The effect of firm size, media exposure and industry sensitivity to corporate social responsibility disclosure and its impact on investor reaction

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Abstract

The purpose of this study is to examine the effect of firm size, media exposure and industry sensitivity to corporate social responsibility disclosure and its impact on investor reaction. This study population is a company listed on Indonesian Stock Exchange. Samples were taken by using purposive sampling method in order to obtain a sample of 53 companies. Data were analysed using partial least squares path modelling. The result reveals that firm size, media exposure and industry sensitivity have a significant effect on corporate social responsibility disclosure; firms size, media exposure and industry sensitivity does not directly effect on investor reaction; corporate social responsibility disclosure directly effect on investor reaction and mediates relationship between firm size, media exposure, industry sensitivity and investor reaction.

Keywords: Firm size, media exposure, industry sensitivity, corporate social responsibility disclosure, investor reaction

1. INTRODUCTION

Over the last few decades there has been an intense escalation in public awareness about the role of corporations in society. There are many firms which have been contributed in economic and technological development were criticized for creating social problems. Issues such as pollution, waste, resource depletion, product quality and safety, the rights and status of workers, and the power of large corporations become the focus of increasing attention and concern (Reverte, 2009).

As a result of uncovered wrongdoings done by the company, the company is encouraged to pay more attention to the community and the environment (Purwanto, 2011). The company should not be solely oriented to the interests of shareholders through profit achievement, but also the interests of other stakeholders (Freeman, 1984 in Zhang, 2013). A corporate social responsibility is a form of corporate awareness and responsibility (Agus, 2011).

Company disclosure is important to obtain legitimacy in response to public pressure (Guthrie & Parker, 1989). The level of social disclosure are closely related to public pressure because of the disclosure is used to respond the exposure of social environment (Patten, 1991). Public pressure is proxied by firm size (Gutrie & Parker, 1989; Patten, 1991; Adler & Milne, 1997; Reverte, 2009), media exposure (Adler & Milne, 1997; Patten, 2002;

Large companies are often have more impact in society, that makes large companies tend to receive more attention from the public and put under a greater public pressure to demonstrate social responsibility (Cowen, Ferrari and Parker, 1987). Small companies tend to have a higher risk than large companies. Therefore, investors in small companies not interested in doing stock trading, contrast to the large companies, which many investors trade stocks, it resulted in the market reaction is more common in large companies than small firms.

Media exposure has an impact on the public opinion and help generate public pressure (Cornier & Magnan, 2003; Brammer & Pavellin, 2004; Michelon, 2011). Bansal (2005) showed that more media exposure will increase the visibility of the company, making the company become the object of attention and public scrutiny. Company relies on the news broadcasted by the media and from processed information from the investor. Media was not able to immediately decide public attitudes and opinions, but media were able to indirectly influence the audience perspective and community decisions by providing specific information, consequently will change public attention to some fact and opinion (Feng, Jun & Wei, 2013).

Companies with higher environmental impacts are found to disclose social and environmental information more than others because of there are greater public pressure against the company (Patten, 1991; Adams, Hill and Roberts, 1998). Environment-sensitive industries would be more transparent about their environmental strategies and spend more resources in environmental management to gain community trust, and it will surely be appreciated by investors. Coincide with the escalating of public trust in the company, it is expected that it will induce enhancement in prices and sales volume of shares (Zuhroh & Sukmawati, 2003).

Corporate social responsibility (CSR) is a phenomenon of corporate strategy that accommodates the needs and interests of the stakeholders. Hence, stakeholders need to know any information about CSR. Investors start applying CSR as a factor in the investment decision making (Gardina, Nining & Ririn, 2014). Investors will see CSR activities as a reference to assess the sustainability of the company. As in case the company does not carry out CSR program, stakeholders could questioned the company about their social responsibility (Rita, et al, 2008). Furthermore, investors will practically assume that the company is unable to maintain the sustainability of its business, it will definitely drive out the investors and they will not be interested to invest in the company. Investors tend to invest in companies that carry out social responsibility activities consistently, which will make the company amenable in public (Megawati & Christiawan, 2011).

2. LITERATURE REVIEW

Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Suchman,1995; Zhang,2013). Companies must be able to adapt to the system which applied to the community value (Rita, et al, 2008). Legitimacy theory emphasizes the importance of corporate disclosure strategies, including social corporate report. This theory has become one of the most cited theories within the social and environmental accounting area. Corporate social responsibility reporting is intended to influence stakeholders and the public perception about the legitimacy of the organization by providing information that will lead the company to pay attention to social responsibility (Hooghiemstra, 2000).

Another theory underlying social disclosure is stakeholder theory. Stakeholder theory states that the company objectives not solely oriented to intensify value of the owner, but also to other parties who interested in the company (Lawrence & Weber, 2011). CSR approach argued that the company should strive to meet the demands of several groups of stakeholders. From a managerial perspective, CSR is a management tool in managing information to meet the needs of various stakeholders.

Large companies tend to do more and also have a greater impact on society, which is eventually received more attention from the public and are under greater public pressure to implementing social responsibility (Patten, 1991; Cowen, Ferreri & Parker, 1987). Large companies are expected to reveal a broader CSR information to describe the company concern, thus legitimizing the existence of the company. Belkaoui & Karpik (1989), Patten (1991), Hackston & Milne (1996), Adler & Milne (1997), Adams, Hill & Roberts (1998), Sembiring (2003), Reverte, (2009), Wang, Song & Yao (2013) has provided empirical evidence that the firm size has a significant relationship with the level of social disclosure.
Bansal (2005) showed that more media exposure increase the visibility of the company, making the company become the object of attention and public scrutiny. If a company has always been under intense public scrutiny it would build a positive image to the public (Roitto, 2013). According to Simon (1992) in Wang, Song & Yao (2013) that media as a source of information plays an important role in influencing the decisions of stakeholders. Reverte (2009); Wang, Song & Yao (2013); Ekowati, Prasetyo & Anis (2014) has provided empirical evidence that media exposure has a significant relationship with corporate social responsibility disclosure.

Industries that produce hazardous materials such as chemicals that can pollute the environment have a higher risk of social pressure. Bowman & Haire, 1975; Cowen, Ferreri & Parker, 1987; Ness & Mirza, 1991; Gao, 2009 in Wang, Song & Yao, 2013 noted that the way the company dealing with the issues of social pressure is vary across the industries. Companies with greater environmental impacts tend to disclose social and environmental information more than others (Patten, 1991; Adams, Hill & Roberts, 1998). Some empirical evidence to explain that there is a significant relationship between the sensitivity of industrial and corporate social responsibility disclosure (Reverte, 2009; Kurniawan & Pangesti, 2011; Wang, Song & Yao, 2013).

The size of the company would affect its ability to bear risks that may arise as a result of various situation faced by the company. In the case of stock trading on the stock exchange, shares of large companies traded more than shares of small companies, so that investors prefer to trade the stock of large companies than small company stocks. Titik (2004) the prior research gives enough guidance to involve firm size as an independent variable to be use in linear regression in determining the investor reaction.

Mass media can predict the movement of stock market activity (Tetlock, 2007). Investors should use all information available for decision making on the basis of rationality and efficiency. The effect of media exposure to investor reaction has been investigated by Shantikumar (2009) found that local investors react more strongly than non-local investors to articles published in regional newspapers.

Sensitive industries would be more transparent about their environmental strategies and spend a lot of resources in environmental management because of the political cost, regulatory and stakeholders pressure are relatively higher and more frequent environmental incidents (Pattern, 2002; Cormier & Magnan, 2003). Furthermore transparency in environmental management will gain public confidence, which in turn will increase the price and trading volume (Zuhroh & Sukmawati, 2003).

The information is useful if the information can lead the investor to conduct a transaction in the capital market. Investor reaction is reflected by an increase in stock price and trading volume activity (Zuhroh & Sukmawati, 2003; Emilia & Cahyandito, 2006; Rima, 2008). Investors began to use information about corporate social responsibility disclosure as a factor in making investment decisions (Gardina, Ninings & Ririn, 2014). Investors will pay attention to social responsibility activities as a reference to assess the potential sustainability of the company. Zuhroh and Sukmawati (2003) found empirical evidence that social disclosure in the annual report of the public companies affect the trading volume for high profile categories.

Large companies have a huge impact on society thus receive more attention from the public and are under greater public pressure on social responsibility (Cowen, Ferreri & Parker, 1987; Patten, 1991). Therefore, it is expected to disclose information about social responsibility to gain legitimacy for the existence of the company in society. Companies who honestly express their social responsibilities will have a positive reaction from investor who marked increase in the stock trading volume (Rita, et al, 2008).

If a company is under intense public scrutiny it would appear an attempt to build a positive image to the public (Roitto, 2013). Media coverage has an impact on public opinion and help generate public pressure (Cormier & Magnan, 2003; Brammer & Pavellin 2004, Arshad & Vakhidulla, 2011). Bansal (2005) argues that more media exposure increase the visibility of the company, making the company become the object of attention and public scrutiny. The media has an important role in the movement of social mobilization, such as interested group in the environment (Pattern, 2002). Companies that are considered successful in the implementing of social responsibility will be considered by investors (Rita, et al, 2008; Zuhroh & Sukmawati, 2003).

Industries that are more likely to cause damage to the environment will get higher social pressure (Roitto, 2013). Industries with high pollution such as chemical industry, mining and mineral were more likely to disclose more environmental information (Joshi, et al, 2011). If companies disclose social information associated with the theory of legitimacy, this is done to legitimize it operations and reduce the pressure of social and environmental
activists (Sari, 2012). Furthermore, enhance public confidence in the company and in turn is expected to increase the price and trading volume (Zuhroh & Sukmawati, 2003).

3. METHODS

3.1 Sample Design and Data Collection

The 53 companies listed on Indonesia Stock Exchange for the period 2012 to 2013 were selected by purposive sampling method with the following criteria: a. companies disclose corporate social responsibility in the annual report for the period 2012 to 2013; b. companies are exposed in SWA Magazine, Bisnis Indonesia, Kompas, Tempo, Republika, Warta Ekonomi and Sindonews for the period 2012 to 2013.

3.2 Measurement of variables

3.2.1 Corporate Social Responsibility Disclosure

Corporate social responsibility disclosure is the disclosure of all information relate to social responsibility activities that have been implemented by companies. CSR disclosure was measured by Corporate Social Responsibility Disclosure Index (CSRDI) which refers Global Report Initiatives (GRI) indicators. GRI indicators consist of three focus disclosure, namely economic, environmental and social as a basis of sustainability reporting. The GRI indicators are international rules that have been recognized by the companies in the world. CSRDI measurement refers to the study by Nurkhin (2009), which uses content analysis to measure the variety of CSRDI. CSRDI formula is as follows:

\[ \frac{\sum X_{ij} \text{CSRDI}_j}{79} \]

Notes:
CSRDI\(_j\): Corporate Social Responsibility Disclosure Index companies \(j\).

3.2.2 Firm Size

The size of a company depends on a number of factors, such as gross receipts, number of workers and total assets. The size of a company in this study was measured by total assets (Titik, 2004; Rita, et al, 2013). Total assets reflect the magnitude of the resources owned by the company. Total assets can better represent the company’s assets compared to gross receipt and number of workers.

3.2.3 Media Exposure

Media exposure was measured by the number of articles published in newspapers and magazines, i.e., SWA magazine, Bisnis Indonesia, Kompas, Tempo, Republika, Warta Ekonomi, Sindonews for the period 1 January 2012 to 31 December 2013. The Bisnis Indonesia, Kompas, and Republika has the largest circulation of any daily newspaper in Indonesia.

3.2.4 Industry Sensitivity

The Industry is classified into two groups, namely the sensitively industry and non-sensitively industry. Industry sensitivity are measured by a dummy variable, 1 for sensitively industry and 0 for non-sensitively industry.

3.2.5 Investor Reaction

Investor reaction is measured by Trading Volume Activity (TVA). The trading volume activity is the ratio between the number of shares traded at a certain time and the number of shares outstanding at any given time (Husnan, 2009; p.267). Trading volume activity can reflect all the activities of investors in the capital market.

\[ \text{TVA}_{jt} = \frac{\text{number of shares traded at time } t}{\text{number of shares outstanding at the time } jt} \]

Observation of the investor reaction using 11-day time period, the day -5 to +5 days date of publication of annual report.
3.3 DATA ANALYSIS

The data gathered were subsequently analysed using the partial least squares path modelling (PLS-SEM) approach to structural equation modelling, is a component-based estimation procedure different from the covariance-based structural equation modelling approach. Partial least squares path modelling can work efficiency with the small sample size and complex model. If the model is formed with intervening variable, the appropriate data analysis technique is the path analysis. Path analysis using SmartPLS for observed variable, the validity and reliability test is not required, thus directly carried out the structural model estimation (Hengky & Ghozali, 2012, p.314). The procedure developed by Sobel (1982) used to test the indirect effect known as Sobel test. Sobel test formula as follow:

$$S_{ab} = \sqrt{(b^2S_a^2 + a^2S_b^2 + S_a^2S_b^2)}$$

t-statistic indirect effect can be calculated by the following formula:

$$t = \frac{ab}{S_{ab}}$$

4. RESULTS AND DISCUSSION

4.1. Descriptive Analysis

Overall descriptions of research variables include the maximum, minimum, and standard deviation as shown in Table 1 below:

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm size</td>
<td>2.076.348</td>
<td>733.099.762</td>
<td>141.416.733</td>
</tr>
<tr>
<td>Media exposure</td>
<td>1</td>
<td>17</td>
<td>3.7976</td>
</tr>
<tr>
<td>Industry sensitivity</td>
<td>0</td>
<td>1</td>
<td>0.4870</td>
</tr>
<tr>
<td>CSR disclosure</td>
<td>0.1392</td>
<td>0.7089</td>
<td>0.1267</td>
</tr>
<tr>
<td>Investor reaction</td>
<td>0.0133</td>
<td>0.7381</td>
<td>0.1110</td>
</tr>
</tbody>
</table>

Table 1 above shows that the size of the company has a minimum value 2.076.348, maximum value 733.099.762 and standard deviation 141.416.733. This data reveal that the total asset of the company which is the smallest is 2.076.348, while the largest value of total assets is 733.099.762, which means that there are considerable differences between large and small companies so that the standard deviation is large.

Media exposure has a minimum value of 1 and a maximum value of 17 and a standard deviation of 3.7976. This reveals that during the years 2012 to 2013, CSR activities undertaken by the company in the media exposure at least 1 time and at most 17 times.

CSR disclosure has a minimum value of 0.1392 and maximum value of 0.7089 and a standard deviation of 0.1267. This data reveal that there are still companies who report social responsibility activities in its annual report only 13.92% of the 79 items of disclosure.

Investor reaction has a minimum value of 0.0133 and maximum value 0.7381 and a standard deviation of 0.1110. This condition reveal that when the company reported a slight social responsibility activities in its annual report around the date of publication of the annual report that five days before and five days after the publication date less get a response by investors who marked small volume of stock trading.

4.2. Results

Simultaneously testing the effect of exogenous variables (X) and mediation (M) on endogenous variables (Y) are as follows:
Table 2. Path coefficients simultaneous testing variables exogenous, mediation and endogenous variables

<table>
<thead>
<tr>
<th>Path Coefficient</th>
<th>Original Sample (O)</th>
<th>Sample Mean (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>Standard Error (STERR)</th>
<th>T Statistics (O/STERR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSRD -&gt; Investor reaction</td>
<td>0.2118</td>
<td>0.2012</td>
<td>0.0833</td>
<td>0.0833</td>
<td>2.0501</td>
</tr>
<tr>
<td>Media Exposure -&gt; CSRD</td>
<td>0.2845</td>
<td>0.2774</td>
<td>0.0817</td>
<td>0.0817</td>
<td>3.4829</td>
</tr>
<tr>
<td>Media exposure -&gt; Investor reaction</td>
<td>-0.077</td>
<td>-0.1027</td>
<td>0.1481</td>
<td>0.1481</td>
<td>0.5199</td>
</tr>
<tr>
<td>Industry sensitivity -&gt; CSRD</td>
<td>0.4991</td>
<td>0.493</td>
<td>0.0768</td>
<td>0.0768</td>
<td>6.4995</td>
</tr>
<tr>
<td>Industry sensitivity -&gt; Investor reaction</td>
<td>0.1427</td>
<td>0.1361</td>
<td>0.0799</td>
<td>0.0799</td>
<td>1.7848</td>
</tr>
<tr>
<td>Firm size -&gt; CSRD</td>
<td>0.1998</td>
<td>0.1951</td>
<td>0.0504</td>
<td>0.0504</td>
<td>2.069</td>
</tr>
<tr>
<td>Firm size -&gt; investor reaction</td>
<td>0.1618</td>
<td>0.169</td>
<td>0.1138</td>
<td>0.1138</td>
<td>1.4215</td>
</tr>
</tbody>
</table>

Table 2 above reveals that the size of the company, media exposure, and the sensitivity of the industry significantly affects social responsibility disclosure respectively with t-statistics value 2.069; 3.4829; 6.4995 greater than 1.96, otherwise the size of the company, media exposure, and the sensitivity of the industry does not affect the investors’ reaction respectively with t-statistics value 1.4215; 0.5199; 1.7848 smaller than 1.96. Corporate social responsibility disclosure significantly affects investors’ reaction with t-statistic values 2.0501>1.96

To test the indirectly effect using a statistical test called Sobel test indicated that corporate social responsibility disclosure mediate the relationship between firm size and investors’ reaction; media exposure and investors’ reaction; sensitivity of the industry and investors’ reaction respectively by 2.0935; 2.0003; 2.3439 greater than 1.96

As shown in Table 3 below the R-square value to social responsibility disclosure and investor reaction respectively by 0.2827 and 0.0942

Table 3 R Square value

<table>
<thead>
<tr>
<th>R Square</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR disclosure</td>
<td>0.2827</td>
</tr>
<tr>
<td>Media exposure</td>
<td>0</td>
</tr>
<tr>
<td>Investor reaction</td>
<td>0.0942</td>
</tr>
<tr>
<td>Industry sensitivity</td>
<td>0</td>
</tr>
<tr>
<td>Firm size</td>
<td>0</td>
</tr>
</tbody>
</table>

5. CONCLUSIONS AND LIMITATIONS

This paper presents the results of a study that investigates the effect of firm size, media exposure, industry sensitivity to corporate social responsibility disclosure and its impact on investor reaction. The findings concluded that the size of the company, media exposure, and the sensitivity of the industry significantly affects social responsibility disclosure, it means the larger the company will express wider social responsibility, companies increasingly severe public pressure through the media exposure will make disclosure of wider social responsibility, increasingly sensitive industry will make disclosure of wider social responsibility.

Otherwise the size of the company, media exposure, and the sensitivity of the industry does not affect the investors’ reaction, it means that the size of the company, media exposure, and the sensitivity of the industry does not become a factor that should be considered investor in making an investment decision. Corporate social responsibility disclosure significantly affects investors’ reaction stated that the issue of disclosure of social responsibility is an important factor for investors to manage their investments.

Furthermore, that corporate social responsibility disclosure mediate the relationship between firm size and investors’ reaction; media exposure and investors’ reaction; sensitivity of the industry and investors’ reaction, thus it can be concluded that the disclosure of social responsibility has become an important issue for the company to preserve the survival of the company. The R-square value to social responsibility disclosure and investor reaction respectively by 28.27% and 9.42% indicates that there are many other factors that can affect the social responsibility disclosure and investor reaction such as community lobby, pressure group, social and political activist groups, etc.

The implications of this research for the company is to change the paradigm of thought the leader of the company towards corporate social responsibility to stakeholders that companies are no longer faced with the responsibility in favour of the single bottom line.
This present study has two limitations. First, using media exposure as a proxy for public pressure may not have been fully fit, but there are still other forms of public pressure as community lobby and pressure groups that can represent public pressure. A second limitation of the present study was not able to answer the problem of the low disclosure of corporate social responsibility.

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472