



Effect of Board Characteristics, Capital Structure on Firm Performance and Value

ABSTRACT

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The board of directors is one of the components of corporate governance used by the company to improve the firm's performance both in the long and short term so that the characteristics of the board become one of the key factors to running a good governance system for the company, even though having a good board composition is not always makes the company have a good performance because of the conflict of interest that occurs between the principal and the manager of the company so that there is a need for an in-depth study of the impact of capital structure on company performance. This study attempts to assess specifically the characteristics of the board (board size, board diversity, and audit committee) owned by the company to capital structure, then confirmed the effect of capital structure on firm performance and firm value by using ROE for performance and Tobin's Q for firm value. Was used in the study sample 25 a company that had always entered into the LQ45 index within a time frame of 2015-2019. The technique of analysis that was used in this study was Path Analysis. The results of the testing of hypotheses found that board size and audit committee had a positive impact on capital structure, while board diversity had a negative effect on capital structure, then capital structure had a positive effect on firm performance, otherwise, the capital structure had a negative effect on firm value.

Keywords: Board Size, Board Diversity, Audit Committee, Capital Structure, Firm Performance, Firm Value

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INTRODUCTION

In recent years, a lot of attention from academics and practitioners has focused on corporate governance issues, in particular on some important decisions (especially investment and funding decisions) made by managers and the resulting performance and corporate assessments (Wintoki et al., 2012). Jensen and Meckling (1976) suggest that agency problems between managers and shareholders can be reduced by the use of debt capital as a governance mechanism. Because the use of debt financing prevents the dilution of insider equity holdings and provides additional monitoring of debt holders, it can increase firm value by reducing agency cost of equity. Stulz (1990)

confirms that leverage can indeed be an effective corporate governance mechanism that reduces agency problems between managers and shareholders by disciplining managers. There are three main reasons for this argument; (1) managers are closely monitored by bondholders and financial markets Stulz (2000) (2) the wiser use of free cash flow for fixed interest payments to bondholders than given to managers and (3) the potential risk of bankruptcy and loss of reputation and jobs for managers Williams (1987). So that there arise agency conflicts about how the manager chooses the optimal level of leverage (able to maximize shareholder wealth) because managers may deviate from the optimal choice of capital structure and prefer to pursue their interests.

Without good corporate governance, the company will go bankrupt and even the country can experience a crisis. For example, when a company fails to manage its leveraged rate. Many studies linking the recent financial crisis to governance failures include (Berglof, 2011), in this context, boards have been criticized for not being able to prevent crises. The Asian Financial Crisis of 1997 and the Global Financial Crisis of 2007 are two prime examples of financial crises that resulted from poor corporate funding decisions. According to the trade-off theory, the capital structure has a trade-off between the benefits obtained and the sacrifices incurred due to debt. Companies that choose the optimal debt composition in their capital structure get tax savings from interest costs, but any debt owned by the company will increase the probability of going bankrupt. Capital structure decisions greatly affect financial conditions which, of course, will have an impact on the profit that will be generated by the company so that it will determine the value of the company going forward.

One of the topics discussed in the corporate governance literature is the characteristics of the board of directors, namely its supervisory role, and its effects on various company variables related to company performance both in the short and long term. This results in the analysis of variables such as board size, percentage of independent directors, separation of chairman and CEO roles, or frequency of board meetings (Hermalin and Weisbach, 2003), all of which form what is called structural diversity.

The study of Corporate Governance (CG) talks about the function, structure, and role of the board of directors (BoD) in managing the company (Campbell, 2007). Directors, who are the primary vehicle for corporate governance, are responsible for protecting the interests of the company's stakeholders by directing its operations and by sorting decision-making (Kaplan, 2001). In general, the board of directors of a company is the body that determines policies for company management and makes decisions on the main issues of the company (Krechovská and Procházková, 2014). Strong corporate governance has been shown to reduce agency problems and encourage managers to operate well (Terjesen et al., 2015).

The relationship between corporate governance and corporate performance has been analyzed following two main approaches. First, is the flow of literature that focuses on

corporate governance concerning certain long-term strategies and policies (Grinblatt & Titman, 2016). The second stream of literature focuses on the characteristics of Directors such as board size, gender, independence, age, and CEO duality (Finegold et al., 2007). In this study, the focus is on the second approach. Zona et al (2018) show that BoD has a significant and positive relationship with company performance. The literature generally agrees that various characteristics of the composition of directors affect the company's financial performance (Duru et al., 2016).

The company's performance assessment should not only be seen from how much profit is generated each year by assessing how much the accounting profit earned is indicated by the ROA or ROE ratio, it only looks at short-term performance, but also has to look at the company's ability to get future cash flows. future and investment opportunities (Carter et al., 2010) by looking at the long-term performance of the company which refers to the behavior of the securities or asset market, which reflects external perceptions and expectations of the organization's future or long-term value (Thaler, 2004). Tobin's Q has been used to measure market performance or long-term firm value (Gyapong et al., 2016).

Previous research on the role of the board of directors on performance has only focused on one short-term or long-term performance (Kanakriyah, 2021; Li et al., 2021) although research conducted by (Mishra et al., 2021) has examined the effect of board characteristics. on the company's performance both in the short and long term, however, the researchers tried to further examine the indirect effect of board characteristics on the company's performance both in the short and long term through the company's capital structure, because according to Brigham and Ehrhardt (2014) there are two ways to improve the company's performance. company performance, increase revenue, and reduce costs, so research on leverage on company performance needs to be done. This study continues the research of Detthamrong et al (2017) who found the mediating effect of leverage on the relationship between board characteristics and firm performance in the short term. This study examines the mediating effect of leverage on the relationship between board characteristics and firm performance in the long term.

This study aims to examine the extent to which the role of board characteristics as seen from the number of boards of directors, the diversity of the board of directors and audit committees owned by the company is able to form an optimal composition of capital structure which will lead to good company performance both in the short and long term in companies that listed in the LQ45 index from 2015-2019. This study also provides empirical evidence of the influence of companies with the LQ45 index being suitable as a research sample because companies that are members of LQ45 are companies that have good performance on the Indonesia Stock Exchange which has the highest market capitalization and transaction value in the capital market.

LITERATURE REVIEW

Agency Theory

Jensen and Meckling (1976) describe an agency relationship as a contract in which one or more people (principal) engage other people (agents) to perform some services on their behalf that involve delegating some decision-making authority to the agent. This relationship gives rise to agency cost as the number of costs incurred by the principal to supervise the agent resulting from the existence of equity obtained from outside.

Signaling Theory

According to signaling theory, the choice of leverage composition does not depend on the concept of optimization and more on the aspect of the company's willingness to send certain signals to investors (Ross, 1977), to obtain profits, sometimes they try to increase debt excessively above the optimal point so that stock prices will be higher and lower. leading the market to believe in the company's growth opportunities in the future.

Trade-off theory

The theory was first introduced by Modigliani and Miller (1963), this theory explains that companies exchange benefits from debt financing in the form of tax savings and sacrifices incurred due to debt in the form of bankruptcy costs (Asri, 2013). In this theory, it is shown that an optimal point will be found that brings together the benefits and trade-offs of the cost of debt.

Pecking order theory

In the pecking order theory, it is explained that companies prefer less risky securities among external financing sources because high-risk securities such as new equity and long-term debt are more sensitive to information asymmetry than low-risk ones such as short-term debt (Myers & Majluf, 1984). The firm will choose funding based on priority order, from non-risky, internal funding to those with minimum risk to those with high risk.

Corporate Governance

Brigham and Ehrhardt (2014) explain that corporate governance is defined as a set of laws, rules, and procedures that affect firm operations and decisions made by managers to control company behavior towards directors, managers, employees, shareholders, creditors, customers, competitors, and community.

Board Size and Capital Structure

Board characteristics are independent variables used in the study. Board characteristics are measured using several proxies, Board Size is measured using the board of directors as the total number of the board of directors (Bhagat and Bolton, 2008), and Board Diversity is measured as the ratio of the number of all female directors to the number of all directors (Detthamrong et al, 2017), Committee Auditing is measured by the number of audit committees in the board structure (Detthamrong et al, 2017).

Board size refers to the number of directors who can influence the company's corporate governance practices (Yermack, 1996), so that the characteristics of the board owned by the company can influence the decision-making process (Fodio & Oba, 2012). According to agency theory by Jensen and Meckling (1976) the composition of the board with a large number of directors is considered more effective in handling and controlling management in dealing with agency conflict problems, the more the number of directors involved in management activities will make the board more alert. board size is an important dimension of board structure (Noor & Fadzil, 2013).

Coles et al (2008) provide evidence that firms with larger board sizes have greater effectiveness even though firms with larger boards tend to be associated with accrual earnings management. Furthermore, Cheng and Courtenay (2006) found that the size of the board of directors is positively related to the level of corporate voluntary disclosure.

Capital structure is a combination of debt and equity used by companies to finance their (Asri, 2013). Measurement of the company's capital structure uses the company's financial leverage as the ratio of total debt to total assets (Vithessonthi & Tongurai, 2015). Wen et al (2002) found a positive relationship between board size and capital structure. Finally, the researcher argues that companies that have many directors can take advantage of their network of directors which allows companies to have better access to external financing, being able to become a control system that can reduce agency conflicts. Therefore, the researcher formulates the hypothesis:

H1: The more the number of the board of directors will improve the capital structure.

Board Diversity and Capital Structure

Board diversity refers to the presence of women in the board structure as measured by the percentage of women directors on the board. Campbell and Mínguez-Vera (2008) emphasized that the gender diversity of the board affects the quality of the controlling role and the company's performance. The presence of women on the board has an impact on better company value due to better monitoring quality (Isidro & Sobral, 2015). Women directors are more likely to assist company management with their skills and knowledge of the law, human resource management, communication, and public relations compared to male directors (Zelechowski & Bilimoria, 2004).

Strom et al (2014) found that having a female director on the board of directors will result in better financial performance, in addition to a woman director on the board can provide a different point of view in the decision-making process compared to men (Hoobler et al., 2016). Woman directors tend to be risk-averse and less courageous in making risky decisions, leading female directors to try to reduce the company's leverage to reduce financial risk, but the presence of female directors does not always indicate the low level of leverage owned by the company, in certain contexts many companies in developed countries have low leverage (Huang et al., 2015). The presence of woman directors in companies with low leverage can encourage companies to increase leverage to higher. Based on the arguments that have been discussed, the researcher proposes the following hypothesis:

H2: The higher the board diversity, the lower the capital structure.

Audit Committees and capital structure

The audit committee is a sub-section that acts independently in the preparation of financial statements and accurate disclosures following reporting standards with the internal control system. The audit committee is responsible for providing advice in selecting external auditors for the board, controlling management, creating confidence in the accuracy, reliability, and quality of financial reports (Harris & Raviv, 2008). The audit committee is one of the important mechanisms in corporate governance, the audit committee also assists companies in controlling financial statements to create good corporate governance.

Chen et al (2016) confirm that audited financial reports will provide a more complete picture of credit risk to capital providers. This information can lead to strict credit approvals, but the completeness of information provided by the audit committee can also increase leverage because the company can provide more complete information in the market so that the more and more credible the audit committee, the higher the opportunity to obtain loans from external parties. Based on the arguments above, the researcher proposes a hypothesis:

H3: More and more audit committees will improve the capital structure.

Capital Structure, Firm Performance and firm value

Firm performance is measured by an accounting return reflects past financial performance, describing how efficiently the organization uses its assets and investments to generate revenue (Estélyi & Nisar, 2016). Bhabra (2007) measures the firm's performance as return on equity (ROE), calculated as the ratio of earnings before interest and taxes to equity. Bhabra (2007) measures the firm's performance as return on equity (ROE), calculated as the ratio of earnings before interest and taxes to equity.

The relationship between financial leverage and company performance still cannot be explained consistently, both theoretically and empirically. Inconsistency of results is

expected to occur because each company has different characteristics, both in terms of industry and the culture of the country where the company operates. Among the theories that support the positive relationship of leverage is signaling theory. According to the signaling theory, the issuance of new shares is a negative signal for investors because there is an indication that the stock price offered is overvalued, so the increase in the amount of leverage is a positive signal for investors (Myers & Majluf, 1984). In addition, MM theory also supports a positive relationship between leverage and firm performance (Dao & Ta, 2020).

Research conducted by Vijayakumaran (2017) found a positive effect of leverage on company performance, although several studies found a negative effect of leverage on company performance (Chadha & Sharma, 2016; Mehmood et al., 2019). Based on the discussion above, the researcher argues that the increase in the amount of leverage owned by the company is a positive signal for investors because companies that have a high level of leverage believe in their ability to earn profits in the future, so that the hypothesis 4 that the researcher proposes:

H4: The higher the capital structure will increase the firm performance.

The discussion of the benefits of leverage on the company's performance until now still gives birth to two perspectives. In theory, trade-off and pecking orders support a negative relationship between leverage and firm performance. According to the trade-off theory, there is a tug-of-war between the tax benefits derived from leverage and the bankruptcy costs that will result, so that in the long-term leverage will harm the company's performance leading to bankruptcy, while in the pecking order theory, leverage is only another alternative. the company is not sufficient in running the business because it has a higher cost of capital. Broadly speaking, company performance can be measured using two bases, accounting and market.

Estélyi and Nisar (2016) argue that market performance shows the wealth position of shareholders and creditors (firm value). It also refers to securities market behavior that reflects external perceptions and expectations of an organization's future value or long-term value (Thaler, 2004). Tobin's Q has been used to measure firm value, by calculating the percentage of market value of a company divided by total assets.

Measurement of company performance based on accounting using return on assets (ROA) or return on equity (ROE) measurements only looks at the company's performance in the short term, while measuring company based on market using Tobin's Q measurement is used to measure market performance so that this measurement is usually used to measure market performance. see the long-term performance of the company or the value of the company (Gyapong et al., 2016). Research conducted by Olajide et al (2017) Olajide et al found a negative relationship between leverage on market performance. Based on the discussion of various relevant pieces of literature, the researcher argues that leverage that is too high will worsen the company's performance in the long term so that the firm value will decrease, so hypothesis 5 in this study:

H5: The higher the capital structure, the lower the firm value.

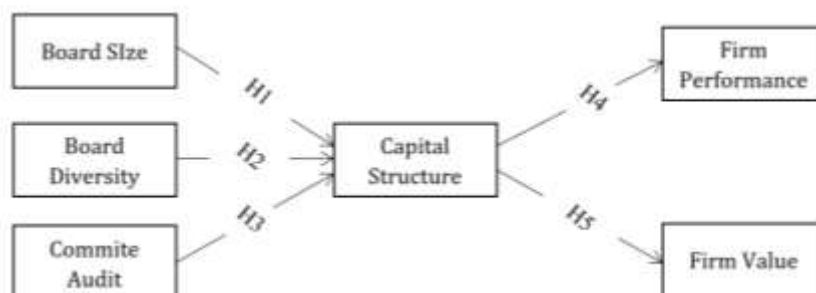


Figure 1. Research model

METHODOLOGY

This study uses a quantitative approach with a path analysis method to test the research hypothesis by using the WarpPLS 6.0 application. This study examines the relationship between the characteristics of the board consisting of board size, board gender diversity, and the audit committee to the capital structure measured by using leverage, then testing leverage on firm performance and firm value. The purpose of this study is to confirm the existing theory. The population of this study is all companies that are included in the LQ45 index in the 2015-2019 period. This period was chosen because during that period the performance of the stock market in Indonesia was in stable condition and was not affected by the COVID-19 crisis.

The sampling technique in this study uses purposive criteria, namely: 1. Companies listed on the Indonesia Stock Exchange at least 12 months before the observation period, 2. Companies that are always included in the LQ45 index from the 2015-2019 period, 3. Companies that report annual reports in the 2015-2019 period, 4. From the 4 criteria, 25 companies were selected as research samples with an observation period of 5 years so $n = 125$. This study uses secondary data obtained from the Osiris database and the company's annual financial statements from 2015-2019 obtained from IDX. The sampling technique in this study used a methodology using the following criteria: companies listed on the Indonesia Stock Exchange at least 12 months before the observation period, companies that are always included in the LQ45 index from the 2015-2019 periods, companies that report annual reports in the period 2015-2019.

RESULTS

Table 1 presents a summary of the value of each research variable consisting of the characteristics of the board (board size, board diversity, audit committee) then performance variables and company value in companies that are members of the LQ45 index from 2015-2019 on the Indonesia Stock Exchange.

Table 1. Descriptive statistics

Column 1	Sample	Min	Max	M	SD
Board Size	125	4	11	7.11	1.652
Board Diversity	125	0	0.833	0.15325	0.184936
Audit Committee	125	2	6	3.54	0.767
Return on Equity	125	-9.110	202.940	29.44752	39.281112
Tobin's Q	125	0.164	22.559	2.69806	4.121694

The average number of company directors on the IDX is 7.11 with the maximum number of directors being 11 and the minimum number of directors being 4, then for diversity, the board of directors has an average of 15.3% of the total board of directors with a maximum percentage of 83.3% of the total number of boards. The board of directors at least has no presence or 0%. For the audit committee, it has an average of 3.54 with a maximum number of 6 and a minimum of 2, then the average ROE of the company on the IDX is 29.44% with a maximum percentage of 202.94% and a minimum percentage of -9.11%, lastly for average -The average Tobin's Q value of companies on the IDX is 2.69 with a maximum value of 22.55 and a minimum value of 0.16.

Table 2. Summary of Hypothesis testing results

Hypothesis	Phat Coefficient	P-value	Conclusion
Board of Direction → Capital Structure	0.343	0.001**	Supported
Board Diversity → Capital Structure	-0.165	0.028**	Supported
Audit Committee → Capital Structure	0.122	0.081*	Supported
Capital Structure → Firm Performance	0.326	0.001***	Supported
Capital Structure → Firm Value	-0.292	0.001***	Supported

Note: Sig (***1%, **5%, *10%).

Hypothesis testing was carried out using path analysis with the WarpPLS 6.0 application, the results will be presented in the Figure 2.

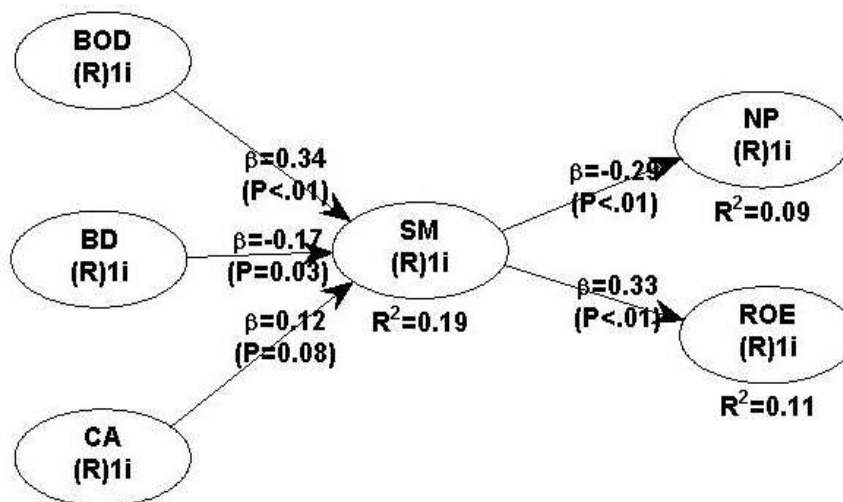


Figure 2. Results of the path analysis

H1: The more the number of the board of directors will improve the capital structure.

The results of testing the first hypothesis show that the effect of board size (X1) on capital structure (Y1) has a coefficient value of 0.343 with a p-value of <0.001. The p-value is smaller than 0.05 so hypothesis 1 is supported, meaning that the more board of directors the company has caused an increase in the debt composition in the company's capital structure.

H2: The higher the board diversity, the lower the capital structure.

Furthermore, the results of testing the third hypothesis show that the effect of board diversion (X3) on capital structure (Y1) has a coefficient value of -0.165 with a p-value of 0.028. The p-value is smaller than 0.05 so hypothesis 3 is supported, meaning that the higher the diversity in the composition of the board of directors of the company causes a decrease in the composition of debt in the company's capital structure.

H3: The higher the audit committee will improve the capital structure.

The results of testing the fourth hypothesis regarding the effect of board diversion (X3) on capital structure (Y1) obtained a coefficient value of 0.122 with a p-value of 0.081. The p-value is smaller than 0.1, so hypothesis 4 is supported by a significance value of 10%, meaning that the more number of audit committees owned by the company increases the debt composition in the company's capital structure.

H4: The higher the capital structure will increase the company's performance.

Then the fifth hypothesis testing in research on the effect of capital structure (Z) on company performance (Y₂) obtained a coefficient value of 0.326 with a p-value of <0.001. The p-value is smaller than 0.05 so hypothesis 5 is supported, meaning that more debt composition in the company's capital structure will increase the company's performance.

H5: The higher the capital structure, the lower the firm's value.

Testing the final hypothesis in this study, the sixth hypothesis regarding the effect of capital structure (Z) on firm value (Y₃) obtains a coefficient value of -0.292 with a p-value of <0.001. The p-value is smaller than 0.05 so hypothesis 6 is supported, meaning that the more debt composition in the company's capital structure results in a decrease in firm value.

DISCUSSION

Effect of Board Size on Capital Structure

In this study, hypothesis testing on companies that are members of the LQ45 index shows that the board size has a positive effect on capital structure. The positive relationship between board size and financial leverage seems to support the idea that companies with more directors might benefit from their director network which allows them better access to external finance.

These results are consistent with research conducted by Ghosh et al (2011) who found a significant positive relationship between large boards of directors and leverage. The results of this study are by what is explained by the trade-off theory introduced by Modigliani and Miller (1963) which states that debt has benefits and sacrifices. In addition to the debt being able to save tax burdens, loyal debt components owned by the company also add bankruptcy costs to an optimal point where debt expansion will no longer have any benefits. It can be said that the board size has a positive relationship with the capital structure because the debt component is not yet optimal so a large number of boards will increase the percentage of debt in the company's capital structure.

The Effect of Board Diversity on Capital Structure

The test results on companies that are included in the LQ45 index found that board diversity has a negative effect on capital structure. Based on the order of financing preferences predicted by the pecking order theory due to information asymmetry, market equity is preferred over debt due to lack of information between companies and investors in the capital market. What underlies the negative relationship of board diversity to the capital structure is based on the effect of disclosure on women. There is

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evidence that board gender diversity contributes to market efficiency by increasing the level of corporate disclosure (Ahmed et al, 2017).

The results of this study support the research conducted by Alves et al (2015) on the capital structure, which results in board diversity which has a positive effect on the use of external equity and a negative effect on the use of short-term debt.

The Effect of the Audit Committee on Capital Structure

The results of hypothesis testing show a positive and significant effect of the audit committee on the capital structure at the 10% level or a weak level of significance. In the board structure, the audit committee is responsible for providing advice in selecting external auditors for the board, controlling management, creating confidence in the accuracy, reliability, and quality of financial reports (Harris and Raviv, 2008).

Research conducted by Chen et al (2016) shows that audited financial reports provide important information about a company's credit risk to capital providers. This information can lead to strict credit approval, thus affecting the chances of getting a loan. The audit committee allows the company to increase leverage because of better and reliable information that is felt by the market (creditors and investors).

The Effect of Capital Structure on Firm Performance

The results of hypothesis testing show that capital structure has a positive effect on company performance. Determining the right capital structure is an important thing to do to maximize the company's wealth because errors in determining the capital structure have an impact on the decline in firm value. Although there is still debate about whether capital structure might affect performance (Abdullah and Tursoy, 2019). However, it is widely expected that leverage can have an impact on company performance. The results of this study support research conducted by Margaritis and Psillaki (2010) and Jouda (2018) who found that a high debt component in the capital structure has a positive effect on company performance. This indicates that it is important to determine the optimal capital structure so that the company's performance is good.

The Effect of Capital Structure on Firm Value

The results of testing this hypothesis indicate that the capital structure has a negative effect on firm value. Firm value is the conclusion of the firms' management performance assessment whether good or bad because increasing profits is not enough to determine a company that is performing well. After all, profit only assesses the company's performance in the short term (Gyapong, Monem, and Hu, 2016). An assessment of the company's market performance (Tobin's Q) is needed because it shows the wealth position of shareholders and creditors (company value). This reflects the external perceptions and expectations of the future of the organization so that the assessment of market performance is a long-term assessment (Thaler, 2004), and also predicts the

company's ability to obtain future cash flows and investment opportunities (Carter et al, 2010).

This research supports research conducted by Ayuba et al (2019) which found that a high debt component in the capital structure has a negative effect on firm value. This indicates that in the short term, leverage will increase the company's performance, but in the long run, it will decrease the company's value because the trade-off theory states that in addition to debt having benefits, debt also provides bankruptcy costs.

CONCLUSION

This study seeks to explore the study of corporate governance in companies more specifically, namely the structure of the board in the company and its relation to the formation of the company's capital structure, furthermore in this study also confirms how the impact of capital structure on company performance in the short term in terms of how much profit earned and the effect of capital structure on firm value by looking at the company's market performance.

This study shows the board size and audit committee owned by the company increase the amount of debt in the capital structure component owned by the company. Companies with more directors may be able to take advantage of their network of directors which allows them to have better access to external financing, whereas having a company audit committee will provide better and more reliable information that is perceived by the market (creditors and investors) which allows the company to improve leverage. The diversity of boards owned by the company will result in a decrease in the debt component in the company's capital structure.

Furthermore, in this study, it is found that a high debt component in the capital structure improves company performance. On the contrary, a high debt component in the capital structure causes the firm's value to decrease. This indicates that in the short term, debt will increase company profits, but in the long run, a high debt component will imply a negative signal to the market because besides having debt benefits, it also increases bankruptcy costs. Further, studies require a larger sample to ensure the accuracy of the research results by increasing the number of samples will increase the generalizability of the results.

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