THE ANALYSIS OF THE INFLUENCE OF FINANCIAL DISTRESS, DEBT DEFAULT, COMPANY SIZE, AND LEVERAGE ON GOING CONCERN OPINION

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Abstract: The objective of this paper is to examine the effect of financial distress, debt default, company size, leverage, and solvability on going concern opinion. This study applies logistic regression (logic analysis) to predict going concern opinion. Logic analysis is one of the best alternatives to overcome the limitation of the multivariate data analysis (MDA) technique. This paper is an empirical work using a sample of listed Indonesian Stock Exchange. Logistic regression method is used to conduct an hypothesis test. The population of this study encompasses all manufacturing companies in which stock is publicly traded on the Indonesian Stock Exchange throughout the years 2011-2014. The result of study depicted that financial distressed, debt default, and leverage has significant influence on the auditor going concern opinion, while the company size has no significant influence on the auditor going concern opinion quality. The going concern assumption is financial reporting presumes that an entity will generally continue largely in its present form for an indefinite future and allows for the financial statements to be prepared using valuations other than liquidation value. The study contributes to auditing literature in the areas of auditor going concern opinion. The financial distress, debt default, and leverage always rise the contradiction to the auditor going concern opinion.

Keywords: Financial Distress, Debt Default, The Company size, Leverage, Going Concern Opinion

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1. **INTRODUCTION**

The going concern assessment is one of the most difficult and ambiguous audit tasks (Carcello and Neal, 2000), and if a company goes bankrupt without having received a prior going concern opinion from the auditor, it is widely viewed as an audit failure (Francis, 2004). The large collapses, such as Enron, WorldCom, and Tyco, resulted in increased litigation against the companies’ auditors, and increased regulatory review of the audit profession, and it was questioned worldwide whether auditors too often failed to identify problem companies (Fargher and Jiang, 2008; Geiger et al., 2005; Myers et al., 2013). In Indonesia, issues concerning audit reports and their relationship to going concern problems have emerged since 1995. The issue emerged with the collapse of the Summa Bank, though the bank had been issued a clean audit report in the preceding year. In 1997, with the economic crisis coming into being, the going concern issue became important in Indonesia. Evidence has shown that, in 1997, 14 companies had been issued a clean audit report in the previous year, but collapsed in the subsequent year. In 1998, 15 companies previously issued a clean report collapsed in the next year (Haron et. al., 2009). A critical question that was raised is why auditors did not foresee the bank collapses during the audit. As a response to the financial crisis, The International Auditing and Assurance Standards Board (IAASB) issued a report in order to raise awareness among managers and auditors of the importance of conducting going concern assessment, in order to prevent corporate collapse. (IAASB, 2009). Indonesia Accounting Standard No. 1 (2009) and SA No. 570 (IAPI, 2013) require management to assess the entity’s ability to maintain the continuity of their business.

SA No. 570 (IAPI, 2013), state that the management responsible to assess the entity’s ability to maintain the continuity of its business (going concern) and its disclosure in the financial statements. On the other hand, the auditor's responsibility is to obtain sufficient appropriate audit evidence about the accuracy and proper use of the going concern assumption by management in the preparation and presentation of financial statements and to conclude whether there is a material uncertainty about the ability of an entity to continue its business. If, after considering management’s plan and mitigating circumstance, the auditor has substantial doubt about the ability of an entity to continue as going concern, then the audit opinion should be modified to reflect such uncertainty.

The auditor shall state in the independent auditor's report that there is a material uncertainty that may cause significant doubt on the entity's ability to continue as going concern at the time of reporting (SA 570: IAPI,
Auditors’ decision whether or not to issue a going concern opinion is a question of competence as well of independence, and can be characterized as a two-stage process (Vanstraelen, 1999). First, auditors should have the ability to identify a company with going concern problem, which is a matter of competence, and secondly, the auditor will have to decide whether or not to report this finding, which is a matter of independence.

2. LITERATURE REVIEW

2.1 Financial Distress

Financial distress is usually applied analogously to term such as default, failure, or bankruptcy. Financial distress is defined as “a condition in which company had negative net income for several consecutive years” (Hofer, 1980 and Whitaker, 1999). Beaver (1966) defines financial distress as “the inability of a firm to pay its financial obligations as they mature.” Meanwhile Emery et.al. (2007) define financial distress as “the result of deterioration in a company’s business, which can be caused by several things, for example, poor management, unwise expansion, fierce competition, too much debt, court lawsuit and unfavorable contracts.” Furthermore Platt and Platt (2002) define financial distress as “a step decrease in financial condition that occured prior to bankruptcy or liquidation.” Hendel (1996) gives a probabilistic definition of financial distress as “the likelihood of bankruptcy, which depends on the level of liquid assets as well as on credit availability.”

McKeown et. al. (1991) state that the deteriorated company’s business will receive going concern opinion. Inversely, a company that has never experienced financial difficulties, auditor will not issue going concern opinion. Mutchler et. al. (1997) found evidence that the going concern opinion was significantly correlated with the probability of bankruptcy and audit report lag as well as contrary information such as default. If this default has occurred or ongoing negotiation process in order to avoid default, the auditor may be inclined to issue a going concern opinion. Company that receive a going concern opinion will affect to the continuity of the company, therefore the management urges to influence the auditor to consider giving going concern opinion because it will lead to negative consequences.

Client’s financial condition influence the auditor’s decision to disclose going concern uncertainties in the audit report (Beaver 1996; Altman & McGough, 1974;Ohlson, 1980; Mutchler, 1985; Boritz, 1991; Citron & Tafler, 1992). The type of evidence available related to financial condition must be
considered by the auditor before issuing going concern opinion (SA 570; Charmechael & Pany, 1993; Behn, Kaplan & Krunwiede, 2001; Chen & Church, 1992; Frost, 1997; Goldstein, 1998; Reynolds & Francis, 2000; DeFond, Raghunandan & Subramanyam, 2002). Consider a company that faces a liquidity problem with evidence that the company may obtain a bank loan. This fact would influence the auditor to issue unqualified emphasis as a matter opinion, rather than a going concern opinion (Haron et al. 2009).

Altman (1968) used multivariate linear, discriminant analysis (MDA) and determined a cut-off value to decide upon the criteria indicating which companies were in financial distress or vice versa.

This study uses five of Altman’s ratios to calculate Z score:

\[ Z \text{ score} = 1.2 \times X_1 + 1.4 \times X_2 + 3.3 \times X_3 + 0.6 \times X_4 + 0.999 \times X_5 \]

where

- \( Z \text{ score} \): financial condition of the company (strong, moderate, and weak)
- \( X_1 \): working capital/total asset
- \( X_2 \): retained earnings/total asset
- \( X_3 \): earnings before interest and tax/total asset
- \( X_4 \): market value of share/book value of debt
- \( X_5 \): sales/total asset

Based on the Z score, Altman categorizes companies as strong, moderate, and weak. Z score for strong, moderate, and weak are as follows:

- Strong when Z score is > 2.99
- Moderate when Z score is 1.811 – 2.98
- Weak when Z score is < 1.811

The Altman Z score can be used to determine the likely bankruptcy and as a measure of the overall financial performance. When Z score begins fell sharply, it is an indication that companies should wary of bankruptcy.

2.2 Debt Default

Auditors examine debt default and covenant violations as a preview to issuance of a going concern opinion. In SA 570 (IAPI, 2013) state that one of the going concern indicators that are widely used in reaching audit opinion
is a failure to meet debt obligations (default). Debt default is defined as “the failure of the debtor (the company) to pay debt principal and/or interest at maturity (Chen and Church, 1992). Study conducted by Chen and Church (1992) found that there is a strong relationship of the debt default on going concern opinion. Auditors tend to be blamed for failing to issue a going concern opinion to a bankrupt company. Failure to issue a going concern opinion consequences higher cost when company is in default. Therefore, debt default may increase the likelihood of auditors issuing going concern opinion.

Foster et.al. (1998) found that loan default/accomodations and loan violations combined with a going concern variable significantly explains future bankruptcy.

Mutchler et. al., (1997) included loan-defaults and covenant violations in the auditors going concern models but they found no real correlation between debt default status and bankruptcy predictions. Hopwood (1994) provided evidence that statistical models based on traditional accounting ratios predicted impending bankruptcy better than auditor’s going concern opinions.

According to Mutchler (1997), bankrupt researches should include loan default/accomodations and covenant violations as control variables when using bankruptcy to test the importance of going concern opinions. Chen and Church (1992) and Mutchler (1997) also provided information on the relationship between audit opinions, debt default and bankruptcy.

2.3 Company Size
The size of the company can be expressed in total assets, sales, and market capitalization. If the total assets, sales, and market capitalization increasingly rise, these indicate that the company size is large. The value of assets is relatively more stable than the market value and sales capitalized in measuring size of the company. Therefore this research using total assets as a proxy of the size of the company.

Mutchler (1985) states that the auditor more often issued a going concern opinion on small companies, because the auditor believes that large companies can resolve their financial problem than small companies. Therefore, the growing size of the company will not receive going concern opinion.
Mutchler et. al. (1997) and McKeown et. al. (1991) in their study about factors that influence the audit report in the bankrupt company, provide empirical evidence that there is a negative relationship between company size and going concern opinion.

Diyanti (2010) state that the size of company affect the going concern audit opinion. Because, the large company has an ability to continue as a going concern. This is consistent with Warnida (2010) which states that any changes in the size of the company, it will cause change to the going concern opinion.

2.4 Leverage

Leverage is measured as total liabilities divided by total assets. The amount of debt that exceeds total assets causing companies deficient in capital or negative equity balance. High leverage ratio show the financial performance of companies is getting worst and may lead to uncertainty about the ability of an entity to continue as a going concern. Companies that have an asset lower than its debt will face the bankruptcy (Chen and Church, 1992). High leverage ratio cause doubt in the ability of the company to continue its business in the future because most of the funds will be used to debt financing and funds to operate will be further reduced. The high leverage ratio will face the likelihood to receive a going concern opinion.

Rudyawan and Badera (2009) states that leverage ratio has no significant effect on the likelihood of acceptance going concern audit opinion. Feng and Li (2009) state that smaller companies with higher leverage are more likely to receive going concern opinions.

2.5 Going Concern Opinion

The going concern assessment is comprised of judgements of future events, which by nature might be uncertain. SA 570 (IAPI, 2013) reveal the conditions that can lead to doubts about the going concern. Events or circumstances that imply that is doubtful that the company will continue its business are negative equity or negative operating profit, inability to pay back loans as they mature, an excessive need of short term financing, negative cash flow and loss of important markets or clients (SA 570, IAPI 2013).

SA 570 (IAPI, 2013) require auditors to assess a variety of management’s plans that might mitigate doubts concerning the going concern status. In evaluating management’s assessment, the auditor should consider whether it
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includes all relevant informations. Prior studies have examined whether auditor use various pieces of information provided by managers when assessing going concern status. Behn et. al. (2001) examines four specific mitigating factors as indicated in SAS No.59; management plans to issue equity, plans to borrow additional funds, plans to reduce spending, and plans to dispose of assets. They find that auditors are less likely to issue going concern opinion to firms disclosing plans to issue equity and to borrow additional funds.

Altman and McGough (1974) state that going concern issue is divided into two conditions, first financial problems include a shortage (deficiency) liquidity, deficiency of equity, inability to pay debts, the difficulty of obtaining funding. Second, operation problems such as operating losses, dubious earning prospects, threatening of operating capability, and weak controls over operations. Audit report with a going concern opinion indicates that there is a risk that the company has inability to continue business.

The going concern assumption is financial reporting presumes that an entity will generally continue largely in its present form for an indefinite future and allows for the financial statements to be prepared using valuations other than liquidation value (Altman 1982; AICPA 1988; Subramanyam and Wild 1996). In this context, and based on relatively privileged information, the external audit firm’s ability to modify their audit report for what they perceive as a heightened threat to the going-concern assumption enables auditors to communicate what is often the first substantial nonfinancial public statement about a stressed company’s ability to continue in business (Kida 1980; Mutchler 1985; Ellingsen et al. 1989). Thus, the communication of a first-time going-concern modified audit opinion from the external auditor reflects the auditor’s current assessment of the increased risk of business failure on the part of their client, and the potential abandonment or adaptation of their extant assets and liabilities.

Auditor’s going concern opinion can be seen as a valuable risk communication to the equity market (Blay et. al. 2011). Research conducted by O’Reilly (2010) confirms that an auditor’s going concern opinion is perceived to be useful for valuing stocks as it is negative signal about the company’s viability. Moreover, the usefulness of the auditor’s opinion is greater when it provides a signal that differs from what the market expects. The study of Jones (1996) shows that independent auditor’s going concern evaluation has information content and the author proved this by examining the market reaction to the release of the auditor’s opinion.
3. THE HYPOTHESES AND MODEL

The hypotheses and theoretical model framework in this study are:

3.1 Hypotheses

**Hypothesis 1:** Financial Distress has influence on going concern opinion.

**Hypothesis 2:** Debt Default has influence on going concern opinion.

**Hypothesis 3:** The Company Size has influence on going concern opinion.

**Hypothesis 4:** The Leverage has influence on going concern opinion.

3.2 Theoretical model framework

![Research Theoretical Framework](image)

3.3 Equations

Based on the model, and with reference to the hypothesis, the equation model can be designed, as follows:

Financial Distress (FD), Debt Default (DD), Company Size (SZ), Leverage (LE) have influence on Going Concern Opinion (GCO).

\[
\ln \left( \frac{GCO}{1-GCO} \right) = \alpha + \beta_1 FD + \beta_2 DD + \beta_3 SZ + \beta_4 LE + \varepsilon
\]
Remarks:

\[ \ln \frac{GC}{1-GC} = \text{probability of getting going concern audit opinion} \]

\[ \alpha = \text{konstanta} \]

\[ \beta = \text{regression coefficient} \]

FD = financial distress

DD = debt default

SZ = company size

LE = leverage

\[ \varepsilon = \text{epsilon} \]

4. RESEARCH METHODOLOGY

The conceptual model structure is presented in Figure 1. This model is developed based on extensive literature review referring to the studies conducted on going concern opinion and relevant research results.

4.1 Variable Operationalizations

Operationalizing a research variable is a process of translating or defining concepts to make them measurable. The concept of financial distress is defined as “a condition in which company had negative net income for several consecutive years” (Hofer, 1980 and Whitaker, 1999). Beaver (1966) defines financial distress as: the inability of a firm to pay its financial obligations as they mature.” Meanwhile Emery et.al. (2007) define financial distress as “the result of deterioration in a company’s business, which can be caused by several things, for example, poor management, unwise expansion, fierce competition, too much debt, court lawsuit and unfavorable contracts.” Furthermore, financial distress is represented by the variable X1.

The concept of debt default is defined as “the failure of the debtor (the company) to pay debt principal and/or interest at maturity (Chen and Church, 1992). Study conducted by Chen and Church (1992) found that there is a strong relationship of the debt default on going concern opinion.
Auditors tend to be blamed for failing to issue a going concern opinion to a bankrupt company. Failure to issue a going concern opinion consequences higher cost when company is in default. Therefore, debt default may increase the likelihood of auditors issuing going concern opinion. Debt Default is represented by variable X2.

The concept of company size can be expressed in total assets, sales, and market capitalization. If the total assets, sales, and market capitalization increasingly rise, these indicate that the company size is large. The value of assets is relatively more stable than the market value and sales capitalized in measuring size of the company. Therefore this research using total assets as a proxy of the size of the company. The company size is represented by X3.

The concept of Leverage is measured as total liabilities divided by total assets. The amount of debt that exceeds total assets causing companies deficient in capital or negative equity balance. High leverage ratio show the financial performance of companies is getting worst and may lead to uncertainty about the ability of an entity to continue as a going concern. Companies that have an asset lower than its debt will face the bankruptcy (Chen and Church, 1992). The leverage is represented by variable X4.

The concept of going concern opinion assumption is financial reporting presumes that an entity will generally continue largerly in its present form for an indefinite future and allows for the financial statements to be prepared using valuations other than liquidation value (Altman 1982; AICPA 1988; Subramanyam and Wild 1996). In this context, and based on relatively privileged information, the external audit firm’s ability to modify their audit report for what they perceive as a heightened threat to the going-concern assumption enables auditors to communicate what is often the first substantial nonfinancial public statement about a stressed company’s ability to continue in business (Kida 1980; Mutchler 1985; Ellingsen et al. 1989). Going concern opinion is represented by the variable Z.

4.2 The sample of the study

Population is the entire group of people, events, or thing that the researcher desires to investigate (Sekaran & Bougie, 2013). The population of this study is all manufacturing companies listed at Indonesia Stock Exchange from 2011-2014. The observation unit is the manufacturing companies itself.
Sampling is the process of selecting items from the population so that sample characteristics can be generalized to population (Sekaran & Bougie, 2013). Sampling consists of decision in design choice an sample size (Sekaran & Bougie, 2013). The sampling technique used in this research is purposive sampling. The size of the sample is 132 manufacturing companies representing 92% of the total population of 144 manufacturing companies that publishes audited financial statements.

5. DATA ANALYSIS AND HYPOTHESES TESTING

Hypothesis testing used logistic regression (logic anaysis) to predict going concern opinion. Logic analysis is one of the best alternatives to overcome the limitation of the multivariate data analysis (MDA) technique. Logistic regression is a regression model which is used to test whether the probability of the dependent variable can be predicted by the independent variable (Ghozali, 2006:225).

Based on the calculation, using SPSS ver. 23, the Lemeshow’s goodness of fit test shows a significance of $\alpha=0.05$; $p=0.206$. Due to the significance level being more than 0.05, it can be concluded that financial distress, debt default, company size, leverage can explain the auditor going concern opinion quality as a dependent variable with the probability (sig) $= 0.206$. The sig value is more than the probability value of 0.05. This means that the independent variables are able to explain the dependent variable and the model tested is fit and worthy to be continued with. This is described in Table 1.

Financial Distress, Debt Default, Company Size, Leverage on the going concern opinion.

Table 1.
Hosmer and Lemeshow Test

<table>
<thead>
<tr>
<th>Step</th>
<th>Chi-square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10,917</td>
<td>8</td>
<td>0.206</td>
</tr>
</tbody>
</table>

Table 2.
Determinant Coefficient (Nagelkerke R Square)
Model Summary

<table>
<thead>
<tr>
<th>Step</th>
<th>-2 Log likelihood</th>
<th>Cox &amp; Snell R Square</th>
<th>Nagelkerke R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>120,848a</td>
<td>0.351</td>
<td>0.474</td>
</tr>
</tbody>
</table>

(a) Estimation terminated at iteration number 6 because parameter estimates changed by less than, 001.
This means that the four independent variables (financial distress, debt default, company size, leverage) are able to influence and explain the going concern opinion by 47.4% (Nagelkerke $R^2$ value). This value indicates that there are other factors that affect the going concern opinion outside the financial distress (FS), debt default (DD), company size (CS), leverage (LE), which is indicated by the error variance of 0.526 or 53%. The remaining 53% is determined by other factors not included in the testing. Other factors are alleged to company’s growth, opinion shopping, value-relevance, audit lag, and audit quality.

5.1 Hypothesis 1. Financial Distress has significance influence on going concern opinion.

The test is conducted to measure the significance of influence of financial distress ($X_1$) on going concern opinion ($Y$).

<table>
<thead>
<tr>
<th>Variables in the Equation</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1a Z_Score</td>
<td>-0.263</td>
<td>0.125</td>
<td>4.437</td>
<td>1</td>
<td>0.035</td>
<td>0.769</td>
</tr>
<tr>
<td>Default(1)</td>
<td>-2.721</td>
<td>0.747</td>
<td>13.282</td>
<td>1</td>
<td>0.000</td>
<td>0.066</td>
</tr>
<tr>
<td>Size</td>
<td>0.000</td>
<td>0.000</td>
<td>0.409</td>
<td>1</td>
<td>0.522</td>
<td>1.000</td>
</tr>
<tr>
<td>Leverage</td>
<td>1.901</td>
<td>0.878</td>
<td>4.684</td>
<td>1</td>
<td>0.030</td>
<td>6.690</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.754</td>
<td>0.672</td>
<td>1.258</td>
<td>1</td>
<td>0.262</td>
<td>0.470</td>
</tr>
</tbody>
</table>

(a) Variable(s) entered on step 1: Z_Score, Default, Size, Leverage

The test shows a significance level of less than $\alpha = 0.05$; $p = 0.035$. Thus it can be said that the financial distress has significance influence on the going concern opinion, a significant ($\alpha = 0.05$; $p=0.035$). Also, the test show negative coefficient -0.263 indicates that the high total asset does not guarantee a company for not receiving going concern audit opinion.

Based on the above table, the mathematical model is as follows:

$$
\ln \left( \frac{GC \text{ Opinion}}{1-GC \text{ Opinion}} \right) = -0.754 - 0.263 \times ZSCORE - 2.721 \times \text{Default} + 0.000 \\
\times \text{Size} + 1.901 \times \text{Leverage}
$$
5.2 Hypothesis 2. Debt Default has significance influence on the going concern opinion.

The test shows a significance level of less than $\alpha=0.05$; $p=0.000$. Thus it can be said that the debt default has significance influence on the going concern opinion, a significant ($\alpha=0.05$; $p=0.000$). A failure to meet debt obligations and interest is an indicator of going concern that is widely used by auditor in assessing the viability of a company.

5.3 Hypothesis 3. Company Size has no significance influence on the going concern opinion

The test shows a significance level of more than $\alpha=0.05$; $p=0.522$. Thus it can be said that the company size has no significance influence on the going concern opinion. Rejection of this hypothesis because the company size is not a benchmark in the provision of going concern opinion. Praptitorini and Januarti (2011) state that the ability of an entity to continue as going concern is always associated with the ability of management to manage.

5.4 Hypothesis 4. Leverage has no significance influence on the going concern opinion

The test shows a significance level of less than $\alpha=0.05$; $p=0.030$. Thus it can be said that the leverage has significance influence on the going concern opinion. The test show positive coefficient 1.901 indicates that the high total equity guarantee a company for not receiving going concern audit opinion. A high debt/equity generally indicates that a company has been aggressive in financing its growth with debt.

6. CONCLUSIONS

Auditors are required to issue a going concern opinion if they doubt the company’s ability to continue its operations in the next accounting period. Financial Distress, Debt Default, and Leverage are able to influence and explain the going concern opinion and the model tested is fit and worthy to be continued with, while company size is not able to influence the going concern opinion. The result of this study indicates that not all variable can influence going concern opinion. The auditors appear to focus on the client’s financial condition and the existence of other indicators of financial distress. It is advisable for the company size to improve, based on the latest data, model and technique.
Our study is subject to some limitation. We cannot directly assess the quality of an audit firm’s going concern report modification decisions, so we rely on surrogate measures (i.e., financial formulas) as an indication of the appropriateness of the decision. Additionally, a potential limitation is the selection of observation period that was just four years. So, it has not been long enough to determine the trends of issuing going concern audit opinion in the long run.

**References**


