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Abstract

This study investigates the determinants of sustainability disclosure of non-financial companies listed on the Indonesia Stock Exchange (IDX) for the period 2013-2015. Sustainability disclosure is measured using sustainability factors disclosed in the companies’ stand-alone sustainability reports. Three financial performance measures which consist of profitability, liquidity, and leverage are hypothesized to determine the disclosure of sustainability factors by sample companies with two firm characteristics, company size and industry group, are considered as control determinants. Sample of the study comprises 21 non-financial companies that consistently produced sustainability reports for the period of study, which made up 63 firm-year observations for the study. Data for the study is collected by using content analysis. Sustainability disclosure data is gathered from the companies’ sustainability reports based on a 30-point sustainability disclosure metric developed by Hannifa & Cooke (2005) from the Global Reporting Initiatives (GRI) guidelines. Whereas financial data is collected from the companies’ annual reports. The data analysis techniques used are classical assumption tests followed by hypothesis testing using multiple linear regression analysis with SPSS 23.0 for windows. The study is on-going thus the results are currently not available. Based on the theories and prior studies, however, the three independent (and control) variables are expected to be positively associated with the disclosure of sustainability factors.

Keywords: Sustainability Disclosure, Environmental Social and Governance factors, Financial Performance

Introduction

From the late 1990s, the concept of sustainability disclosure has become an important topic in business and academia, which emerged from the growing demands and expectations from the public on the company's role in society. The societal demand arises due to many environmental tragedies, social and governance issues in various parts of the world, such as Chernobyl (USSR), Minamata (Japan), Bhopal (India) and also environmental tragedy that occurred in Indonesia, such as the case of Lapindo Brantas Sidoarjo Mud Flow (Susanto and Tarigan, 2013)

In social aspects, safety and equality in the workplace remain a big challenge in many part of the world. Businesses today are obligated to ensure workplace security and labour protection as inadequate workplace conditions can lead to poverty, inequality and discrimination (Wynhoven, 2016).
A recent economic crisis has also emphasized the demand for corporate governance such as transparency and accountability. Transparency and accountability are two key steps to good corporate governance in order to ensure that management is not engage in an improper or unlawful behavior.

According to a study from KPMG (2008), the trends towards sustainability disclosure has been driven by two principle factors. First, an increasing recognition of the potential for sustainability related issues to materially affect a company's long term economic performance. Secondly, the need for the business community to appropriately respond to issues of sustainable development.

In Indonesia, sustainability disclosure began to develop since the enactment of UU No. 40 of 2007 on Limited Liability Company (Marwati (2015). The act states that social responsibility has become mandatory actions for companies as the law stated that: Limited Liability Company that currently running businesses in the field and/or concerned with natural resources needs to be responsible for social and environmental aspects. (Article 74 paragraph 1). In addition, the annual award presentation on sustainability report, which was initiated by the National Center for Sustainability Reporting (NCSR) also becomes one of the prompts of companies in disclosing their sustainable performance.

At present, sustainability disclosure is mainly guided by the Global Reporting Initiative (GRI) sustainability reporting guidelines. GRI provides a framework to guide the sustainability disclosure process and performance metrics. This results in a sustainability report that conveys disclosures on companies’ positive and negative impacts on the environment, society, and governance (Sullivan, 2016). Sustainability reports, therefore, have been increasingly produced by companies worldwide.

In line with the GRI guidelines, there are three factors commonly disclose in a sustainability report, they are environmental, social, and governance (ESG) factors, in order to meet the public expectation of companies’ transparency, accountability and sustainable performance (Umoren et.al, 2015). Sustainability disclosure helps organizations set goals, measure performance, and manage change around ESG impacts on companies’ value.

As the trends of sustainability disclosure increase, the sustainability reports have also been extensively produced. In a survey of 1,946 executives representing a wide range of industries and regions, McKinsey and Company (2010) found that more than 50 % of executives consider sustainability as very or extremely important in their business practices. In this context, sustainability reports have been serving as an essential communication tool between organizations and the stakeholders. This notion is supported by KPMG (2008) that reported nearly 80 % of the top 250 organizations listed on the Fortune Global 500 ranking (G500) issued a type of sustainability report.

On the other hand, there is also the perception that companies are producing sustainability reports primarily as part of public relation duties in order to give a good impression to the public about the social and environmental practices (Hubbard, 2008). Companies are expected to gain positive reputations by publishing the sustainability reports, which aim to respond to requests from various stakeholders, while enjoying the benefits in the form of operations, finance, and reputation (Blyth, 2005, p.29 in Lopez et al, 2007).

Along with the growing interest in sustainability reporting worldwide, there have been several researchers focusing on the determinants of sustainability disclosure. Existing studies currently provide inconsistent determinants that influence sustainability disclosure. Legendre and Coderre (2012), Ibrahim et al., (2015), Giannarakis (2014) and Frias-Aceituno et al., (2014) provide evidence that profitability has a positive relationship with sustainability disclosure. However, Wang (2016) shows that profitability is negatively association with sustainability disclosure. Furthermore, Giannarakis (2014) and Jannah (2016) suggest that financial leverage has a negative effect on sustainability disclosure.
While, Purnasiswi (2011) finds that leverage has a positive effect on sustainability disclosure.

Despite the inconclusive evidence in previous research in the global context as illustrated above, research trends on sustainability report have been gradually increased in Indonesia, along with the increasing number of companies publishing sustainability reports. Marwati (2015) and Ridho, K. T. (2015) that use ROA as a proxy for profitability find that profitability has significant effect on sustainability disclosure. However, Kusuma and Koesrindartoto (2014) suggest that ROA does not has significant effect on the disclosure. Whereas, Marwati (2015) and Widianto (2011) show that Current Ratio (CR) do not affect sustainability disclosure. This is also different from the results of a study conducted by Jannah (2016) that finds liquidity measure and current ratio have positive effects on sustainability disclosure.

The inconsistent results in the previous studies on the determinants of global sustainability disclosure, is the gap this study intends to explore. To extend the contributions made by previous research, this study operationalises several new or rarely used measures for the variables of interest. Most of previous studies have used return on asset as a proxy for profitability, in this research, however, return on equity is used as a proxy for profitability, current ratio as a proxy for liquidity, and debt to equity ratio as a proxy for leverage.

This study focuses primarily on non-financial companies listed on the Indonesia Stock Exchange for the period 2013-2015, for the following reasons. Companies such as banks, credits agencies, securities and insurance are excluded because this industrial group applies different practices and regulatory requirements in the financial performance (Marwati, 2015). Thus, including financial companies in the dataset can create bias in interpreting the results of the present study.

The period of 2013-2015 is chosen for this study because the latest GRI guidelines which is GRI-G4 guidelines started in the year 2013 and there is no recent study on the determinants of sustainability disclosure for Indonesian data for these periods.

In conclusion, this research is significant because the investigation on the effect of the determinants of sustainability disclosure using Indonesian data is still limited. This research is also expected to provide a reference for further research on the sustainability disclosure, so that promotes the sustainable development in Indonesia and helps optimize the company's responsibility to all parties. Therefore, research on the sustainability disclosure is still pivotal for further research.

The reminder of the paper is organized as follows. Section II discusses literature review, hypothesis development and theoretical framework. Section III presents research design. Section IV provides conclusion and future research.

**Literature Review, Hypothesis Development and Theoretical Framework**

**Theory**

This study employs two related theories to guide the hypothesis development and explain the result of the study. Those theories are Legitimacy theory and Signalling Theory.

Legitimacy theory states that companies should strive to ensure that their work based on the norms and frameworks that exist in the community or the environment in which the company is located, this ensures that the companies’ activities are accepted by outsiders (Deegan, 2004). Thus, Legitimacy theory encourages companies to disclose such information in a sustainability report as part of the companies’ accountability to the public. The ultimate goal is to gain public legitimacy and to manage reputational risk of the organization (Michelon, 2012). Legitimacy theory, therefore, explains why companies are disclosing their sustainability factors, which is to gain public approval of companies overall activities.
The second theory that influences sustainability disclosure is Signaling theory. Signaling theory suggests that the disclosure of information forwarded to the market can reduce information asymmetries, optimize financing expenses and increase company value (Baimian and Verrecchia, 1996). Signaling theory, therefore, explains that sustainability disclosure might contributes positively to company’s performance, as it reduces information asymmetry, thus, improve public trust and creates a positive signal. This positive reputation would enable the company to raise fund at lower cost (Elliott and Jacobson, 1994). In short, both Legitimacy theory and Signaling theory support the disclosure of sustainability factors.

**Sustainability Disclosure And Disclosure Metric**

Global Reporting Initiative (2008) defines sustainability disclosure as the practice of measuring, disclosing and being accountable to both internal and external stakeholders concerning organization's participation in achieving the United Nation’s objectives of sustainable development. As sustainability disclosure has gradually evolved, several guidelines have been enacted around the world to provide guidance and standards for the practice of sustainability disclosure. Global Reporting Initiative (GRI) is currently one of the most-used sustainability reporting guidelines, which is recognized and adopted by many organizations around the world (Borglund et al. 2010). The popularity of the GRI guidelines is a result of its well-accepted guide for collecting a standard set of data (Chen et. al., 2015). Consequently, it has been employed by many international companies in their investigation of sustainability disclosure (Ernst & Young, 2013).

According to Joseph and Taplin (2011), one of the methods of measuring the disclosure is by using content analysis, which aims to quantify the extent of the disclosure in the text, such as from annual reports or its stand-alone sustainability reports, with numerical counts that can be analyzed statistically. In this research, content analysis is used based on a disclosure metric build on the GRI reporting guidelines (Rejeb, 2016). In line with the GRI guidelines, of the three ESG factors, there are a total of 30 items that must be disclosed, which consists of 6 items of environmental aspects, 18 items for social aspects, and 6 items of governmental aspects (Rejeb, 2016).

**Company Financial Performance**

Financial performance of a company can be reflected from the company's financial ratios (Ross et al., 2004). Ross further explain that there are five dimensions of financial ratios used in measuring the financial performance of the organization. They are Asset Management Dimensions, Profitability Dimensions, Leverage Dimensions, Liquidity Dimensions, and Market Dimensions.

However, in this research profitability, leverage, and liquidity dimensions are selected as the variables hypothetically determining sustainability disclosure based on the suggestions from previous research. The following section will discuss some of this research.

**Hypothesis Development**

This section presents literature review of prior studies on the determinants of sustainability disclosure, which will be used to build the hypotheses for this present study. The review covers related International and Indonesian studies focussing on the three financial dimensions mentioned above, thus the review discusses the influence of profitability, leverage, and liquidity measures on the disclosure of sustainability factors by sample companies.

**The Effect of Profitability on Sustainability Disclosure**

Profitability measures a company’s ability to generate profits in order to increase shareholder value. In other words, the profitability shows whether and to what extent the company creates profits during certain periods. Profitability of a company is measured using profitability ratio. There are a number of ratios commonly used by researchers to measure profitability of a company, among others are Return on asset (ROA), Return on investment (ROE) and Return on equity (ROE). In this study, ROE is used as a measure of profitability of a company considering this study is a capital market research, which uses data from...
companies listed on the capital market. ROE is calculated as net profit divided by the total shareholders’ equity. This ratio measures the shareholders rate of return on their investment in the company for a given period (Kabajeh et al., 2012).

The link between ROE and sustainability disclosure has been found in a number of prior studies. Almilia (2008) show that a company that has a high level of profitability tend to disclose more information because they want to show the public and stakeholders that the company has a better level of profitability compared to other companies.

Tagesson et al. (2009) suggest that if a company is profitable, there is a positive relationship between the level of sustainability disclosure and profitability as the companies can afford the cost for disclosure. Haniffa and Cooke (2005) state that the profitable companies provide more sustainability information to legitimize their existence. However, Ho and Taylor (2007) indicate that less profitable companies tend to disclose more information regarding social and environmental disclosures to demonstrate their contribution to the public. As suggested by Legitimacy Theory and Signalling Theory, the above studies indicate that companies used sustainability disclosure to legitimise their position though positive signal emerged from the disclosure efforts. Based on this argument, the first hypothesis of the study is:

\[ H_1: \text{The company’s profitability is positively associated with the sustainability disclosure.} \]

*The Effect of Liquidity on Sustainability Disclosure*

Liquidity signifies the degree to which an asset can be quickly converted to generate cash in order to meet immediate and short-term obligations, therefore, liquidity shows the company’s financial position in terms of the amount of current assets own compares to its current liabilities. Thus, liquidity indicates the strength of the company’s financial position in terms of current assets compares to its current liabilities (Almilia and Ikka, 2007). As a result, companies with high liquidity or greater current assets than current liabilities, have the ability to pay their obligations in a timely manner due to their liquid state (Rahajeng, 2010). Liquidity connects the current assets and current liabilities that shows the security claim of the creditors if there is a failure or bankruptcy (Helfert, 1997). It is, therefore, imperative that companies’ liabilities or short-term debt obligations can be covered by current assets.

There are a number of measures commonly used by researchers to measure companies liquidity, namely: Current Ratio, Quick Ratio and Cash Ratio. This study uses current ratio as a measure of liquidity considering current ratio is the most general ratio used in predicting the risk of debt presence in the balance sheet. This ratio is calculated by dividing the current assets to current liabilities.

The relationship between companies’ liquidity and sustainability disclosure is well documented in the literature. Rahajeng, 2010 suggests that companies with high liquidity or greater current assets than current liabilities, have the ability to pay their obligations in a timely manner due to their liquid state. These types of companies receive positive impression from stakeholders and sustainability disclosure effort strengthen the company’s reputation in gaining further support from stakeholders.

A study conducted by Almilia and Ikka (2007) show that a high level of liquidity indicates the strength of the company’s financial position. Such companies tend to do a more extensive disclosure of information to outsiders to show the company’s credibility. The Almilia and Ikka (2007) study found that liquidity ratio affect sustainability disclosure. The next hypothesis for this study is formulated as below:

\[ H_2: \text{The company’s liquidity is positively associated with the sustainability disclosure.} \]
The Effect of Leverage on Sustainability Disclosure

Leverage is a measure used to determine the company’s level of debt or loan capital to the value of its equity or common stock. The view on financial leverage receive several debate in the financial literature. In one way, leverage signals a positive sign because financial community views that leverage arises when the company is unable to raise enough capital from issuing shares, thus the higher the level of debt of the company indicates high level of trust from the creditors because the company is believed to be able to meet its obligations (Setiawan, 2006). In another way, leverage signals risks. If, for example, a company’s ROA does not exceed the interest of the loan, it can greatly result in diminishing companies’ ROE. Thus the presence of financial leverage is commonly seen as companies’ potential growth and risks.

Thus, the effect of companies’ leverage position on sustainability disclosure is commonly found with inconsistent results. Companies that have high levels of leverage, are considering the need to provide disclosure of sustainability, so there will be good news about social performance of companies that can attract stakeholders to invest in companies (Nugroho and Arjowo, 2014). In line with Purnasiwi (2011) that suggests that leverage level has positive effects on sustainability disclosure. However, Andrikopoulos and Krikiani (2012) show that the companies with high levels of financial leverage tend to reduce the extent of disclosures because the preparation of voluntary disclosure is a costly. These studies suggests that some companies with high level of leverage tend to reduce the extent of sustainability disclosure in order to legitimise their financial position using borrowing for extended growth potential. Whereas some other companies with high level of leverage are showing their risky position or true lack of capacities in obtaining good financial position thus unable to use sustainability disclosure as a positive strategy. This study, however, based on the underlying theories, Legitimacy theory and Signaling theory, we predict a directional hypothesis for this study:

H3: The company’s leverage is positively associated with the sustainability disclosure

Theoretical Framework dan Research Design

Based from the hypotheses discussed above, the theoretical framework for this study can be illustrated as is shown in figure 1 below.

![Figure 1. Theoretical Framework](image)
Research Design

Sample and Data

Population of this research is all public companies listed on IDX for the period 2013-2015. To obtain research sample, this study employs purposive sampling technique as sampling procedure which involved four stages: First, all 539 companies in the population are selected as sample of the study. Second, all non-financial companies are excluded from the sample, this process resulted in 91 companies excluded from the study sample. Third, all non-financial companies that do not publish annual report during the study period are also excluded from the sample, this process gives a further 69 companies being excluded from the sample. Fourth, all non-financial companies without issuing sustainability report during the study period are further excluded from the sample, an additional 358 companies excluded from the sample. These process resulted in 21 companies as the study sample and 63 firm-year observations as all the companies will be regress in the analysis for three consecutive years. This sampling procedure is illustrated in table 1 below:

Both sustainability and financial data for this study are collected using content analysis. Sustainability disclosure data is collected through hand-pick process from the companies’ sustainability reports based a 30-point sustainability disclosure metric developed by Hannifa & Cooke (2005) from the GRI guidelines. This metric has also been applied in the study by Rajeb, W.B. (2016). Whereas financial data is also self-gathered from the companies’ annual reports. Thus all data used in this study is in the form of primary data.

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Method of Analysis

This study employs quantitative analysis using statistical technique. The sequent of quantitative analysis involved are as follows. A descriptive statistical analysis will be the first analysis to pursue, followed by classical assumption tests to determine the accuracy of the regression model. There are four classical assumption tests will be performed, namely normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. The normality test is used to assess whether the dependent variable and independent variables are normally distributed. Normality test in this study will be using Kolmogorov-Smirnov test. Multicollinearity test aims to test whether the regression model found a correlation among the independent variables. Multicollinearity in this study will be performed using the
Tolerance Value and Variance Inflation Factor (VIF). Heteroscedasticity test examines whether the regression model has unequal variance from one residual observation to the other observation (Ghozali, 2006). This study uses Scatterplot test for this purpose. Autocorrelation test is defined as the correlation between the members of a series of observations, sorted by time (as in the data row of the time) or space, as in a cross-sectional (Gujarati, 2002:201; Anuwar, 2015). In this research, the Durbin-Watson Test is used. To determine whether there is an autocorrelation, the Durbin-Watson decision table is used.

After the four classical assumption tests described above produce good results, the hypothesis testing will be performed. Following other researchers, F-Statistical Test, T-Statistical Test, Coefficient Determination using Multiple Regression Analysis will be performed to test the effect of the independent variables on the dependent variable with interval or ratio measurement scale in a linear equation. The regression equation model in this research is:

\[ SDI = \alpha + \beta_1 \text{ROE} + \beta_2 \text{CR} + \beta_3 \text{DER} + \beta_4 \text{SIZE} + \beta_5 \text{IG} + \varepsilon \]

Where
- SDI : Sustainability Disclosure Index
- \( \alpha \) : Constant
- \( \beta_1, \ldots, 5 \) : Regression Coefficients
- ROE : Return on Equity
- CR : Current Ratio
- DER : Debt to Equity Ratio
- SIZE : Company Size
- IG : Industry Group
- \( \varepsilon \) : Error terms

In addition to the main test, a number of sensitivity tests will also be performed on alternative data sets to check the robustness results in the main test. First, data will be classified based by industry group of the companies. Industry group is adopted from the Jakarta Stock Industrial Classification (JASICA) Index. Regression tests will be run on the individual industry sample. Second, data will also be classified based on company size: large, medium and small companies. Regression tests will be run on individual size. These tests will determine whether the main results persist for the alternative data sets.

Conclusion

Using primary data generated from content analysis, this study examines the relationship between financial performance measures and the companies sustainability disclosure. Three financial performance measures consisting of profitability, liquidity, and leverage are hypothesized to determine the disclosure of sustainability factors by sample companies with two firm characteristics, company size and industry group, are considered as control determinants. Sample of the study comprises which made up 63 firm-year observations of 21 non-financial companies that consistently produced sustainability reports for the period of study. Data for the study is collected using content analysis on companies’ sustainability reports to gather sustainability disclosure data and companies’ annual reports to collect financial data. The data is analyzed using multiple linear regression. The study is currently taking place thus the results are not available at this stage. Consistent with the theories and prior studies, the three independent variables of the study namely profitability, liquidity, and leverage and two control variables namely company size and industry group, are expected to be positive and significant.

This study contributes to the debate on determinants of sustainability disclosure in two folds. Based on our knowledge, this study is the first study on Indonesian data that uses content analysis to gather environmental, social and governance factors on a 30-point sustainability disclosure metric developed from the GRI disclosure index, this is the main
contribution of the study. This study also uses several rarely used proxies for financial performance measures, thus enriches the literature in the field of study.

Nevertheless, we acknowledge that this study has a limitation common to content analysis data, that the analysis is limited to the data available on a stand-alone sustainability report, thus it does not reflect companies’ disclosure in other channels of sustainability disclosure. In addition, this study is also limited in scope to a three-year period and three independent variables. This study, therefore, can be extended in the scope of the analysis.

References


