDUSTRY_OF_INDIA)
- [13] Khaki, A. R., & Akin, A. (2020). Factors affecting the capital structure : New evidence from GCC countries. *Journal of International Studies*, 13(1), 9–27. <https://doi.org/10.14254/2071-8330.2020/13-1/1>
- [14] Mohammadi, S. S., Dalwai, T., Najaf, D., & Al-yaarubi, A. S. (2020). Determinants Of Capital Structure : An Empirical Evaluation Of Oman ' S Tourism Companies. *International Journal of Tourism & Hospitality Reviews*, 7(1), 1–10. <https://doi.org/https://doi.org/10.18510/ijthr.2020.711>
- [15] Mukaromah, D. U., & Suwanti, T. (2022). Pengaruh Profitabilitas, Likuiditas, Struktur Aset dan terhadap Struktur Modal dengan Ukuran Perusahaan sebagai Variabel Moderating. *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi)*, 13(1), 2614–1930. <https://ejournal.undiksha.ac.id/index.php/S1ak/article/view/39819/21410>
- [16] Nasar, P., & Krisnando. (2020). Pengaruh Likuiditas, Profitabilitas, Dan Struktur Aset Terhadap Struktur Modal Dengan Ukuran Perusahaan Sebagai Variabel Moderasi Pada Perusahaan Textile Dan Garment Yang Terdaftar Di Bursa Efek Indonesia Periode Tahun 2014-2019. *Sekolah Tinggi Ilmu Ekonomi Indonesia*. <http://repository.stei.ac.id/id/eprint/1215>
- [17] Nenu, E. A., Vintila, G., & Gherghina, S. C. (2017). The Impact of Capital Structure on Risk and Firm Performance: Empirical Evidence for the Bucharest Stock Exchange Listed Companies. *International Journal of Financial Studies*, 6(41). <https://doi.org/10.3390/ijfs6020041>
- [18] Nhung, N. T. P., Lien, N. P., & Hang, D. T. T. (2017). Analyze the Determinants of Capital Structure for Vietnamese Real Estate Listed Companies. *International Journal of Economics and Financial*, 7(4), 270–282. <https://econpapers.repec.org/RePEc:eco:journl:2017-04-36>
- [19] Nisfianti, R., & Handayani, N. (2017). Pengaruh Struktur Aktiva Dan Profitabilitas Terhadap Struktur Modal: Ukuran Perusahaan Sebagai Pemoderasi. *Jurnal Ilmu Dan Riset Akuntansi*, 6(2), 2460–0585. <http://jurnalmahasiswa.stiesia.ac.id/index.php/jira/article/view/922>
- [20] Novwedayaningayu, H. C., & Hirawati, H. (2020). Pengaruh Profitabilitas , Likuiditas Dan Struktur Aktiva Terhadap Struktur Modal Pada Perusahaan Consumer Goods. *JSMBI ( Jurnal Sains Manajemen Dan Bisnis Indonesia )*, 10(2), 255–262. <http://jurnal.unmuhjember.ac.id/index.php/SMBI/article/view/4124>
- [21] Panggabean, V. D. Y., Inrawan, A., Silitonga, H. P., & Sembiring, L. D. (2019). Dampak Struktur Aset Dan Ukuran Perusahaan Terhadap Struktur Modal. *Sultanist: Jurnal Manajemen Dan Keuangan*, 7(2), 92–101. [https://www.researchgate.net/publication/338835768\\_DAMPAK\\_STRUKTUR\\_ASET\\_DAN\\_UKURAN\\_PERUSAHAAN\\_TERHADAP\\_STRUKTUR\\_MODAL](https://www.researchgate.net/publication/338835768_DAMPAK_STRUKTUR_ASET_DAN_UKURAN_PERUSAHAAN_TERHADAP_STRUKTUR_MODAL)
- [22] Safitri, & Akhmadi. (2017). Pengaruh Profitabilitas Dan Pertumbuhan Perusahaan Terhadap Struktur Modal Dengan Ukuran Perusahaan Sebagai Variabel Moderating. *SAINS: Jurnal Manajemen Dan Bisnis*, 9(2), 1978–2241. <https://jurnal.untirta.ac.id/index.php/jsm/article/download/4225/2984>
- [23] Salam, J. A., & Sunarto, S. (2022). Pengaruh Likuiditas , Growth Opportunity dan Ukuran Perusahaan terhadap Struktur Modal dengan Profitabilitas sebagai Variabel Moderasi (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2016-2020). *Jurnal Pendidikan Tambusai*, 6(2), 9165–9178. <https://jptam.org/index.php/jptam/article/view/3861>
- [24] Sari, N. P., & Samin. (2016). Pengaruh Profitabilitas, Struktur Aset, Dan Likuiditas Terhadap Struktur Modal. *Ekonomi Dan Bisnis*, 3(1), 15–26. <https://doi.org/10.35590/jeb.v3i1.721>
- [25] Siddik, N. A., Kabiraj, S., & Joghee, S. (2017). Impacts of Capital Structure on Performance of Banks in a Developing Economy: Evidence from Bangladesh. *International Journal of Financial Studies*, 5(13). <https://doi.org/10.3390/ijfs5020013>
- [26] Suherman, Purnamasari, R., & Mardiyati, U. (2019). Pengaruh Struktur Aset, Likuiditas, Dan Profitabilitas Terhadap Struktur Modal Dimoderasi Oleh Ukuran Perusahaan. 9(2), 369–381. [https://www.researchgate.net/publication/335697019\\_Pengaruh\\_Struktur\\_Aset\\_Likuiditas\\_dan\\_Profitabilitas\\_terhadap\\_Struktur\\_Modal\\_yang\\_Dimoderasi\\_Oleh\\_Ukuran\\_Perusahaan](https://www.researchgate.net/publication/335697019_Pengaruh_Struktur_Aset_Likuiditas_dan_Profitabilitas_terhadap_Struktur_Modal_yang_Dimoderasi_Oleh_Ukuran_Perusahaan)
- [27] Wijaya, I. P. A. S., & Utama, I. M. K. (2014). Pengaruh Profitabilitas, Struktur Aset, Dan Pertumbuhan Penjualan Terhadap Struktur Modal Serta Harga Saham. *E-Jurnal Akuntansi Universitas Udayana*, 6(3), 514–530. <https://ojs.unud.ac.id/index.php/Akuntansi/article/view/8344>
- [28] Yıldırım, D., & Çelik, A. K. (2021). Testing the pecking order theory of capital structure : Evidence from Turkey using panel quantile regression approach. *Borsa Istanbul Review*, 21(4), 317–331. <https://doi.org/10.1016/j.bir.2020.11.002>