



The Influence of Ownership on Capital Structure Of Companies Listed In Indonesia Stock Exchange (IDX)

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Abstract

The purpose of this research is to analyze the effect of foreign, institutional, and family ownership on capital structure. The two control variables include company size and profitability, while the secondary data were obtained from the financial firm, and 2014-2018 annual report. Sampling technique by using total sampling method. A total of 197 companies listed on the Indonesia Stock Exchange (IDX) were sampled. Data analysis by used descriptive analysis, classic assumption test and pane data regression. The results showed that foreign, institutional, and family ownerships have no significant effect on capital structure. However, firm size and profitability have positive and negative significant effects on capital structure, respectively.

Keywords: Capital Structure, Institutional Ownership, Family Ownership, Firm Size, and Profitability

1. Introduction

The current business development has resulted in stiff competition among Indonesia's companies. Organizations are forced to adjust their business operations due to globalization, technological innovation, and competition. In general, competition requires each company to have good decision-making policies on funds selection and create capital structure equilibrium to realize financial stability. According to (Basit & Hassan, 2017) a capital structure consists of a company's long-term fixed costs, including debt, preferred stock, and equity. (Agrippina et al., 2017) stated that capital structure affects the company's ability to meet each stakeholder's needs.

2017, with foreign investor ownership of 45.50%. In 2018, the shareholder percentage slightly rose to 54.82%, with foreign investor ownership of 45.18%. The shareholder percentage dropped to 54.25% in 2019, while the foreign investor ownership increased to 45.75%. The slight decrease means that a company should continuously improve its performance to thrive in the investor-capital competition.

Several influential parties determine the company's capital structure, including foreign, institutional, and family ownership. According to (Ullah & Bagh, 2019), ownership structure critically determines the institutional financial performance and the corporate governance metaphor. (Zhou, 2019) established that this ownership structure is one of the internal governance influencing the company's managerial mentality and determines its strategic behavior. (miraza & Muniruddin, 2017) showed that institutional ownership has no significant effect on capital structure. However, (Primadhanny, 2016) indicated that institutional and foreign ownership partially affect the capital structure. (Thai, 2019) also stated that the proportion of foreign investment is negatively related to the short term, total, and market leverage.



Figure 1. Shareholder Composition 2017-2019

According to Figure 1 above, Indonesia's shareholder composition fluctuates every year, marked by percentage increase and decrease in domestic investors. The percentage shareholder was 54.50% in

According to (Primadhanny, 2016), a company's foreign ownership structure has a crucial role in information disclosure. Companies with high foreign ownership are pressurized to disclose in detail all their

activities to create value. For instance, in Indonesia, Foreign Direct Investment significantly affects various company's contribution to the level of economic growth. (Gu et al., 2020) stated that the foreign institution's owners provide incentives to pay attention to the company performance matrix. The optimal combination of equity and debt requires lower capital to achieve company goals (Kyissima et al., 2019). The research conducted in Vietnam by (Thai, 2019) on foreign ownership of the capital structure showed that the proportion of foreign investment is negatively related to the short term, total, and market leverage. In line with this, (Ahmad & Nawaz, 2018) in Pakistan, showed that foreign ownership is statistically significant and negatively related to debt ratios. Therefore, the first hypothesis is formulated as:

H1: Foreign ownership affects the capital structure

According to (Panda & Leepsa, 2019), large institutions improve company performance through effective decision-making. Companies with strong institutional ownership use funds efficiently by supervising and controlling management policies on cash flow. Conversely, (Mahdi & Mohsen, 2019) showed that institutional ownership consists of passive and active investors. Basit & Hassan (2017) examined the effect of institutional ownership on capital structure. The results showed that institutional ownership has no significant effect on capital structure. However, (Primadhanny, 2016) stated that institutional ownership partially affects capital structure. Therefore, the formulation of the second hypothesis is as follows:

H2: Institutional ownership affects the capital structure

Family companies increase the relationships between shareholders and managers based on interests (Pacheco, 2017). (Naima et al., 2017) stated that family companies do not engage much in income manipulation because it adversely affects their reputation and wealth. On the other hand, institutional ownership will make the company have more value in the perspective of investors (Sanjaya et al., 2020) Another reason for this is that they are not pressured to meet income expectations. The capital structure of family companies is generally affected by governance factors, such as continuity, loss of control, and inter-generational stewardship. Moreover, conflicts between creditors and family companies are minimized by investment and long-term survival interests. According to (Alzoubi, 2016), these companies need to be more efficient than public companies due to reduced monitoring costs. (Amaia et al., 2019) stated that the internal mechanism serves as family companies' corporate governance.

Family ownership is not related to debt ratio (Young et al., 2016). However, according to a CEO's evaluation of control and optimum performance, family ownership is positively related to debt ratio and market

book value. The debt ratio is offset by family control through the CEO's position and equity performance. Therefore, the third hypothesis is formulated as:

H3: Family ownership affects capital structure.

2. Method

This study uses 555 publicly traded companies listed on the Indonesia Stock Exchange (IDX) from 2014 to 2018, determined through random sampling. Additionally, the 197 sample companies were determined by random sampling based on certain criteria. Capital structure is a permanent financing form, such as long-term debt, preferred stock, and shareholder capital. Capital is sourced from internal personal funding or external debts (Buana, 2018). It is calculated as total debt to total equity ratio (Chandra et al., 2017).

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$$

According to (Rely & Arsajah, 2018), foreign investors are individuals, business entities, and or governments investing in Indonesia. There are two foreign ownership categories, including share ownership and additional subsidiary companies. [7] and (Kao et al., 2019) stated that foreign ownership is the total shares of foreign investors divided by the total shares issued by a particular company, then multiplied by 100.

$$\text{Foreign Ownership} = \frac{\text{Total foreign share ownership}}{\text{total shares outstanding}} \times 100\%$$

Institutional ownership is the number of shares owned by an institution in a company. According to (Salehi et al., 2017), the institutional ownership percentage determines the proportion of shares owned by companies, such as insurance, investment financial institutions, banks, governments, companies, and other parts of the country. It is calculated by dividing institutional ownership with the number of shares at the end of the year. According to (Ullah & Bagh, 2019b), this ownership is interpreted as the total shares held by institutional owners in a company or organization.

$$\text{Institutional Ownership} = \frac{\text{Total institutional share ownership}}{\text{total shares outstanding}} \times 100\%$$

According to (Thitima, 2017), an increase in family share ownership decreases the interest conflict between the main and minority shareholders. (Manuel, 2018) stated that high family ownership causes the possible risk of pursuing personal interests. Therefore, family ownership is the percentage of shares owned divided by the number of outstanding shares.

$$\text{Family Ownership} = \frac{\text{Total Family Ownership}}{\text{Total Share Outstanding}} \times 100\%$$

In terms of size, banks are more likely to loan to large companies, both in debt and share capital (Perusahaan & Likuiditas, 2018). According to (Nguyen et al., 2019), company size is measured by the natural logarithm of total assets at the end of the year.

$$\text{Size} = \text{Ln}(\text{Total Asset})$$

Profitability is the company's ability to generate profits based on the effectiveness and efficiency of using its assets. (Chandra et al., 2017) According to (Zaitul et al., 2019) and (Thai, 2019), profitability is measured with ROA by comparing net income to the total assets.

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Total asset}} \times 100\%$$

The secondary data was obtained from the annual or company financial reports from 2014-2018. The research used the library, documentation, and internet utilization methods. The data sources' official website was www.idx.co.id.

Data were analyzed by Eviews 9 to evaluate the influence of foreign, institutional, and family ownership on the capital structure. The panel data regression analysis equation is formulated as follows:

$$\text{DER}_{it} = \alpha + \beta_1 \text{KA}_{it} + \beta_2 \text{KI}_{it} + \beta_3 \text{KK}_{it} + \beta_4 \text{SIZE}_{it} + \beta_5 \text{ROA}_{it} + e$$

Description:

- DER = Capital Structure (Y)
- α = Constant
- β_1 - β_5 = Regression Coefficient
- KA = Foreign Ownership (X1)
- KI = Institutional Ownership (X2)
- KK = Family Ownership (X3)
- SIZE = Company Size (Z1)
- ROA = Profitability (Z2)
- e = Standard error

3. Result and Discussion

Result

After the required data was collected, it was processed using program Eviews 9.

Table 1. Descriptive Statistics Results

	Min	Max	Mean	Std. Dev
DER	-3,780	6,140	1,154	1,489
KA	0,000	97,750	25,233	28,677
KI	0,000	99,980	71,341	23,321
KK	0,000	95,150	15,967	25,816
SIZE	5,224	63,991,229	8,919,326	13,788,538
ROA	-24,560	30,020	4,839	7,988

Data processed by authors

From the descriptive analysis, the capital structure (DER) ranges from -3,780 to 6,140 as the highest value with the mean of 1.154, where the standard deviation value is 1.489. Foreign ownership (KA) has a mean of 25.233%, a standard deviation of 28.677%, the lowest value is 0.000%, and the highest value is 97.750%.

Institutional ownership (KI) has the lowest value of 0.000%, and the highest is 99.980%, the mean of 71.341%, and a standard deviation of 23.321%. Moreover, family ownership (KK) ranges from 0.000% to 95.150%, with a mean of 15.967% and a standard deviation of 25.816%.

Based on the data in millions of rupiah units, the company size (SIZE) has the highest and lowest value of Rp. 63,991,229 and Rp. 5,224, respectively, with a standard deviation of Rp. 13,788,538, and a mean of Rp. 8,919,326. Lastly, the profitability data (ROA) has a mean value of 4.839%, a standard deviation of 7.988%, the highest value is 30.020%, and the lowest is -24.560%.

The *Jarque-Berra* test resulted in a probability value of 0.150, which was greater than 0.05, and a significance level of 0.927. This means that the research data was normally distributed. Based on the multi-collinearity test from the correlation matrix, the independent and control variables have a correlation coefficient below 0.80. This means that there was no multi-collinearity between the variables. Subsequently, the heteroscedasticity test results were obtained with a probability value of 0.066 greater than 0.05. Therefore, all research variables were free from heteroscedasticity symptoms.

Table 2. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	12.323	5	0.030

Data processed by authors

From table 2, the Chi-Square probability value is 0.030 less than 0.05 (0.030 < 0.05). This means that H_0 is accepted, and the Fixed Effect Model needs to be implemented in this study. However, before selecting the model, the data need the classical assumption test qualification. Therefore, the estimated result is consistent and unbiased. From the panel data regression, the estimated results of the model used in this study were:

$$\text{DER} = -1,796 - 0,006\text{KA} + 0,004\text{KI} - 0,029\text{KK} + 0,100\text{SIZE} - 0,015\text{ROA}$$

The equation's result is similar to the panel data regression estimation, as shown in the following table:

Table 3. Panel Data Regression Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.796	0.620	-2.893	0.004
KA	-0.006	0.003	-1.883	0.060
KI	0.004	0.002	1.684	0.093
KK	-0.029	0.048	-0.597	0.550
SIZE	0.100	0.039	2.522	0.012
ROA	-0.015	0.005	-2.858	0.004
R-squared	0.889	F-statistic	26.607	
Adjusted R-squared	0.856	Prob(F-statistic)	0.000	

Data processed by authors

Discussion

The KA data have a regression coefficient of -0.006, a t-statistic of -1.883, a probability of 0.060, and a significance level of 0.05. Therefore, the foreign ownership variable (KA) does not significantly affect the capital structure (DER) of companies registered in the Indonesia Stock Exchange 2014-2018. (Peilouw, 2017) showed that foreign ownership does not affect DER, while (Ahmad & Nawaz, 2018) showed that foreign ownership is statistically significant and negatively related to debt ratio. However, (Primadhanny, 2016) showed that foreign ownership (KA) affects capital structure.

Data on institutional ownership obtained from regression testing has a coefficient value of 0.004, a t-statistic of 1.684, a probability of 0.093, and a significance level at 0.05. This shows that the institutional ownership variable (KI) does not affect the capital structure (DER) of companies listed on the Indonesia Stock Exchange in 2014-2018.

(Miraza & Muniruddin, 2017), (Kusumo & Hadiprajitno, 2017) showed that institutional ownership (KI) has no significant effect on capital structure (DER). However, (Primadhanny, 2016) found that institutional ownership (KI) partially affects the capital structure (DER).

Family ownership has a coefficient value of -0.029, a t-statistic of -0.597, a probability value of 0.550, and the significance level set at 0.05. Therefore, the family ownership variable (KK) does not affect the capital structure (DER) of companies listed on the Indonesia Stock Exchange in 2014-2018.

According to (Young et al., 2016), family ownership (KK) has no relation to the debt ratio. This is in line with (Peilouw, 2017), that family ownership does not affect DER.

The company size regression test shows the coefficient value of 0.100, t-statistic of 2.522, the probability of 0.012, and a significance level of 0.05. Therefore, the firm size variable (SIZE) has a positive and significant effect on capital structure (DER) of companies listed on the Indonesia Stock Exchange in 2014-2018.

These results are consistent with the previously proposed descriptions and the hypothesis that firm size (SIZE) affects capital structure (DER). Therefore, a large company has facilitated loans in debt and share capital forms due to its excellent operational value and reputation. Moreover, the bigger the company size, the greater the need for funding.

According to (Kusumo & Hadiprajitno, 2017), company size (SIZE) has a significant and negative effect on capital structure, while (Nainggolan et al., 2017) showed that company size has no significant effect on capital structure.

ROA value has a regression coefficient of -0.015, a t-statistic of -2.858, a probability of 0.004, and a significance level of 0.05. Therefore, the profitability variable (ROA) negatively and significantly affects the capital structure (DER) of companies listed on the Indonesia Stock Exchange in 2014-2018.

This study is consistent with previous descriptions and hypotheses, where profitability affects the capital structure. It is because companies with higher profitability funding levels use fewer debts. Furthermore, (Kusumo & Hadiprajitno, 2017), and (Peilouw, 2017) showed that profitability (ROA) has a significant and negative effect on capital structure.

The F-statistic test value is 26.607, and the probability is 0.000, with an error rate of 0.05. Hence, the probability value generated is 0.000 smaller than 0.05. Foreign ownership (KA), institutional ownership (KI), family ownership (KK), company size (SIZE) and profitability (ROA) simultaneously have a positive and significant effect on the capital structure (DER) of companies listed on the Indonesia Stock Exchange (IDX) from 2014 to 2018.

4. Conclusion

According to the analysis and discussion of the hypothesis testing, foreign, institutional, and family ownership partially has no significant effect on capital structure. However, firm size and profitability have positive and negative significant effects, respectively. Moreover, future research should include other variables affecting the capital structure, such as company growth, liquidity, business risk, to increase the observations. The research period should also be extended.

Reference

- Agrippina, I., Fachrudin, Fachrudin, K. A., & Siburian, R. (2017). The Influence of Capital Structure , Growth Opportunity and Profitability at Mining Companies in Indonesia. *Research Journal of Finance and Accounting*, 8(16), 31–37.
- Ahmad, H., & Nawaz, M. Z. (2018). *Foreign Ownership , Governance Practices and Gearing Level : Evidence from Pakistan Stock Exchange*.

- 9(11), 37–46.
- Alzoubi, E. (2016). Ownership structure and earnings management: Evidence from Jordan. *International Journal of Accounting & Information Management*, 24, 135–161. <https://doi.org/10.1108/IJAIM-06-2015-0031>
- Amaia, M., Txomin, I., Gloria, A., Lotfi, B., & Sarah, C. (2019). Family board ownership, generational involvement and performance in family SMEs: A test of the S-shaped hypothesis. *European Journal of Management and Business Economics*, 28(3), 285–300. <https://doi.org/10.1108/EJMBE-07-2018-0071>
- Basit, A., & Hassan, Z. (2017). Impact of Capital Structure on Firms Performance: A Study on Karachi Stock Exchange (KSE) Listed Firms in Pakistan. *International Journal of Management, Accounting and Economics*, 4, 118–135.
- Buana, F. K. (2018). The Effect of Asset Structure and Business Risk on Capital Structure with Profitability as the Moderating Variable. *Accounting Analysis Journal*, 7(3), 200–206. <https://doi.org/10.15294/aa.v7i3.22727>
- Chandra, K., Fachrudin, Sadalia, I., & Siburian, R. (2017). The Effect of Capital Structure, Profitability and Dividend Policy on Intrinsic Value of Firm. *Journal of Finance and Accounting*, 8(14), 101–107.
- Gu, V., Cao, R., & Wang, J. (2020). Foreign ownership and performance: mediating and moderating effects. *Review of International Business and Strategy*, 29. <https://doi.org/10.1108/RIBS-08-2018-0068>
- Kao, M. F., Hodgkinson, L., & Jaafar, A. (2019). Ownership structure, board of directors and firm performance: evidence from Taiwan. *Corporate Governance (Bingley)*, 19(1), 189–216. <https://doi.org/10.1108/CG-04-2018-0144>
- Kusumo, T., & Hadiprajitno, P. (2017). *The Effect of Good Corporate Governance on Capital Structure (Empirical Study on Mining Companies Listed on the Stock Exchange 2011-2014)*. 6(2), 126–136.
- Kyissima, K. H., Xue, G. Z., Kosselle, T. P. Y., & Abeid, A. R. (2019). Analysis of capital structure stability of listed firms in China. *China Finance Review International*.
- Mahdi, S., & Mohsen, S. (2019). Debt maturity structure, institutional ownership and accounting conservatism: Evidence from Iranian listed companies. *Asian Journal of Accounting Research*, 4(1), 35–51. <https://doi.org/10.1108/AJAR-05-2018-0001>
- Manuel, S. M. R. J. (2018). The effect of ownership composition on earnings management: evidence for the Mexican stock exchange. *Journal of Economics, Finance and Administrative Science*, 23(46), 289–305. <https://doi.org/10.1108/JEFAS-01-2017-0011>
- miraza, chairanisa natasha, & Muniruddin, S. (2017). The Effect of Institutional Ownership, Managerial Ownership, Income Variability, Corporate Tax Rate, and Non Debt Tax Shield on Capital Structure of Manufacturing Companies Listed on the Stock Exchange in 2011-2015. *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi Unsyiah*, 2(3), 73–85. <https://doi.org/10.24815/jimeka.v2i3.4764>
- Naima, L., Mouna, B. R. A., & Houda, S. (2017). Earnings management and ownership structure in emerging market: Evidence from banking industry. *Managerial Finance*, 43(10), 1117–1136. <https://doi.org/10.1108/MF-11-2015-0312>
- Nainggolan, M. V., Azlina, N., & Julita, J. (2017). The Effect of Dividend Policy, Profitability, Company Size, Business Risk, Cash Holding, Ownership Control, and Non Debt Tax Shield on Capital Structure in Manufacturing Companies Listed on the Indonesia Stock Exchange (Period 2011-2014). *Jurnal Online Mahasiswa Fakultas Ekonomi Universitas Riau*, 4(1), 528–542.
- Nguyen, T. T., Trinh, T. A., & Do, T. T. (2019). Ownership Structure and Firm Growth: Evidence from Vietnam. *Www.Ijbm.Com International Journal of Business Marketing and Management*, 4(8), 2456–4559.
- Pacheco, L. (2017). Internationalization vs. family ownership and management: the case of Portuguese wine firms. *International Journal of Wine Business Research*, 29, 195–209. <https://doi.org/10.1108/IJWBR-10-2016-0034>
- Panda, B., & Leepsa, N. M. (2019). Does institutional ownership engagement matter for greater financial performance? *International Journal of Law and Management*.
- Peilouw, C. T. (2017). The Effect of Ownership Structure on Debt Policy in Companies Listed on the Indonesia Stock Exchange. *Jurnal Akuntansi Dan Perpajakan*, 3(1). <https://doi.org/10.26905/ap.v3i1.1325>
- Perusahaan, P. U., & Likuiditas, D. A. N. (2018). The Effect of Company Size, Profitability, and Liquidity on Capital Structure in Automotive Companies Listed on the Indonesia Stock Exchange for the 2012-2015 Period. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 6(1), 11–21. <https://doi.org/10.35794/emba.v6i1.18705>
- Primadhanny, R. (2016). The Effect of Ownership Structure on Capital Structure in Mining Sector Companies Listed on the Stock Exchange 2010-2014. *Jurnal Ilmu Manajemen (JIM)*, 4(3), 1–9.
- Rely, G., & Arsjah, R. J. (2018). An effecting of foreign ownership structure in firm value towards

- offshore debt financing in manufacturing firms. *Research Journal of Finance and Accounting*, 9(12), 46–56.
- Salehi, M., Tarighi, H., & Rezanezhad, M. (2017). The relationship between board of directors' structure and company ownership with corporate social responsibility disclosure: Iranian angle. *Humanomics*, 33, 0. <https://doi.org/10.1108/H-02-2017-0022>
- Sanjaya, S., Haryani, D., & Yamasitha, Y. (2020). Dividend Payout Ratio in terms of Ownership Structure and Free Cash Flow of Consumer Goods Sector Companies Listed on the Indonesia Stock Exchange. *Jurnal Kajian Manajemen Bisnis*, 9(2), 92–100.
- Thai, A. (2019). The Effect of Foreign Ownership on Capital Structure in Vietnam. *Review of Integrative Business and Economics Research*, 8(1), 20.
- Thitima, S. (2017). Family ownership and free cash flow. *International Journal of Managerial Finance*, 13(2), 133–148. <https://doi.org/10.1108/IJMF-06-2014-0088>
- Ullah, K., & Bagh, T. (2019a). *Finance and Management Scholar at Riphah International University Islamabad, Pakistan, Faculty of Management Sciences*. 10(5), 42–53. <https://doi.org/10.7176/RJFA>
- Ullah, K., & Bagh, T. (2019b). *Finance and Management Scholar at Riphah International University Islamabad, Pakistan, Faculty of Management Sciences*. 10(6), 126–136. <https://doi.org/10.7176/RJFA>
- Young, B. H., D., C. D., & L, F. P. (2016). Family ownership, control and corporate capital structure: An examination of small capitalization public firms. *Journal of Family Business Management*, 6(2), 169–185. <https://doi.org/10.1108/JFBM-02-2015-0006>
- Zaitul, Z., Melmusi, Z., & Ilona, D. (2019). Corporate Governance and Bank Performance: Global Financial Crisis 2008. *Journal of Reviews on Global Economics*, 8, 625–636. <https://doi.org/10.6000/1929-7092.2019.08.54>
- Zhou, C. (2019). Effects of ownership structure on the relationship between multinationality and downside risk: Evidence from China. *Cross Cultural & Strategic Management*, 26, 401–421. <https://doi.org/10.1108/CCSM-10-2018-0172>