## ANALYSIS EFFECT OF RISK, SHARE HOLDERS STRUCTURE AND LEVERAGE TOWARD FINANCIAL DISTRESSED FIRM

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**Abstract:** This analysis is aimed to examine the effect of risk, shareholder structure, and leverage towards financial distressed firms in the existing companies in Indonesia Stock Exchange in the period 2010-2012. This study used purposive sampling with the number of samples obtained as many as 56 companies. Data analysis techniques in this study is logistic regression.

The test results of logistic regression prove that the risk variable, and leverage have a positive and significant effect on the dependent variable, that is financial distress. While the shareholder structure variables have no significant effect on the financial distress.

### Key Words: Financial Distress, Risk, Share Holders Structure, Leverage

**Abstrak:** Penelitian ini bertujuan untuk menguji pengaruh resiko, struktur pemegang saham, dan pendanaan terhadap kesulitan keuangan pada perusahaan-perusahaan yang ada di Bursa Efek Indonesia pada periode 2010-2012. Penelitian ini menggunakan teknik purposive sampling dengan jumlah sampel yang diperoleh sebanyak 56 perusahaan. Teknik analisis data dalam penelitian ini adalah regresi logistik.

Hasil uji logistik membuktikan bahwa variabel resiko, dan pendanaan berpengaruh secara positif dan signifikan terhadap variabel terikat, yaitu kesulitan keuangan. Sedangkan variabel struktur pemegang saham berpengaruh secara tidak signifikan terhadap kesulitan keuangan.

### Kata Kunci: Kesulitan keuangan, Resiko, Struktur pemegang saham, Pendanaan

#### 1. BACKGROUND

The prediction of financial strength of a company is usually carried out by external and internal parties of company such as investor, creditor, auditor, government and company owner. Before investing the fund into company, investor and creditor always evaluate financial condition of the company. External parties of company are often reactive to distress signals such as delivery delay, product quality deterioration,

bank bill, and others indicating the occurrence of financial distress of a company. The analysis and prediction of financial condition of company are very important because the understanding of financial distress of a company is used to solve the situation and to avoid the possibility of financial difficulties at very serious level.

Financial distress represents a wide concept consisting of many situations when a company faces difficulties. financial A lot of general terms are used to describe this situation, including bankruptcy, failure, incapacity to pay loan, and default. The position of insolvency in bankruptcy case is defining negative net wealth. Incapacity to pay loan is showing negative performance and liquidity problems. Default means that the company violates the covenant with creditor, thus causing a legal action (Atmini, 2005).

Main reference of this research is Swandari (2003),but some modifications of other researches are also involved. Independent variables Swandari (2003)in are risky behavior stock ownership and structure. but in this research, leverage is also added. Motivation behind this research is to give evidence empirical about influence of leverage on financial distress of company, which is used as an in addition to the influence of risk and stock ownership structure.

### 2. LITERATURE REVIEW

### 2.1.1 Financial Distress

Financial distress is a wide concept which consists of several situations when company difficulties. experiences financial There are many terms used to describe this situation, such bankruptcy, failure, incapacity to pay loan, and default. The situation of insolvency during bankruptcy is related to negative net wealth. Incapacity to pay loan is related to negative performance and liquidity problems. Default means that the company has violated the covenant with creditor and it causes a legal action (Atmini, 2005).

### 2.1.2 Risk

Based on Capital Asset Pricing Model (CAPM) theory, risk is differentiated into systematic risk and not-systematic risk. Systematic risk cannot be eliminated, and is usually called as market risk. Systematic risk is a probability when the company profit is below the expected profit because there are some factors which influence the, companies in such as government regulation, tax increase, recession, devaluation. and others. Notsystematic risk is a risk that can be eliminated through diversification.

Not-systematic risk is a probability when the company profit is below the expected profit because there are some factors which influenced only one company such as labor strike, management change, innovation, fire, and others.

### 2.1.3 Stock Ownership Structure

According to Hastuti (2005), corporate governance problem is a problem occurred due to different interest shown by many parties who participate in the company.

### 2.1.4 Leverage

Leverage is defined as the use of asset or fund, and as the consequence of this definition, company must spend not only fixed cost but also fixed expense. The goal of company in using leverage is to increase the return to the common stock holder, but the use of leverage also increases risk (Warsono, 2003: 204).

### 2.2 Hypothesis Development

### 2.2.1 The Influence of Risk on Financial Distress

Swandari (2003) examined the influence of risky behavior and ownership structure on bankruptcy among Indonesia banks. It is assumed that risky behavior is very potential to cause a loss and bankruptcy to the bank. Risky behavior may develop from very

concentrated ownership structure of bank. However, the measurement of risk variable is not consistent and not able to be a differentiator between bankrupt bank and notbankrupt bank.

Almilia (2003) carried out research about factors influencing financial distress and included daily return cumulative as a factor. This factor was considered because actual stock return is describing systematic risk and company specific risk, and it will provide good reflection about expectation market about probability of company to experience financial distress. It is also shown that stock return cumulative has negative and statistically significant relationship with the probability of company to be delisted.

H1: Business risk affect positive to financial distress of company.

# 2.2.2 The Influence of InstitutionalOwnership and ManagerialOwnership on Financial Distress

According to Wahyudi and Hanafi (2006), stock ownership structure (managerial ownership and institutional ownership) is believed by some authors as influencing the company. It is also influencing company performance to achieve the company goal, which is the maximization of company value. This influence exists because of

company's sense of control over the effort of achievement.

Sujoko and Soebiantoro (2007) proposed that institutional ownership structure influences company value. The variable of managerial ownership does not have significant influence on company value. The management of company does not have entire control over the destinv company. Mostly, company is controlled by the majority owner, that SO management is only representing the owner of majority stock.

H2: Institutional ownership affect positive to financial distress of the company.

H3: Managerial ownership affect positive to financial distress of the company.

### 2.2.3 The Influence of Leverage on Financial Distress

Financial distress is situation when company is not able to pay short-term debt. The company with financial difficulties faces the cost that is bigger than normal company does. The cost can reduce company value, and it involves direct cost and indirect cost. The indirect cost from financial distress influenced by organizational characteristic, agency conflict, and industrial factors. Organizational characteristic is understood through proxies such as company size, leverage and political connection. Leverage is measured by using the ratio of debt total to asset total (Wijantini, 2007).

Sujoko and Soebiantoro (2007) determined that theoretically, related leverage is to stock The ownership structure. more concentrated stock ownership is, the more effective supervision by the owner over the management. The management will be cautious in giving debt (lending) because the higher debt rate may produce financial distress. The occurrence of financial distress decreases company value and therefore, also reduces owner's wealth. It is also found that leverage influences company value.

H4: Leverage affect positive to financial distress of the company.

### 3. RESEARCH METHODS

### 3.1. Research Type

The approach of research is quantitative which emphasizes on the test over theories through measuring variables and analyzing data with statistic procedure. The objective of this research is to test hypotheses to explain the nature of certain relationship or to determine the difference among groups or the independence of two or more factors in a situation (Sekaran, 2006:162).

### 3.2. Methods of Population **Determination and Sampling**

Research population involves whole manufacturing companies which were listed in Indonesia Stock Exchange in period of 2010-2012. The use of enterprise manufacturing sector deserves to be the object of study because it dominates the number of companies listed on the Stock Exchange (over 50%), so the conclusion is expected to describe the condition of the capital market in Indonesia.

Sampling method used is purposive sampling. This sampling method is only limited to specific type of information, in accordance with especially the expected information which shall meet some criteria made by the author (Sekaran, 2006: 136).

The criteria of sampling are as follows:

- 1. The company included within the group of manufacturing companies that were listed with in Indonesia Stock Exchange in period of 2010-2012 based on ICMD Classification.
- 2. The company had to publish the audited annual statement during period of 2010-2012, including the transcript of financial statement and not experiencing delisting during observation period. The use of this period was judged have adequately represented the condition of capital markets in Indonesia, which has

- been fairly stable after a period of financial crisis.
- 3. The company had to issue the audited financial statement dated on 31 December 2010-2012 which was explained in term of rupiah.
- 4. Companies that submit complete data during the study period 2010-2012 related to variable risk, institutional ownership, managerial ownership and leverage.

### 3.3. Type and Source of Data

The type of data obtained in this research is data obtained documentary researcher indirectly through an intermediary medium (obtained and recorded by others), generally in the form evidence of historical records or reports that have been compiled in the archives (documentary data) are published and are not published.

Sources of data used in this research is secondary data, that is data that has been processed as well as the primary data collection through literature that has to do with the problems encountered and analyzed, presented in the form of information.

Data used in this research are secondary data that come from:

- a. The audited financial statement of company and the transcript of financial statement in period 2010-2012, which was accessed from www.idx.co.id.
- b. Indonesian Capital Market Directory during the observation period.

### 3.4. Definition and Measurement of Variable

### 3.4.1. Dependent Variable

Financial distress is condition when the company experiences financial difficulties and faces threat of bankruptcy. Variable in this study is a binary variable which means that the dependent variable is presented in the form of dummy variables to measure binominal. Financial distress represents a binary variable with categories as follows:

1: for company with financial distress.

0: for company without financial distress.

As for financial distress measured by using interest coverage ratio. This current research defines financial distress in a similar manner to Classen et al (1999)\_and also carried out by Wardhani (2006).

### 3.4.2. Independent Variable

Some independent variables are used in this research, such as risk, stock ownership structure and leverage

Risk is a condition experienced by individual or company with the possibility of being lost. According to Swandari (2003), risky behavior is understood by dividing equity with asset total.

Stock ownership structure is expressed with institutional ownership and managerial ownership.

Leverage reflects the ability of company to survive by limiting the adverse condition of business (Warren, 2006: 312).

### 4. ANALYSIS AND

### **DISCUSSION**

### **4.1** Descriptive Statistics

This study is aimed to investigate the influence of risk, share holder's structure, and leverage toward of financial distress company. The types of data in this study are divided into categories of nominal data (financial distress) and ratio data (risk, ownership structure, and leverage).

The results of the descriptive statistics of the study variables that have category ratio data are shown in Table 4.1 below.

Table 4.1 Descriptive Statistics

Variabl	Min	Max	Mean	Std. Dev
e	(%)	(%)	(%)	(%)
RISK	0.2	9.6	2.6	2.1
MAN	0.000	87.460	4.155	11.634
<b>INST</b>	0.030	99.920	67.428	18.612
LEVER AGE	9	288	66	45.3

The results of descriptive statistics of the variable risk (RISK) yields a minimum value of 0.02%, the maximum value of 9.6%, with the average and standard deviation of 2.6% and 2.1%.

The results of descriptive statistics on the percentage of managerial ownership (MAN) yield a

minimum value of 0%, the maximum value of 87.46%, with an average and standard deviation of 4.155% and 11.634%.

The results of descriptive statistics on the percentage of institutional ownership (INST) yield a minimum value of 0.03%, a maximum of 99.92%, with an average and standard deviation of 67.428% and 18.612%.

The result of descriptive statistics on the level of leverage (LEV) yield a minimum value of 9%, the maximum value of 288%, with an average and standard deviation of 66% and 45.3%.

### **4.2 Company Profile Samples**

The results of the descriptive statistics of the study variables that have nominal data categories are shown in Table 4.2 below.

Table 4.2
Company Distress Risk Classification
Results

		Frequ		Valid
		ency	Percent	percent
Va lid	Non Distress	126	75.2	75.2
	Distress	42	24.8	24.8
	Total	168	100.0	100.0

Resulted from as many as 126 companies (75.2%) can be categorized as non-distress and potentially as many as 42 companies (24.8%) are in the category of potential distress. These results generally describes the condition of public companies in the Stock Exchange are quite healthy, if the terms

of the interest coverage ratio more than 1 is owned.

### **4.3 Logistic Regression Test Results**

Testing of the hypothesis was conducted by using logistic regression and the nominal data as the dependent variable. Logistic regression model assumptions require a series of tests in order to produce a predictive model that is not biased. Tests were carried out by using  $\alpha$  of 5%.

### 4.3.1 Examine the feasibility of regression model.

Test results using the Hosmer and Lemeshow test are shown in the following table.

Table 4.3
Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	3.673	8	0.885

The test shows the Chi-square value of 3.673 with significance (p) of 0.885. Based on these results because the significance value is greater than 0.05, it can be concluded that regression models are able to predict the value of the observations accurately.

### 4.3.2 Nagelkerke R Square

The results of calculation of the value of Nagelkerke R Square are shown in the following table.

Tabel 4.4
Nagelkerke R Square

	-2 Log	Cox &	Nagelker
Step	likeliho	Snell R	ke R
	od	Square	Square
1	101.295	0.143	0.213

Nagelkerke R Square value produced is equal to 0.213 it means that the variability of the dependent variable that can be explained by the independent variables is equal to 21.3%, while the rest is explained by other variables outside the research model.

### 4.3.3 Logistic Regression Models Generated

Logistic regression models which were formed are presented in the following table.

Table 4.5
Logistic Regression Coefficient
Test Results

Variab	•		Wal		Explanatio
le	В	S.E.	d	Sig. (p)	n
RISK	8.504	4.225	4.051	0.044	Sig nificant
MAN	0.230	0.203	1.284	0.257	Not sig nificant
INST	0.025	0.240	0.011	0.917	Not sig nificant
LEV	3.119	1.107	7.938	0.005	Sig nificant
Consta nt	5.459	2.544	4.603	0.032	-

The results of testing can produce a regression. The

coefficient regression equation is as follows:

$$DISTRESS = -5,459 + 8,504RISK + 0,23MAN + 0,025INST + 3,119LEV$$

#### 4.4 DISCUSSION

The results of data analysis on the first and fourth hypothesis testing indicate that the hypothesis is supported by research data. The first hypothesis examines the effect of variables on the risk of financial distress. Meanwhile, the fourth hypothesis in this research tests examine that variable leverage affect to financial distress. In this research. hypothesis testing was performed using binary logistic regression test indicates that the variable is statistically influence the risk of financial distress. These results demonstrated the significant value of 0.044 is smaller than significant level. And these results supported the results of previous studies conducted by Wibowo, Ghozali and Waridin, (2001) and Almilia (2003), using the stock risk, managed to find the positive influence on the probability level of risk the company's financial difficulties.

Then for the variable leverage binary logistic regression test results show that a significant value of 0.005 is significantly smaller than the value of the research is 5%. These results prove that the variables can affect the leveraged to financial distress. And these results supported the results of previous studies conducted by Classens et al. (1999) which states that the company is facing bankruptcy tend to have higher leverage.

Meanwhile. for variable Managerial Ownership (MAN) and Institutional Ownership (INS), results of data analysis showed that the significant value for both variables significantly higher than the value of 0.05 is 0.257 (MAN) and 0.917 (INS). These results indicate that managerial ownership variable (MAN) institutional ownership (INS) does not affect the financial distress companies listed in Indonesia Stock Exchange.

#### 5. CONCLUSION

#### 5.1 Conclusion

The conclusions that can be drawn from the results of this study are:

- 1. Based on the results of testing Hypothesis 1, this research is able to prove the existence of a positive influence on the probability of the risk level of the company's financial difficulties. Test results that show the positive direction indicates that the increase in the uncertainty of future cash flows will be followed by a rise in the potential of the company that is experiencing financial distress.
- 2. Based on the results of testing Hypothesis 2, this research is not able to prove the influence of managerial ownership on the probability of financial distress. The test results which failed to find a significant influence of managerial ownership is thought to be caused by the average percentage of managerial ownership causing the

- agency conflict that can not be replaced by the role of the managerial ownership itself.
- 3. Based on the test results of the 3rd hypothesis, this study is not able to prove the effect of institutional ownership on the probability of financial distress. The test results which failed to find significant effect suggests that the presence of institutional investors still can not be used as a monitoring tool in order to minimize agency costs.
- 4. Based on the test results of the 4th hypothesis, this study is able to prove the existence of a positive effect of leverage on the probability of financial distress. Test results that show the direction of the positive effect describes the phenomenon of agency cost of debt, where high debt levels will cause the company to choose the risky investment projects in excess, which are potentially increasing the risk of a company's financial.

### 5.2 3 Implications for Further

### Research

Based on the limitations of this study, further research could be developed on the following matters:

1. In order to make a more accurate measurement, subsequent studies could be developed using the other criteria and other measuring devices in assessing the financial condition of the company, such as the average cash flow during certain periods. By using different criteria, it is expected

to obtain better results which can describe the real condition of the sample companies.

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