

The Influence of Asset Structure, Innovation and Technology, Agency Costs, Company Size, and Company Growth on Leverage

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KEYWORDS	ABSTRACT
Asset Structure, Innovation, and Technology; Agency Cost; Company Size; Company Growth; Leveraged	Until now, companies that are included in the LQ45 category are companies that attract large investors. Therefore, the company must have the ability to manage the company's financing sources well and avoid company losses. Therefore, this research aims to empirically understand the impact of asset structure, innovative technology, agency costs, firm size, and firm growth on leverage ratio. LQ45 companies listed on the Indonesia Stock Exchange between 2019 and 2021. This research uses causal benchmarking. The sample of this study is LQ45 member companies listed on the Indonesia Stock Exchange for the 2019-2021 period, using the target sampling method. 11 companies meet the research sample criteria and 33 financial reports. The results showed that asset structure, innovative technology, agency costs, and company size significantly affected the leverage ratio. In contrast, the company growth variable had no significant effect on the leverage ratio.

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Introduction

Large companies play an important role in the economic development of some emerging markets, such as Indonesia. Any decision to finance a company and its subsidiaries is influenced by several factors, namely the level of corporate debt ratio (Avarmaa et al., 2011). Management always considers the capital structure to ensure that the company remains sustainable and stable, allowing corporate leverage to change dynamically along with fluctuations in financial performance and macroeconomic factors (Santosa, 2019; Prieto & Lee, 2019).

The company's goal is to maximize the wealth of its owners by increasing the value of the company and to achieve this, for the first time, the company must look at the substantial aspects of equity capital related to leverage (Chow, 2019; Prieto & Lee, 2019). The capital structure aspect is closely related to business and financial difficulties because the company can operate and develop properly if its management has sufficient capital to meet business expansion needs and working capital (Santosa, Tambunan & Kumullah, 2020). However, because the company's internal capital sources (paid-up capital and retained earnings) for company development are increasingly limited,

management must seek alternative external funding through bank loans and capital markets (Horvathova et al., 2018; Ozkan, 2001).

The current condition of all kinds of businesses is very dependent on capital issues; there is an opinion that to encourage economic growth, it is necessary to mobilize the real sector, although the business world still faces many obstacles, the most important of which is financial problems. The business world is experiencing a setback as many financial institutions face financial difficulties due to credit defaults in the business world despite the maximum limit of bank loans and other issues; creditworthiness issues have been approved, and the pandemic is sweeping the world. Capital-related issues and financial issues are still an important influence on company performance (William & Sanjaya,) 2017 . In this effort, the company's financial manager pays more attention to determining the company's capital structure. In the capital market, companies compete with each other, especially those listed in LQ 45 on the IDX. This competition encourages companies to improve their performance further to achieve their goals. The view of investors is very important, especially it can affect a company's performance. Some factors that affect company performance are asset structure, innovation and technology, agency costs, company size and company growth (Li, Wu, Xu & Tang, 2017; Rani, Yadav & Tripathy,) . 2019

This study's urgency is to determine the significance of the variables used, especially in LQ45 companies listed on the IDX. Several empirical studies on capital structure theory have focused on the influence of factors on leverage and firm value (Baule, 2018; Ben-Nasr et al., 2015). Some studies have compared pecking order and trade-off theories to analyze which is better for leverage (Arsov & Naumoski, 2016; Zunckel & Nyide, 2019).

In addition, some have analyzed dynamic capital structure with leverage and targeted the speed of adjustment. (Islam Abdeljawad & Nor, 2017; Li, Wu, Xu & Tang, 2017; Rani, Yadav & Tripathy, 2019). All results present some novel and appropriate leverage variables. Management expects companies to have proportional and optimal corporate solvency to maximize value creation and shareholder prosperity. Other factors considered influential in financial performance are asset structure, innovation and technology, agency costs, and firm size (Prieto & Lee, 2019; Vo, 2017). The influence of several factors on capital structure and financial performance differs empirically because it is specific to the type of company or each respective business field in which it operates (Santosa & Puspitasari, 2019).

Company growth also affects leverage; according to Jensen (1986), leaders tend to have resources that they manage. Asset growth, revenue growth, and profit growth will significantly affect the amount of cash managers own, so managers tend to hold these resources to finance their operations. Manage the company.

Companies that grow will get a positive response from the market, which will trigger an increase in their share price. This aligns with Signaling Theory (Managerial et al., 2014). The effect of company growth on debt is stated by (Managerial et al., 2014) if company growth as measured using sales growth positively affects leverage. The effect of growth on leverage is proven by Mahadwartha (2016), which proves that company growth negatively affects leverage. According to the pecking order theory, managers use internal capital first to finance expansion and then

external capital (Managerial et al., 2014). However, what distinguishes this research from previous research is changing the profitability variable to company growth and using the latest year and sector changes from the food and beverage sector to LQ45 companies for the period August 2022. There are differences in the results of these studies and still need further research to obtain empirical evidence regarding the determining factors that can affect leverage. This study aims to examine the factors that affect leverage, which are the responsibility of company management, which includes sources of funds, internal, external, and other factors that affect the leverage of business units or companies.

Research Methods

This study focuses on LQ45 companies for the period of August 2022; we exclude financial companies such as banks, insurance companies, and public companies due to their different nature. All stocks with negative market-to-book ratios are also excluded. The population of this study are companies included in the LQ 45 category listed on the Indonesia Stock Exchange Consumer Goods Index from 2019 to 2021 and have published company financial reports, so the population of this study is 45 companies. This study uses sampling techniques, including target sampling techniques, with various considerations. Therefore, the selected sample must be representative, it reflects all the characteristics of the population. Because this research uses a quantitative approach, each variable requires measurement or proxy.

This study uses descriptive statistics; then classical hypothesis testing includes a normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test (Ghozali, 2018). Hypothesis testing is done with the t-test, F-test and coefficient of determination. In addition, the study used multiple regression analysis with multiple regression equation models (Ghozali, 2018). as :

$$LEV = i\alpha + i\beta_1.AST - i\beta_2.TEC - i\beta_3.AGC + i\beta_4.SIZ + i\beta_5.GRO + i\varepsilon$$

Description:

LEV	= <i>Leverage (Total debt to equity)</i>
α	= constant
β	= regression coefficient
AST	= Asset Structure (<i>Total debt to equity</i>)
TEC	= and Technology (<i>Technology</i>)
AGC	= Agency Cost (<i>Operation cost to revenue</i>)
SIZ	= Firm Size (<i>Log-rank of total assets</i>)
GRO	= Company Growth
ε	= error

Results and Discussion

Research Results

Table 1. Descriptive Statistics Test Results

	N	Minimu	Maxi	Mean	Std.
AST	33	.076	.803	.44494	.220089
TEC	33	.000	1.792	.23706	.400474
AGC	33	.027	.603	.11358	.131314
SIZE	33	10.647	29.710	19.1150	6.102651
GROWTH	33	.019	1.676	.18006	.307757
LEV	33	.029	3.772	.83252	.889268
Valid N (listwise)	33				

The results of descriptive statistical testing obtained conclusions, namely the asset structure variable (AST) gets a min value of 0.076, a max value of 0.803 and a mean value of 0.444 and a std. deviation of 0.220. The innovation and technology variable (TEC) gets a min value of 0.000, a max value of 1.792 and a mean value of 0.237 and a std. deviation of 0.400. The agency cost variable (AGC) gets a min value of 0.027, a max value of 0.603 and a mean value of 0.113 and a std. deviation of 0.131. The company size variable (SIZ) gets a min value of 10,647, a max value of 29,710 and a mean value of 19,115 and a std. deviation of 6,102. The company growth variable (GROWTH) gets a min value of 0.019, a max value of 1.676 and a mean value of 0.180 and a std. deviation of 0.307. The Leverage variable (LEV) gets a min value of 0.029, a max value of 3.772 and a mean value of 0.832 with a std. deviation of 0.889.

Classical Assumption Test

Table 2. Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardiz
N		30
Normal	Mean	.0000000
	Std. Deviation	.68045362
<u>Most Extreme</u>	<u>Absolute</u>	.124
<u>Differences</u>	<u>Positive</u>	.089
	<u>Negative</u>	-.124
Kolmogorov-Smirnov		.124
<u>Asymp. Sig. (2-tailed)</u>		.200

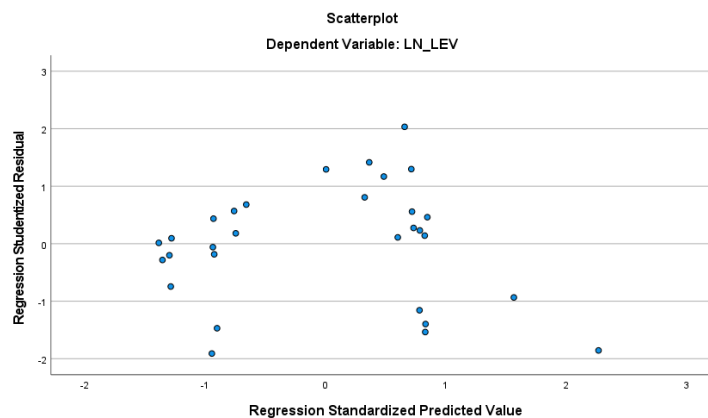
The normality test results obtained a p-value of 0.200 or 0.200 greater than 0.05; it can be concluded that the assumption required for the regression test must circulate normally so that this regression model can be continued. From the multicollinearity test, it can be found that all independent variables used in the study have a VIF number < 10 (or Tolerance > 0.10), the AST variable with VIF 1.471, the TEC variable with VIF 1.399, the AGC variable with VIF 1.169, the SIZ variable with VIF 1.226, and the GROWTH variable with VIF 1.175, from this statement it indicates that the regression model can be continued and there is no multicollinearity problem.

Table 3. Multicollinearity Test Results

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AST	.680	1.471
	TEC	.715	1.399
	AGC	.855	1.169
	SIZE	.816	1.226
	GROWTH	.851	1.175

a. Dependent Variable: LEV

From multicollinearity testing, it can be found that all independent variables used in the study have a VIF number < 10 (or Tolerance > 0.10), the AST variable with a VIF of 1.471, the TEC variable with a VIF of 1.399, the AGC variable with a VIF of 1.169, the SIZ variable with a VIF of 1.226, and the GROWTH variable with a VIF of 1.175, from this statement it indicates that the regression model can be continued and there is no multicollinearity problem.

**Figure 2. Heteroscedasticity Test Results**

The results of the heteroscedasticity test above, as shown in the scatter plot, show that the existing points do not form a certain regular pattern (wavy, widening, then narrowing) and spread around the number 0 on the y-axis, so this indicates that there is no problem with heteroscedasticity.

Table 4. Autocorrelation Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R	Std. Error of	Durbin-
1	.902 ^a	.814	.763	.72839	1.990

a. Predictors: (Constant), SIZE, AGC, AST, GROWTH, TEC

b. Dependent Variable: LEV

Based on the autocorrelation test, the lower limit value (dL) known from the Durbin Watson table for $n = 33$ and $k = 5$ at a significant level of 5% is 1.127 (4-dl worth 2.873). The upper limit value (dU) is 1.812 (4-du worth 2.188), Durbin Watson worth 1.990 is in the $du \leq dw \leq 4 - du$ area, meaning that there is no autocorrelation in the regression model, meaning that the test is passed.

Hypothesis Test

Table 5. Simultaneous Test Results (F Test)

ANOVA ^a						
Model		Sum of	df	Mean Square	F	Sig.
1	Regression	50.764	5	10.153	18.147	.001 ^b
	Residuals	13.427	24	.559		
	Total	64.192	29			

a. Dependent Variable: LEV

b. Predictors: (Constant), GROWTH, SIZE, AGC, TEC, AST

The ANOVA or F test results obtained an F count of 18.147 (F table: 2.52), a significant level of 0.000. Because the F count is higher than the F table and the probability is much lower than 0.05, it means that H_a is accepted so that AST, TEC, AGC, SIZ, and GROWTH simultaneously affect LEV.

Table 6. Results of the t-test

Model	Standardized Coefficients		t	Sig.	Results
	Beta				
1	(Constant)		3.681	.001	
	AST	.604	5.335	.000	Hypothesis Accepted and positive effect
	TEC	.787	7.125	.000	Hypothesis Rejected and positive effect
	AGC	-.354	-3.507	.002	Hypothesis Accepted and negative effect
	SIZE	-.285	-2.762	.011	Hypothesis Rejected and negative effect
	GROWTH	.055	.543	.592	Hypothesis Accepted and positive effect

a. Dependent Variable: LEV

Table 7. Coefficient of Determination Test Results (R²)

Model Summary^b					
Model	R	R Square	Adjusted R	Std. Error of	Durbin-
1	.902 ^a	.814	.763	.72839	1.990

a. Predictors: (Constant), SIZE, AGC, AST, GROWTH, TEC

b. Dependent Variable: LEV

Based on the coefficient test (r) which is 0.889. this figure indicates that if there is a relationship between AST, TEC, AGC, SIZ, GROWTH with LEV, it is stated that it has a close relationship due to a correlation of > 0.50. While the Adjusted R Square (coefficient of determination) is 0.747, meaning that the variation in LEV can be described by the AST, TEC, AGC, SIZ, GROWTH variables is 0.747 or 74.7% while the remaining 25.3% is described by other factors not explained in this study.

Multiple Regression Test

The regression equation can be seen as follows:

$$\text{LEV} = 4.823 + 1.848.\text{AST} + 0.829.\text{TEC} - 0.643.\text{AGC} - 1.300.\text{SIZ} + 0.102.\text{GROWTH}$$

The constant value in the regression equation of this study has a value of 4.823; it can be concluded that if the independent variables, namely asset structure, innovation and technology, agency costs, company size, and company growth, are estimated to be constant 0, then there is an increase in the variable, namely 4.823. The empirical value of X1 (AST) is 1.848 which means that if there is a 1% increase in X1, there is a decrease of 1.848 in leverage. The empirical value of X2 (TEC) is 0.829, which means that if there is a 1% increase in X2, there is a decrease of 0.829 in leverage. The empirical value of X3 (AGC) is -0.643, which means that if there is a 1% increase in X3, there will be a decrease of -0.643 in leverage. The empirical value of X4 (SIZ) is -1.300, which means that if there is a 1% increase in X4, there is an increase of -1.300 in leverage. The empirical value of X5 (GROWTH) is 0.102, which means that if there is a 1% increase in X5, so there is an increase of 0.102 in leverage.

Discussion

Effect of Asset Structure on Leverage

The t-test results prove that the asset structure variable (AST) significantly affects debt policy. Therefore, H1, namely asset structure, has a significant positive effect on leverage is accepted. This means that the business unit or company has sufficient assets to finance the operations of the company or business unit. When a company wants to apply as a condition of applying for a loan or debt, the company's asset ownership is very secure. The existence of collateral can make it easier for a company compared to a company that has no collateral. Asset structure determines the important role of financing. This study's results align with the research

studied by Yoo & Wu (2020) and Forte et al. (2013), which says that asset structure affects leverage.

Effect of Innovation and Technology on Leverage

The t-test results prove that the innovation and technology (TEC) variable significantly affects leverage. Therefore, H2, namely innovation and technology, negatively influences leverage and is rejected. Businesses that use innovation and technology in their business activities are not always carried out by taking on debt but have been budgeted carefully, planned, and directed to achieve company goals. According to Arifin et al. (2016), this aligns with his research, which states that innovation and technology significantly positively affect leverage.

The Effect of Agency Costs on Leverage

The t-test results prove that the agency cost variable (AGC) significantly affects debt policy; therefore, H3, namely agency costs have a negative effect on debt policy, is accepted. Agency costs in industries or business sectors that have been transparent and practice the principles of Good Corporate Governance tend to be stable and decrease. Stable agency costs encourage management to utilize more rational and measured decisions following a healthy debt ratio target. The results of Santosa and Puspitasari (2019) research show that agency costs negatively influence corporate debt policy are significant.

Effect of Company Size on Leverage

The t-test results prove that the company size variable (SIZ) has a negative and significant effect on leverage; therefore, H4, namely company size has a positive influence on leverage, is rejected. The size of a business unit or company facilitates activities and is more easily recognized by the public. The size of the business unit or company makes more debt-financed assets. From this study, it can be said that manufacturing business units engaged in basic consumer needs are more likely to carry out debt reduction policies. This research is in line with research conducted by Yoo and Wu (2019), by concluded that company size has a negative and significant effect on leverage.

The Effect of Company Growth on Leverage

The t-test results show that the company growth variable (GROWTH) has a negative and insignificant effect on leverage, so H5 means rejected. This means that leverage does not increase with company growth. High growth does not necessarily mean the company is growing so much that financing needs become important. Therefore, companies use other means, such as selling shares or selling assets, to finance company operations. This statement is supported by Ozakan's research (2021), which states that company growth has no significant effect on leverage.

When the data is processed, a sample of 11 companies is obtained. Financial report data as much as 45 company data that have been published on the Indonesia Stock Exchange which

concludes that the asset structure variable (AST) has a positive influence on leverage, the innovation and technology variable (TEC) has a positive influence on leverage, the agency cost variable (AGC) has a negative influence on leverage, the company size variable (SIZ) has a negative influence on leverage and the growth variable (GROWTH) of the company has a positive influence on leverage.

This study has a certain level of independence, including many companies that have innovative technology or intangible assets, so the sample size obtained is only 11 out of 45 companies, and only limited variables, asset structure (AST), innovation and technology (TEC), agency costs (AGC), company size (SIZ) and company growth (GROWTH), which is recommended that future research not only examine companies in the LQ45 industry, but also expand the industrial sector. and add variables outside the study, such as inflation, interest rates, auditor quality, or investment.

Good management influences the funding decisions of both large business units. For business units, having a high-value asset structure has the potential to obtain more accessible external funding, either in the form of debt or new share issuance, because it has more significant asset collateral, credibility, sustainable business expansion, and high competitiveness. Companies that add budget for innovation and technology produce more innovative consumer goods that can create intangible value and brand image for customers, making it easier to achieve company targets. Therefore, management is expected to continue to innovate and develop technology properly and plan; in addition, management must also be able to adequately control the company's financial development to make the right decisions in managing the company's business operations.

Conclusion

Based on the test results, the management implications for LQ45 companies listed on the IDX are that companies are expected to be able to manage the capital resources used to support their operational and equity needs. Companies in the LQ45 sector are expected to be able to maintain their asset structure properly to maintain business continuity. Innovation and technological development must continue to be carried out so that the company does not lose out on competition with similar companies. The company must be controlled and more open to be stable. For already healthy companies, the size of the company is not the main measure of success. However, the company's size also needs to be considered for its long-term sustainability. The company's growth must be given more attention because the more it grows, the more it will gain the trust of internal or external parties, which in turn can increase the company's value.

References

- Ali, C. Ben. (2020). Agency Theory and Fraud. *Corporate Fraud Exposed*, 1976, 149–167. <https://doi.org/10.1108/978-1-78973-417-120201009>
- Ardalan, K. (2017). Capital structure theory: Reconsidered. *Research in International Business and Finance*, 39, 696–710. <https://doi.org/10.1016/j.ribaf.2015.11.010>
- Arifin, Z., Firmanzah, Fontana, A., & Wijanto, S. H. (2016). The determinant factors of technology adoption for improving firm's performance: An empirical research of Indonesia's electricity

- company. *Gadjah Mada International Journal of Business*, 18(3), 237–261. <https://doi.org/10.22146/gamaijb.16898>
- Arsov, S., & Naumoski, A. (2016). Determinante strukture kapitala: Empirijska studija kompanija iz odabranih post-tranzicijskih ekonomija. *Zbornik Radova Ekonomskog Fakultet Au Rijeci*, 34(1), 119–146. <https://doi.org/10.18045/zbefri.2016.1.119>
- Arvin Ghosh, Francis Cai, R. H. F. (2017). *Capital Structure and Firm Performance*.
- Avarmaa, M., Hazak, A., & Männasoo, K. (2011). Capital structure formation in multinational and local companies in the Baltic States. *Baltic Journal of Economics*, 11(1), 125–145. <https://doi.org/10.1080/1406099X.2011.10840494>
- Azmal, R., Negoro, D. A., Yanuar, T., & Syah, R. (2019). The Influence Cash Position Analysis over Debt to Equity Ratio, Return On Assets, And Inventory Turnover on Dividend Payout Ratio: Consumer Goods Companies in Indonesia Stock Exchange 2012-2017 Case Study. *Journal of Multidisciplinary Academic*, 3(4).
- Baule, R. (2018a). The cost of debt capital revisited. *Business Research*, 2, 721–753. <https://doi.org/10.1007/s40685-018-0070-6>
- Baule, R. (2018b). The cost of debt capital revisited. *Business Research*, 2, 721–753. <https://doi.org/10.1007/s40685-018-0070-6>
- Ben-Nasr, H., Boubaker, S., & Rouatbi, W. (2015a). Ownership structure, control contestability, and corporate debt maturity. *Journal of Corporate Finance*, 35, 265–285. <https://doi.org/10.1016/j.jcorpfin.2015.10.001>
- Ben-Nasr, H., Boubaker, S., & Rouatbi, W. (2015b). Ownership structure, control contestability, and corporate debt maturity. *Journal of Corporate Finance*, 35, 265–285. <https://doi.org/10.1016/j.jcorpfin.2015.10.001>
- Bertuah, Syah, Negoro, A. (2021). *Impact Of Empiris Profitability, Growth, Size Firm, Tangbility On Capital Structure Of The Hotel Industry*.
- Booth, L., Aivazian, V., Demirguc-Kunt, A., & Maksimovic, V. (2001). Capital structures in developing countries. *Journal of Finance*, 56(1), 87–130. <https://doi.org/10.1111/0022-1082.00320>
- Brealey, R. A., Myers, S. C., & Marcus, A. J. (2001). *Fundamental Of Corporate Finance* (3rd Edition). In *McGraw-Hill*.
- 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>
- Cao, Z., & Lumineau, F. (2015). Revisiting the interplay between contractual and relational governance: A qualitative and meta-analytic investigation. *Journal of Operations Management*, 33–34, 15–42. <https://doi.org/10.1016/j.jom.2014.09.009>
- Castro, P., Tascón, M. T., & Amor-Tapia, B. (2015). Análisis dinámico de la estructura de capital en empresas tecnológicas basado en sus fases de ciclo de vida. *Revista Espanola de Financiacion y Contabilidad*, 44(4), 458–486. <https://doi.org/10.1080/02102412.2015.1088202>
- Chang, F.-M., Wang, Y., Lee, N. R., & La, D. T. (2014). DECISIONS AND FIRM PERFORMANCE OF Contribution / Originality. *Asian Economic and Financial Review*, 4(11), 1545–1563.
- Chow, Y. P. (2019). Sectoral analysis of the determinants of corporate capital structure in Malaysia. *Organizations and Markets in Emerging Economies*, 10(2), 278–293.

- <https://doi.org/10.15388/omee.2019.10.14>
- Cindy, A., & Wulandari, A. (2022). Pengaruh Profitabilitas, Ukuran Perusahaan dan Pertumbuhan Penjualan Terhadap Nilai Perusahaan. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, Dan Akuntansi)*, 6(1), 494–512.
- Endri, E., Supeni, M. I. R., Budiasih, Y., Siahaan, M., Razak, A., & Sudjono, S. (2021). Oil Price and Leverage for Mining Sector Companies in Indonesia. *International Journal of Energy Economics and Policy*, 11(4), 24–30. <https://doi.org/10.32479/ijeep.11237>
- Forte, D., Barros, L. A., & Nakamura, W. T. (2013). Determinants of the capital structure of small and medium sized Brazilian enterprises. *BAR - Brazilian Administration Review*, 10(3), 347–369. <https://doi.org/10.1590/S1807-76922013000300007>
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25 Edisi 9*. Badan Penerbit Universitas Diponegoro.
- Godoe, P., & Johansen, T. S. (2012). Understanding adoption of new technologies: Technology readiness and technology acceptance as an integrated concept. *Journal of European Psychology Students*, 3, 38. <https://doi.org/10.5334/jeps.aq>
- Graham, J. R., Leary, M. T., & Roberts, M. R. (2015). A century of capital structure: The leveraging of corporate America. *Journal of Financial Economics*, 118(3), 658–683. <https://doi.org/10.1016/j.jfineco.2014.08.005>
- Handayani, S. (2014a). *Kualitas Pengungkapan Dan Manajemen Laba Dalam*.
- Handayani, S. (2014b). *Kualitas Pengungkapan dan Manajemen Laba Dalam Kaitannya Dengan Karakteristik Perusahaan*. 5, 2.
- Hasan, M. B., Ahsan, A. F. M. M., Rahaman, M. A., & Alam, M. N. (2014). Influence of Capital Structure on Firm Performance: Evidence from Bangladesh. *International Journal of Business and Management*, 9(5), 184–194. <https://doi.org/10.5539/ijbm.v9n5p184>
- Horvathova, J., Mokrisova, M., & Dancisinova, L. (2018). Modelling of capital structure in relation to business performance maximization. *Investment Management and Financial Innovations*, 15(2), 292–304. [https://doi.org/10.21511/imfi.15\(2\).2018.26](https://doi.org/10.21511/imfi.15(2).2018.26)
- Indrati, M., Purwaningsih, E., Agustinah, W., & Sarikha, A. (2021). *Corporate Governance Mechanisms and Possible Financial Statements Containing Fraud*. November. <https://doi.org/10.33258/birci.v4i4.2805>
- Irwanti, A., Marimin, Haryadi, P., Eriyatno, & Handoko, L. T. (2020). The role of innovation capacity and technology adoption towards product innovation performance measurement in micro small enterprises food industry. *IOP Conference Series: Earth and Environmental Science*, 443(1). <https://doi.org/10.1088/1755-1315/443/1/012060>
- Islam Abdeljawad, & Nor, F. M. (2017). The capital structure dynamics of Malaysian firms: timing behavior vs adjustment toward the target. *The Eletronic Library*, 13(3), 1–5. <https://doi.org/10.1108/JAMR-12-2017-0125>
- Jermias, J., & Yigit, F. (2019). Factors affecting leverage during a financial crisis: Evidence from Turkey. *Borsa Istanbul Review*, 19(2), 171–185. <https://doi.org/10.1016/j.bir.2018.07.002>
- Jumono, S. (2013). *Model Pendeteksian Efek Sinergi Pertumbuhan Asset atas Nilai Perusahaan Untuk Keputusan Pendanaan Berbasis Hutang di Bursa Efek Indonesia (BEI)*.
- Kanita, G. G. (2014). Pengaruh Struktur Aktiva dan Profitabilitas terhadap Struktur Modal Perusahaan Makanan dan Minuman. *Trikonomika*, 13(2), 127. <https://doi.org/10.23969/trikononika.v13i2.608>
- Kyriazopoulos, G. (2017). Corporate governance and capital structure in the periods of financial distress. Evidence from Greece. *Investment Management and Financial Innovations*, 14(1),

- 254–262. [https://doi.org/10.21511/imfi.14\(1-1\).2017.12](https://doi.org/10.21511/imfi.14(1-1).2017.12)
- Lesmana, H., Indradewa, R., & Syah, T. Y. R. (2021). Organization Innovation Effect On Job Satisfaction And Employee Engagement Over Job Performance At PT. UTAC Manufacturing Services Indonesia. *Journal of Multidisciplinary Academic*, 5(3), 208–215. <https://doi.org/10.51971/joma.v5n3.057602021>
- Li, W., Wu, C., Xu, L., & Tang, Q. (2017). Bank connections and the speed of leverage adjustment: evidence from China's listed firms. *Accounting and Finance*, 57(5), 1349–1381. <https://doi.org/10.1111/acfi.12332>
- Manajerial, P. K., Institusional, K., & Rahma, A. (2014). Pengaruh Kepemilikan Manajerial, Kepemilikan Institusional, dan Ukuran Perusahaan Terhadap Keputusan Pendanaan dan Nilai Perusahaan (Studi Kasus Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Priode 2009-2012), 23(2), 45–69. <https://doi.org/10.14710/jbs.23.2.45-69>
- Michael C. JENSEN and William H. MECKLING 1976. (2019). Managerial Behavior, Agency Costs and Ownership Structure, Michael. *Human Relations*, 72(10), 1671–1696. <https://doi.org/10.1177/0018726718812602>
- Munandar, A., Putri Kartika Sari, D., Sintha, L., & Bertuah, E. (2022). *The Influence of Ownership Structure, Capital Structure, Dividends, and Auditors on Firm Performance*. www.aijbm.com
- Nguyen, V. C. (2020). Human capital, capital structure choice and firm profitability in developing countries: An empirical study in Vietnam. *Accounting*, 6(2), 127–136. <https://doi.org/10.5267/j.ac.2019.11.003>
- Novianti, N. (2015). Pengaruh Struktur Modal, Ukuran Perusahaan, Dan Kebijakan Dividen Terhadap Koefisien Respon Laba. *Etikonomi*, 13(2), 118–147. <https://doi.org/10.15408/etk.v13i2.1882>
- Ozkan, A. (2001). Determinants of capital structure and adjustment to long run target: Evidence from UK company panel data. *Journal of Business Finance and Accounting*, 28(1–2), 175–198. <https://doi.org/10.1111/1468-5957.00370>
- Prawibowo, T. (2014). Analisis Pengaruh Persaingan Terhadap Agency Cost (Studi Empiris Perusahaan Manufaktur yang Terdaftar di BEI pada Tahun 2010-2012). *Diponegoro Journal of Accounting*, 0(0), 606–620.
- Prieto, A. B. T., & Lee, Y. (2019). Internal and External Determinants of Capital Structure in Large Korean Firms. *GLOBAL BUSINESS & FINANCE REVIEW*.
- 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>
- Rashid, A. (2016). Does risk affect capital structure adjustments? *Journal of Risk Finance*, 17(1), 80–92. <https://doi.org/10.1108/JRF-06-2015-0060>
- Reskika, N., & Ickhsanto, W. (2021). the Effect of Company Size, Profitability, Audit Committee on Audit Delay With Public Accounting Firm Size As Moderating Variables. *Hirarki : Jurnal Ilmiah Manajemen Dan Bisnis*, 3(3), 418–441. <https://doi.org/10.30606/hirarki.v3i3.1430>
- Rizka Putri Indahningrum dan Ratih Handayani. (2009). Pengaruh kepemilikan manajerial, kepemilikan institusional, dividen, pertumbuhan perusahaan, free cash flow dan profitabilitas terhadap kebijakan hutang perusahaan. *Jurnal bisnis dan akuntansi*, 11(3), 189–207.
- Sanil, H. S., Noraidi, A. A. A. bin, & Ramakrishnan, S. (2018). The Impact of Different Firm Sizes on Capital Structure Determinants Among Listed Consumer Product Firms In Malaysia. *Journal of Economic Info*, 5(2), 1–6. <https://doi.org/10.31580/jei.v5i2.104>
- Santosa, P. W. (2019). Financial Performance, Exchange Rate and Stock Return: Evidence from

- Manufacturing Sector. *Jurnal Manajemen Teknologi*, 18(3), 205–217. <https://doi.org/10.12695/jmt.2019.18.3.5>
- Santosa, P. W. (2020). The effect of financial performance and innovation on leverage: Evidence from Indonesian food and beverage sector. *Organizations and Markets in Emerging Economies*, 11(22), 367–388. <https://doi.org/10.15388/OMEE.2020.11.38>
- Santosa, P. W., & Puspitasari, N. (2019). Corporate Fundamentals, Bi Rate And Systematic Risk: Evidence From Indonesia Stock Exchange. *Jurnal Manajemen*, 23(1), 39. <https://doi.org/10.24912/jm.v23i1.443>
- Santosa, P. W., Tambunan, M. E., & Kumullah, E. R. (2020). The role of moderating audit quality relationship between corporate characteristics and financial distress in the Indonesian mining sector. *Investment Management and Financial Innovations*, 17(2), 88–100. [https://doi.org/10.21511/imfi.17\(2\).2020.08](https://doi.org/10.21511/imfi.17(2).2020.08)
- Sari, N. L., & M. Daud, R. (2016). Pengaruh Informasi Laba Terhadap Koefisien Respon Laba (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bei Pada Tahun 2011-2014(2), 227–326. <https://jurnal.widyagama.ac.id/index.php/cebi/article/view/71>
- Shambor, A. Y. (2017). The Determinants of Capital Structure: Empirical Analysis of Oil and Gas Firms during 2000-2015. *Asian Journal of Finance & Accounting*, 9(1), 1. <https://doi.org/10.5296/ajfa.v9i1.9359>
- Suhendra, E. S. (2014). Factors Impacting Capital Structure in Indonesian Food and Beverage Companies. *International Conference on Eurasian Economies 2014*, 75–82. <https://doi.org/10.36880/c05.00896>
- Sutomo, S., Wahyudi, S., Pangestuti, I. R. D., & Muharam, H. (2020). The determinants of capital structure in coal mining industry on the Indonesia Stock Exchange. *Investment Management and Financial Innovations*, 17(1), 165–174. [https://doi.org/10.21511/imfi.17\(1\).2020.15](https://doi.org/10.21511/imfi.17(1).2020.15)
- Tan, Y., & Yang, Z. (2016). Contingent capital, capital structure and investment. *North American Journal of Economics and Finance*, 35, 56–73. <https://doi.org/10.1016/j.najef.2015.10.016>
- TITMAN, S., & WESSELS, R. (1988). The Determinants of Capital Structure Choice. In *The Journal of Finance* (Vol. 43, Issue 1). <https://doi.org/10.1111/j.1540-6261.1988.tb02585.x>
- Vo, X. V. (2017). Determinants of capital structure in emerging markets: Evidence from Vietnam. *Research in International Business and Finance*, 40, 105–113. <https://doi.org/10.1016/j.ribaf.2016.12.001>
- Widarti, A. A., & Sudanandra, I. M. (2014). Pengaruh karakteristik perusahaan terhadap keputusan pendanaan (Perbandingan antar sub sektor industri manufaktur). *Jurnal Siasat Bisnis*, 18(2), 190–201. <https://doi.org/10.20885/jsb.vol18.iss2.art5>
- Yoo, S., & Wu, J. (2019). Capital Structure and Stock Returns: Evidence from Korean Stock Markets. *GLOBAL BUSINESS & FINANCE REVIEW*, 24(4), 8–23. <https://doi.org/10.17549/gbfr.2019.24.4.8>
- Zunckel, S., & Nyide, C. J. (2019). Capital structure of small, medium and micro enterprises: Major factors for a developing economy. *Problems and Perspectives in Management*, 17(2), 124–133. [https://doi.org/10.21511/ppm.17\(2\).2019.09](https://doi.org/10.21511/ppm.17(2).2019.09)