

Measuring the Likelihood of Restructuring During the decline in company performance through the agency theory model

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ABSTRACT

This research is a quantitative descriptive study with the aim to describe the influence of agency variables including leverage, management ownership, institutional ownership, controlling shares, independent directors, and board size on restructuring decisions through statistical tests. The research model used is binomial logistic regression to measure the likelihood of restructuring decisions through the agency model. The results of the research will be described in this paper.

Keywords: Agency Theory, Binomial Logistics, Agency Variables, Restructuring.

1. Introduction

Agency theory attempts to explain the relationship between principals and agents in a company. In many companies, owners cannot directly supervise every manager's actions and decisions due to limited information and resources. This condition creates an agency situation, where managers have freedom in managing the company and take decisions that may not always be in line with the interests of the owners. Conflicts can occur between: principal with agent, agent with debtholders, and agent and principal with debtholders.

Methods that can be used to reduce the occurrence of agency problems and reduce costs associated with agencies (Rahayu, 2005) Among other things: first, through external control or motivational mechanisms. It aims to harmonize the interests between Agent and principal by increasing management ownership in the company (Jensen, 1992). Second Institutional Investor as Monitoring Agents. Moh'd et al., (1998) states that institutional ownership such as banks, insurance companies, investment companies, and other institutional ownership can lead to increased supervision that is more optimal.

Third, through Dividend Payout Ratio (DPR). An increased House of Representatives will lead to free cash flow not available enough so Agent forced to seek outside funding to finance his investment (Wahidahwati, 2002). Fourth, through increased funding sourced from external, namely debt. Increasing debt is believed to reduce conflicts between principal with agent. In addition, debt will also reduce cash flow that exists in the company so as to reduce the possibility of waste carried out by agent (Jensen, 1992).

Lai and Sudarsanam (1997) stated that the choice of recovery strategy is determined by the complex interaction of ownership structure, corporate governance, and creditor monitoring of companies experiencing declining performance. When creditors dominate the decision-making process, they demand operational restructuring, actions that can make money quickly, dividend cuts/write-offs, and cuts in capital expenditures. Dominating management ownership will avoid actions of operational restructuring, acquisitions and managerial restructuring strategies, and opt for capital expenditures. Similarly, when shareholding is concentrated it dominates the company's decision-making process, they dislike operational restructuring and capital expenditure (Lai and Sudarsanam, 1997, Ofek, 1993, Pandey and Ongpipattanakul, 2015).

Based on the description above, it is known that there are several problems that often arise in the agency model. These problems are classified into type I which describes the conflict between the owner (principal) and manager (agent) and type II which describes the conflict between the majority owner and the minority. On the Indonesia Stock Exchange, the majority of listed companies report the number of shares they release as much as 2.5% to 25%. This is also explained through the Financial Services Authority (OJK) regulation by requiring every centralized allotment or pooling of 2.5 percent to 25 percent at the time of the initial public offering (IPO) since January 2021. So it can be concluded that the Indonesian stock market is included in the category of type II agency conflicts, namely conflicts between majority and minority holders.

Through the use of logistic regression models, it is expected to predict several possible restructuring decisions during the decline in company performance. Concentrated ownership has a high chance of making decisions that tend to benefit the majority. Majority ownership can also control information that is strong enough to cause moral hazard effects. Therefore, it is necessary to measure the possibility of restructuring through an agency model using a logistic regression model within the scope of the Indonesian stock market. This step is a form of anticipation of risks that may occur and can harm investors who only have little control over the company.

2. Literatur Review and Hipotesis Developments

2.1. Restructuring

Corporate restructuring involves rearranging the company's management system, including capital management and management, with the aim of improving the company's performance. There are various restructuring strategies to choose from, including business restructuring, financial restructuring, and management restructuring. Restructuring decisions are often influenced by agency factors and company performance as measured using financial ratios such as Return on Assets (ROA).

Agency theory explains the relationship between principals and agents who have different interests. In this context, there is a conflict between owners who want to maximize the value of the company and management who may seek to maximize their personal interests. These conflicts can result in agency costs, such as the cost of monitoring by the owner and information asymmetry. Restructuring decisions can also be influenced by agency variables such as leverage, management ownership, institutional ownership, controlling shareholding, independent directors, and board size.

2.2. Leverage (Debt)

According to Fakhruddin (2001), leverage refers to the use of debt in a company's capital structure. In the context of agency relations, debt can be used as a disciplinary tool to control conflicts between principals and agents. As Jensen et al. (1976) explain, debt can reduce management's opportunistic behavior and motivate them to act in the interests of the owner. Based on agency theory and previous research conducted by Fama and Jensen (1983) and Ofek (1993), companies with high levels of leverage tend to respond more quickly to declining performance by adopting restructuring strategies, including dividend cuts. The results of relevant studies have validated this hypothesis, as seen in the findings of Rudiana and Venusita (2018). Therefore, the first hypothesis is as follows:

H1: There is a positive influence between the company's leverage and the implementation of debt bond financial restructuring strategies.

2.3. Ownership Management

Management ownership, as outlined by Marpaung et al. (2014), reflects the shares owned by management in the company. This is an important aspect of agency relations because it can affect the level of management involvement in maximizing company profits. Significant management ownership, as described by Pandey and Ongpipattanakul (2015), can bring benefits in agency conflict control, but can also give rise to the risk of an entrenchment effect, where management uses their strengths for personal gain. In the context of Asymmetry Information Theory, significant levels of management ownership can reduce a company's desire to rely on debt and tend to avoid managerial restructuring, including dividend cuts. The results of previous studies, as revealed by Rahayu (2005), have also supported the positive association between management ownership and restructuring strategies. Therefore, the second hypothesis is as follows:

H2: There is a positive influence between the level of management ownership and the implementation of debt bond financial restructuring strategies.

2.4. Controlling Shareholder

The controlling shareholder, as Porta et al. (1998) explain, is the shareholder who has enough control to influence the decisions of the company. They can play a key role in controlling management behavior and mitigating moral hazard in controlling shareholders. However, as Jensen et al. (1976) explain, controlling shareholders can also use their power for personal gain. Based on the findings of Bethel and Liebeskind (1993) as well as other research, controlling shareholders have a negative influence on corporate restructuring, including dividend cuts. Therefore, the fourth hypothesis is as follows:

H3: There is a negative influence between controlling shareholding and the implementation of debt bond financial restructuring strategies.

2.5. Independent Board of Directors

Independent directors are neutral members of the board of directors who are not affiliated with the company's management. As Surya and Yustiavanda (2006) explain, they play an important role in corporate governance mechanisms. Independent directors, as you mentioned in the citation, can help reduce agency conflicts by conducting more objective oversight of management behavior. Independent directors are expected to have a negative influence on restructuring strategies involving dividend cuts, according to the text description. Therefore, the fifth hypothesis is as follows:

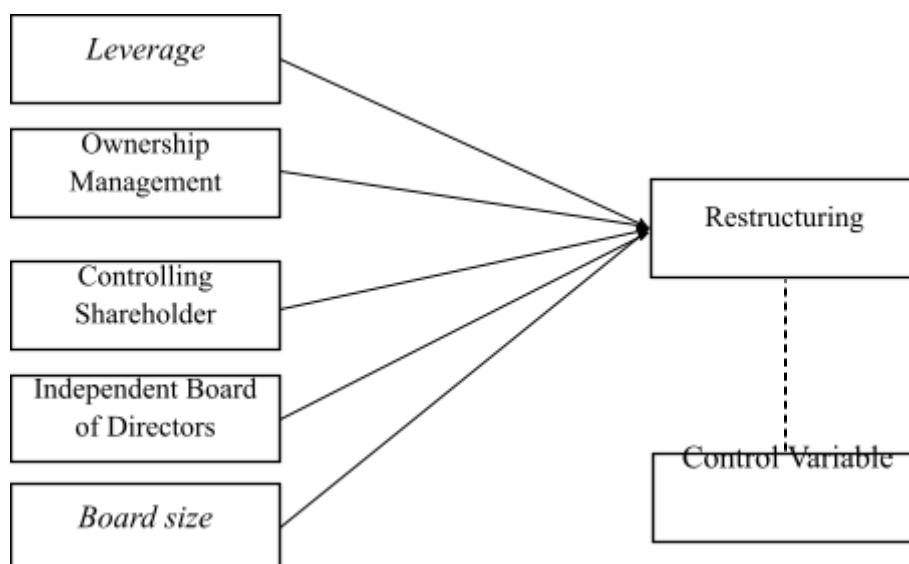
H4: There is a negative influence between the number of independent directors on the board of directors and the implementation of debt bond financial restructuring strategies.

2.6. Board Size

According to Hanas (2009), the size of the board reflects the number of members of the board of directors and commissioners in the company. The size of the board affects the effectiveness of oversight of management. As explained by Yezzieka (2013), boards that are too big or too small can have different impacts on the board's ability to make decisions and monitor company performance. Based on previous research, as revealed by Gillan & Starks (2003) and Lai and Sudarsanam (1997), large board sizes can influence financial restructuring decisions by increasing the use of debt in difficult situations. Therefore, the sixth hypothesis is as follows:

H5: There is a negative influence between the size of the board of directors (board size) and the implementation of debt bond financial restructuring strategies.

3. Methodology



3.1. Population and Sample

A side technique used in this study is to use purposive sampling with criteria of companies that experienced a decline in performance for two years during the period 2015 to 2020. In 2020 there was a non-natural disaster that had an impact on the international economy, so it is expected to put more pressure on sample companies in making restructuring decisions.

Control variables are also considered in this study by taking the Company's external factors including capital intensity (income / fix assets), Current Ratio (lancer assets / current debt), Company size (log (total assets), and year of decline (Dummy variable).

3.2. Data analysis methods

The analysis method used is logistic regression, an approach to create predictive models such as linear regression or commonly referred to as Ordinary Least Squares (OLS) regression. The difference is that in logistic regression, researchers predict bound variables that are dichotomous scaled. The

dichotomous scale in question is a nominal data scale with two categories, for example: Yes and No, Good and Bad or High and Low. Research Model

$$\Pr [y_{jit}=1|X_{it}]=\Pr [y_{jit}=1|x_{1it},x_{2it},x_{3it},x_{4it},x_{5it},x_{6it},x_{7it},x_{8it},x_{9it},x_{10it},x_{11it},x_{12it},x_{13it}]$$

Where j 1, 2, 3, 4, 5, ..., 16 (restructuring strategy); i 1, 2, 3, ..., 120 (company); t annual period 2016-2020; $\Pr[y_{jit}|X_{it}]$ =conditional probability of any restructuring action taken on the set of explanatory variables [2]; and $y_{jit}=1$ if choosing strategy j action, 0 vice versa.

3.3. Data Analysis

Hypothesis	Description	B	Exp(B)	P Value	Result
H1	There is a positive influence between the company's leverage and the implementation of financial restructuring strategies in the form of bond issuance.	13.430	679794,542	.000	Accepted
H2	There is a positive influence between the level of management ownership and the implementation of financial restructuring strategies in the form of bond issuance.	2.326	10.234	.570	Rejected
H3	There is a negative influence between controlling shareholding and the implementation of the financial restructuring strategy of bond issuance.	-9.617	.000	.002	Accepted
H4	There is a negative influence between the number of independent directors on the board of directors and the implementation of a financial restructuring strategy in the form of bond issuance.	-3.614	.027	.351	Rejected
H5	There is a negative influence between the size of the board of directors (board size) and the implementation of financial restructuring strategies in the form of bond issuance.	-.400	.670	.026	Accepted
Control Variables					
Name	Description	B	Exp(B)	P Value	Result
Capital Intensity	Total Revenue/total non-current assets	.018	1.018	.948	Rejected
Current Ratio	Total assets lancer/total current debt	.449	1.566	.330	Rejected
Company Size	Ln(Total Asset)	1.373	3.948	.018	Accepted
Year of decline	Dummy variable (1=year down and 0 vice versa)	-1.211	.298	.115	Rejected

4. Results

4.1. *The Effect of Leverage (Debt) on Debt Bond Financial Restructuring Strategy*

The results of the logistic regression test showed that the P-value of the variable leverage $< \alpha$ $0.000 < 0.05$. This means that leverage has a significant influence on the Debt bond financial restructuring strategy. As for the B Value of 13,430, it means that the higher the leverage owned by the Company, the higher the possibility of debt bond financial restructuring strategies by the Company that have decreased for two consecutive years. So the first hypothesis proposed was declared accepted.

Leverage can reduce the consumption of management ownership, the agent makes a bond fee that aims to guarantee to creditors that management will reduce the use of costs. According to Putri and Nasir (2006), after experiencing difficult times, the company needs additional funds in a short time for its business activities. Therefore, financing with debt can be a solution for the Company's cash availability in a short time. This activity indicates that the company can recover so that it can grow public trust through debt issuance. According to Linda et al., (2021) The higher the level of debt will affect the company's profits because it has to pay interest expenses, but on the other hand funding through debt can save the current year's tax burden.

Based on the results of the study, it shows that the average leverage value owned by the sample company is 44.62%, meaning that the average leverage owned by the sample company is still relatively low because it is less than 50% compared to the total own capital. So that during difficult times creditors do not have the right of control over the company so that decisions and voting power are held by principals and agents respectively (Gilson, 1990, Ofek, 1993, Lai and Sudarsanam, 1997).

4.2. *The Effect of Management Ownership on the Debt Bond Financial Restructuring Strategy*

The results of the logistic regression test showed that the P-value of the management ownership variable $> \alpha$ $0.570 > 0.05$. This means that management ownership does not have a significant influence on the Debt bond financial restructuring strategy. As for the B value of 2,326, it is positive, meaning that the higher the management ownership owned by the Company, the higher the possibility of a debt bond financial restructuring strategy by the company that has decreased for two consecutive years. So the second hypothesis proposed was declared rejected.

Management ownership is a factor influencing the financial restructuring strategy. However, the percentage of management ownership in the study sample only had an average of 2.5%. According to Rahayu (2005) if the percentage of management ownership in a company is low, then an increase in the percentage of management ownership has an impact on the alignment of interests between management and shareholders. The impact given when management ownership increases will encourage to lower debt levels, resulting in lower debt levels.

Inversely proportional if management ownership dominates then the entrancement effect is formed, as a result opportunism management is higher and therefore the debt ratio is lower because agents as managers and owners tend to avoid the risk of debt. The sample studied explains the low ownership of management (2.5%) so that it can be concluded that agent control in decisions on debt is less and does not have a significant impact on the occurrence of debt bond restructuring decisions.

4.3. The Effect of Controlling Shares on Debt Bond Financial Restructuring Strategy

The results of the logistic regression test showed that the P-value of the Controlling Stock variable $< \alpha 0.002 < 0.05$. This means that the controlling stake has a significant influence on the Debt bond financial restructuring strategy. As for the B value of -9,617, it is negative, meaning that the higher the dominance of controlling shares owned by the Company, the lower the possibility of a debt bond financial restructuring strategy by the company that has decreased for two consecutive years. So the third hypothesis proposed was declared rejected.

In the context of financial restructuring through the issuance of debt bonds, the controlling shareholder has a significant influence on the company's decisions. This means that in this situation, the controlling shareholder has the ability to influence decisions regarding the financial restructuring of the company. The results of the logistic regression test show that the Exp(B) value of the controlling stock variable is 0.000, which is less than 1. This indicates that the presence of a controlling stake in the company tends to reduce the tendency to issue bonds when the company's condition declines.

On the other hand, the Exp(B) value of the leverage variable is very high, which is 679,794,542, which is greater than 1. This means that the dominance of a company's debt influence tends to reduce the impact of a controlling stake. Another factor that must be considered in the decision to increase debt is the size of the company. The research data shows that the company size variable has an Exp(B) value of 3.948, which is higher than the controlling stock variable. So it can be concluded that the consideration of issuing bonds also considers the assets owned by the company, as collateral to pay the bond debt to be issued.

4.4. The Influence of Independent Directors on Debt Bond Financial Restructuring Strategy

The results of the logistic regression test showed that the P-value of the independent derrection variable $> \alpha 0.351 > 0.05$. This means that independent directors do not have a significant influence on the Debt bond financial restructuring strategy. Meanwhile, the B value of -3,614 is negative, meaning that the more independent directors owned by the Company, the lower the possibility of debt bond financial restructuring strategy by the company that has decreased for two consecutive years. So the fourth hypothesis proposed was declared rejected.

Independent directors do not have significant influence on debt bond financial restructuring strategy decisions. The influence of independent directors on company decisions may vary depending on the context and characteristics of a particular company. The number of independent directors in the sampel used is only 8.4% of the total board size. Therefore, it can be assumed that the lack of independent directors can affect the level of significance for the debt bond restructuring decision and can affect the supervisory function of the Company during performance decline.

4.5. The Effect of Board Size on Debt Bond Financial Restructuring Strategy

The results of the logistic regression test showed that the P-value of the variable size of the board of directors $< \alpha 0.026 < 0.05$. This means that the size of the board of directors has a significant influence on the Debt bond financial restructuring strategy. As for the B value of -0.400 is negative, it means that the higher the size of the board of directors owned by the Company, the lower the possibility of debt bond financial restructuring strategies by the

company that have decreased for two consecutive years. So the fifth hypothesis proposed was declared accepted.

The size of the board of directors has a significant negative influence on debt bond financial restructuring strategy decisions. The larger the board size, the less likely the company will adopt a debt bond financial restructuring strategy. This suggests that the size of the board can influence a company's decisions regarding restructuring during times of decline in company performance. These results also underscore the importance of considering the composition of the board of directors in a company's strategic decision-making, especially in a challenging financial situation.

4.6. *Assess the Likelihood of a Debt Bond Restructuring Strategy*

Binomial logistic regression can be used to measure the likelihood of an opportunity occurring. The variable of debt bond financial restructuring is measured using the dummy variable. Where the value of 1 indicates the selection of a debt bond financial restructuring strategy and 0 vice versa. Through the agency model by considering agency variables including leverage, management ownership, controlling shareholding, independent directors, and board size, it can be calculated through the binomial logistic regression equation of panel data, namely;

$$\Pr [y_{jit}=1|X_{it}]=\Pr [y_{jit}=1|x_{1it},x_{2it},x_{3it},x_{4it},x_{5it},x_{6it},x_{7it},x_{8it},x_{9it},x_{10it},x_{11it},x_{12it},x_{13it}]$$

$\Pr[y_{jit}=1=Debt\ bond)$ value of 0.001 or 1% was obtained from the average chance of debt bond financial strategy in 160 samples during 2016 to 2020.

5. Discussion

Based on the results of the study, it shows that the average leverage value owned by the sample company is 44.62%, meaning that the average leverage owned by the sample company is still relatively low because it is less than 50% compared to the total own capital. So that during difficult times creditors do not have the right of control over the company so that decisions and voting power are held by principals and agents respectively (Gilson, 1990, Ofek, 1993, Lai and Sudarsanam, 1997).

Inversely proportional if management ownership dominates then the entrancement effect is formed, as a result opportunism management is higher and therefore the debt ratio is lower because agents as managers and owners tend to avoid the risk of debt. The sample studied explains the low ownership of management (2.5%) so that it can be concluded that agent control in decisions on debt is less and does not have a significant impact on the occurrence of debt bond restructuring decisions.

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6. Conclusion

Based on the results of the analysis and discussion, the following conclusions can be drawn:

- Agency variable leverage has an influence Significantly positive for the debt bond financial restructuring strategy.
- Management ownership agency variables It does not have a significant positive influence on the debt bond financial restructuring strategy.
- The controlling stock agency variable has an influence Significantly negative for the debt bond financial restructuring strategy.
- The agency variables of independent directors have no influence Significantly negative for the debt bond financial restructuring strategy.
- Agency board size variables have an influence Significantly negative for the debt bond financial restructuring strategy

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