
Does Short-Term Debt increase Profitability? The Role of Corporate Governance as a Moderating Variable

Does Short-Term
Debt

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Abstract

This research is conducted to inspect the relationship of Short-Term Debt as a predictor for the financial leverage on Profitability of the company. In the analysis, Short-Term Debt will act as the independent variable and Profitability will be the dependent variable using Return on Equity (ROE) as the indicator. In the model analysis, corporate governance will be used as the moderating variable to bridge the relationship between the independent and dependent variable. In this study, the mediating variable of corporate governance uses Board of Directors (BOD) and board of commissioner (BOC) size, board of independent commissioners' size, managerial and also the institutional ownership. From the analysis, it is shown that Short-Term debt has a significant positive impact on the company's Profitability. In addition, board size weakens the relationship between financial leverage and profitability. Board size and institutional ownership significantly strengthen the relationship between financial leverage and profitability. Board of independent commissioners' size and managerial ownership did not moderate the relationship between financial leverage and profitability.

Keywords: Financial leverage; profitability; short-term debt.

Introduction

In the current era of globalization and a competitive business world, companies' performances must be improved to be competitive and able to maintain the going concern of their business and also able to generate maximum profits for their shareholders. (UNCTAD, 2019). The era of globalization and a very competitive business world is characterized by the competition between companies in order to be more profitable, which can lead to higher profit for the companies and higher returns for their shareholder as well. Companies' ability to generate profit can reflect on their position as a favorable choice by shareholders, and also have a better survivability in the business competition. In order for the company to be able to run the operational business activities, additional source of funds might be needed for the business to be able to grow. According to (DePamphilis, 2022) internal fundings are normally preferred by the business, but as the business grows the options from external fundings, namely through debt financing are also an available choice. According to (Tayachi et al., 2022) internal sources of funds are obtained from the company's retained earnings and external sources of funds can come from debt or loans and capital from the owners (shareholders). When a company uses debt, it means that the company has done financial leverage.

Business profitability is a very important issues as it reflects the capability of business to survive. Companies will find it difficult to attract capital from outside if the company does not have high profitability. (Jihadi et al., 2021) argues that creditors tend to choose companies that are stable and have good performance in the market. The performance and ability of managers in managing all company resources including funds obtained from debt to generate profits can be seen from their profitability (Zharfpeykan & Akroyd, 2022). Manager should prepare a business strategy in which it will be able to cover the cost of the funds, ie., interest expense, while also able to grow their business and earns profit. (Anginer et al., 2021). Managers must be able to manage the funds from debt efficiently and effectively (Widnyana et al., 2020).



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Manager's ability to formulate a good business decision making processes, can be reflected in a good company performance. (Chandra et al., 2021). Managers often invest in projects that only benefit themselves rather than for the shareholders' benefits. The manager (agent) benefits more because the manager knows more about the company's internal conditions than the shareholders (principal). This happens because of the agency problem, which is a problem that arise because of the split between management and shareholders (Ghorbani & Salehi, 2021).

The issues regarding agency problem are debatable in emerging economies and therefore will be able to influence the effectiveness of managerial decisions in the use of debt financing for these countries (Ghorbani & Salehi, 2021). According to (al Farooque et al., 2020), emerging market countries have high agency problems and Indonesia is one of the emerging market countries (Jin & Kim, 2021). Agency problems in a company can be minimized by practicing a good corporate governance in which will encourage the use of effective debt financing. The existence of a good corporate governance situation can also have a good influence on financial leverage with company performance. However, moderating the effect of corporate governance in minimizing agency problems in the use of debt has received less attention. (Ghorbani & Salehi, 2021) suggest the ownership structure and board structure as the main characteristics of corporate governance in emerging markets. According to Barros et al. (2020) a board structure can help reduce agency problems. The ownership structure and corporate governance mechanism that can reduce agency problems (Feng et al., 2020)

The company uses investment financial leverage for expansion (Hajisaaid, 2020). Companies that use financial leverage with short-term debt are most likely to experience growth in their investment because short-term debt signals that the company has low credit risk. The use of short-term debt increases the accessibility of peripheral finance and stimulates better financial performance for companies. Regarding the use of short-term debt, several researchers in Indonesia including, Lorenza et al. (2020) found that "short-term debt has a positive effect on profitability". Nguyen & Nguyen (2020) said that "short-term debt in Indonesia has the advantage that the interest set tends to be cheaper so that it does not burden companies in their payments to creditors". Lorenza et al. (2020) mentions in his research that long-term debt yield higher interest expense while the short-term debt yield lower interest expense comparably that can increase income. The manufacturing sector is one of the companies that invests for expansion purposes. The bigger the company, the greater the production of goods, so the company buys new assets such as machinery and production equipment. Nguyen & Nguyen (2020) suggests that manufacturing industries prefer to use short-term debt for the intent of producing goods and his research proves that short-term debt has more ability to generate profitability than long-term debt.

This study develops the research of Pham & Nguyen (2020) which explains the the influence of the existence of corporate governance between the influence of financial leverage and profitability. The difference with the research conducted by Pham & Nguyen (2020) is that the research does not separate short-term and long-term debt, while this study uses short-term debt as the independent variable and the moderating variable is the corporate governance mechanism.

Background and Research Hypothesis

Financial Leverage and Profitability

A situation where the company uses more short-term debt, the more consequences the company has to fulfill, the higher the company's performance in generating profits is needed so that the company can pay all these obligations (Mangesti Rahayu et al., 2020). In addition, the higher the use of short-term debt, the higher the risk of the debt. So that high profitability

is needed because the greater the level of profitability, the more profit is expected to reduce the risk of the debt (Poursoleiman et al., 2020). According to Chandra et al. (2021) the interest on short-term debt loans is lighter, it has a positive impact on the company's finances so that it does not reduce profitability. Nguyen & Nguyen (2020) suggests that manufacturing companies prefer to apply short-term debt for the producing goods purposes and his research proves that short-term debt has more ability to generate profitability than long-term debt. Nguyen & Nguyen (2020) in their research argue that short-term debt in Indonesia has a low interest expense so that companies feel it is not difficult to pay off debts to creditors. They found a relationship with positive direction between short-term debt and ROE. Lorenza et al. (2020) mentions in his research that long-term debt is relatively higher interest expense while short-term debt has the opposite which can lead to an increase in level of income. Research conducted by Chandra et al. (2021); Lorenza et al. (2020); Samo & Murad (2019); Nguyen & Nguyen (2020)] found that short-term debt and profitability have a positive effect on profitability. The following hypothesis based on that exposure is proposed: H1: Short-term debt has a positive effect on profitability

The BOC' Size, Financial Leverage and Profitability

Mahrani & Soewarno (2018) argues that the monitoring function performed by the commissioners is taken from agency theory. According to the perspective described in agency theory, the BOD is the main internal instrument that controls management's opportunistic behavior to help align the interests of shareholders and managers. According to Ahmed (2019) the larger the the BOC, the greater the supervision of management, so that management will act in line with the requests of shareholders and will ultimately reduce agency costs. Schäuble (2019) argue that with supervision and control by the BOC, the BOD cannot easily abuse power for their own interests. (Barros et al., 2020), [53] in their research found that the fewer the number of commissioners, the greater the agency costs. Based on the explanation above, the following hypothesis based on the exposure above is proposed: H2: BOC' size weaken the effect of short-term debt financing on profitability

The BOD' Size, Financial Leverage and Profitability

The BOD has full responsibility for all forms of management and operations in order to carry out the interests of achieving company goals (Ahmed, 2019). In addition, the BOD also has strong authority in managing company resources and determining policies and decisions that need to be taken in the use of short-term debt (Merendino & Melville, 2019). Al Farooque et al., (2020) argues that the BOD can assist in improving the company's performance because the larger the number of the BOD, the more effective the management of the company which has an impact on reducing agency costs. The research of Hastori et al. (2015) and Rislina (2019) found found that the higher the number of commissioners, the lower the agency costs. From the explanations and research results mentioned above, it shows that the greater the number of directors, the more the performance of the company's management in generating profits increases. According to the above explanation, the following hypothesis is proposed:

H3: BOD' size strengthen the effect of short-term debt financing on profitability

Moderation Effect of Independent Commissioners' Size on the Relationship Between Financial Leverage and Profitability

The independent BOC plays an important role in monitoring the actions of the BOD and ensuring that the policies and decisions taken are in line with the shareholders' interest (Noviani et al., 2019). Because the independent BOC is a board member who has no affiliation with the company, other board members and shareholders, the BOC cannot be

influenced to act independently and can be neutral with both minority and majority shareholders and their existence is able to represent the interests of shareholders (Mahrani & Soewarno, 2018). Karim et al. (2020) argue that a larger independent BOC can increase stricter supervision of management so that managers' opportunistic behavior decreases which can lead to the action taken to be in line with the interests of shareholders and reduce agency costs. Research conducted by Hastori et al. (2015) found a negative relationship between independent commissioners and agency costs. Research conducted by Hastori et al. (2015); Puwanenthiren et al. (2021); Yolanda & Utama, (2021) and Suhadak et al. (2020) found a negative impact between independent commissioners and agency costs. In Puwanenthiren et al. (2021), he argues that the fewer the number of independent commissioners, the lower the agency costs because the more effective they are in supervising management performance. The results obtained from the studies mentioned above show the relationship between the size of independent commissioners and agency costs arising from agency conflicts, where the role of independent commissioners is used to reduce agency conflicts by monitoring and supervising the actions of managers in making debt financing decisions. Based on this description, the following hypothesis is proposed:

H4: Independent commissioners' size weaken the effect of short-term debt financing on profitability

Moderation Effect of Managerial Ownership on the Relationship Between Financial Leverage and Profitability

With the manager as the manager as well as the shareholder, it is one of the method to make the manager actions to be in line with the shareholders' interest, since the consequences of the manager's action will be bore as well due to their position as shareholder (Zainuddin et al., 2020). According to (Karim et al., 2020), with managerial ownership, managers will act by considering the risks that will be borne by shareholders and managers are more motivated to improve their performance in managing the company. Agency costs can be reduced by an increase in managerial ownership because the higher the managerial ownership, the manager can act in the interests of the shareholders (Feng et al., 2020). Research conducted by Feng et al. (2020) and Rislina (2019) found managerial ownership has a negative effect on agency costs. The results obtained from the studies mentioned above show the relationship of ownership by management and agency cost arising from agency conflicts, where managers who also have share ownership will be careful in making decisions regarding the use of debt so that the company's performance in generating profits increases. . Therefore, we can conclude that the following hypothesis is proposed:

H5: Managerial ownership moderates the effect of short-term debt financing on profitability

Moderation Effect of Institutional Ownership on the Relationship Between Financial Leverage and Profitability

According to Zamzamin@Zamzamin et al. (2021), institutional investors are very influential on the actions of managers as indicated by the greater the number of shareholders who have the more ability to reduce and prevent opportunistic behavior of managers. With institutional ownership, managers become more careful in making decisions (Karim et al., 2020). Therefore, institutional ownership is very important in the company because it can play a role in disciplining the use of debt (Widnyana et al., 2020). According to Zamzamin@Zamzamin et al. (2021), the higher the institutional ownership, the more effective the supervision of shares so that agency costs are reduced. According to Mahrani & Soewarno (2018), with the increasing number of institutional shareholders, the supervision of managers will increase so that they can align the interests between managers and shareholders which will have a positive impact on the company's performance in

generating profits. A study by Feng et al. (2020) and Suhadak et al. (2020) found that institutional ownership has a negative effect on agency costs. The results obtained from the studies mentioned above show the relationship between institutional ownership and agency costs arising from agency conflicts, where institutional investors monitor and supervise the actions of managers in making decisions related to the use of debt in order to reduce the opportunistic actions of managers so that the company's performance in generate increased profits. According to the explanation above, the following hypothesis is constructed:

H6: Institutional ownership moderates the effect of short-term debt financing on profitability

Research Methodology and Data

Sample selection

This research uses the quantitative data from the financial statement of listed manufacturing industries on Indonesia Stock Exchange in which can be accessed from the official website www.idx.co.id and the company's official website. Collection of data for this research is conducted by documenting the annual reports of manufacturing sector companies listed on the Indonesia Stock Exchange for the 2015 and 2019 periods on the variables used. Of these 151 companies, there were 59 companies that met the sampling criteria. The sampling criteria, apart from being a manufacturing company listed on the BEI, are also required to use rupiah in their financial statements, complete for 5 years, having the percentage of independent commissioners of 30% of the total commissioners.

Variable identification

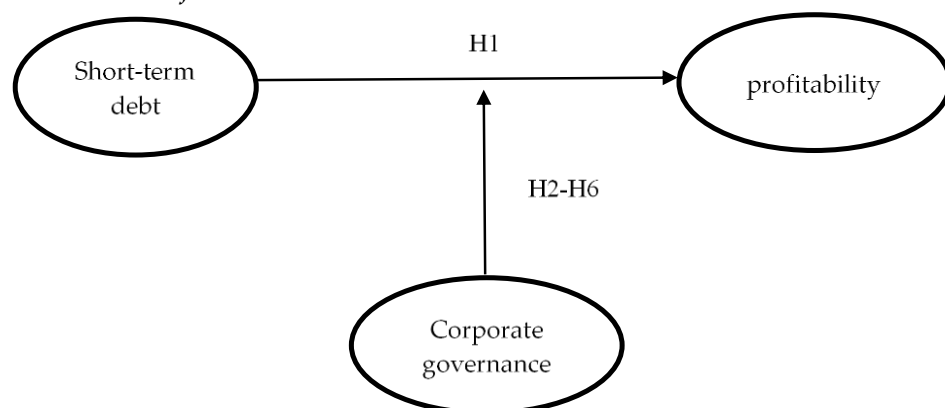


Figure 1. Conceptual framework

Operational Definition and Variable Measurement

Financial Leverage

Financial leverage is measured using the ratio of short-term debt compared to total assets. According to Mboi et al., (2018), the ratio of short-term debt to total assets shows how much total assets have their source of finance coming from loans or debts that have a duration of less than a year. The formula for the financial leverage variable is as follows:

$$\text{SDA} = (\text{Short-term Debt} / \text{Total Assets}) \times 100\%$$

Profitability

Profitability measured by the ratio of Return on Equity (ROE). According to Schäuble (2019) the The Return on Equity Ratio measures the level of profit generated by the company compared to the paid-up capital by shareholders. The formula for profitability variable is as follows:

ROE = (Earning After Taxes/Total Equity) x 100%

BOD' Size

The size of the BOD is measured based on the total number of the BOD in the company [Merendino & Melville (2019). The formula for BOD' size is as follows:

BOD Size = Total BOD

BOC' Size

The size of the independent BOC is measured based on the proportion of the number of independent commissioners from the total number of commissioners (Schäuble, 2019). The formula for BOC' size is as follows:

$$\text{BOC' Size} = \frac{\text{Number of Independent Commissioners}}{\text{Total Number of Commissioners}}$$

Managerial Ownership

Managerial ownership refers to the percentages of the number of shares owned by managers of the total company shares outstanding (Feng et al., 2020). The formula for managerial ownership is as follows:

$$\text{Managerial Ownership} = \frac{\text{Total Shares of Management}}{\text{Total Shares Outstanding}} \times 100\%$$

Institutional Ownership

Institutional ownership is a proportion of the number of shares owned by institutions of the total company shares outstanding (Feng et al., 2020). The formula for institutional ownership is as follows:

$$\text{Institutional Ownership} = \frac{\text{Number of shares owned by Institution}}{\text{Total Shares Outstanding}} \times 100\%$$

Firm Size

Company size is a common measuring tool for assessing the performance of a company because large companies can have various abilities, which can positively affect company performance (Feng et al., 2020). The formulation for firm size is as follows:

SIZE = Log (Total Asset)

Data Analysis

This study uses moderated regression analysis using the PLS-SEM-based WarpPLS 7.0 application. The regression equation is as follows:

$$\text{ROE}_{i,t} = \alpha + \beta_1\text{SDA}_{i,t-1} + \beta_2\text{BOD}_{i,t-1} + \beta_3\text{BOC}_{i,t-1} + \beta_4\text{IC}_{i,t-1} + \beta_5\text{MO}_{i,t-1} + \beta_6\text{IO}_{i,t-1} + \beta_7\text{BOD}_{i,t-1} * \text{SDA}_{i,t-1} + \beta_8\text{BOC}_{i,t-1} * \text{SDA}_{i,t-1} + \beta_9\text{IC}_{i,t-1} * \text{SDA}_{i,t-1} + \beta_{10}\text{MO}_{i,t-1} * \text{SDA}_{i,t-1} + \beta_{11}\text{IO}_{i,t-1} * \text{SDA}_{i,t-1} + \beta_{12}\text{Firmsize}_{i,t-1} + \epsilon_{i,t}$$

Model 1

- ROE = company profitability
- SDA = Short term debt to total asset ratio
- BOD = BOD' size
- BOC = BOC' size
- IC = board of independent commissioners' size
- MO = managerial ownership
- IO = institutional ownership
- BOD*SDA = moderation between BOD' size and the short-term debt to total asset ratio
- BOC*SDA = moderation between BOC' size and the short-term debt to total asset ratio
- IC*SDA = moderation between board of independent commissioners' size and short-term debt to total asset ratio
- MO*SDA = moderation between managerial ownership and short-term debt to total asset ratio

IO*SDA = moderation between institutional ownership and short-term debt to total asset ratio

Firmsize = Firm size, measured by total asset value, and then normalized by logarithm (LG. Size);

i = company i

t = year

t-1 = year t-1

ε = error term

Results and Discussion

Descriptive Statistic

To obtain a general description of the data used, a descriptive statistical analysis was carried out. The following are the results obtained from descriptive statistics:

Table 1. Descriptive Statistic

Variable	Minimal	Maximal	Mean	Standard deviation
SDA	0.014	1.572	0.297	0.169
ROE	0.000	1.197	0.129	0.143
BOD	2.000	15.000	5.214	2.469
BOC	2.000	12.000	4.193	1.929
IC	0.300	1.000	0.394	0.094
MO	0.000	0.810	0.048	0.112
IO	0.000	0.989	0.658	0.231
Firmsize	19.054	32.201	28.011	1.916

As shown on Table 2 above, it outlays the data from the smallest, largest, average, and standard deviation values of all research variables obtained from 59 manufacturing companies for the 2015-2019 period. The independent variable short-term debt (SDA) has the smallest value of 0.014 or 1.44% from PT Impack Pratama Industri Tbk and the largest value is 1.572 or 157.16% from PT Sekar Bumi Tbk. The average value (mean) of 0.297 means that manufacturing companies in 2015-2019 on average have a short-term debt ratio to total assets of 29.7%. The standard deviation value is 0.169, which is smaller than the mean value, which means that the short-term debt variable has low data variation. The dependent variable Return on Equity (ROE) has the smallest value of 0.000 or 0.04% from PT Buana Artha Anugerah Tbk and the largest value of 1.197 or 119.68% from PT Multi Bintang Indonesia Tbk. The average value (mean) of 0.129 means that manufacturing companies in 2015-2019 on average have an ROE ratio of 12.9%. The standard deviation value is 0.143, which is greater than the mean value, which means that the ROE variable has a high variation in data. The moderating variable of the size of the BOD (BOD) has the smallest value of 2 and the largest value of 15, meaning that manufacturing companies in 2015-2019 on average have a BOD of at least 2 people and the most 15 people from PT Mandom Indonesia Tbk. The average value (mean) of 5,214 means that manufacturing companies in 2015-2019 on average have a BOD of 5 people. The standard deviation value is 2,469 which is smaller than the mean value, concluding that the variable size of the BOD has low data variation. The moderating variable of the size of the BOC (BOC) has the smallest value of 2 and the largest value of 12, meaning that manufacturing companies in 2015-2019 have at least 2 commissioners and 12 people from PT Astra Internasional Tbk. The average value (mean) of 4,193 means that manufacturing companies in 2015-2019 on average have a BOC of 4 people. The standard deviation value is 1.929, which is smaller than the mean value, which means that the variable size of the BOC has low data variation. The moderating

variable for the size of the independent commissioner (IC) has the smallest value of 0.300 or 33.33% and the largest value of 1,000 or 100%, meaning that manufacturing companies in 2015-2019 have the proportion of independent commissioners at least 33.33% of the total board and 100% of the total BOC. the total number of boards from PT Alkindo Naratama Tbk. The average value (mean) of 0.394 means that manufacturing companies in 2015-2019 on average have a proportion of independent commissioners of 4 people. The standard deviation value is 0.094, which is smaller than the mean value, which means that the variable size of the independent BOC has low data variation. The moderating variable of managerial ownership (MO) has the smallest value of 0.000 or 0.00% and the largest value of 0.810 or 81.00%, meaning that manufacturing companies in 2015-2019 have managerial ownership of at least 0.00% and the most 81.00% originating from PT Industri Jamu dan Farmasi. Sido Muncul Tbk. The average value (mean) of 0.048 means that manufacturing companies in 2015-2019 have an average managerial ownership of 4.8%. The standard deviation value is 0.112, which is greater than the mean value, which means that the managerial ownership variable has a high variation in data. The mediating variable of institutional ownership (IO) has the smallest value of 0.000 or 0.00% and the largest value of 0.989 or 98.90% meaning that manufacturing companies in 2015-2019 have institutional ownership of at least 0.00% and the most 98.90% originating from PT Hanjaya Mandala Sampoerna Tbk . The average value (mean) of 0.658 means that manufacturing companies in 2015-2019 have an average institutional ownership of 65.8%. The standard deviation value is 0.112, which is greater than the mean value, which means that the institutional ownership variable has low data variation. The control variable company size (Firmsize) has the smallest value of 19,054 from PT Darya-Varia Laboratoria Tbk and the largest value of 32,201 from PT Indofood Sukses Makmur Tbk. The average value (mean) of 28,011 means that manufacturing companies in 2015-2019 on average have a company size of 28,011. The standard deviation value is 1.916, which is smaller than the mean value, which means that the variable company size has low data variation.

Outer and Inner Model Analysis

Outer model analysis

Outer model analysis is measured by Weight Value Significance. the P-Values for all indicators are $P < 0.001$ or below 0.05, which means that the significant weight values have been met and the formative latent variables have been constructed correctly and the validity and reliability criteria have been met (Kock, 2021).

Inner Model Analysis

- *R-Squared (R^2)*. The R-Squared (R^2) test obtained a result of 0.411 which means that the endogenous (dependent) variable Return on Equity (ROE) is influenced by exogenous (independent) variables of short-term debt (SDA) of 41.1% and the remaining 58.9 % is influenced by other variables undefine in this research. The value of 0.411 can be said that the effect of exogenous variables on endogenous variables is moderate.
- *F-Squared (F^2)*. The F-Squared (F^2) test in this research for SDA variable obtained an F^2 value of 0.02 which categorized as a weak influence. The moderating variable of the BOD (BOD) obtained an F^2 value of 0.073 which categorized as a weak influence. The moderating variable of the BOC (BOC) obtained an F^2 value of 0.226 which was categorized as moderate. The independent BOC (IC) moderating variable obtained an F^2 value of 0.016 which categorized as a weak influence. The moderating variable of managerial ownership has an F^2 value of 0.002 which is categorized as a weak influence. The moderating variable of institutional ownership has an F^2 value of 0.032 which is categorized as a weak influence.

- *Goodness of Fit (GoF)*. All components of the gof have met the fit requirements. APC, ARS, AARS SSR and NLBCDR are accepted, AVIF, AFVIF, SPR, and RSCR are ideal. The rest indicator, GoF is large. So, it can be concluded that model is fit and which means the model can be used for research.

Hypothesis Test

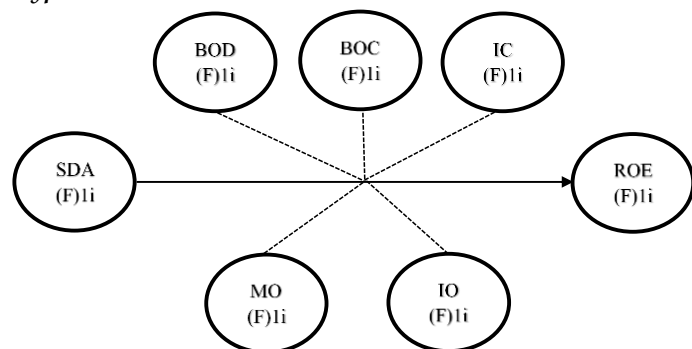


Figure 2. WarpPLS Analysis Model Results

From Figure 4.1, it can be seen that there is an effect between short-term debt and ROE as evidenced by the value of $\beta=0.1$ and a significance value of 0.05. The moderating variables that moderate the relationship between short-term debt and ROE positively are BOC' size (BOC) with a value of $\beta=0.59$, board of independent commissioners' size with a value of $\beta=0.09$, and institutional ownership (IO) with a value of $\beta=0.18$. The moderating variables that moderated negatively were BOD' size (BOD) with a value of $\beta=-0.42$ and managerial ownership (MO) with a value of $\beta=-0.32$. The control variable firm size (Firmsize) has a positive effect on ROE with a value of $\beta=0.21$.

Table 2. Hypothesis Testing Results

Hypothesis	Relationship	Path Coeff.	P-Values	Hypothesis
H1	SDA -> ROE	0.097	0.046	Accepted
H2	BOD*SDA -> ROE	-0.417	<0.001	Accepted
H3	BOC*SDA -> ROE	0.593	<0.001	Accepted
H4	IC*SDA -> ROE	0.087	0.065	Rejected
H5	MO*SDA -> ROE	-0.020	0.365	Rejected
H6	IO*SDA -> ROE	0.177	<0.001	Accepted

From table 2 we have 6 hypotheses. As for the results of statistical tests, several hypotheses are supported, but there are two hypotheses that are not supported.

Discussion

The Company's Profitability on the Effect of Short-Term Debt

The results of the analysis indicate the acceptance of the H1 hypothesis, namely that short-term debt has a positive effect on profitability as measured by ROE. From the positive path coefficients value of 0.097, it can be explained that the increasing short-term debt, the higher the profitability. The results of the analysis of this study obtained the same results as previous research by Chandra et al. (2021; Lorenza et al. (2020); Nguyen & Nguyen (2020); and Samo & Murad (2019) This is because the higher the debt means the higher the obligation or fixed burden on the debt so as to encourage management to improve its performance to generate high corporate profits in order to be able to pay all these obligations [63]. In addition, there is also a higher risk if the company is not able to fulfill all obligations so that high management performance is needed along with the increase in liabilities and risks from short-term debt (Poursoleiman et al., 2020). An increase in the corporation's

short-term debt which normally has lower interest rate can lead to the increase in profits shown from increasing it (Return on Equity). Because with relatively low interest, it can make it easier for companies to pay off their obligations to creditors so that they can increase profits received and allow management to achieve company goals, namely increasing the welfare of the owners (shareholders).

Moderation Effect of BOC' Size on the Relationship between Financial Leverage and Profitability

The results of the analysis show that the H2 hypothesis is accepted, namely BOC' size moderates positively and significantly the relationship between financial leverage and profitability. From the results of the positive path coefficient value of 0.593, it can be said that BOC' size strengthens the relationship between the use of debt (financial leverage) and management performance as measured by profitability. The results of this research analysis are in line with the findings of Hastori et al. (2015) and Schäuble (2019) that the BOC' size can reduce agency costs arising from agency problems because managers use debt funds that only benefit the management and do not act according to the wishes of shareholders. With the increasing BOC' size, the supervision of management in the use of debt funds is also greater so that it can reduce management's opportunistic behavior so that managers act in accordance with the wishes of shareholders, namely, to obtain the maximum possible profit for the welfare of shareholders (Ahmed, 2019).

Moderation Effect of BOD' Size on the Relationship between Financial Leverage and Profitability

The analysis shown that the H3 hypothesis is accepted, which means that BOD' size moderates the relationship between financial leverage and profitability. From the results of the negative path coefficient value of -0.417, it can be said that BOD' size weakens the relationship between the use of debt (financial leverage) and management performance as measured by profitability. The results of this research analysis are not in line with the findings of research conducted by Hastori et al. (2015), Ahmed (2019) and Risliana (2019) found that BOD' size has a negative effect on agency costs. According to Mahrani & Soewarno (2018) the larger the size of the BOD, it means that the more people who control the management of the company, the less effective the supervision of management will be. The larger the size of the BOD will lead to ineffectiveness in decision-making related to short-term debt due to the reduced discussion meaning due to the many differences of opinion so that it will be more difficult, time-consuming, and the incompatibilities of the members of the BOD which have an impact on decreasing performance. management in generating profits. From the explanation above, the larger the size of the BOD, the weaker the relationship between the use of short-term debt (financial leverage) and profitability.

Moderation Effect of Independent BOC Size on the Relationship between Financial Leverage and Profitability

The results of the analysis show that the H4 hypothesis is rejected, which means that board of independent commissioners' size does not moderate the relationship between financial leverage and profitability. From the results of the negative path coefficient value of 0.087 and p-values of 0.065 (above 0.05) which means it is not significant. The results of the analysis of this study are not in line with the results of research by)Hastori et al. (2015); Puwanenthiren et al. (2021) and Yolanda & Utama (2021) and Suhadak et al. (2020) namely that board of independent commissioners' size is getting bigger and able to reduce agency costs that arise from agency problems that affect relationship between the use of debt (financial leverage) and profitability. The average value (mean) of the size of the independent BOC in this study of 39.4% is in accordance with Indonesia Stock Exchange Regulation No. Kep.315/BEJ/06-2000 concerning Securities Listing and OJK Regulation No.33/POJK.04/2014, requires that the Listed Company where the company is listed on the IDX must have at least 30% of the total number of commissioners. According to Pham & Nguyen (2020), the existence of the

BOC is only to fulfill these regulations and if the BOC does not agree with the decisions made by management, the company can replace the original independent commissioner's position with someone else, so that the supervision carried out by the independent commissioner is not effective. According to Ahmed (2019) the existence of an independent BOC is more helpful in supervision so that it does not affect managers in making decisions on the use of short-term debt (financial leverage).

Moderation Effect of Managerial Ownership on the Relationship between Financial Leverage and Profitability

The results of the analysis show that the H5 hypothesis is rejected, which means that managerial ownership does not act as the moderator explaining the relationship between financial leverage and profitability. The results of the analysis of the negative path coefficients are -0.020 and p-values are 0.365 (above 0.05), which means that they are not significant. The results of the analysis of this study are not in line with the results of research by Feng et al. (2020) and Risliana (2019) who found that managerial ownership has a negative effect on agency costs. This can be influenced because managerial ownership of manufacturing companies in Indonesia is still low, namely with an average value (mean) of 0.048 or 4.8%. This low managerial ownership can trigger opportunistic actions by managers so that managers are more concerned with their interests than the interests of shareholders Pham & Nguyen (2020). This has an impact on the use of short-term debt because in its use managers are less careful in making decisions related to its use which can have an impact on company profitability (Zainuddin et al., 2020).

Moderation Effect of Institutional Ownership on the Relationship between Financial Leverage and Profitability

The results of the analysis show the acceptance of H6, which means that institutional ownership moderates the relationship between financial leverage and profitability. From the results of the positive path coefficient value of 0.177, it can be said that institutional ownership strengthens the relationship between the use of short-term debt (financial leverage) and management performance as measured by profitability. This study obtained results that are in line with Feng et al. (2020) and Suhadak et al. (2020) who found that increasing institutional ownership will reduce agency costs arising from agency conflicts because of the separation of management and ownership. From the results of the analysis, it can be proven that the higher the institutional ownership, which means the higher the institutional investors, the more effective the supervision of managers in the use of debt so that opportunistic behavior can be prevented and the interests between managers and shareholders can be aligned (Zamzamin@Zamzamin et al., 2021). This alignment of interests is followed by an increase in the performance of managers because managers are encouraged to fulfill the interests of shareholders (Mahrani & Soewarno, 2018).

The Effect of Firm Size as a Control Variable on Profitability

The consequences of the analysis show that firm size has a positive impact on profitability as measured by ROE. The results of this analysis are in line with the research of (Younis & Sundarakani, 2019) and Adria & Susanto (2020). From these results it can be explained that the larger the size of the company, the greater the total assets owned, which means that the more assets that can be used so that managers can optimize their performance to generate more profits.

Referring to the research conducted, researchers can draw conclusions that the independent variable of Short-Term debt has a significant positive influence on the dependent variable of Profitability. This is because by increasing short-term debt, it means that the obligations arising from these debts increase causing the performances in generating profits as measured by profitability also increases in order to fulfill all these obligations. The

results also show that corporate governance as a proxy for the BOD' size, BOC' size, and institutional ownership moderates the relationship between the use of short-term debt (financial leverage) and profitability. BOD' size moderates a significant negative relationship between financial leverage and profitability. In the condition that BOD' size is larger, the decision making on the use of short-term debt (financial leverage) becomes ineffective due to the large number of members, the many differences of opinion, and it takes longer to make a decision. This also has an impact on ineffectiveness in decision making related to the use of short-term debt which will cause a decrease in company performance. The mediating variable of Corporate Governance analyzed using the BOC' size and institutional ownership, moderates the positive and significant relationship between financial leverage and profitability. The larger the size of the BOC and institutional ownership, the greater the supervision of the company's management in making decisions so that opportunistic actions can be prevented and managers will act in the interests of shareholders, namely to generate maximum profit for the welfare of shareholders. The existence of the BOC and institutional ownership is able to reduce agency costs so that managers in using short-term debt will make decisions in accordance with the interests of shareholders and improve their performance to generate maximum profit. Corporate governance as proxied by the board of independent commissioners' size and managerial ownership does not moderating the relationship between financial leverage and profitability. The cause of the failure of the board of independent commissioners' size in moderating is because the BOC is only helpful in supervision and not in decision making, and if the independent commissioners does not agree with the manager's decision, the position of the independent commissioner can be replaced by someone else who makes management ineffective. The cause of the failure of managerial ownership in moderating is because in this research it can be seen that the average managerial ownership of manufacturing companies is 0.48% which can be said to be small and there are 19 of 59 samples of companies that do not have managerial ownership or managerial ownership of 0% for 5 years so had no effect on the research conducted. Company size as a control variable has a positive and significant effect on profitability because the larger the size of the company, the more assets owned so that managers can optimize their performance to generate more profits.

Conclusion and Limitation

This, in turn, indicates that companies with greater financial leverage will be able to achieve increased performance thereby increasing the profitability of the company. The existence of corporate governance is supposed to be a trigger for the increasing positive influence among financial leverage and profitability. In this study, the five pillars of corporate governance are used which are of course expected to strengthen the influence of financial leverage and profitability. However, not all pillars succeeded in moderating the influence of the two main variables. The pillars that managed to moderate positively were BOD, BOC, and IO, while the next two, namely IC and MO, failed to moderate. The existence of firm size as a control variable also has a positive effect so that it can be said to have succeeded in controlling the existence of financial leverage in relation to profitability.

This research suggests companies in Indonesia to create good corporate governance and then apply managerial ownership. By creating good corporate governance, managers will find it to be difficult to be entrenched. And by applying managerial ownership, it can help managers be careful in making decisions regarding the use of short-term debt because managers share the consequences for their decisions. In addition, the researcher suggests to create the internal audit departments, in which they identify if there is any fraudulent activities that can be applied by the managers. Furthermore, the internal audit department can also provides independent performance evaluation regarding the business activities and thus the effectivity and effectiveness usage of debt financing towards the company's performance.

References

- Adria, C., & Susanto, L. (2020). Pengaruh Leverage, Likuiditas, Perputaran Modal Kerja, Dan Perputaran Total Aset Terhadap Profitabilitas Dengan Ukuran *Jurnal Multiparadigma Akuntansi Tarumanagara*, 2(1), 393–400. <https://doi.org/http://dx.doi.org/10.24912/jpa.v2i1.7168>
- Ahmed, I. A. (2019). Capital Structure, Ownership Structure and Corporate Governance of SMEs in Ghana. *Journal of Accounting - Business & Management*, 26(01), 45. <https://doi.org/10.31966/jabm-international.v26i01.397>
- al Farooque, O., Buachoom, W., & Sun, L. (2020). Board, audit committee, ownership and financial performance – emerging trends from Thailand. *Pacific Accounting Review*, 32(1), 54–81. <https://doi.org/10.1108/PAR-10-2018-0079>
- Anginer, D., Demirguc-Kunt, A., Simsir, S. A., & Tepe, M. (2021). Is short-term debt a substitute for or complementary to good governance? *Borsa Istanbul Review*, 22(2), 197–208. <https://doi.org/10.1016/j.bir.2021.05.004>
- Barros, F. E. E. de, Santos, R. C. dos, Orso, L. E., & Sousa, A. M. R. (2020). The evolution of corporate governance and agency control: the effectiveness of mechanisms in creating value for companies with IPO on the Brazilian stock exchange. In *Corporate Governance (Bingley)* (Vol. 21, Issue 5). <https://doi.org/10.1108/CG-11-2019-0355>
- Chandra, T., Junaedi, A. T., Wijaya, E., & Ng, M. (2021). The impact of co-structure of capital, profitability and corporate growth opportunities on stock exchange in Indonesia. *Journal of Economic and Administrative Sciences*, 2010. <https://doi.org/10.1108/jeas-08-2019-0081>
- DePamphilis, D. M. (2022). Financing the deal: private equity, hedge funds, and other sources of financing. In *Mergers, Acquisitions, and Other Restructuring Activities (Eleventh Edition)* (11th ed., pp. 343–372). Academic Press. <https://doi.org/https://doi.org/10.1016/B978-0-12-819782-0.01001-7>
- Feng, Y., Hassan, A., & Elamer, A. A. (2020). Corporate governance, ownership structure and capital structure: evidence from Chinese real estate listed companies. *International Journal of Accounting and Information Management*, 28(4), 759–783. <https://doi.org/10.1108/IJAIM-04-2020-0042>
- Ghorbani, A., & Salehi, M. (2021). Earnings management and the informational and disciplining role of debt: evidence from Iran. *Journal of Asia Business Studies*, 15(1), 72–87. <https://doi.org/10.1108/JABS-11-2019-0336>
- Hajisaaid, A. M. S. A. (2020). The Effect of Capital Structure on Profitability of Basic Materials Saudi Arabia Firms. *Journal of Mathematical Finance*, 10(04), 631–647. <https://doi.org/10.4236/jmf.2020.104037>
- Hastori, H., Siregar, H., Sembel, R., & Ahmad Maulana, T. N. (2015). Agency costs, corporate governance and ownership concentration: The case of agro-industrial companies in Indonesia. *Asian Social Science*, 11(18), 311–319. <https://doi.org/10.5539/ass.v11n18p311>
- Jihadi, M., Vilantika, E., Hashemi, S. M., Arifin, Z., Bachtiar, Y., & Sholichah, F. (2021). The Effect of Liquidity, Leverage, and Profitability on Firm Value: Empirical Evidence from Indonesia. *Journal of Asian Finance, Economics and Business*, 8(3), 423–431. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0423>
- Jin, B. E., & Kim, G. (2021). Assessing Malaysia and Indonesia as emerging retail markets: an institution-based view. *International Journal of Retail and Distribution Management*. <https://doi.org/10.1108/IJRDM-05-2020-0187>
- Karim, S., Manab, N. A., & Ismail, R. B. (2020). The dynamic impact of board composition on CSR practices and their mutual effect on organizational returns. *Journal of Asia Business Studies*, 14(4), 463–479. <https://doi.org/10.1108/JABS-07-2019-0214>
- Kock, N. (2021). WarpPLS user manual : Version 7.0. In *ScriptWarp Systems*. ScriptWarp Systems™.
- Lorenza, D., Kadirb, Muh. A., & Sjahrudin, H. (2020). Pengaruh struktur modal dan ukuran perusahaan terhadap profitabilitas pada perusahaan otomotif yang terdaftar di bursa efek indonesia. *Jurnal Ekonomi Manajemen*, 13(01), 85–97.
- Mahrani, M., & Soewarno, N. (2018). The effect of good corporate governance mechanism and corporate social responsibility on financial performance with earnings management as mediating variable. *Asian Journal of Accounting Research*, 3(1), 41–60. <https://doi.org/10.1108/AJAR-06-2018-0008>
- Mangesti Rahayu, S., Suhadak, & Saifi, M. (2020). The reciprocal relationship between profitability and capital structure and its impacts on the corporate values of manufacturing companies in Indonesia. *International Journal of Productivity and Performance Management*, 69(2), 236–251. <https://doi.org/10.1108/IJPPM-05-2018-0196>

- Mboi, C. S., Muturi, W., & Wanjare, J. (2018). Effect of Short-term Debt to Total Assets Ratio on Financial Performance of Medium-sized and Large Enterprises in Kenya. *Research Journal of Finance and Accounting*, 9(18), 40–49.
- Merendino, A., & Melville, R. (2019). The board of directors and firm performance: empirical evidence from listed companies. *Corporate Governance: The International Journal of Business in Society*, 19(3), 508–551. <https://doi.org/10.1108/CG-06-2018-0211>
- Nguyen, T. H., & Nguyen, H. A. (2020). Capital structure and firm performance of non-financial listed companies: Cross-sector empirical evidences from Vietnam. *Accounting*, 6(2), 137–150. <https://doi.org/10.5267/j.ac.2019.11.002>
- Noviani, A. V., Atahau, A. D. R., & Robiyanto, R. (2019). Struktur modal, profitabilitas, dan nilai perusahaan: Efek moderasi Good Corporate Governance. *Jurnal Ekonomi Dan Bisnis*, 22(2), 391–415. <https://doi.org/10.24914/jeb.v22i2.2601>
- Pham, H. S. T., & Nguyen, D. T. (2020). The effects of corporate governance mechanisms on the financial leverage–profitability relation: Evidence from Vietnam. *Management Research Review*, 43(4), 387–409. <https://doi.org/10.1108/MRR-03-2019-0136>
- Poursoleiman, E., Mansourfar, G., & Abidin, S. (2020). Financial leverage, debt maturity, future financing constraints and future investment. *International Journal of Islamic and Middle Eastern Finance and Management*, 13(4), 613–634. <https://doi.org/10.1108/IMEFM-10-2019-0430>
- Puwanenthiren, P., Sathasivam, B., & Thirunavukarasu, V. (2021). Corporate governance, ownership structure and agency costs: evidence from Sri Lanka. *Indonesian Management and Accounting Research*, 19(2), 121–134. <https://doi.org/10.25105/imar.v19i2.7265>
- Rislina, F. (2019). Pengaruh good corporate governance dan kebijakan hutang terhadap agency cost. *Jurnal Riset Ekonomi Dan Bisnis*, 3(2), 28–31. <http://www.jurnal.unsyiah.ac.id/bioleuser>
- Samo, A. H., & Murad, H. (2019). Impact of liquidity and financial leverage on firm's profitability – an empirical analysis of the textile industry of Pakistan. *Research Journal of Textile and Apparel*, 23(4), 291–305. <https://doi.org/10.1108/RJTA-09-2018-0055>
- Schäuble, J. (2019). The impact of external and internal corporate governance mechanisms on agency costs. *Corporate Governance (Bingley)*, 19(1), 1–22. <https://doi.org/10.1108/CG-02-2018-0053>
- Suhadak, S., Mangesti Rahayu, S., & Handayani, S. R. (2020). GCG, financial architecture on stock return, financial performance and corporate value. *International Journal of Productivity and Performance Management*, 69(9), 1813–1831. <https://doi.org/10.1108/IJPPM-09-2017-0224>
- Tayachi, T., Hunjra, A. I., Jones, K., Mehmood, R., & Al-Faryan, M. A. S. (2022). How does ownership structure affect the financing and dividend decisions of firm? *Journal of Financial Reporting and Accounting*. <https://doi.org/10.1108/JFRA-09-2021-0291>
- UNCTAD. (2019). *Digital economy report 2019*.
- Widnyana, I. W., Wiksuana, I. G. B., Artini, L. G. S., & Sedana, I. B. P. (2020). Influence of financial architecture, intangible assets on financial performance and corporate value in the Indonesian capital market. *International Journal of Productivity and Performance Management*, 70(7), 1837–1864. <https://doi.org/10.1108/IJPPM-06-2019-0307>
- Yolanda, Y., & Utama, C. A. (2021). Family Ownership Structure, Independent Directors, and Independent Commissioners: Effects on Leverage. *Jurnal Manajemen Bisnis*, 12(1), 41–55. <https://doi.org/10.18196/mabis.v12i1.9525>
- Younis, H., & Sundarakani, B. (2019). The impact of firm size, firm age and environmental management certification on the relationship between green supply chain practices and corporate performance. *Benchmarking*, 27(1), 319–346. <https://doi.org/10.1108/BIJ-11-2018-0363>
- Zainuddin, Z., Andaresta Mananohas, O., & Akindutire, O. R. (2020). The Effect of Debt Policies, Profitability, Managerial Ownership Structure, and Liquidity on Dividend Policy. *The Indonesian Journal of Accounting Research*, 23(03), 411–428. <https://doi.org/10.33312/ijar.483>
- Zamzamin@Zamzamin, Z., Haron, R., & Othman, A. H. A. (2021). Hedging, managerial ownership and firm value. *Journal of Asian Business and Economic Studies*, 28(4), 263–280. <https://doi.org/10.1108/jabes-08-2020-0101>
- Zharfpeykan, R., & Akroyd, C. (2022). Factors influencing the integration of sustainability indicators into a company's performance management system. *Journal of Cleaner Production*, 331(December 2021), 129988. <https://doi.org/10.1016/j.jclepro.2021.129988>