

Conference Paper

From Theory to Practice of Signaling Theory: Sustainability Reporting Strategy Impact on Stock Price Crash Risk with Sustainability Reporting Quality as Mediating Variable

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Abstract

Stock Price Crash Risk (SPCR) is the risk of stock price collapse. SPCR conditions must be understood by stakeholders, among others: for regulators in order to avoid the devastation of stock prices that have systemic impact on the capital market; for suppliers to sell their products to the company; for company employees to maintain the sustainability of the company so that they can still work; for shareholders to keep the stock of the company from the risk of delisting in the capital market; to the prospective investor as the basis of investment decision in the capital market; and to the Investment Manager in order to master the stock portfolio risk knowledge in the capital market. We examine the relation among implementation of sustainability reporting strategy (SRS) impact on SPCR with sustainability reporting quality (SRQ) as variable intervening. Using signaling theory, we find that a good company will provide signal hints for stakeholders regarding SRS that have a significant effect on the SRQ. This provides legitimacy for the company by gaining stakeholders' confidence to buy its stocks (shares) so as to minimize SPCR.

Keywords: Signaling theory, stock price crash risk (SPCR), sustainability reporting strategy (SRS), sustainability reporting quality (SRQ)

1. Introduction

The main predictor of SPCR is the tendency of management to hold and stockpile its bad news from investors. Controlling the specific determinants of stock price crash risk indicates that the disclosure of non-accounting information about the company as outlined in the sustainability report tends to have the ability to reduce SPCR. Disclosure of information signals between management and stakeholders through SRS and the role of mediation SRQ, can be used as a reference in decision-making. A sustainability report immediately publicized by the company will have an impact on increasing stock prices.

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Cho et al. (2012) argue that managers as agents cover non-accounting information in the form of bad news from investors, as well as principals to maintain careers and compensation managers concerned. When bad news accumulates, so the accumulation of all bad news out and lead to the SPCR. Fraker (2006), Kim & Zhang (2010) supported the previous study, demonstrating the disclosure of SRS reducing those risks (James 2013). The incidence of stock price crashes on the Indonesia Stock Exchange, that is, the collapse of the stock price of TAXI in 2015 which is more than 90%, thus destroying the portfolio of investors who invest money in this stock. The decline in TAXI's stock price is due to a managerial tendency to cover up the bad news that TAXI cannot pay interest on its loans and bonds due to the impact of a SRS. Fernandez (2013) stated that SRS improvement cannot minimize SPCR. Utama (2013) conveys the need for appropriate strategies to improve the transparency of non-accounting information, so investors can capture good information signals from the company. Kim et al. (2014) states that all SRS that demonstrate environmental and social concerns are contained in the SRQ. This is a testament to the behavior of the responsible management/board of director. Bonheure & Ramos (2009) and Rashid et al. (2015) supporting SRS may impact on the SRQ.

Firms with legitimacy and good reputation are usually supported by SRS that have a significant effect on SRQ (Dhaliwal et al. 2012). These companies will get a positive image in the eyes of local investors and global investors associated with stock prices that have a lower risk of SPCR (Utama, 2013). According to Michelon & Parbonetti (2012) a positive image in the investor's view is the result of positive signals that the company can increase its share price thus encouraging the company to behave in a responsible manner. This is according to Beck et al. (2010) is in accordance with the sustainability agenda and strengthened by Burritt & Schaltegger (2010) which states the influence of the signaling theory underlies the existence of sustainability reports. Wong & Millington (2014) argues that the company is firmly committed to implementing sustainable business practices as a positive corporate identity, thereby creating a new paradigm for sustainability (Lin et al., 2012).

The new paradigm for sustainability is closely linked to the non-accounting information quality set forth by the board of directors in SRS. Good and transparent SRS affect SRQ, but SRS cannot minimize SPCR (Burritt & Schaltegger 2010). Investors as stakeholders begin to pay attention to social and environmental issues, so that the use of other non-accounting information is used as a basis for decision-making. Garcia et al. (2013) argues that investors are increasingly believing to use the SRQ information as a basis for the decision to buy the company's shares. In contrast, Amran et al.

(2013) suggests that SRS has no significant effect on SPCR. This provides the basis for conducting research proving that the SRQ can be used as an intervening variable against SPCR.

SRQ disclosures has the ability to minimize SPCR (Nur et al., 2013). Based on signaling theory, Li et al. (2016) serve as the basis for examining the SRQ as an intervening variable against SPCR. The implementation of SRQ is very important and gets the attention of all stakeholders (Chauvey et al., 2014), especially investors and risk managers who learn a lot from accounting cases and scandals as a result of poor SRQ. Amran et al. (2014) proves that the SRQ is important in the framework of the company's strategy to maintain its stock price from SPCR.

In contrast, Reimsbach et al. (2017) stated that the SRQ is not important in influencing SPCR. Research on the impact of SRS on SPCR mediated by SRQ, as far as the researcher has not done much. Another reason is the results of previous research by Reimsbach et al. (2017) inconsistency with the results of Amran et al. (2013), so researchers need to add SRQ as intervening variable to SPCR.

Al-Shaer & Zaman (2016) proves that SRS does not relate to the proportion / number of women as members of the board of directors on the SRQ. The results of this study have differences with Amran et al. (2014) which states that SRS relating to the number / proportion of women as directors compared to the total number of directors affects the SRQ.

Based on the background of inconsistency of research result and addition of variable of SRQ as intervening variable, hence formulation of problem in this research is as follows: (i) Does SRS affect SPCR? (ii) Does SRS affect SRQ? (iii) Does SRS affect SPCR mediated by SRQ?

This research is expected to give practical contribution for investor and go public's company in Indonesia Stock Exchange that is: (i) For Investor: The results of this study are expected to confirm investors' perceptions of the SRS presented by the Board of Directors and SRQ's disclosure in improving information reliability. This study can also provide added value and show the investor response to SRQ of the company. This will influence investors to evaluate their portfolio based on their corporate social, economic and environmental responsibility activities and the level of disclosure they have made, to serve as a basis for decision-making for investors in investing. (II) For Company: The results of this study can provide an overview for the company about the impact of SRS and SRQ's disclosure against SPCR. This becomes the basis for risk managers to take into account in order to maintain the company's stock price against SPCR. This research is also expected to encourage companies to evaluate risk management and

improve SRQ so as to minimize the occurrence of SPCR. This research will also show the market response to the profit of the company and SRQ's disclosure. This will encourage companies to evaluate the effectiveness and efficiency of reporting practices as well as SRQ's disclosure within the company. (iii) For Policy Contributions: This research is expected to provide empirical evidence on SRS in improving the reliability, transparency and SRQ. This can serve as a basis for evaluating mandatory rules related to sustainability reporting. The results of this study are also useful for the Financial Services Authority (OJK) on sustainability reporting reports that are mandatory, so it can be used as evaluation and basic improvement on the quality of SRQ as a form of corporate social responsibility (CSR).

2. Conceptual Framework from Theory to Practice

The signaling theory is a behavior of corporate management in giving directions to investors, related to management strategies and views on future prospects (Brigham & Houston, 2011). Disclosure of signaling theory is in the form of information (signals) of success or failure of a given company. The signaling theory also states that a good quality company will deliberately signal to the market, so the market is expected to differentiate good and bad quality companies. In order for the signal to be good then it should be captured and perceived good market and not easily imitated by companies that have poor quality. A good signal can be captured by the market and not easily imitated by poor quality companies is a signaling theory implementation that underlies the practice of income smoothing, one form of earnings management. This theory deals with asymmetric information that can occur if one party has a more complete information signal than the other party. Accounting figures reported by the management can be used as a signal, if the numbers can reflect information about the attributes of company decisions that are not monitored. In addition to financial statement information that sometimes shows the results of profit manipulation, investors also consider sustainability reports as a reliable information signal (Kim et al., 2014). Disclosure of these signals indicates an attempt to minimize the asymmetric information that occurs between management and the stakeholders in the form of SRQ.

Disclosure of information signals between management and stakeholders expressed in the form of sustainability reporting practices is differentiated by its nature. Anthony & Govindarajan (2014) states there are two types of disclosure properties: voluntary disclosure and mandatory disclosure. Voluntary disclosure is a corporate disclosure beyond what is required / regulated. Instead, mandatory disclosure is the

standard setter's disclosure to management in making financial reporting. The Company voluntarily discloses important information in the form of quality sustainability reports (SRQ) to stakeholders to be a reference in decision-making. The theory underlying voluntary disclosure is the signaling theory. This theory illustrates the actions preferred by high-type managers rather than low-level managers. Management always tries to disclose private information which according to its consideration is very interested by potential investors and shareholders especially if the information is good news (good news). In addition, management is keen to convey information that can improve its credibility and company success, even though such information is not required (Kim, 2014). Unnecessary information can improve the credibility and success of the company will still be delivered by management. Based on the signaling theory, it also reveals that the company gives a signal in the form of information on activities that have been done by management (Chauvey et al., 2014) to realize the interests of the owners that is to maximize their profits. Thus, the longer the duration of the publication of the sustainability report (SR), causing unstable stock price movement, so investors interpret it as a delay condition. This condition occurs because the company does not immediately publish SR and annual report (annual report), which then affects the decline in stock prices of its company.

The SR that will be publicly published by the company will have an impact on the increase of stock price. The SR is a voluntary disclosure done by the company to help investors better understand the strategies used by the company's management (Dhaliwal et al., 2011). Voluntary disclosure will be more done by the company if the quality of information owned by the manager of the company is relatively high. Companies are increasingly expanding their voluntary disclosure of SR as they seek to attract public and investor attention (Dhaliwal et al., 2011). With a broader voluntary disclosure, the company will be more concerned by investors, thereby reducing asymmetric information and reducing the firm's capital costs, which will ultimately reduce the stock price crash risk estimates. In making voluntary disclosures, management considers the costs and benefits derived from those disclosures. If the benefits gained are greater than the costs incurred, the management will disclose the information voluntarily. Low capital costs are the main benefits felt by management in disclosing the information made for decision-making. Many studies have proven that voluntary disclosure of reports will help control conflicts of interest among shareholders, debtholders, and management (Brigham & Houston, 2011); (Andreou, et al., 2016); Anthony & Govindarajan (2014).

According to Brigham & Houston (2011) the signaling theory has three advantages: (i) can reveal the information needed by investors to distinguish between high-value

firms and low-value firms by observing the ownership of their capital structure, and marking high valuations for firms which has a high value/highly leveled. Equilibrium is stable because low-value companies cannot emulate higher-value firms; (ii) Another advantage of signaling theory is its ability to explain the occurrence of rising stock prices in response to increased financial leverage; (iii) Another advantage is that signaling theory is needed to reduce the effect of information asymmetry (asymmetric information).

Anthony & Govindarajan (2014) mentions 2 weaknesses of signaling theory, namely: (i) inability to explain the reverse relationship between profitability and leverage; (ii) Cannot explain why firms with high growth potential and intangible asset value should use more debt than high non-tangible assets companies.

Several previous studies have attempted to forecast the risk of SPCR specifically for companies (Burhan, 2012; Rashid et al., 2015). Firth et al. (2006) stated that the distribution of stock returns showed a tendency of negative asymmetry. One of the main predictor factors of the risk of SPCR is the managerial tendency to cover up the bad news of the company from investors (Fernandez, 2013). Cho, et al. (2012) argue that managers (agents) cover and retain bad news from investors and principals, aim to maintain the career and compensation of the manager concerned. When bad news accumulates and reaches a critical point, the accumulation of all bad news comes out and leads to SPCR. Kim et al. (2014) states that SRQ and responsible behavior realities of directors in financial reporting (Bonheure and Ramos 2009) indicate a lack of evidence of earnings management (Rashid et al., 2015). This is stated by the firm's commitment to higher ethical standards having a positive impact on the quality of accounting information. The same results by Kim et al. (2011) found that companies that do Corporate Social Responsibilities (CSR) provide financial disclosures more consistent with corporate strategy ideas (Bebbington et al. (2012) which considers increased disclosure of SRQ as socially responsible behaviors (Cho, Michelon et al., 2012) in the overall implementation of SR. Disclosure of the SRQ is a form of corporate responsibility with a better CSR culture (Dhaliwal, Radhakrishnan, Tsang, & Yang, 2012). This condition is able to withstand high ethical standards in SR. Companies tend to be more transparent (Chen and Roberts 2010), so as to obscure bad news from investors. Thereby expected to improve the reputation of these companies, which ultimately make the investors buy their shares, then the stock price rises. This condition is related to stock price which has lower risk to SPCR (Utama, 2013). An increase in stock prices and minimal SPCR increases the complexity of the company's business (Michelon and Parbonetti

2012). This condition is coupled with a global transformation that encourages companies to behave more responsibly and push the sustainability agenda. Sustainability is generally defined in the context of sustainable development. The Company is firmly committed to implementing sustainable business practices in corporate identity (Wong and Millington 2014), thus creating a new paradigm for sustainability.

This is evidenced by the benefits of disclosure of information and the facilities for decision-making facilities, so that companies can strengthen its legitimacy. Disclosure of information disclosure has several benefits. Herbohn et al., (2014) shares the benefits of quality disclosure in SR by profit-making enterprises based on three categories of interest: (i) corporate interests, (ii) non-owner interests, and (iii) national interests. Therefore, the SRQ is seen as a way to influence perceptions of a company's financial outlook in the view of external stakeholders, especially financial stakeholders (stock analysts, capital markets, and institutional investors). This proves that although a qualified SR report is a voluntary report and the report is unaudited, it has the credibility that the financial stakeholders take into account for decision-making.

Andreou et al. (2016) corroborates the study of Herbohn et al. (2014) stating that accounting information should be able to make a decision. If it does not affect the decision, the information is said to be irrelevant to the decision taken. There is currently a tendency for increased dissatisfaction with traditional financial reporting and its ability to provide sufficient information about the company's ability to create wealth for stakeholders. This happens because of the decline in the quality of the value of information submitted financial statements. Financial information, such as profit, book value, and cash flow are highly irrelevant in stock price crash risk (Reimsbach et al., 2017). In contrast, non-financial indicators and information in the SR report have a high degree of relevance in the assessment of stock price crash risk (Kim et al., 2014). Amran et al. (2014) conducted based on a cross-sectional study of 113 companies in 12 countries in the Asia Pacific region shows evidence that there is no relationship and no influence between the diversity / gender diversity of the board of directors with the quality of the SR report. Research conducted by Fernandez (2013) and Al-Shaer & Zaman (2016) conducted at different countries locations, shows that the board of directors with more quantities / quantities of women, will reveal more complete SRQ information. Board of directors with the number of three or more women will further improve the SRQ. This is evidenced by the disclosure of more complete information, including assurance reports that provide credibility for SR. It is argued that the presence of female directors also mediates the production of moderate SRQ on SRS. This shows the results of inconsistent research, thus providing opportunities for further research.

3. Conclusion

The impact of the disclosure of SRS by providing more complete information signals is carried out by the company through proactive communication strategies such as those communicated through press (media activities). The benefit of the company sharing relevant information in the SR to outsiders is to derive the asymmetry information that occurs on the company with its stakeholders.

The disclosure of general information affecting the SRQ and the impact of the company's activities, so this approach can be useful for knowing the SR report with an insight into the organization's underlying commitments, thus demonstrating a committed approach. The more qualified SRQ, the more SR disclosure information in its annual report, thereby reducing the public's spotlight on the company. Conversely, companies that have managers (board of directors) who like to hoard bad news, it can increase the SPCR. Under a weak monitoring environment, charitable /philanthropic activities can be useful to play a greater role in increasing transparency and beneficial to lower SPCR.

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