

# Corporate governance effect on financial distress: evidence from Indonesian public listed companies

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## ABSTRACT

The study aims to determine the effect of corporate governance structures: managerial ownership, institutional ownership, independent commissioners, board of commissioners' size, and board of directors' size on financial distress. It used the sample taken from non-financial companies listed on the Indonesia Stock Exchange (IDX) for period 2012-2016. This study used a purposive sampling method involving 605 observations using binary logistic regression analysis techniques. The results show that there are significant negative impact between institutional ownership, size of board of commissioners and directors on financial distress. However, the results confirm that managerial ownership and independent commissioners had no significant impact on financial distress

## ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh corporate governance structure yaitu: kepemilikan manajerial, kepemilikan institusional, komisaris independen, ukuran dewan komisaris, dan ukuran dewan direksi terhadap financial distress. Adapun variabel kontrol penelitian yaitu leverage dan ukuran perusahaan. Sampel yang digunakan adalah perusahaan non-keuangan yang terdaftar di Bursa Efek Indonesia (BEI) periode 2012 – 2016. Penelitian ini menggunakan metode purposive sampling yang melibatkan 605 observasi dengan menggunakan teknik analisis regresi logistik biner. Hasil penelitian menunjukkan bahwa kepemilikan institusional, ukuran dewan komisaris, dan ukuran dewan direksi berpengaruh negatif signifikan terhadap financial distress, sedangkan kepemilikan manajerial dan komisaris independen tidak berpengaruh signifikan terhadap financial distress.

## 1. INTRODUCTION

Since rupiah's weakening against dollar and the increase in fuel prices, researchers estimate that 30 companies had a financial distress situation each year from 2010 by seeing negative net-income and operational cash flow. Ito Warsito, President Director of Indonesia Stock Exchange (IDX), stated that in 2009 to 2013, 20 companies were delisted from the Indonesia Stock Exchange (IDX) where 15 of them had a financial distress because of the lack of business continuity.

In addition to external factors, the weakening of the country's economic condition, the internal factor is, among others, a decline in the company's financial condition. Company's financial condition can be declared unhealthy if the company has liquidity and solvency difficulties (Sudana, 2011). Companies with a proportion of debt that are too

large will have high financial risks and the financial statements show a decline. If the company has this condition continuously, they will face financial distress. Other factors that can make a company experience financial distress are mistakes from management that occur repeatedly (Sudana, 2011). Management's managing inability also has caused the company to fail. For that reason, the company must be able to identify the factors that cause the company's business failure and must have good corporate governance to avoid financial distress.

Corporate governance has received greater attention in Asia since the financial crisis in mid-1997. The weak implementation of corporate governance is believed to be the main cause of economic insecurity which has caused deterioration in economic conditions in several Asian countries, including Indonesia. Based on the Pricewaterhouse Coopers

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study published in the Report on Institutional Investor Survey, Indonesia was placed at the bottom with China and India with a value of 1.96 for transparency (Kaihatu, 2006). Corporate governance's weakness is an indication of the lengthy recovery process of the 1998 economic crisis in Indonesia.

Corporate governance is mechanisms and rules that control an organization or a company in achieving their goals to maximize shareholders' long-term profits (Abu-Tapanjeh, 2006). According to the Forum on Corporate Governance in Indonesia, corporate governance is a set of rules that regulate relations between shareholders, company managers, creditors, governments, employees, and other stakeholders related to their rights and obligations, or in other words a system that regulates and controls the company. The Organization for Economic Corporation and Development (OECD) defines corporate governance as a structure for setting company goals, suggestions for achieving these goals, and for determining supervision of company performance. The aim of corporate governance is to create added value for all stakeholders.

This study aims to determine the effect of corporate governance structures: managerial ownership, institutional ownership, independent commissioners, board of commissioners size, and board of directors size, on financial distress in the Indonesian public listed companies. Our study contributes to the literature in different way. Previous literature analyzes the effect of corporate governance on firm's financial distress and the obtained results are different.

## 2. THEORETICAL FRAMEWORK AND HYPOTHESIS

### Managerial ownership

Corporate governance issues are motivated by agency theory which states that agency problems arise when the management of a company is separate from its ownership. Managerial ownership can reduce agency problems that arise in a company. Managerial ownership is the proportion of company ownership by management, both directors and commissioners. The greater the proportion of ownership by management, the greater the management's responsibility in managing the company. Decisions from management are expected to be a decision for the interests of the company. Therefore, companies can also avoid the potential for financial distress.

According to Jensen and Meckling (1976), if the proportion of managerial ownership is greater,

then managers will work better to improve performance in managing company finances, and more consider in making decisions that can harm the company. Therefore, the greater the percentage of managerial ownership can reduce the possibility of companies experiencing financial distress. This is in line with the results of research by Elloumi and Gueyie (2001) and Abdullah (2006), which show that high managerial ownership in companies can strengthen the incentives of managers in monitoring management to prevent financial difficulties. However, the results of research by Manzanegue, Priego and Merino (2015) stated that there was no significant effect between managerial ownership of the company and the condition of financial difficulties. The hypothesis for managerial ownership variable is arranged as follows:

*H1: Managerial ownership has a negative impact to financial distress.*

### Institutional ownership

Institutional ownership is the percentage of shares held by the institutions of the total outstanding shares of the company. The institutions are banks, insurance companies, pension funds, and other institutional investors. Institutional shareholders do not target short-term or annual performance, but focus on the long term and help management to improve its long-term performance (Donker, Santen and Zahir, 2009).

Institutional shareholders have many advantages in obtaining and managing information. This view is supported by Shiller and Pound (1989) stating that institutional investors often analyze each investment rather than individual investors, so institutional investors can oversee the company and make decisions that are more directed and not detrimental to the company. Institutional ownership can also reduce management motivation in improving their own welfare with close supervision (Bushee, 1998). This statement is supported by the results of Crutchley and Hansen (2015) and Abdullah (2006) who stated that institutional ownership of the company negatively affected financial difficulties. However, in the results of the study of Manzanegue, Priego and Merino (2015) actually states that there is no significant influence between institutional ownership and financial distress. The hypothesis for institutional ownership variable is arranged as follows:

*H2: Institutional ownership has a negative effect on financial distress.*

### Independent commissioners

Independent commissioners appear as part of the board of commissioners because the board of commissioners has not been able to carry out the oversight function properly and independently. Independent commissioners are expected to create a more objective, independent climate, able to maintain stability between the interests of majority and minority shareholders. Jensen and Meckling (1976) explain that the more supervisors, the better it will be for the company because it can reduce the possibility of agency conflicts and reduce agency costs. Elloumi and Gueyie (2001) Manzanegue, Priego and Merino (2015) show that the proportion of independent commissioners has a significant negative effect on the probability of financial difficulties. The high proportion of independent commissioners in the company can reduce the possibility of financial difficulties. Whereas in the study of Miglani, Ahmed and Henry (2015) state that there is no significant relationship between independent commissioners and the possibility of corporate financial difficulties. The hypothesis for independent commissioner variables is arranged as follows:

*H3: Independent commissioners have a negative effect on financial distress.*

#### **Board of commissioners size**

The board of commissioners has the ability to supervise and control the management of the company. The larger board of commissioners' size allows greater access to information. The information can facilitate the board of commissioners in monitoring management performance, so that the possibility of corporate financial distress will be smaller. Wardhani (2006) and Manzanegue, Priego and Merino (2015) which shows that a larger board of commissioners size can reduce the possibility of financial distress.

The larger board of commissioners has several problems in the balance of the company. The board of commissioners to prioritize personal interests at the expense of the company (Chaganti, Mahajan and Sharma, 1985). The larger board size causes a lack of effectiveness when economic conditions are volatile (Goodstein, 1994). The smaller board size is more effective in controlling the company. It can reduce the possibility of economic and financial instability of the company (Jensen, 1993). Previous study states that the board size has a significant positive effect on financial distress (Dalton *et al.*, 1999). Larger size of the board of commissioners causes the probability of financial distress to be greater. The hypothesis for the board of commissioner size variables is as follows:

*H4: Board of commissioners size has a positive effect on financial distress.*

#### **Board of directors' size**

The board of directors run the managerial and daily operations of the company. The board of directors also determines the policies and strategies to be taken, both in the short and long term. Size and diversity of the board of directors is beneficial because of the relationship and network's formation with outside parties in ensuring the availability of company resources (Pearce and Zahra, 1992). Specifications of each field will be higher so that the company's performance can be more optimal. Thus, the probability of companies have financial stress conditions will be lower. The larger board of directors' size in a company, the less likelihood of financial distress will be happen. However, there are differences in the results of previous study. It shows that the larger board of directors' size, the higher likelihood company will have financial distress. The hypothesis for board size variables is arranged as follows:

*H5: Board of directors size has a negative effect on financial distress.*

### **3. RESEARCH METHODS**

#### **Sample selection and data collection**

The population in this study were all non-financial companies listed on the Indonesia Stock Exchange in 2012-2016. The sample consist of 605 observations, 220 observations for health firms and 385 observations for financially distressed firms. Information about composition of shareholders and corporate governance has been taken from annual reports. Information about financial data has been taken from financial statements. This information is available on Indonesia Stock Exchange and company's web page.

Financial distress is defined as the situation where the company's operating cash flow is not sufficient to fulfill its current liabilities and the company is forced to take corrective action (Wruck, 1990). Therefore, this study consider as financial distress companies those that meet one of the following criteria: (1) Negative net income for three consecutive years (Elloumi and Gueyie, 2001); (2) Negative net operation cash flow for three consecutive years (Wruck, 1990); (3) Interest coverage ratio  $< 1$  for three consecutive years (Claessens and Djankov, 1999).

#### **Test specification**

Logistic regression analysis is used to estimate the

effect of corporate governance structures on corporate financial distress. This study applied this analysis because financial distress, the dependent variable, is dichotomous, as is the case (Hosmer and Lemeshow, 1989; Tabachnick and Fidell, 1996). Maddada (1991) also states that logistic regression is the appropriate analysis procedure where disproportionate sampling from two populations (i.e. the financially distressed and healthy population) is used. The following logistic regression model are used to test the hypothesized relations between corporate governance structure (managerial ownership, institutional ownership, independent commissioners, board size, and board of directors' size) as the independent variables and financial distress as the dependent variable:

$$FD_{it} = \alpha + \beta_1 \text{Man\_Own}_{it} + \beta_2 \text{Ins\_Own}_{it} + \beta_3 \text{Indp\_Com}_{it} + \beta_4 \text{Com\_Size}_{it} + \beta_5 \text{Dir\_Size}_{it} +$$

$$\beta_6 \text{Lev}_{it} + \beta_7 \text{Size}_{it} + \varepsilon$$

where: FD = Financial Distress (measured as a variable dummy, financially distressed firms are coded 1 and healthy firms are coded 0); Man\_Own<sub>it</sub> = Managerial Ownership (measured by the percentage of shares owned by commissioners and directors); Ins\_Own<sub>it</sub> = Institutional Ownership (measured by the percentage of shares owned by institution); Indp\_Com<sub>it</sub> = Independent Commissioner (measured by the percentage of independent commissioners in the board of commissioners); Com\_Size<sub>it</sub> = Board of commissioners size (measured by the number of the board of commissioners); Dir\_Size<sub>it</sub> = Board of directors size (measured by the number of the board of directors); Lev<sub>it</sub> = Leverage's firm (measured by total debt to total asset) ; Size<sub>it</sub> = Firm Size (measured by the natural logarithm of total assets). For more details, it can be seen in Table 1.

**Table 1**  
**Definition and Expected Signs of Variables**

Variables	Definition	Abbreviation	Expected Signs
<u>Dependent variables</u>	Dummy variable, financially distressed firms are coded 1 and healthy firms are coded 0.	FD	
Financial distress	I consider as financial distress companies those that meet one of the following criteria: (1) Negative net income for three consecutive years; (2) Negative net operation cash flow for three consecutive years; and/or (3) Interest coverage ratio < 1 for three consecutive years.		
<u>Independent variables</u>	Percentage of shares owned by commissioners and directors	Man_Own	-
Managerial ownership	(number of shares by commissioners and directors <sub>i,t</sub> / number of shares outstanding <sub>i,t</sub> )		
Institutional ownership	Percentage of shares owned by banks, insurance companies, pension funds, and other institutional investors	Ins_Own	-
	(number of shares by banks, insurance companies, pension funds, and other institutional investors <sub>i,t</sub> / number of shares outstanding <sub>i,t</sub> )		
Independent commissioners	Percentage of independent commissioners in the board of commissioners	Indp_Com	-
	(number of independent commissioners <sub>i,t</sub> / number of the board of commissioners <sub>i,t</sub> )		
Board of commissioners size	Number of members in the board of commissioners <sub>i,t</sub>	Com_Size	+
Board of directors size	Number of members in the board of directors <sub>i,t</sub>	Dir_Size	-
Control variables	Ratio of total debt to total asset in the company	Lev	+
Leverage	(total debt <sub>i,t</sub> /total asset <sub>i,t</sub> )		
	Natural logarithm of total assets	Size	-
Firm size			

**4. DATA ANALYSIS AND DISCUSSIONS**

**Descriptive analysis and univariate test**

Descriptive statistics and results in mean difference test on variables are presented in Table 2. These results indicate that financially distressed firms have higher proportion than the healthy firms on sample (56% for financially distressed firms). At the

same time, mean of managerial ownership is 2.62% of the shares and mean of institutional ownership is 33.36% of the shares. It indicates ownership by institutions have a larger proportion than ownership by management in the composition of shareholders.

**Table 2**  
**Descriptive Statistics**

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Man_Own	605	0.0000	0.5053	0.0262	0.0726
Ins_Own	605	0.0000	0.6980	0.3336	0.2220
Indp_Com	605	0.3333	1.0000	0.4398	0.1369
Com_Size	605	2	9	4.23	1.643
Dir_Size	605	2	11	4.55	1.720
Lev	605	0.0002	0.9940	0.4839	0.2298
Size	605	8.3591	18.3355	14.6446	1.6179
FD	605	0	1	0.56	0.497

Source: Author's own (2018)

The Hosmer and Lemeshow test table, which presented in Table 3, shows that the chi-square has a significance value greater than the alpha value of

0.05 (0.124>0.05). It can be concluded that the model formed able to predict observation data well and the model is suitable for use.

**Table 3**  
**Hosmer and Lemeshow Test**

Step	Chi-square	df	Sig.
1	12.667	8	0.124

Source: Author's own (2018)

Table 4 presents the correlation matrix to examine multicollinearity between independent variables. The results show that the possible existence

of multicollinearity between independent variables can be ruled out.

**Table 4**  
**Correlation Matrix**

Variables	Constant	Man_Own	Ins_Own	Indp_Com	Com_Size	Dir_Size	Lev	Size
Constant	1.000							
Man_Own	-0.438	1.000						
Ins_Own	-0.444	0.355	1.000					
Indp_Com	-0.281	0.111	-0.079	1.000				
Com_size	0.002	0.087	-0.032	0.177	1.000			
Dir_Size	0.132	-0.104	-0.156	0.003	-0.404	1.000		
Lev	-0.017	0.137	0.014	0.029	0.096	-0.092	1.000	
Size	-0.849	0.262	0.213	-0.031	-0.231	-0.240	-0.185	1.000

Source: Author's own (2018)

Table 5 presents the results obtained after the application of logistic regression analysis. The coefficient indicates that managerial ownership (Man\_Own) is not significant on financial distress. Thus hypothesis H1 is not accepted. This result consistent with the findings of Manzanque, Priego

and Merino (2015) although contradicting that obtained by Elloumi and Gueyie (2001) and Abdullah (2006). They found a negative significant impact between managerial ownership and financial distress. The insignificance of relationship between managerial ownership and financial distress shows

that ownership by company management cannot yet act as a mechanism in preventing companies from financial distress. This is probably due to the small percentage of ownership by directors and commissioners owned by most sample companies.

For the variable institutional ownership, the result shows that institutional ownership (Ins\_Own) has a negative significant impact on financial distress. It means that the greater proportion of ownership of shares by institution, the smaller probability of financial distress, thus accepting hypothesis H2. This finding is contrary to Wardhani (2006), Putri and Merkusiwati (2014), and Manzanegue, Priego and Merino (2015) stating that there is no significant influence between institutional ownership and financial distress. However, the result is consistent with previous empirical evidence (Abdullah, 2006; Crutchley and Hansen, 2015), institutional ownership of companies has a negative effect on financial distress. Institutional investors consisting of banks, insurance companies, and other institutional investors, oversee management's action and decision making to increase their value and reduce the risk of losses due to financial distress (Jensen and Meckling, 1976).

The result of independent commissioners' variable (Indp\_Com) indicates that variable does not have significant impact on financial distress, thus hypothesis H3 is not accepted. This finding is consistent with result of Miglani, Ahmed and Henry (2015) although contradicting that obtained Elloumi and Gueyie (2001); and Manzanegue, Priego and Merino (2015), those who find a negative significant impact between independent commissioners and financial distress. The existence of an insignificant relationship between independent commissioners and financial distress shows that independent commissioners cannot yet act as an effective mechanism to prevent companies from financial distress. The possibility of the existence of independent commissioners in the company is only to fulfill the regulations in Indonesia (Wardhani, 2006).

For the variable board of commissioners size (Com\_Size), this study obtain the negative significant relationship between board size and financial distress, thus hypothesis H4 is not supported. It means that the greater size of board of commissioners, the smaller probability of financial distress. This finding is contrary to that obtained by Chaganti, Mahajan and Sharma (1985), Goodstein (1994), Dalton *et al.* (1999), those who find a positive relationship between board size and financial distress. The larger size of the board of commissioners causes a lack of effectiveness when econom-

ic conditions are volatile and requires a strategic change (Goodstein, 1994). Larger board of commissioners' size causes the probability of financial distress to be greater. However, the result is consistent with Wardhani (2006) and Manzanegue, Priego and Merino (2015) which shows that the size of board of commissioners has a significant negative effect on financial distress.

The coefficient indicates that board of directors size (Dir\_Size) has a negative significant impact to financial distress. It confirms that the larger board of directors size, the smaller probability of financial distress, thus accepting hypothesis H1. This result is supported by the findings of Nur and Emrinaldi (2007) and (Bodroastuti, 2009) although contradicting that obtained by Wardhani (2006), those who find a positive relationship between board of directors size and financial distress. This is consistent with the argument of Pearch and Zahra (1992), according to which companies with larger board of directors' size have the ability to manage company performance. Additionally, the specifications of each field will be higher, so that the company performance can be more optimal.

For control variable, leverage (Lev) and company size (Size) have a significant impact to financial distress. Leverage has a positive relationship with financial distress. This result is consistent with Elloumi and Gueyie (2001), Wardhani (2006), and Manzanegue, Priego and Merino (2015). The larger proportion of debt, the higher possibility of financial distress will be happen. Company size has a negative impact to financial distress. This finding is supported by Wardhani (2006) and Putri and Merkusiwati (2014). The greater total assets owned by the company, the higher level of the company's ability to fulfill the company's obligations in the future.

## 5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATION

This paper extends prior empirical research on financial distress on corporate governance structure in context like Canada, United States, Spain, Australia, and Malaysia, where overall analysis is still lacking. This study investigates the effect of Indonesian corporate governance structure on the financial distress.

The result shows that corporate governance structure as institutional ownership, size of board of commissioners and directors can reduce the probability of financial distress. However, managerial ownership and independent commissioner have no significant impact on financial distress.

This research offers some important implication for the empirical literature about how corporate governance can influence on financial distress. Companies can pay attention to the proportion of share ownership by institution and the number of board of commissioners and directors. It can be used in setting indicators that affect possibility of financial distress. Investors can consider corporate governance structure in determining the probability of financial distress and sustainability of the company in the future.

The factors of corporate governance structure, that have a significant effect on financial distress, are only institutional ownership, board of commissioners size, and board of directors size. There are still many factors of corporate governance structure that affect financial distress. The suggestion for further research is that the researchers need to add the other factors of corporate governance and financial ratio variables to see the feasibility of companies in predicting financial distress.

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