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Innovation as a strategic moderator in the link between corporate governance, interest coverage ratio, and financial distress

Nurdian Susilowati, Nurhalizah
Department of Accounting Education, Universitas Negeri Semarang, Semarang, Indonesia
*Corresponding author: nurdiansusilowati@mail.unnes.ac.id

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ABSTRACT

This study aims to determine the effect of corporate governance and interest ratio on financial distress with innovation as a moderating. The population of this study was LQ45-indexed companies on the Indonesia Stock Exchange for the 2019-2023 period. The sampling technique used was purposive sampling, which obtained 110 analysis units. This study uses descriptive statistical analysis and logistic regression analysis. The results of this study found that the board of commissioners and the board of directors did not have a significant effect on financial distress. Meanwhile, the audit committee and interest coverage ratio significantly and negatively affected financial distress. Innovation could not moderate the board of commissioners and the audit committee on financial distress. Innovation was able to weaken the influence of the board of directors on financial distress. Innovation strengthened the impact of the interest coverage ratio on financial distress.

Introduction

The Center for Economics and Development Studies of Padjadjaran University (CEDS Unpad) stated that the Business Competition Index (IPU) in Indonesia in 2023 increased to reach an index of 4.91 compared to 2022, with an index of 4.87 (kppu.go.id, 2024). Less innovative companies will have difficulty competing with their competitors, thus increasing the risk of the company experiencing financial distress. Therefore, companies must be able to maintain or improve their performance to survive (Sari et al., 2024).

The financial distress phenomenon that shocked the mass media in 2024 was the threat of Tupperware Brands Corporation going bankrupt. It happened due to the company's deteriorating liquidity, with debt of US$812 million (around 12.4 trillion rupiah), and product demand decreased in recent years. Tupperware products were considered unable to compete with its competitors, such as Lock&Lock, Snapware, IKEA, Lion Star, Corkcicle, and others (cnnindonesia, 2024; Khasanah & Natalia, 2024). Furthermore, the Semarang District Court officially declared bankruptcy the largest textile company in Indonesia, PT Sri Rejeki Isman Tbk (Sritex), on Monday, October 21, 2024. The cause of the company's bankruptcy was due to a significant financial burden, such as bond debt and syndicated loans that the company could not appropriately manage. Additionally, poor management levels, business expansion without considering long-term financial implications, and the Company's inability to adapt to market dynamics were the primary triggers for the bankruptcy of PT Sri Rejeki Isman Tbk (Sritex) (Darmansyah et al., 2025).

Agency Theory explains that financial distress is an early warning system before a company goes bankrupt, and the company can take action to mitigate and improve its financial health (Erayanti, 2019). Corporate governance is an internal factor that predicts financial distress (Wijaya & Suhendah, 2023). Corporate governance is a mechanism that regulates, manages, and controls the company's mechanisms (Aulia & Suwandi, 2023). Agency theory explains that determining the effect of corporate governance on financial distress can be done by examining the composition of the board of commissioners, board of directors, and audit committee (Jensen & Meckling, 1976).

Prayuningsih et al. (2021) stated that various ratios in the company's report can show the health level of a company. The interest coverage ratio is one of the ratios used as a source of analysis in predicting financial distress. A low interest coverage ratio illustrates the possibility of a company having difficulty fulfilling its obligations, which is an early sign of financial distress (Vo, 2023). Dewi and Novridayani (2019) stated that the factors that influence financial distress are corporate governance, financial performance, and company size.

Hsu et al. (2015) stated that the higher the level of innovation a company has, the lower the risk of going bankrupt. Lailah and Soehari (2020) stated that companies with good innovation can improve company performance, leading to the company's financial stability and a decrease in the risk of default. Presenting innovation as a moderating variable can weaken or strengthen the influence of the board of commissioners, board of directors,

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audit committee, and interest coverage ratio on financial distress. Novelty of this paper is used innovation that can prevent financial distress to support sustainable business. Innovation is a pillar of development and competitiveness of the company. Innovation can help companies in developing products, services, business models and even new strategies that are in line with the needs of stakeholders. With an innovative approach, companies can increase competitiveness and adapt to market changes, so that companies will have a competitive advantage. With innovation moderation, it can provide a more comprehensive picture of financial health and produce a more accurate prediction model to measure financial distress in companies.

This study provides an in-depth understanding of the dynamics of the relationship between principal and agent (manager) and information asymmetry that can cause agents to prioritize personal interests over principal interests, ultimately affecting corporate decision-making and financial performance. It contributes to helping management take appropriate actions to prevent companies from experiencing financial distress, which is influenced by corporate governance, interest coverage ratio, and innovation as moderating variables.

Literature Review

Agency Theory

Agency theory defines an agency relationship as a contract in which one or more persons (the principals) engage another person (the agent) to perform some service on their behalf that involves delegating some decision-making authority to the agent. If the agent and principal maximize the existing utilities, the agent could not always act in the principal's best interests (Jensen & Meckling, 1976). The board of directors is the party that determines policies and strategies in the company. In the corporate governance mechanism, the board of directors is tasked with making policies or creating company strategies for both the long and short term. The board of commissioners minimizes agency problems between the board of directors and shareholders. The board of commissioners usually forms committees that assist the board of commissioners, including the audit committee. The task of the audit committee is to help improve financial performance.

Resource Based View Theory (RBV)

Resource-based view theory (RBV) explains that a company can excel and compete with its competitors when it understands how to manage its assets strategically. Wernerfelt (1995) emphasized that the resources owned by a company, both tangible and intangible, are determining factors in creating competitive advantage and value for the company.

Diffusion of Innovation Theory

Diffusion of innovation (DOI) theory of Everett M. Rogers (1931-2004) defines innovation as an idea, practice, or object that is perceived as new by an individual or other unit of adoption (Rogers, 2003). The diffusion of innovation theory conceptualizes five steps in establishing a decision model in innovation, including knowledge, perception, decision, implementation, and the final stage, confirmation, evaluating the results of the innovation decision made. The theory of innovation diffusion (Rogers, 2003) states that innovation is an idea, practice, or object considered new by individuals or units that adopt it. Wernerfelt (1995) states that innovation is associated with a valuable, rare, and difficult resource for competitors to imitate; innovation is one of the valuable intangible resources.

Financial Distress

Platt and Platt (2002) stated that financial distress is a decline stage in a company's financial condition before bankruptcy or liquidation occurs. Chandra et al. (2024) noted that financial distress occurs when a company cannot meet its matured obligations. According to Wruck (1990), a company goes through various stages before going bankrupt, including financial distress, inability to pay debts on time (insolvency), filing for bankruptcy, and administrative receivership.

The Influence of the Board of Commissioners on Financial Distress

Agency Theory states that the board of commissioners can minimize agency problems between the principal and agent to align common interests (Jensen & Meckling, 1976). Resource-based view theory states that, as a valuable resource for the company, the board of commissioners can improve company performance and assist management in making strategic decisions to create competitive advantages (Wernerfelt, 1995).

The board of commissioners is a corporate body that oversees the board of directors' performance. The size of good corporate supervision is reflected in the high number of board of commissioners. The large number of board of commissioners provides adequate supervision of agents, so that in taking actions and making decisions, agents continue to carry out their responsibilities following the goals of common interests, not for personal interests (Prasetya & Carolina, 2023; Puspitasari et al., 2023; Yuliani & Rahmatiasari, 2021). Therefore, the research hypothesis is:

H_1: The board of commissioners has a negative effect on financial distress.

The Influence of the Board of Directors on Financial Distress

The board of directors carries out its role in the corporate governance mechanism to minimize conflicts between principals and agents if they occur in the long term (Jensen & Meckling, 1976). Resource-based view theory states that the board of directors, as a valuable resource, can improve company performance and help decide on strategies to create competitive advantages (Wernerfelt, 1995).

The board of directors in a company is responsible for decision-making. The more boards of directors in a company, the more difficult it will be for the company to experience financial distress, because decision-making will be more effective. Conversely, if the company has a small number of boards of directors, it will be easier for the company to experience financial distress (Lestari & Wahyudin, 2021; Manan & Hasnawati, 2022; Sulastri & Pamungkas, 2024; Yuliani & Rahmatiasari, 2021). The research hypothesis is:
H_2: The board of directors has a negative effect on financial distress.

The Influence of the Audit Committee on Financial Distress

Rosdwianti et al. (2016) explained that Earning per Share or EPS is a profit rate that shows the net income obtained Resource-based view theory states that the audit committee, as a valuable resource for the company, can improve the company's performance and help ensure the transparency and accuracy of the company's financial reports (Wernerfelt, 1995). The size of the audit committee can affect the effectiveness of the supervision it carries out, the fewer members of the audit committee will encourage the company to experience financial distress, because it does not have enough knowledge and expertise in carrying out supervision (Adielyani & Pangestuti, 2023; Ashraf et al., 2022).

The number of audit committees in a company must be at least three people, with one of the members being an independent commissioner (Damayanti, 2020). Next, a large audit committee can provide better monitoring and improve the quality of financial reports (Jensen & Meckling, 1976). The research hypothesis is:
H_3: The audit committee has a negative effect on financial distress.

The Effect of Interest Coverage Ratio on Financial Distress

The interest coverage ratio is a ratio that measures how capable a company is in paying interest on debt from its operating profit. If the company experiences a high ICR, then the company is healthy and can pay off interest on debt from operating profit, conversely if the company's ICR is low, the company is unable to pay interest on debt and can be indicated as experiencing financial distress (Meryana & Erna Setiany, 2021; Permata & Juliarto, 2021; Diana & Sriyono (2021); Rijanto, 2022; Sabrina & Salim, 2023; Suranta et al., 2023; Syifa & Idawati, 2024; Vo, 2023). Therefore, the research hypothesis is:
H_4: Interest coverage ratio has a negative effect on financial distress

The Moderating Effect of Innovation on Board of Commissioners and Financial Distress

The role of the board of commissioners in adopting innovation is to encourage agents to work together in adopting innovation, including providing the requirements to implement the innovation (Jensen & Meckling, 1976). In resource-based view theory (RBV), the board of commissioners is considered a strategic resource that functions on a company's innovation capabilities and helps the company overcome financial challenges (Wernerfelt, 1995). Rogers (2003) states that the board of commissioners is responsible for evaluating and overseeing the impact of the innovation on the company's performance, decisions made by the board of commissioners in embracing agents to adopt innovation, and making decisions that can improve the company's performance. Therefore, the research hypothesis is:
H_5: Innovation has a moderating effect on board of commissioners and financial distress.

The Moderating Effect of Innovation on Board of Directors and Financial Distress

In decision-making and strategy, the board of directors plays an important role in being directly involved and ensuring that the innovations adopted by the company follow the company's strategy. As the highest controller, the board of directors needs to identify risks related to innovation and formulate mitigation strategies. The diffusion of innovation theory states that good adoption of innovation can lead to success in innovation (Rogers, 2003).

The theory noted by Wernerfelt (1995), namely the resource-based view theory (RBV), states that the board of directors can function as a valuable resource that can help provide strategic direction in adopting innovation related to short-term and long-term decisions. Garcia and Alvarez (2018), and Chenchehene (2019) stated that innovation supports members of the board of directors in creating sustainable programs, overcoming external supervision and R&D control to reduce the risk of financial distress. The research hypothesis is:
H_6: Innovation has a moderating effect on the board of directors and financial distress.

The Moderating Effect of Innovation on the Audit Committee and Financial Distress

The audit committee's function is to oversee the company's financial statements so that the reported reports are prepared accurately, clearly, and transparently to avoid agency conflicts between agents and company owners (Jensen & Meckling, 1976). The audit committee plays a role in providing investment approval in innovative projects and ensuring that the company has an adequate control system to support the implementation of innovation (Wernerfelt, 1995).

In adopting innovation, the audit committee is responsible for helping identify, evaluate, and implement innovations related to internal control and the company's financial statements (Rogers, 2003). Strict supervision of the audit committee in overseeing the innovation adoption process, so that there are no deviations caused by inconsistent decision-making, helps the company recover from financial distress and avoid the risk of financial distress. The research hypothesis is:

H_7: Innovation has a moderating effect on audit committee and financial distress.

The Moderating Effect of Innovation on Interest Coverage Ratio and Financial Distress

The agents play a role in determining funding policies, one of which is through debt. Agents who cannot handle company debt wisely cause an enormous financial burden, so the company experiences financial problems in the future (Jensen & Meckling, 1976). Resource-based view theory (RBV) states that the company's ability to create sustainable competitiveness can create competitive advantages, thereby creating a high ICR.

The diffusion of innovation theory according to (Rogers, 2003) states that agents have the responsibility to introduce, communicate and facilitate the adoption of innovation to various parties in the company, the application of innovation in the company is critical, so that the company can continue to be able to compete with its competitors, to avoid the risk of default and financial distress. The research hypothesis is:

H_8: Innovation has a moderating effect on interest coverage ratio and financial distress.

Research Method

This study uses a quantitative approach, which is measured by numerical data and analyzed using statistical measurement techniques. The population in the survey was LQ45-indexed companies from August 2024 to January 2025 on the Indonesia Stock Exchange for the 2019-2023 period. The sampling technique in this study was purposive sampling. The criteria and number of sample determinants, namely (1) LQ45 indexed companies from August 2024 to January 2025 on the Indonesia Stock Exchange for the 2019 to 2023 period; (2) companies that did not consecutively publish financial reports during the 2019-2023 period; (3) companies that did not have research and development costs during the 2019-2023 period. The research data is in the form of annual financial reports downloaded from the Indonesia Stock Exchange website, namely www.idx.co.id.

Table 1 presents all the dependent and independent variables utilized, along with explanations of their accounting and sources.

Table 1. Measurement of Variables

Acronym	Variables	Measurement
Dependent Variable		
FD	Financial Distress	Altman Z-score method for manufacturing companies (Aulia & Suwandi, 2023; Binesh et al., 2024; Hanny & Marlinah, 2023). Z = 1,2X1 + 1,4X2 + 3,3X3 + 0,6X4 + 1,0X5 Altman Z-Score method for non-manufacturing companies (Leki, 2021). Z = 6,56X1 + 3,26X2 + 6,72X3 + 1,05X4 Description: X1 (Net Working Capital / Total Assets), X2 (Retained Earnings / Total Assets), X3 (Earnings Before Interest and Tax / Total Assets), X4 (Market Value of Equity / Total Liabilities), X5 (Sales / Total Assets).
Independent Variable		
DK	Board of Commissioners	$DK = \sum Board\ of\ Commisioner\ in\ That\ Year$
DD	Board of Directors	$DD = \sum Board\ of\ Directors\ in\ That\ Year$
KA	Audit Committee	$KA = \sum Audit\ committee\ in\ That\ Year$
ICR	Interest Coverage Ratio	$ICR = \frac{EBIT}{Interest\ expense}$
Moderating Variable		
INN	Innovation	$INN = \frac{R\&D\ Costs}{Total\ Sales}$

Analysis of Data

This study uses descriptive statistical analysis and logistic regression analysis. Descriptive statistical analysis is applied to see the general picture and description of data, containing the average (mean), standard deviation, variance, maximum value, minimum value, sum, and range. The overall model fit test aims to see whether the entire regression model belongs to the good category, following the research data values . The omnibus test of model coefficients seeks to determine the independent variables that simultaneously affect the dependent variable. Further, the Negelkerker R-squared test evaluates how much the independent variables can affect the dependent variable. Hosmer and Lemeshow's goodness-of-fit test aims to assess the regression model's suitability. The Wald test is applied to evaluate each variable's significance level.
The logistic regression equation in this study can be formulated as follows:

$$\text{Logit FIN\_DIS} = \alpha + \beta DK + \beta DD + \beta KA + \beta ICR + \beta DK{*}INN + \beta DD{*}INN + \beta KA{*}INN + \beta ICR{*}INN + e$$

Description:

Logit FIN_DIS : Dummy variable for financial distress conditions, namely financial distress companies with a value of = 1 and non-financial distress companies with a value of = 0. Dummy variables for financial distress conditions are useful for categorizing, thus facilitating the interpretation process.
A : Constant
DK : Board of Commissioners
DD : Board of Directors
KA : Audit Committee
ICR : Interest coverage ratio
DK*INN : Interaction between the Board of Commissioners and Innovation
DD*INN : Interaction between the Board of Directors and Innovation
KA*INN : Interaction between Audit Committee and Innovation
ICR*INN : Interaction between Interest Coverage Ratio and Innovation
E : Error

Results and Discussion

The population in the study was LQ45-indexed companies from August 2024 to January 2025 on the Indonesia Stock Exchange from 2019 to 2023, obtained from the official website of the Indonesia Stock Exchange (IDX) and the company's website. The data in this study amounted to 110 analysis units based on 22 companies for 2019-2023. The results of the descriptive analysis test are in Table 2.

Table 2. Descriptive Statistical Test

	N	Minimum	Maximum	Mean	Standard Deviation
FD	110	0	1	0.15	0.354
DK	110	2	12	6.91	2.421
DD	110	4	14	7.62	2.366
KA	110	1	10	3.94	1.422
ICR	110	0.11	564.82	31.4089	77.35122
INN	110	0.00	0.30	0.0293	0.04479
VALID N (listwise)	110				

The results of the descriptive analysis show that the average value of financial distress is 0.150. This data shows that the companies indexed LQ45 from August 2024 to January 2025 on average that experienced financial distress did not exceed the average number of companies indexed LQ45 from August 2024 to January 2025 that did not experience financial distress. The minimum number of boards of commissioners is 2, in line with OJK Regulation No. 33 of 2014, which states that public companies are required to have at least 2 members of the Board of Commissioners. While the maximum number of boards of commissioners is 12. The table also shows the mean value of the number of commissioners, which is 6,910 with a standard deviation of 2,421. The minimum number of boards of directors is 4, based on OJK Regulation No. 33 of 2014, every public company is required to have at least 2 members of the Board of Directors. While the maximum value of the number of directors is 14. The table also displays the mean value of the number of directors of 7,620 with a standard deviation of 2,366. The minimum value of the number of audit committees is 1, this is certainly not in line with OJK Regulation Number 55 which regulates the formation and guidelines for the implementation of the work of the audit committee which states that the minimum number of audit committee members is 3 people. While the maximum value of the number of audit committees is 10. The table also displays the mean value of the audit committee, which is 3,940 with a standard deviation of 1,422.

Furthermore, the minimum value of the interest coverage ratio is 0.110. While the maximum value of the interest coverage ratio is 564,820. The table also displays the mean value of the interest coverage ratio of 31,408 with a standard deviation of 77,351. This means that the distribution of data in the study is relatively wide. This indicates that the interest coverage ratio variable data has a heterogeneous or relatively diverse distribution, so that the data is considered inconsistent with the average value of its calculation. The minimum innovation value is 0.000. While the maximum value of innovation is 0.300. The table also shows the mean value of innovation of 0.030 with a standard deviation of 0.045. This indicates that the interest coverage ratio variable data has a heterogeneous or relatively diverse distribution, so that the data is considered not consistent enough with the average value of its calculation.

Meanwhile, the maximum value of the number of boards of commissioners is 10. The table also shows the mean value of the audit committee, which is 3.940 with a standard deviation of 1.422. The results of the descriptive analysis show that the minimum value of the interest coverage ratio is 0.110. Next, the maximum value of the interest coverage ratio is 564.820. The table also shows the mean value of the interest coverage ratio of 31.408 with a standard deviation of 77.351. The minimum value of innovation is 0.000. Further, the maximum value of innovation is 0.300. The table also shows the mean value of innovation of 0.030 with a standard deviation of 0.045.

Table 3 shows the overall model fit test, omnibus test of model coefficients, Nagelkerke R-squared test, goodness of fit test, and Wald test. The overall model fit test results showed a decrease from -2LL in the final block, which indicated that the hypothesized model was in accordance (fit) with the data. In other words, adding independent and moderating variables to the model showed that the regression model was improving. Therefore, H0 was accepted. The results of the simultaneous test f (omnibus test of model coefficients) obtained f_(count) more significant than f_table (49.412> 2.10) with significance (0.000 <0.05). Therefore, the variables of the board of commissioners, board of directors, audit committee, interest coverage ratio, and moderating variables simultaneously affect financial distress.

The Nagelkerker R-squared test shows that the Cox & Snell R Square is 0.362 and the Nagelkerker R Square value is 0.642, a percentage of 64.2%. It indicates that the variables of the board of commissioners, board of directors, audit committee, and interest coverage ratio are independent variables, and innovation is a moderating variable, explaining 64.2% of financial distress as a dependent variable in this study. Other variables outside this research model explain the remaining 35.8% financial distress. The chi-square test results (Hosmer and Lemeshow test) obtained a chi-square value of 1.120 with a significance (p-value) of 0.997. It shows that the significance value or p-value> 0.05 means no significant difference exists between the empirical data and the model. Hence, the model fits the data, or H0 is accepted.

Table 3. Logistic Regression Model

		Variables in the Equation					
		B	S.E.	Wald	df	Sig.	Hypothesis
Step 1[a]	DK	0.220	0.532	0.171	1	0.679	rejected
	DD	0.110	0.386	0.080	1	0.777	rejected
	KA	-2.380	1.050	5.143	1	0.023	accepted
	ICR	-0.723	0.250	8.390	1	0.004	accepted
	INN	2.480	6.053	0.168	1	0.682	rejected
	DK*INN	30.292	18.657	2.636	1	0.104	rejected
	DD*INN	-33.959	13.312	6.508	1	0.011	accepted
	KA*INN	15.519	17.548	0.782	1	0.376	rejected
	ICR*INN	4.516	2.212	4.167	1	0.041	accepted
	Constant	6.790	2.711	6.272	1	0.012	

a. Variable(s) entered on step 1: DK, DD, KA, ICR, DK*INN, DD*INN, KA*INN, ICR*INN

Discussion

The Effect of the Board of Commissioners on Financial Distress

The board of commissioners has a positive correlation of 0.220 and a significant value of 0.679> 0.05. It indicates the hypothesis that states the board of commissioners has a negative effect on financial distress is not supported. The results in line with Agustina and Anwar (2021) which stated that companies that usually only make the board of commissioners a formality that must be fulfilled as a securities company, result in the board of commissioners having no effect on financial distress. Furthermore, the results in line with Lestari and Wahyudin's (2021) study, that stated the large number of commissioners makes it difficult for management to use performance evaluation as a guideline, so that the board of commissioners does not affect financial distress. Manan and Hasnawati (2022) also concluded that changes in the number of board of commissioners, either increasing or decreasing, do not affect the company's financial distress. In line with that, Gaos and Mudjiyanti (2021) found that even though the number of board of commissioners is large, the board of commissioners has not been able to carry out its supervisory function effectively to prevent the company from experiencing financial distress.

The Effect of the Board of Directors on Financial Distress

The board of directors has a positive correlation of 0.110 and a significance value of 0.777> 0.05. It indicates the hypothesis that states board of directors has a negative effect on financial distress is supported. The study shows that number of board of directors' members does not impact the company's risk of experiencing financial distress. This study aligns with research by Budiningsih et al. (2022) that the number of boards of directors tends to be large, which is believed to create ineffective decision-making due to difficulties in coordinating when making decisions. Janah and Salim (2022) stated that the board of directors is ineffective in preventing financial distress because the number of directors cannot guarantee that a company will avoid financial distress. The board of directors is the party that determines policies and strategies in the company. Dewi and Novridayani (2019) explains the corporate governance mechanism, the board of directors is tasked with making policies or creating company strategies for both the long and short term. The research results of Pradiptaningratri and Sitinjak (2023) and Prasetya and Carolina (2023) stated that the number of boards of directors in a company does not have much influence on financial distress; the final decision is at the general meeting of shareholders.

The Effect of the Audit Committee on Financial Distress

The audit committee has a negative correlation of -2.380 and a significance value of 0.023 <0.05. It indicates the hypothesis that states audit committee has a negative effect on financial distress is supported. The members of the audit committee can minimize the risk of the company experiencing financial distress. The results supported by Adielyani and Pangestuti (2023), the greater the number of audit committees, the more they will improve company performance because they have more resources to overcome company problems. Ashraf et al. (2022) state that fewer audit committee members will encourage the company to experience financial distress, because they do not have sufficient knowledge and expertise in carrying out supervision.

The Effect of Interest Coverage Ratio on Financial Distress

The hypothesis that states Interest coverage ratio has a negative effect on financial distress is supported. The interest coverage ratio has a negative correlation of -0.723 and a significance value of 0.004 <0.05. The research align with Meryana and Erna Setiany (2021) stated that the greater the interest coverage ratio of a company, the healthier the company's financial condition. Rijanto (2022) stated that the greater the company's interest coverage ratio, the healthier the company is; conversely, if a company's ICR is low, the company is indicated to be experiencing financial distress. Vo (2023) also stated that companies with low ICR must be increased to avoid the risk of financial distress. Permata and Juliarto (2021); Sabrina and Salim (2023); Suranta et al. (2023); and Syifa and Idawati (2024) stated that the lower interest coverage ratio of the company causes its inability to manage finances properly and could experience financial distress.

The Moderating Effect of Innovation on Board of Commissioners and Financial Distress

The hypothesis that states innovation has a moderating effect on board of commissioners and financial distress is not supported. The statistical analysis has a positive correlation of 30.292 and a significance value of 0.104> 0.05. It indicates that innovation cannot moderate the influence of the board of commissioners on financial distress. Thus, it shows that the board of commissioners adopting or increasing innovation in the company will not impact financial distress. This result is supported by Rogers (2003), although members of the board of commissioners can encourage the adoption of innovation, not all members of the board of commissioners or other agents are willing to adopt the innovation used. This limitation in adoption is a factor that inhibits the effectiveness of innovation in overcoming financial distress. Platt and Platt (2012) stated that apart from the age and experience of board members, board members must have many skills, expertise, relationships, and other resources to help the board members function well.

The Moderating Effect of Innovation on Board of Directors and Financial Distress

The hypothesis that states innovation has a moderating effect on the board of directors and financial distress is supported and weaken impact. The statistical analysis has a negative correlation of -33.959 and a significance value of 0.011 <0.05. It indicates that innovation weakens the influence of the board of directors on financial distress. Thus, it shows that the board of commissioners adopting or increasing innovation in the company will not impact financial distress. Hence, the higher the level of company innovation, the weaker the performance of board members in decision making when the company is experiencing financial distress. Innovation can reduce the effectiveness of the board of directors' performance towards the company. Members of the board of directors have different knowledge and abilities. Therefore, the more members of the board of directors, the more difficult it is for the company to adopt innovation, and the role of the board of directors in finding a way out of the company's financial distress conditions will decrease. Chen (2012) stated that companies that adopt innovation do not have many board members because they will make the performance ineffective. The diffusion of innovation theory states that a high level of innovation in a company does not require many board members because dependence on obtaining accurate information will be reduced. It will reduce the information asymmetry that often occurs in a company and help it avoid financial distress (Rogers, 2003).

The Moderating Effect of Innovation on Audit Committee and Financial Distress

The hypothesis that states innovation has a moderating effect on audit committee and financial distress is not supported. The coefficient correlation is 15.519 and a significance value of 0.376> 0.05. It indicates that innovation cannot moderate the audit committee's influence on financial distress. The diffusion of innovation theory states that if agents do not accept the proposed innovation, it can affect the supervision and direction of financial policies carried out by the audit committee (Rogers, 2003). This result is supported by Delia et al. (2024) stated that the inability of innovation to moderate the influence of the audit committee on financial distress can be influenced by external parties, such as government regulations, pressure from stakeholders, or resources that hinder the company from implementing the innovation efficiently.

The Moderating Effect of Innovation on Interest Coverage Ratio and Financial Distress

The hypothesis that states innovation has a moderating effect on interest coverage ratio and financial distress is supported. The coefficient correlation is 6.790 and a significance value of 0.012 <0.05. By adopting or increasing innovation, the company will have sufficient funds to pay interest obligations on the company's operating debt. Agency Theory states that the interests of agents play a role in determining funding policies, one of which is through debt. Agents who can handle company debt wisely can minimize significant financial burdens so that the company avoids financial problems in the future (Jensen & Meckling, 1976). Diffusion theory states that the presence of innovation in a company helps the company increase cash flow, which impacts the company's ability to fulfil obligations (Rogers, 2003).

Resource-based view theory (RBV) states that companies that can produce something difficult to imitate and rare to create sustainable competitiveness can generate sufficient funding to meet all forms of obligations in the company. Li (2024) states that companies that are innovative and wise in managing research and development (R&D) costs will produce profitable innovations and increase profits in the future. Lailah and Soehari (2020) innovation has a significant positive role in financial performance, so that when a company has good innovation, its performance will increase, and it also has a good impact on increasing the company's ability to meet its obligations.

Conclusion

This study concludes that the board of commissioners and the board of directors do not significantly affect financial distress. The audit committee and interest coverage ratio significantly negatively affect financial distress. Meanwhile, innovation cannot moderate the board of commissioners and the audit committee on financial distress. Innovation can weaken the influence of the board of directors on financial distress. Innovation can also weaken the influence of the interest coverage ratio on financial distress. Based on the results, the study expects that the Company will be able to consider adopting innovation. Especially the adoption of product innovation, technology, and innovation in the transparency of company reports to reduce fraud in recording operational profits. Innovation improves company management, such as developing the skills and abilities of members, creating good corporate governance and improving supervision and the effectiveness of decision making. Product innovation and financial transparency can increase revenue and increase stakeholder trust. Other benefits make it easier for companies to obtain capital. Furthermore, investors should make investment decisions by considering and paying attention to the company's corporate governance and policies to determine the level of health of the company.

Further research could consider other populations outside the LQ45-indexed companies from August 2024 to January 2025 to get a broader perspective, because this study limits its population to as many as 14.5% of companies experiencing financial distress. In addition, based on the Nagelkerke R-squared test, this study explains as much as 64.2% of financial distress, which means that 35.8% of variables are outside this study. Therefore, further research can consider other variables such as macroeconomic conditions and Environmental, Social, and Governance (ESG).

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