

THE ROLE OF DEBT IN MODERATING THE INFLUENCE OF OWNERSHIP STRUCTURE ON COMPANY PERFORMANCE IN THE MANUFACTURING SECTOR LISTED ON THE IDX

Tjeng Lily^{1*}, Cicilia Erna Susilawati²

^{1,2}Faculty of Business, Widya Mandala Catholic University, Surabaya, Indonesia

*Corresponding Author: tjenglily.edu@gmail.com,

Abstract: This study examines the role of debt as a moderating variable in the relationship between ownership structure and company performance in the manufacturing sector listed on the Indonesia Stock Exchange (IDX) during 2021-2022. Focusing on institutional and managerial ownership, the study investigates how these factors influence company performance using agency theory. A sample of 220 manufacturing companies was analyzed through linear regression. The findings reveal that managerial ownership significantly positively impacts company performance, while debt moderates this relationship with a significant negative effect. Conversely, institutional ownership has no significant effect on company performance, nor does debt as a moderating factor in this context. The study offers insights into the dynamics of ownership structure and its impact on performance, serving as a reference for strategic decision-making in the manufacturing industry.

Keywords: Institutional Ownership, Managerial Ownership, Debt Policy, Company Performance, Agency Theory.

1. Introduction

This research presents the importance of company performance as an indicator of the effectiveness of resource management, which demonstrates the potential for growth and profitability to maintain and enhance the company's value. In the context of corporate management, the agency conflict emphasized by Jensen & Meckling (1976) becomes important, where the separation between managers as agents and company owners as principals can lead to fundamental conflicts of interest. Jensen & Meckling (1976) stated that there is an agency relationship that arises due to the separation between managers as agents managing the company and company owners as principals. The company manager has the duty to manage the company by making decisions and policies on behalf of the company owner, as well as maximizing the owner's wealth. If the manager has personal interests that conflict with the interests of the company owner, an agency conflict will arise. Ownership structure (institutional ownership and managerial ownership) becomes a factor that can reduce the potential emergence of agency conflicts, and in addition, debt policy can also be one of the control mechanisms in reducing agency conflicts.

Chaganti & Damanpour (1991) mention that banks, pension funds, insurance companies, and mutual fund managers are part of institutional ownership. Institutional ownership plays an important role in reducing agency costs through more effective oversight. Crutchley et al. (1999) show a negative relationship between institutional ownership and the use of debt, indicating that with stronger institutional ownership, companies do not need to use debt as a mechanism to reduce agency conflicts. This is supported by the research of Rossi & Cebula (2016), which found that the greater the institutional ownership, the less companies rely on

debt to reduce agency conflicts. Managerial ownership, on the other hand, is intended to make managers feel like they own the company, so in decision-making, they are expected to contribute their best to improve the company's performance. Institutional ownership is effective in reducing agency conflicts by providing optimal supervision of managers, which ultimately will enhance the company's performance and prevent moral hazard. (Kao et al., 2018).

The difference in interests between managers and shareholders can occur because managers do not own shares in the company. Managerial ownership is considered a mechanism to align the interests of both parties and encourage managers to make decisions that maximize the company's performance (Alabdullah, 2018). Managerial ownership also has a negative relationship with debt policy, where managers who own shares tend to avoid excessive use of debt to reduce agency costs. (Crutchley et al., 1999; Vo & Nguyen, 2014). Debt policy is a strategic decision of the company regarding the use of debt in its capital structure, including the type, amount, and duration of the debt that will be used to finance the company's operations and investments. (Shaffira, 2018). Factors such as market conditions, interest rates, and the company's risk profile influence this debt policy. Although debt can be used to finance company activities, excessive use of debt can increase financial risk and decrease the company's value. Furthermore, debt can reduce agency conflicts with the oversight of creditors, but improper debt policies can create conflicts among the stakeholders in the company. Debt can also serve as a control mechanism that reduces agency problems by forcing managers to operate more efficiently to meet debt repayment obligations. Some studies have found a negative relationship between debt policy and company performance, where a low level of debt reflects higher company quality. (Danso et al., 2021; Muhammad & Shah, 2014).

In the context of this research, debt is tested as a moderating variable that affects the relationship between institutional and managerial ownership and company performance. The result can strengthen or weaken the relationship, depending on whether debt functions as a complement or a substitute in the control mechanism to reduce agency problems. In addition, the backdrop of the COVID-19 pandemic adds a dimension to the analysis of external influences on company performance, specifically observing the period of 2021-2022 in the manufacturing industry listed on the Indonesia Stock Exchange. The research question aims to examine the positive influence of institutional and managerial ownership on company performance and to investigate how debt as a moderator can affect this dynamic.

2. Literature Review

Agency Theory

Jensen & Meckling, (1976) explain the concept of agency theory, "agency relationship as a contract under which one or more persons (the principals) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent." (page 308). This theory explains that the principal grants authority and power to managers (agents) to make the best decisions in managing the company to maximize shareholder profits (principals). The separation between shareholders as principals and managers as agents, who receive delegated authority from shareholders for decision-making and company policy functions, can lead to agency conflicts and incur agency costs.

Institutional Ownership

According to Kao et al. (2018), institutional ownership is a very important part of the ownership structure, such as pension funds, life insurance companies, and investment funds, to effectively monitor management, thereby having a significant impact on the company's performance. Institutional investors have superior knowledge compared to individual investors and have the ability to influence companies. The agency conflict that arises between the principal and the agent can be mitigated by institutional ownership because institutions have a long-term interest in the financial health of the company. Companies with significant institutional ownership demonstrate strong control capabilities over the company, which can reduce agency costs.

Managerial Ownership

According to Warfield et al. (1995), managerial ownership is related to the company's shares owned by executives at the managerial level who are responsible for decision-making in the management of the company. Managerial ownership is considered an internal control mechanism that can reduce agency conflicts between managers and shareholders. Therefore, it is recommended that stock ownership by managers be one of the ways to align the interests of management with those of shareholders and encourage managers to make decisions and actions that improve the company's performance (Jensen, 1993). An increase in the level of managerial ownership in a company can reduce agency conflicts, thereby improving the company's performance. Because managers with high ownership are expected to have a sense of ownership towards the company, they will be motivated to act in the interest of the company as a whole, resulting in better performance and increased value for shareholders.

Debt Policy

Jensen (1986) stated that if a company has excess free cash flow, there is a possibility that managers will use that free cash flow to invest in unprofitable projects. Debt can be used as a control mechanism within the company to address agency conflicts between shareholders and managers. Excessive use of corporate debt without considering the cost of debt can lead to the risk of financial distress for the company, which in turn will jeopardize the company's liquidity. Excessive use of debt must consider costs due to the risk of bankruptcy if not balanced with the profits obtained. In addition to the risk of bankruptcy costs, according to the trade-off theory, the use of debt can also provide benefits in the form of tax savings. (Kraus & Litzenberger, 1973; Myers, 1984).

Company Performance

The company owner hopes that the manager can run the company according to the established goals and expectations, but sometimes the manager has personal interests that may conflict with the owner's interests. In an effort to address this issue, the agency theory developed by Jensen & Meckling (1976) provides a theoretical framework for analyzing the relationship between shareholders and managers in the context of the company. This theory explores various mechanisms and strategies that can be used to minimize conflicts of interest and encourage managers to act in accordance with the shareholders' goals. This conflict can negatively impact the company's performance if managers might prefer investments that benefit themselves in the short term rather than focusing on the more sustainable long-term growth of the company. The financial performance of a company can be measured through financial ratios, with the return on assets (ROA) ratio used to measure the effectiveness of the

company in managing its assets to generate profits. Return on assets (ROA) provides an overview of how efficiently the company uses its assets to generate net income.

Previous Research

Research on the relationship between institutional ownership and company performance, conducted by Al-Janadi (2021); Kao et al. (2018); Rashid (2020). The results of those studies indicate a positive influence of institutional ownership on company performance. This happens because institutional investors have strong control capabilities in supervising managers, so high institutional ownership can improve company performance by minimizing deviations made by managers.

Several studies examine the relationship between managerial ownership and company performance. (Alabdullah, 2018; Al-Janadi, 2021; Rashid, 2020). The research results clearly show that there is a positive relationship between managerial ownership and company performance. It means that the higher the ownership of shares by management, the better the company's performance can be, because the performance of management also improves. The management tends to do their best for the company because it relates to the interests of the managers who also act as shareholders.

The relationship between institutional ownership and managerial ownership towards debt policy has been studied by Rossi & Cebula (2016). Rossi & Cebula (2016) found a negative relationship between institutional ownership and debt policy. In this case, institutional ownership functions to oversee and control management in managing the company and influences decision-making related to capital structure. The findings of Crutchley et al. (1999) and Vo & Nguyen (2014) also indicate a negative relationship between institutional ownership and managerial ownership towards debt policy in simultaneous research. If the ownership structure, both institutional and managerial, is high, it can reduce the use of debt.

Empirical testing of the relationship between debt policy and company performance was studied by Danso et al. (2021); Muhammad & Shah (2014); Ramadan (2015); Vieira (2017). Those studies prove that debt policies negatively contribute to company performance. When a company decides its capital structure by using external funds in the form of debt as additional capital for operations, it will affect the company's performance. The higher the debt used, the more it can reduce the company's performance due to the high costs incurred. Dao & Ta's (2020) research also found a negative relationship between debt policy and company performance supported by agency theory and trade-off theory.

Framework of Thought

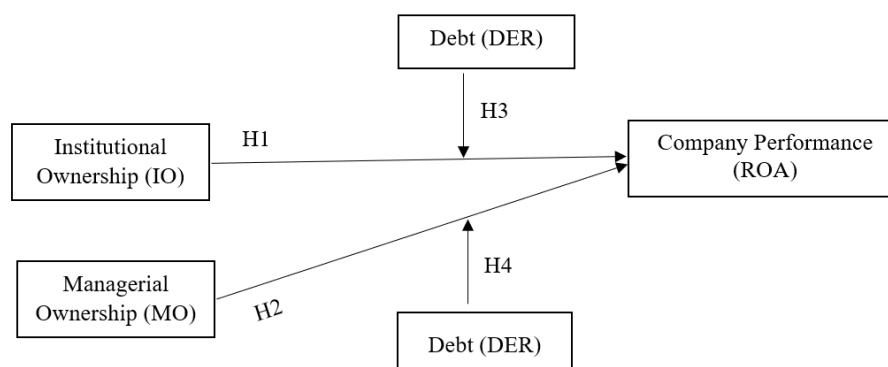


Figure 1: Theoretical Framework

3. Method

Population and Sample

In this study, the sampling technique used is purposive sampling, which is a technique for determining samples based on specific criteria. There are criteria for selecting companies as research samples, namely:

1. Manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2021 to 2022 that have not undergone delisting or suspension. The sample data does not include companies without institutional ownership, without managerial ownership, and with negative equity.
2. Companies that went public in 2019.
3. Companies that issued and published financial reports for 2021-2022 on the Indonesia Stock Exchange (IDX) website.
4. Data is taken from the Indonesia Stock Exchange website (www.idx.co.id)

Operational Definitions and Measurement of Variables

Company performance is related to a company in achieving its business goals and serves as a measure of the company's success in managing its resources to generate profits. Profitability can be calculated through return on assets (ROA), which is a financial ratio in generating net profit through available assets. In this study, ROA (Rashid, 2020) can be formulated as follows (expressed in ratio scale, namely percentage):

$$ROA = \frac{\text{Net Profit after Tax}}{\text{Total Assets}}$$

Institutional Ownership (IO) is the ownership of the number of shares held by institutional investors (Chaganti & Damanpour, 1991), such as financial institutions like banks, pension funds, and insurance companies, which can be calculated using the following formula:

$$IO = \frac{\text{The number of shares owned by the Institution}}{\text{Number of Share Outstanding}}$$

Managerial Ownership (MO) is a form of share ownership in a company that is held by internal parties within the company. Managerial ownership (MO) refers to the percentage of shares held by managers on the board of directors (Shaffira, 2018; Morck et al., 1988) and managerial leadership generally refers to internal ownership, formulated as follows:

$$MO = \frac{\text{The number of shares owned by the management}}{\text{Number of Share Outstanding}}$$

A company's strategy for managing its financial obligations in the form of debt can be measured using the formula (Muhammad & Shah, 2014) as follows:

$$DER = \frac{\text{Total Liabilities}}{\text{Total Shareholder's Equity}}$$

Technique for data analysis

This research was conducted to test and analyze the relationship between variables in the equation and moderation using linear regression analysis techniques with E-Views version 12. The regression equation model in this study is:

$$ROA_{i,t} = \alpha_0 + \beta_1 IO_{i,t} + \beta_2 MO_{i,t} + \beta_3 DER_{i,t} + \beta_4 DER_{i,t} * IO_{i,t} + \beta_5 DER_{i,t} * MO_{i,t}$$

Detail :

- ROA i,t = Return on Asset Ratio i in period t
 IO i,t = Institutional Ownership i in period t
 MO i,t = Managerial Ownership i in period t
 DER i,t = Debt to Equity Ratio i in period t
 α = Constant
 $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Regression Coefficients

4. Result and Discussion

General Information About Research Items

This research focuses on manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period from 2021 to 2022. Sample selection was carried out using several selection criteria to ensure the quality of the analyzed data. Out of 238 listed manufacturing companies, 18 companies were excluded from the sample due to suspended and delisted status, leaving 220 companies that met the research criteria. The data for this research was obtained from the BEI website (www.idx.co.id) and the securities ownership data from the KSEI website, providing a strong foundation for the analysis conducted.

The data collection and selection process resulted in 168 observation data ready for analysis. From the initial 440 observation data, 261 were removed due to lack of institutional and managerial ownership and negative equity, while 11 other data were removed as they were considered outliers that could affect the analysis results. Thus, the analysis in this study is based on 168 selected observational data that meet the predetermined criteria, allowing the researcher to draw more accurate and relevant conclusions regarding manufacturing companies in Indonesia.

Classical Assumption Testing

Table 1. Descriptive Statistics Results

Variable	Average	Mean	Maximum	Minimum	Std. Dev.	N
ROA	0,0345	0,0273	0,3428	-0,2098	0,0800	168
IO	0,0541	0,0199	0,6944	2,55E-06	0,0838	168
MO	0,0592	0,0067	0,7361	2,16E-06	0,1154	168
DER	1,2934	0,7528	17,0370	0,0409	2,0906	168

Sources: Data processed using the EViews version 12 statistical tool

Table 2. Multicollinearity Test Results

Variable	Coefficient of Variation	Uncentered VIF	Centered VIF	Result
C	8.11E-05	2,5260	NA	There is no multicollinearity
IO	0,0076	2,3563	1,6611	There is no multicollinearity

Variable	Coefficient of Variation	Uncentered VIF	Centered VIF	Result
MO	0,0040	2,0951	1,6567	There is no multicollinearity
DER	1,95E-05	3,6605	2,6429	There is no multicollinearity
DER*IO	0,0037	2,8111	2,3742	There is no multicollinearity
DER*MO	0,0029	2,7250	2,3547	There is no multicollinearity

Sources: Data processed using the EViews version 12 statistical tool

Table 3. Results of the Breusch-Pagan-Godfrey Heteroscedasticity Test

Obs*R-Squared	Prob. Chi-Square	Result
2,8670	0,7205	There is no heteroscedasticity

Sources: Data processed using the EViews version 12 statistical tool

Table 4. Results of the Autocorrelation Test – Breusch-Godfrey Serial Correlation LM Test

Obs*R-Squared	Prob. Chi-Square	Result
5,2550	0,0723	There is no autocorrelation

Sources: Data processed using the EViews version 12 statistical tool

Regression Analysis Testing

Table 5. Determination Coefficient Results (R^2)

R-squared	0,1836
Adjusted R-squared	0,1584
F-statistic	7,287
Prob (F-Stat)	0,000003

Sources: Data processed using the EViews version 12 statistical tool

Table 6. Results of the t-test with the Dependent Variable ROA

Variable	Coefficient	t-Statistic	Prob.	Result
IO	0,0839	0,9606	0,3382	Not Significant
MO	0,2351	3,7086	0,0003	Significant
DER	-0,0011	-0,2501	0,8028	Not Significant
DER*IO	-0,0882	-1,4416	0,1513	Not Significant
DER*MO	-0,1980	-3,6436	0,0004	Significant

Sources: Data processed using the EViews version 12 statistical tool

Table 7. Summary of Hypothesis Testing

Hypothesis	Influence	Coefficient	Prob.	Result
H1	Institutional ownership has a positive impact on company performance.	0,0839	0,3382	Rejected
H2	Managerial ownership has a positive impact on company performance.	0,2351	0,0003	Accepted
H3	Debt moderates the influence of institutional ownership on company performance.	-0,0882	0,1513	Rejected
H4	Debt moderates the influence of managerial ownership on company performance.	-0,1980	0,0004	Accepted

Sources: Data processed using the EViews version 12 statistical tool

Baased on the t-test results displayed in Table 7, the institutional ownership (IO) variable on ROA has a coefficient of 0.0839 with a probability value of 0.3382. A probability value greater

than 0.05 indicates that institutional ownership does not significantly affect the company's performance as measured by Return on Assets (ROA). This result suggests that changes in institutional ownership do not substantially influence the company's performance in the context of this study. The results of this study are not in line with the previous research by Al-Janadi (2021); Kao et al. (2018); Rashid. (2020). The results of the three previous studies indicate a positive influence of institutional ownership on company performance, which is also measured by Return on Assets. (ROA). In this study, it can be concluded that institutional ownership in manufacturing companies in Indonesia does not affect the company's performance during this research period.

The results show that managerial ownership has a positive and significant impact on company performance. This means that an increase in managerial ownership will enhance company performance as measured by ROA. This positive influence is due to the increase in share ownership by management, which can improve company performance because managerial ownership tends to lead managers to do their best for the company, as their interests align with those of the shareholders. Oversight and control will be exercised when managers have a sufficiently high ownership stake in the company. The results of the three previous studies clearly show that there is a positive relationship between managerial ownership and company performance. The results of the three previous studies (Alabdullah, 2018; Al-Janadi, 2021; Rashid, 2020) clearly show that there is a positive relationship between managerial ownership and company performance.

In this study, debt does not significantly moderate the effect of institutional ownership on company performance. This means that in the context of this research, debt neither strengthens nor weakens the relationship between institutional ownership and company performance. The results of this study indicate that an increase in debt actually has the potential to weaken the relationship between institutional ownership and company performance. High debt may bring additional financial burdens that can hinder the company's performance, even when there is significant institutional ownership. The conclusion of this hypothesis is that, in the context of this research, the debt financing strategy does not effectively moderate the relationship between institutional ownership and company performance.

The results of this study indicate that debt significantly moderates the effect of managerial ownership on company performance. The negative coefficient indicates that debt has a negative moderating effect, meaning that debt reduces the positive influence of managerial ownership on company performance. This may be due to the high debt burden, which can reduce the effectiveness of managerial oversight or increase financial risk, thereby lowering company performance. The negative coefficient found in this study indicates that debt has a negative moderating effect on the influence of managerial ownership. This means that when a company's debt increases, the positive influence of managerial ownership on the company's performance tends to decrease. This may be due to the high debt burden that can reduce the effectiveness of managerial oversight. Managers who have ownership in the company are usually expected to be more motivated to improve the company's performance. However, when the company has a high debt burden, managers may focus on managing the debt rather than on efforts to improve operational performance and company strategy.

5. Conclusions

This research examines manufacturing companies during the period of 2021-2022, coinciding with COVID-19 in 2021 and the transition from pandemic to endemic status in 2022, with a total of 168 observational data points. The testing in this research aims to examine the influence

of institutional ownership and managerial ownership on company performance with debt as a moderating variable. Here are the conclusions that can be outlined in this research:

1. The research results indicate that institutional ownership does not have a significant impact on company performance. This study suggests that changes in institutional ownership do not substantially affect company performance in the context of manufacturing companies in Indonesia during the study period.
2. Managerial ownership shows a positive and significant influence on company performance. The results of this study indicate that an increase in managerial ownership can improve company performance. Managerial ownership can reduce conflicts of interest between managers and shareholders in the agency problem, as managers who own shares in the company will act in the interests of the shareholders.
3. The research results show that debt does not significantly moderate the influence of institutional ownership on company performance. In this study, the results indicate that debt neither strengthens nor weakens the relationship between institutional ownership and company performance.
4. Research shows that debt has a negative moderating effect (weakening) on the influence of managerial ownership on company performance. The results of this study indicate that high debt can reduce the positive impact of managerial ownership on company performance. A high debt burden can decrease the effectiveness of managerial oversight and increase financial risk, which in turn can hinder company performance.

References

- Alabdullah, T. T. Y. (2018). The relationship between ownership structure and firm financial performance: Evidence from Jordan. *Benchmarking: An International Journal*, 25(1), 319-333. <https://doi.org/10.1108/BIJ-04-2016-0051>
- Al-Janadi, Y. (2021). Ownership Structure and Firm Performance in the Middle East: A Meta-Analysis. *Journal of Risk and Financial Management*, 14(577), 1-23. <https://doi.org/10.3390/jrfm14120577>
- Chaganti, R., & Damanpour, F. (1991). Institutional ownership, capital structure, and firm performance. *Strategic Management Journal*, 12, 479-491.
- Crutchley, C. E., Jensen, M. R. H., Jahera, J. S. Jr., & Raymond, J. E. (1999). Agency problems and the simultaneity of financial decision making: The role of institutional ownership. *International Review of Financial Analysis*, 8(2), 177-197. [https://doi.org/10.1016/S1057-5219\(99\)00011-3](https://doi.org/10.1016/S1057-5219(99)00011-3)
- Danso, A., Lartey, T. A., Gyimah, D., & Adu-Ameyaw, E. (2021). Leverage and performance: Do size and crisis matter? *Managerial Finance*, 47(5), 635-655. <https://doi.org/10.1108/MF-10-2019-0522>
- Dao, B. T. T., & Ta, T. D. N. (2020). A meta-analysis: Capital structure and firm performance. *Journal of Economics and Development*, 22(1), 111-129. <https://doi.org/10.1108/JED-12-2019-0072>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323-329. <https://doi.org/10.2307/1818789>

- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831-880. <https://doi.org/10.1111/j.1540-6261.1993.tb04022.x>
- Kao, M.-F., Hodgkinson, L., & Jaafar, A. (2018). Ownership structure, board of directors and firm performance: Evidence from Taiwan. *Corporate Governance: The International Journal of Business in Society*, 18(6), 1147-1164. <https://doi.org/10.1108/CG-04-2018-0144>
- Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The Journal of Finance*, 28(4), 911-922. <https://doi.org/10.2307/2978343>
- Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20(1), 293-315. [https://doi.org/10.1016/0304-405X\(88\)90048-7](https://doi.org/10.1016/0304-405X(88)90048-7)
- Muhammad, H., Shah, B., & ul Islam, Z. (2014). The impact of capital structure on firm performance: Evidence from Pakistan. *Journal of Industrial Distribution & Business*, 5(2), 13-20. <https://doi.org/10.13106/jidb.2014.vol5.no2.13>
- Myers, S. C. (1984). The capital structure puzzle. *The Journal of Finance*, 39(3), 575-592. <https://doi.org/10.2307/2327914>
- Ramadan, I. Z. (2015). Leverage and the Jordanian firms' value: Empirical evidence. *International Journal of Economics and Finance*, 7(4), 75-81. <https://doi.org/10.5539/ijef.v7n4p75>
- Rashid, M. M. (2020). Ownership structure and firm performance: The mediating role of board characteristics. *Corporate Governance: The International Journal of Business in Society*, 20(4), 719-737. <https://doi.org/10.1108/CG-02-2019-0056>
- Rossi, F., & Cebula, R. J. (2016). Debt and ownership structure: Evidence from Italy. *Corporate Governance: The International Journal of Business in Society*, 16(5), 883-905. <https://doi.org/10.1108/CG-02-2016-0025>
- Shaffira, F. S. (2018). Pengujian hubungan simultanitas antara kepemilikan manajerial dan kebijakan hutang (Studi Empiris pada Bursa Efek Indonesia) (*Skripsi*, Universitas Katolik Widya Mandala Surabaya). <http://repository.ukwms.ac.id/id/eprint/13819/>
- Vieira, E. S. (2017). Debt policy and firm performance of family firms: The impact of economic adversity. *International Journal of Managerial Finance*, 13(3), 267-286. <https://doi.org/10.1108/IJMF-03-2016-0062>
- Vo, D. H., & Nguyen, V. T.-Y. (2014). Managerial ownership, leverage and dividend policies: Empirical evidence from Vietnam's listed firms. *International Journal of Economics and Finance*, 6(5), 274-284. <https://doi.org/10.5539/ijef.v6n5p274>
- Warfield, T. D., Wild, J. J., & Wild, K. L. (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting and Economics*, 20(1), 61-91. [https://doi.org/10.1016/0165-4101\(94\)00393-J](https://doi.org/10.1016/0165-4101(94)00393-J)