Eurasian Journal of Business and Management, 7(1), 2019, 1-10
DOI: 10.15604/ejbm.2019.07.01.001

EURASIAN JOURNAL OF BUSINESS AND MANAGEMENT

www.eurasianpublications.com

THE INFORMATION ASYMMETRY AND CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE

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Abstract

CSR become one of the highlighted activities, aligned with the requirement to adopt the interest of stakeholders. This study aims to search whether the earnestness of companies to manage CSR as disclosed in their sustainability reporting reduces information asymmetry. The sample consists of the companies that have published sustainability reporting for the period 2008-2014 and listed in Indonesia Stock Exchange. The finding of this research are as follow: (1) unlike the previous research that found a reducing of information asymmetry after the issuing of sustainability reporting, this study finds the opposite, that the higher the disclosure of CSR activities, the wider the spread, (2) further, this study finds that the companies which have a negative earning tend to disclose more CSR information (3) The presence of institutional investors representing well-informed investors help the company to ensure the reliability of CSR activity information delivered through Sustainability Reporting.

Keywords: Bid-Ask Spread, Information Asymmetry, Sustainability Reporting

1. Introduction

Companies with a high CSR rating provide broader disclosure as a form of their responsibility to stakeholders (Gelb and Strawser, 2001). Cho *et al.* (2013) stated that CSR activities motivate companies to provide public disclosure. CSR disclosure is used as a tool by companies in communicating about the attitudes, policies or actions of the company to stakeholders including the community as a whole on the impact of the company's operational activities on society and the environment (Setyorini and Ishak, 2012; Mathews, 1995; Campbell and Shiller, 1988). Disclosures regarding CSR aspects are not found in the company's financial statements (Jensen and Berg, 2011). Thus, CSR disclosures complement financial (economic) disclosures and help demonstrate the company's efforts and commitment in increasing transparency to investors regarding the company's performance and risk management (Dhaliwal *et al.* 2011; Martinez *et al.* 2015). The higher information disclosed by the company will show the increasing information transparency (Fung, 2014) and will reduce information asymmetry (Diamond and Verrecchia, 1991; Reverte, 2011; Cui *et al.* 2012, 2018; Cho *et al.* 2013; Lopatta *et al.* 2015).

Although there is some evidence that CSR disclosure can reduce information asymmetry, research on the effect of CSR on information asymmetry has not been done much. Some studies have found a significant negative relationship between CSR and information asymmetry among them (Cui *et al.* 2012; Cho *et al.* 2013; Lopatta *et al.* 2015; Lu and Chueh, 2015; Semenescu and

Curmei, 2015; Cui *et al.* 2018; Diebecker and Sommer, 2017). Many prior studies have investigated the direct relationship between CSR and financial performance (Alexander and Buchholz, 1978; Aupperle *et al.* 1985; Guidry and Patten 2010; Hermawan and Mulyawan 2014; Firli and Akbar, 2016).

In Indonesia, CSR and information asymmetry research has also not been systematically summarized, because there have not been many studies exploring CSR disclosure to information asymmetry. Existing researches have focused on the motivation of implementing CSR, the relationship of CSR with performance, and how consumers respond to disclosure of CSR activities (Hidayati and Murni, 2009; Dewi *et al.* 2014; Hermawan and Mulyawan, 2014). This study fills the gap in previous empirical studies, so that more empirical evidence can be obtained regarding CSR, which is theoretically predicted to contribute to the reduction of information asymmetry (Cui *et al.* 2012; Cho *et al.* 2013; Lopatta *et al.* 2015; Lu and Chueh, 2015; Semenescu and Curmei, 2015; Cui *et al.* 2018; Diebecker and Sommer, 2017). Second, this study contributes to broadening previous empirical evidence about a decline in information asymmetry on CSR activities delivered in the Sustainability Reporting.

2. Literature Review

2.1. Corporate Social Responsibility

Stakeholder theory states that the survival and success of a company depend on fulfilling economic and non-economic (social and environmental) goals through meeting the interests of stakeholders (Clarkson, 1995; Pirsch *et al*. 2007; Laplume *et al.* 2008). Stakeholders theory is based on the idea that outside investors, several people or groups have rights or interests related to company actions and decisions (Clarkson, 1995; Branco and Rodrigues, 2007). When companies make strategic decisions, companies must care about the interests of all stakeholders.

CSR is an implementation of Stakeholder theory, representing groups or people that must be considered in the company's business activities (Carroll, 1991; Branco and Rodrigues, 2007; Omran and Ramdhony, 2015). The company is expected to be responsible not only to investors but to all parties by helping resolve social and environmental problems caused by the company (Elijido-Ten, 2007). CSR implies that companies strive to achieve economic performance by considering the social and environmental impacts of their actions on each entity that may be directly or indirectly influenced by the company going forward (Cormier *et al*. 2011; Lu and Chueh, 2015). Van Marrewijk (2003) and Joseph (2009) define CSR as an activity that reflects the company's moral responsibility as a whole for the impact of the company's operational activities on society and environment. In social terms related to employees, human rights, society, and product responsibility (Taskin, 2015). Concerning the environment, it shows how a company pays attention to environmental impacts and through company actions or initiatives to minimize ecological impacts, such as waste management, recycling etc. (Saleh, 2009).

CSR relates to phenomena such as transparency and sustainability report (Van Marrewijk, 2003). Companies with high CSR performance are expected to be able to disclose broader non-financial information, thereby increase the transparency of information for investors (Dhaliwal *et al.* 2011; Martinez *et al.* 2015). In Indonesia, according to BAPEPAM-LK Regulation XK6 concerning Submission of Annual Report of Issuers or Public Companies in 2012, companies have to disclose information on CSR performance in annual reports or separate reports, such as sustainability reports or reports on corporate social responsibility delivered together with an annual report to BAPEPAM.

2.2. Information Asymmetry

Information asymmetry describes a situation where one party has more information (Nestorowicz, 2014; Martinez *et al.* 2015) and does not pass it on to others (Boujelbene and Besbes, 2012). Internal parties, such as management and board of director members (BoD) have more advantages than external stakeholders regard ing information about company's activities, revenue, events or company decisions that may affect stock prices and performance company in the future (Lopatta *et al.* 2015; Liu *et al.* 2013). Investors need clear information to provide an assessment of the real company (Scordis *et al.* 2008).

When the level of disclosure is inadequate, those who feel they have inadequate information such as investors will protect themselves by giving prices that are lower than the actual price or refusing to do transactions that ultimately lead to an increase in bid-ask spreads (Dhaliwal *et al.* 2011; Thorne *et al.* 2014). This is in line with what Akerlof (1970) put forward that the information asymmetry phenomenon causes a good car to be valued as much as a lemon car because of the widening gap with the real information.

This study uses the bid-ask spread to measure information asymmetry, referring to Cormier *et al.* (2011), Cho *et al.* (2013), Hung *et al.* (2013), Lu and Chueh (2015), Cui *et al.* (2018), Diebecker and Sommer (2017). Bid-ask spread shows the difference between the prices offered at the requested price. The wider the spread shows, the higher information asymmetry (Diebecker and Sommer, 2017).

2.3. Hypothesis Development

CSR activities as the manifestation of the Stakeholder Theory (Carroll, 1991; Branco and Rodrigues, 2007), where the company seeks to accommodate the interests of all stakeholders (Elijido-Ten, 2007). This encourages companies to provide disclosures on CSR activities (Joseph, 2009; Cormier *et al.* 2011; Cho *et al.* 2013; Diebecker and Sommer, 2017). The company's action to provide CSR disclosure is a signal delivered to outside parties that the company is a good company (Mahoney, 2012; Thorne *et al.* 2014). The company does not only strive to achieve economic performance but is also morally responsible for all parties (Cormier *et al.* 2011; Lu and Chueh, 2015). CSR disclosure increases the availability of information for investors (Su *et al.* 2014; Martinez *et al.* 2015).

Higher CSR disclosures will provide additional non-financial information to increase information transparency (Liu *et al.* 2013; Cui *et al.* 2018). This will lead to a decrease in information asymmetry (Diamond and Verrecchia, 1991; Reverte, 2011; Cui *et al.* 2012, 2018; Cho *et al.* 2013; Lopatta *et al.* 2015). With the increasing amount of information, investors are expected to be able to provide an assessment as expected by the company (Kirmani and Rao, 2000; Scordis *et al.* 2008; Dhaliwal *et al.* 2011; Mahoney 2012; Su *et al.* 2014). Investors who have more information about the condition of the company will set a bargaining price that is close to the requested price or in the ask that is approaching the bid. This will then cause the difference between the bid and ask to narrow the bid-ask spread (Akerlof, 1970; Greenstein and Sami, 1994; Cormier *et al.* 2011).

Previous research consistently stated that Corporate Social Responsibility (CSR) affects information asymmetry. Cormier *et al.* (2011) with a sample of large Canadian companies in 2005, found that social and environmental disclosure reduced information asymmetry, as reflected in the volatility of stock prices and lower bid-ask spreads. Lopatta *et al.* (2015), Cui *et al.* (2012, 2018) and Cho *et al.* (2013) researched US companies to find consistent results that there is an inverse relationship between CSR involvement and the level of information asymmetry.

Similar results were expressed in Hung *et al.* (2013), and Liu *et al.* (2013) who researched companies in China found that CSR can play the same role as financial disclosure in promoting stock market transparency and then affecting investor behavior. With CSR reporting can cause a decrease in information asymmetry. In Indonesia, Hapsoro and Zidni (2015) conducted a study of 167 high-profile companies listed on the Indonesia Stock Exchange (IDX) found that overall disclosures related to CSR performance had a negative and significant relationship to the bid-ask spread. Based on the explanation above and previous research studies, the hypothesis proposed in this study are:

H_1: The level of CSR disclosure hurts information asymmetry as measured by the bid-ask spread.

3. Research Methodology

This study examines the information presented by the company through CSR disclosures that are reported separately in sustainability reporting. This study includes some control variables such as leverage, negative earnings, liquidity ratios and the proportion of institutional ownership that is a proxy of investors who are well-informed, to test the hypothesis

$$SPREAD = \alpha + \beta_1 TCSR_{i,t-1} + \beta_2 LEV_{i,t-1} + \beta_3 LABNEG_{i,t-1} + \beta_4 LIKUID_{i,t-1} + \beta_5 KINST_{i,t-1} + \varepsilon \quad (1)$$

where:
$SPREAD_{i,t}$ = the average of the bid and ask spread during the stock trading period for the firm *i* in period i,t
$TCSR_{i,t-1}$ = the level of CSR disclosure form the firm i in period $_{t\text{-}1}$
$LEV_{i,t-1}$ = company lever for the firm *i* in period $_{t\text{-}1}$
$LABNEG_{i,t-1}$= negative earning of firm *i* in period $_{t\text{-}1}$
$LIKUID_{i,t-1}$ = liquidity ratio for the firm *i* in period $_{t\text{-}1}$
$KINST_{i,t-1}$ = institutional ownership of the firm *i* in period $_{t\text{-}1}$

3.1. Variable Operationalization
3.1.1. Bid-Ask Spread (SPREAD)

Bid-Ask Spread is a proxy of information asymmetry. This measurement refers to Cormier *et al.* 2011), Cho *et al*. (2013), Hung *et al.* (2013), Hapsoro and Zidni (2015), Lu and Chueh (2015), Cui *et al.* (2018), Diebecker and Sommer (2017). SPREAd is obtained from the spread at the end of the day divided by the average price of the last bid and ask. Daily spreads are then summed up and divided by the number of trading days for the annual spread. The formula for calculating SPREAD is as follow:

$$SPREAD_i = \frac{\sum_i^n \frac{s_{i,t}}{\frac{BID_{i,t} + ASK_{i,t}}{2}}}{n} \quad (2)$$

where:
$SPREAD_i$ = Average bid and ask difference during the stock trading period i
$S_{i,t}$ = Difference between last bid and ask on day t of stock i
$BID_{i,t}$ = Last price offered on day t of stock i
$ASK_{i,t}$ = The last price requested on day t of stock i
n = Number of trading days in a year

3.1.2. Corporate Social Responsibility (TCSR)

The level of disclosure of Corporate Social Responsibility (TCSR) shows how much disclosure of CSR activities carried out by the company through sustainability report (SR). The assessment uses the Global Reporting Initiative (GRI) reference, both version 3.0, 3.1, or 4.0 which are core options, following the references used by each company. If the company discloses the criteria in the GRI, then it will be given a score of 1, if not disclosed then given a score of 0. The score is then summed and divided by the total GRI criteria. The total criteria for GRI version 3.0 are 79 criteria, GRI version 3.1 is 84 criteria, while GRI version 4.0 with core options is 91 criteria. The GRI measurement index is also used by many previous studies such as Guidry and Patten (2010), Najah and Jarboui (2013), Hapsoro and Zidni (2015), and Taskin (2015).

$$TCSR = \frac{\Sigma \text{company disclosure}}{\Sigma \textit{disclosure as required by } \text{GRI}} \quad (3)$$

3.1.3. Leverage (LEV)

Leverage is measured by dividing total debt with total assets, such as Ryan (1996), Cormier *et al.* (2011), Dhaliwal *et al.* (2011), Lopatta *et al.* (2015), and Habbash (2016). Debt is an obligation due to the influx of funds into the company, such as loans.

3.1.4. Negative earning (LABNEG)

Negative earning is part of the company's risk. Negative profit indicates a loss in the company's operations (Hayn, 1995) is determined when the company's profit after tax shows a negative value. This study uses a dummy variable if the company loses the value of 1, and if it does not experience a loss, it is given a value of 0.

3.1.5. Institutional Investors (KINST)

The number of institutional investors is a proxy of investors who have greater information access to the company, measured by the proportion of share ownership by institutional investors. Institutional investors are considered to have more information than individual investors.

3.1.6. Liquidity (LIKUID)

The level of liquidity shows the level of short-term risk of a company, as measured by the portion of current liabilities divided by total current assets.

3.2. Samples

This study assesses CSR disclosures reported by companies through separate reports, known as sustainability reporting. The reason for not using CSR disclosures through annual reports is because companies that individually convey information on CSR activities separately show a high commitment to social and environmental responsibility.

The sample selection in this study follows a purposive sampling technique, where the sample is selected based on the following criteria: (1) the company publishes sustainability reporting, (2) is registered in the GRI database in 2008 - 2014, (3) has been listed on the Exchange Indonesian Securities, and (3) have the data needed to calculate SPREAD. There were 131 observations from 34 companies that met the criteria as research samples.

4. Results

The number of sustainability reporting (SR) published from 2008 to 2014, as many as 250 reports, but as many as 80 reports were published by companies that are not yet listed on the IDX. Besides, four reports do not have a bid and ask data, so they are excluded from the sample. There were 131 SR reports published by 34 companies, which met the requirements as samples. The sample profile is as follows.

On average, companies convey CSR disclosures that are quite high, namely as much as 58.7% of the standard criteria set by the GRI version. Even some companies express fully under GRI, because of the maximum value of 1. SPREAD which represents the existence of information asymmetry from the sample company has a relatively narrow average.

The results of the hypothesis are presented in Table 1, showing that high CSR performance represented by the score of CSR implementation (TCSR) has a positive and significant effect on SPREAD. The higher the TCSR is directly proportional to the increase in SPREAD. Investors have not seen that the score of CSR disclosure is high as an effort to distribute information as widely as possible to the public.

Table 1. Testing hypotheses using 131 observations
Dependent variable: SPREAD

	Coefficient		*t-ratio*	*p-value*
TCSR	0.00332		4.175	<0.0001
LEV	0.00364		4.060	<0.0001
LABNEG	0.00827		4.706	<0.0001
LIKUID	−0.00110		−0.903	0.3682
KINST	−0.00054		−2.890	0.0045
R-squared	0.28185	Adjt.R-squared		0.25313
F(5, 125)	9.81210	P-value(F)		6.27e-08

Following the results of Cho *et al.* (2013) which proves that there is an institutional role of investors in enlarging SPREAD, this study tries to integrate CSR variables and institutional investors (Table 2). The test results show that the existence of institutional investors narrows SPREAD, contrary to previous research. This can be seen from the negative and significant KINST*TCSR interaction coefficient. Institutional investors have high confidence in their private information about the company's CSR activities, thus reducing doubts about the information disclosed in sustainability reporting. Without being interacted with the CSR disclosure score, it turns out that the KINST variable widens the SPREAD (Table 2).

Table 2. Testing of Interaction of Institutional Investors and CSR Score
Dependent variable: SPREAD

	Coefficient		*t-ratio*	*p-value*
const	0.00238		2.536	0.0125
TCSR	0.00520		4.532	<0.0001
LEV	0.00739		4.235	<0.0001
LABNEG	−0.00181		−1.345	0.1811
LIKUID	−0.00057		−3.330	0.0011
KINST	0.00578		2.530	0.0127
KINST*TCSR	−0.00542		−1.845	0.0674
R-squared	0.29072	Adjt.R-squared		0.25640
F(5, 125)	8.47085	P-value(F)		1.04e-07

5. Discussion

The results showed the opposite of predicted that the level of disclosure of corporate social responsibility (CSR) had a significant positive effect on information asymmetry as measured by the bid-ask spread. This result is not consistent with previous studies such as Cui *et al.* (2012), Cormier *et al.* (2011), Cho *et al.* (2013), Hung *et al.* (2013), Liu *et al.* (2013), Lopatta *et al.* (2015), Lu and Chueh (2015), Martinez *et al.* (2015), Semenescu and Curmei (2015), Cui *et al*. (2018), Diebecker and Sommer (2017), which states that CSR has a negative influence on information asymmetry.

This study found that the higher the level of disclosure of corporate social responsibility (TCSR), the higher the information asymmetry, which was reflected in the higher value of the bid-ask spread (SPREAD). Jaggi and Freedman (1992) show that companies that provide disclosure of CSR activities do not receive positive responses from investors. Investors consider the extent of the disclosure provided by the company does not contain additional information for them (Jaggi and Freedman, 1982). Investors suspect the company's actions that provide broad disclosure as a company effort to be seen as a good company.

The follow-up tests conducted above revealed that companies that have negative profits make more CSR disclosures to distract investors from deteriorating operational performance. This answers why investors generally do not believe in the substantial amount of CSR disclosures. Investors have not captured the seriousness of the company to distribute information that occurs on the company's internal.

However, in contrast to previous studies which found that the existence of institutional investors was counterproductive with a decrease in asymmetry information (Cho *et al*. 2013), this study proved otherwise. When institutional investors have private information access to CSR activities carried out by the company, they do not use their superiority for their own benefit. Access to private information on CSR can eliminate investors' institutional doubts that the information submitted is less reliable. Institutional investor confidence will reduce the information gap which can be seen from the narrower bid-ask spread.

6. Conclusion

This study aims to examine the effect of the level of corporate social responsibility disclosure on information asymmetry as measured by the bid-ask spread. Contrary to the results of previous studies, this study found the opposite result, that CSR disclosure through Sustainability Reporting hurts decreasing information asymmetry. The higher counterproductive disclosure scores with a decrease in information asymmetry.

An interesting phenomenon in developing countries, where the level of openness to disclose information is still suspected as an action with specific intentions to divert investor attention to the actual condition of the company. However, the investor's suspicion is entirely rational, given the additional testing results indicate a significant negative correlation between companies that have negative earnings and the extent of CSR disclosures.

However, the existence of institutional investors representing investors who are well-informed is enough to help the company to ensure the reliability of information on CSR activities delivered through Sustainability Reporting. In contrast to the results of previous studies which showed that institutional investors tend to use the superiority of information, they have to maximize their interests, in this study institutional investors also distributed the information they possess to reduce asymmetry information.

This study has limitations because some companies do not continuously submit reports through SR, so consistency in the impact of CSR disclosures on the reduction of information asymmetry cannot be obtained. The number of companies submitting reports on CSR activities through SR is still very little less than 10% of the total companies listed on the IDX, thus limiting the generality of the results of this study.

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