QUALITY OF SUSTAINABILITY DISCLOSURE AMONG THE ASEAN-5 COUNTRIES AND THE ROLE OF STAKEHOLDERS

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Abstract

This study was carried out to reveal the actual quality of sustainability disclosure, actuated by some recent studies that pointed out the lack of disclosure quality amid the growing trend of CSR and the tendency that CSR disclosure was dominantly constructed to manage the corporate image. This study also seeks to investigate the role of stakeholder groups (primary, secondary and regulatory stakeholders) by analyzing the sustainability disclosures of 224 primary sector companies among the five emerging markets in Southeast Asia: Indonesia, Malaysia, Singapore, Thailand, and Philippines in 2016. An extensive disclosure index was also employed to assess each disclosure item under the GRI G4 Guidelines. Results revealed that the quality of sustainability disclosure is still low. In this regard, Thailand turns out to be the country with the highest score, followed by Malaysia and Indonesia. Labor practice became the most expressed aspect by the companies, followed by environmental and social aspects. Based on the results obtained, it is therefore argued that employees, auditors, mass media, and regulators all play their roles in encouraging companies to enhance the quality of sustainability disclosure. However, this study does not find a significant influence from the shareholders and international consumers. The contradictory result was found from creditors, conveying that they possess a negative influence on the quality of sustainability disclosure.

Keywords: sustainability, disclosure, stakeholder, GRI G4, ASEAN


Kata kunci: pengungkapan, keberlanjutan, pemegang kepentingan, GRI G4, ASEAN

1 This paper was the author’s work when studied Master Program of Accounting Science in Universitas Indonesia
INTRODUCTION

Two decades have passed since the concept of Triple Bottom Line was first mentioned by Elkington in 1997. The fundamental concept of TBL, also known as Triple P (Profit, People, Planet), emphasizes that a company should equally provide attention to its economic, social and environmental performance (Elkington 1997). Illustrated as three circles interconnecting with each other, the Triple P addresses that the social and environmental responsibility of a company is as important as its profitability. To achieve success, a company is not only required to maintain its profitability but also to keep its business in a sustainable way (Perrini and Tencati 2006).

A company, as a nexus of contracts, receives considerable interest from a wide range of stakeholders (Jensen and Meckling 1976), such as shareholders, customers, employees, the government, the local community, and environment. In relation to this obvious issue, Clarkson, (1995) who conducted a review of 10-year research related to CSR, prefers to view CSR as a concept of stakeholder management, by fulfilling the responsibility of the company to its stake-holders rather than its responsibility only to society.

The capacity of a company to create long-term sustainable prosperity is determined from its management relation with critical stakeholders (Post et al. 2002; Perrini and Tencati 2006). Therefore, several previous studies have used stakeholder framework as a basis for companies in conducting and reporting their CSR activities, such as the study of Huang and Kung (2010), Dong et al. (2014), Chiu and Wang (2015), and Siregar and Rudyanto (2016). These studies discovered that several stakeholders, such as employees (Huang and Kung 2010; Siregar and Rudyanto 2016), government (Lu and Abeysekara 2014), and consumers (Dong et al. 2014) have assigned influences in encouraging quality social and environmental disclosures.

Data from various CSR studies and surveys indicate that the development of the sustainability reporting trend has occurred globally, both in developed and developing countries (ASR 2010; Sharma 2013; KPMG 2015; Loh et al. 2016). Based on the report of Carrot and Stick: 2016 Edition published by KPMG, GRI, UNEP, and the Center for Corporate Governance in Africa, the main factors causing such escalation is the existence of sustainability reporting regulations by governments. This is an encouraging fact that implies the increasing awareness on the issue of sustainability. Yet the remarkable question arises concerning the quality of such obvious disclosures. Moreover, De Villiers and Alexander (2014) convey that sometimes the company is just looking to “tick more GRI boxes” by increasing the number of their reporting, regardless of the content and quality of information (De Villiers and Alexander 2014; Michelon et al. 2015). Some recent studies from Cho et al. (2012), Chiu and Wang (2014), Michelon et al. (2015) also pointed out a lack of significant association between CSR reporting practices and disclosure quality as evidence of a tendency that CSR reporting was used to manage the corporate image rather than to impact sustainable development (Gray 2010; Michelon et al. 2015) Therefore, the crucial matter is not only about the “quantity” but also the “quality” of the disclosure.

This study identified three research gaps in previous studies and tried to fill these gaps. Firstly, most of the previous studies only captured the quantity aspects of sustainability reporting. The majority of previous studies used the traditional measure for content analysis, such as looking at the percentage allocation of CSR disclosure in the annual report or using dichotomous scoring (score of 1 for items that are reported, 0 if not reported) (Michelon et al. 2015). This measurement sometimes led to a less accurate result, because a company that makes a one sentence
disclosure is treated equal to a company which discloses 50 sentences (Hackston and Milne 1996; Dong et al. 2014). Therefore, this study aims to conduct a more detailed examination to see the actual quality of the disclosure of sustainability by adapting the disclosure scoring index used by Dong et al. (2014) and Vuontisjärvi (2006). Each disclosure made by the company will be assessed from their accuracy (0-3 score range) and substance (0-3 score range) for general aspects and its specificity level of performance indicator (0-6 score range) for specific/performance aspects.

Second, most of the previous studies have examined the influence of each stakeholder group on the quality of their CSR/sustainability report. Thus, this study uses a stakeholder framework to evaluate the role of stakeholder groups in encouraging companies to conduct quality reporting. This study employs the stakeholder group classification of Buysse and Verbcke (2003) by dividing stakeholders into four groups: internal primary stakeholders, external primary stakeholders, secondary stakeholders, and regulatory stakeholders. Such classification is expected to facilitate a conclusion of varied results from previous studies because each group of stakeholders gives a different motivation for companies to conduct quality disclosures.

Third, from the literature review conducted, the majority of previous studies that examined determinants of CSR disclosure only evaluate one or two aspects of the CSR reporting, such as only social disclosure (Branco and Rodrigues 2008; Menassa 2010; Chiu and Wang 2015), environmental aspects (Clarkson et al. 2008; Huang and Kung 2010; Thijssens et al. 2015), or social and environmental aspects (Tagesson et al. 2009; Gamerschlag et al. 2011; Lu and Abeysekara 2014). Therefore, this study attempts to provide a comprehensive picture of the quality of sustainability disclosure by assessing the three dimensions of a sustainability report under the GRI G4, namely the economic, social, and environmental aspects.

This study is expected to contribute to the development of related research in developing countries. Most of the prior studies have been conducted in developed countries, where there are different institutional backgrounds in developed and developing countries (Kuzey and Uyar 2017). A literature review was conducted by Ali et al. (2017) to compare the determinants of CSR disclosure in developed and developing countries. The concern of specific stakeholders in developed countries include regulators (Chih et al. 2010; Shi et al. 2012), shareholders (Thorne et al. 2014), creditors (Roberts 1992), and the media (Deegan et al. 2002) are important in influencing CSR disclosure. Meanwhile, CSR reporting in developing countries is influenced by the external forces or powerful stakeholders, such as international buyers (Belal and Owen 2007), foreign investors (Chiu and Wang 2014), international media concerns (Islam and Deegan 2008), and international regulatory bodies such as the World Bank (Rahaman et al. 2004).

Ali et al. (2017) also emphasized that most of the CSR research in developing countries were only conducted in one country (single-country case studies), thus the results cannot be generalized and depend on the contextual factors of the country. Therefore, this study acquires a wider sample which consists of primary sector industries among the five emerging markets in ASEAN: Indonesia, Malaysia, Singapore, Thailand, and the Philippines (ASEAN 2015; Majid et al. 2008). The ASEAN-5 countries chosen as the object of study are also due to considerations of Sustainable Development Goals (SDGs) as a new global set of development goals in the South East Asia region (ASEAN 2015). This study is expected to give a contribution in strengthening the SDGs framework for regional integration by enriching SDGs-related regional research and intensifying knowledge-sharing between decision -
makers and the research community (Olsen et al. 2015).

In addition, a study from Loh et al. (2016) which was aimed at reviewing the progress of sustainability reporting in 2014-2015 in Indonesia, Malaysia, Singapore, and Thailand found that the overall progress of sustainability reporting is considered adequate, but additional effort is needed to produce better quality sustainability reporting. Hence, this study selected 2016 as the observation year to extend the study of Loh et al. (2016) by investigating which stakeholder groups have the power in encouraging companies to enhance their sustainability reporting quality. The selection of 2016 as the observation year is also related to the mandatory regulation of Indonesian companies to report their CSR as regulated by the Financial Services Authority of Indonesia (OJK), effective as of year-end 2016, and the publication of the Sustainability Reporting Guide by Malaysian Stock Exchange in October 2015.

Based on a literature review by Ali et al. (2017), the industry sector was found to be associated with CSR disclosure (Haniffa and Cooke 2005; Amran and Devi 2008; Huang and Kung 2010). Although it has no consistent effect on the ethical/social disclosure, it still has an important effect on the amount of environmental disclosure (Adams et al. 1998), considering that environmental disclosure has greater relevance to companies related to natural resources compared to those in other fields. Hence, this study selected primary sector companies as the research sample, considering that all three aspects of sustainability disclosure (economic, social, and environmental) are very crucial to this sector.

Through content analysis methods under the GRI G4 guideline, the assessment of sustainability disclosures was conducted on 224 companies. The findings revealed that the level of quality of sustainability disclosure still tends to be marginally low. Thailand has the highest score, followed by Malaysia and Indonesia. Labor practice disclosures showed to be the most frequent, followed by environmental and social aspects. Based on the regression results, the employee group as the internal primary stakeholders, mass media and auditors as secondary stakeholders, and the regulatory stakeholders have a significant engagement in encouraging companies to conduct quality sustainability disclosure. However, there is no significant influence from the shareholders and international consumers on the quality of sustainability disclosure. The study also found a negative influence of the creditors on the quality of sustainability disclosure.

This paper is organized as follows: Firstly, an introductory section is presented. A review of the literature and the development of the research hypotheses in the second section will be presented. The research methodology used will be discussed in the third section, followed by the results and analysis in the fourth section. Finally, in the fifth section, the conclusion along with the implications, limitations, and suggestions for subsequent research will be described.

**LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

**Stakeholder Theory**

The stakeholder theory is one of the most widely used theories in CSR-studies (Clarkson 1995; Harrison and Freeman 1999; Sharma and Henriques 2005; Huang and Kung 2010; Dong et al. 2014; Beckman et al. 2016). This theory developed from a change of business paradigm that was originally focused on maximizing the welfare of only the stockholder, which expanded and considered the many parties related to the company (Clarkson 1995; Andriof et al. 2002) and became known as ‘stakeholder’ terms.

In this respect, Freeman (1983) explained that there are two definitions of stakeholders, in the narrow sense and the broad sense. Under the narrow sense
definition, stakeholders are simply defined as individuals or groups to which the organization depends on to survive in operating the business. Whereas in the broad definition, stakeholders are defined as groups that might affect the achievement of corporate goals and groups that are affected by the existence of the company. However, in formalizing and managing corporate strategy in the long term, stakeholders must be viewed in the broad sense (Freeman 1983).

Clarkson (1995) attempted to distinguish stakeholders into two major premises; primary stakeholders and secondary stakeholders. Primary stakeholders are defined as the main stakeholder groups that determine the going concern of the company. Thus, without a good relationship with these groups, the company cannot survive and run the business properly. The secondary stakeholders are groups that can affect or be affected by the company, but are not as important as the primary stakeholder in determining the business sustainability of the company. In accordance with the argument of Freeman (1994), in the broad definition of the stakeholder, management should pay attention to both the primary and secondary stakeholder groups.

Moreover, some contention has emerged around the development of stakeholder theory. There are two major branches in stakeholder theory: the ethical (moral) branch and the managerial (positive) branch (Gray et al. 1996; Deegan 2000; Belal2008). The ethical branch of stakeholder theory asserts that all stakeholders have certain fair treatment rights that should be protected by the organization (An et al. 2011). Companies should engage in activities that meet the expectations of all stakeholders (Deegan 2000; Fernando and Lawrence 2014). On the other hand, the managerial branch of stakeholder theory assumes that management takes into account the interests of a limited number of stakeholders, who have significant power to influence the success of the business (Roberts 1992).

A study from Mitchell et al. (1997) also gives critical thought about the theory of stakeholder salience, by explicating how and under what circumstances managers can and should respond to various stakeholder types. Based on the study, the salience of stakeholders is determined by three attributes: (1) power, the ability of those who possess power to bring about the outcomes they desire; (2) legitimacy, a generalized perception that the actions of an entity are appropriate within some socially constructed system of norms; and (3) urgency, the degree to which stakeholder claims call for immediate attention. Thus, stakeholders who only have the power attribute do not mean that they will have a high degree of salience. Power needs legitimacy to gain authority, and it gains exercise with urgency. As a note, urgency is not a steady-state attribute but can vary across the relationships of stakeholder and manager or within a single relationship across time (Salancik and Pfeffer 1974, Suchman 1995, Mitchell et al. 1997).

**Media Agenda Setting Theory**

Media agenda setting theory was first introduced by McCombs and Shaw (1972) who discovered how political news coverage from the US press determines public opinion in the 1968 US presidential election (Brown and Deegan 1998). They provide evidence that there is a strong influence from the news media on people’s consideration of major issues in a presidential campaign (Elijido 2011).

The main idea is the ability of the media to influence the degree to which the public prioritizes certain topics (McCombs and Reynolds 2002; Liao et al. 2018). The media are not seen as mirroring public priorities, rather, they are seen as shaping them (Brown and Deegan 1998). Hence, the more the news media report about particular issues, the more prominence these issues will gain among the general public (McCombs et al. 1997; Pollach 2014).
The role of the media is especially relevant for business and CSR behaviors (Zucker 1978). As the development of the application of media agenda setting theory in communications, political, and business research, various studies also use this theory to explain the corporate behavior regarding its CSR activities. The disclosure of CSR information may be used as a strategy by companies to meet the expectations of society (Gray et al. 1995) and as a mechanism to manage their exposure to media and public pressures (Patten 1991; Garcia-Sanchez et al. 2014). Through the media power in shaping public opinion, firms could reasonably expect that engaging in CSR activities to be discussed in the media will improve their organization’s image (Zyglidopoulos et al. 2012).

Along with the increased media concern of the community’s social and environmental issues, many studies found that the firms responded by increasing the extent of their disclosures through their annual reports (Deegan 2000; Patten 2002). Although the media is categorized as the secondary stakeholder for a company, it still has a crucial role in determining public opinion about topics on society in general (Ader 1995; Brown and Deegan 1998). Firms with high visibility also receive high levels of media attention. Thus, engaging in CSR is one of their powerful tools to improve their public image (Zyglidopoulos et al. 2012).

**Sustainability Disclosure from a Stakeholder Perspective**

In the past two decades, CSR and sustainability reporting have attracted worldwide attention by the increasing number of its adoption and being the subject of substantial academic research (Haniffa and Cooke 2005; Jamali and Mirshak 2007). One of the purposes of sustainability reporting is to communicate a company’s efforts and sustainability progress to its stakeholders (Dalal-Clayton and Bass 2002, Lozano and Huisingh 2011). Sustainability disclosures may evaluate the performance of the company based on three different parameters: economic, social, and environmental (Dutta et al. 2012). It provides the overall performance of the company to satisfy the needs of the various groups of stakeholders rather than financial statements alone (Siregar and Bachtiai 2010). Different to a financial report which provides quantitative information, sustainability disclosure contains both quantitative and qualitative information related to a firm’s economic, social, and environmental performance in a balanced manner (KPMG/WIMM 2002) to accommodate the information needs of each stakeholder.

The development of the CSR concept cannot be detached from stakeholder theory. Coase (1988) explained that the term ‘CSR’ should be reserved for the process by which companies identify and voluntarily neutralize the harmful effects their operations have on society (Johnston 2011). However, as the development of the sustainability concept from a stakeholder perspective, CSR is not only seen as a philanthropic activity because it tends to be interpreted as reciprocity by the company for its irresponsible activities (Hörischet al. 2014).

Under the ethical branch of stakeholder theory, the fundamental idea of CSR has been shifted as an obligation for business corporations to work towards meeting the needs of a wider array of stakeholders (Clarkson 1995; Waddock et al. 2002, Jamali and Mirshak 2007). Hence, the ethical branch of stakeholder theory broadens the scope of CSR by changing its purpose to create value for all stakeholders (Freeman et al. 2010). Based on the concept of the social contract, as the part of a society with various stakeholder relationships, the company exists at the will of its society to the extent that it continues to maintain society with benefits (Gray et al. 2010) as its effort to be socially responsible.

However, from the managerial branch of stakeholder theory that assumes management focuses mainly on managing the relationship between an organization
and its critical stakeholders, CSR information is disclosed to comply with the expectations of powerful stakeholders rather than all the stakeholders of the firm (Ali and Rizwan 2013). Furthermore, based on the concept of the salient stakeholder theory, only a stakeholder who has power and legitimacy will become the salient stakeholder for the company (Mitchell et al. 1997). In this context, the stakeholder needs to gain authority by its power and legitimacy to encourage the company to consider the sustainability issue as a serious matter.

Thus, through the examination of this issue, this study desires to point out the stakeholder groups which are considered to be the salient stakeholder by the companies, so that it can push them to reveal the sustainability quality disclosure as a way to meet the stakeholders’ expectation on sustainability matters.

Hypotheses Development

Several previous studies use stakeholder framework as a basis for evaluating a firm’s performance. Most of these studies (Huang and Kung 2010; Lu and Abeysekara 2014; Chiu and Wang 2015) figure out that some stakeholder groups have power to encourage the companies to carry out CSR reporting, especially the primary stakeholder groups. However, to understand the role of various groups in CSR reporting, it becomes important for us to not only understand the role of primary groups, but also the role of the other group of stakeholders (Clarkson 1995). Therefore, this study uses stakeholder’s framework developed by Buysse and Verbeke (2003) by dividing stakeholders into four types: internal primary, external primary, secondary, and regulatory stakeholders.

Internal Primary Stakeholder

In this obvious issue, two groups of stakeholders would simply be tested as internal primary stakeholders for the company: the shareholders and employees. Creating value for stakeholders creates value for shareholders (Freeman 2004), given that the capital owners are one of the salient stakeholders for the company. They obtain power with their capital for business continuity and legitimacy with their ownership in the company. Sustainability reporting mechanism provides information needed by the shareholder groups as the main stakeholder of a company, both quantitative and qualitative information about a firm’s economic, social, and environmental performance (KPMG/ WIMM 2002). Thus, the degree of shareholder concentration will affect the disclosure policy undertaken by the company (Cormier and Magnan 2015). Evidence from previous studies has suggested that dispersed ownership across many investors has contributed to increasing the need for voluntary disclosure (Cullen and Christopher 2002; Brammer and Pavelin 2005). Distributed company ownership, especially when owned by several investors concerned about social responsibility, will put pressure on management to increase the quality of the company's CSR report (Chiu and Wang 2015). As outlined in the stakeholder theory, the wider the company’s responsibility scope towards the stakeholder groups, the larger its incentive to reveal more information in sustainability reporting, and vice versa (Lu and Abeysekara 2014). Therefore, the hypothesis is proposed as follows.

H1a: The diffusion rate of shareholders has a positive effect on the quality of sustainability disclosure.

Employees, as the intellectual capital and the executors of corporate strategy, are the main and influential stakeholders of the company. As described by the salience stakeholder theory, corporate liability for employees can become a tool to gain power and legitimacy, so they can be considered as potential salient stakeholders (Mitchell et al. 1997). Considering the surge in CSR awareness, Fernandez-Feijoo et al. (2014) found that employees became one of the most influential stakeholders for transparent sustainability reporting.
Through interviews with company executives, Jamali and Mirshak (2007) also found that CSR communication with employees is essential and has positive spillover effects on their morale and motivation. Since the rights and interests of the employees are closely connected to the firm prospects, the employees are particularly concerned about the firm’s attitudes toward social responsibility. The presence of extensive reporting is also one of the management tools to inform the company's social performance and to maintain an ongoing good relationship with its employees (MMSD 2002; Siregar and Rudyanto 2016). Consequently, the larger the number of employees, the greater the influence they have to demand CSR/sustainability information from the company (Huang and Kung 2010). Therefore, the next hypothesis is stated as follows.

H1b: Labor intensity rate has a positive effect on the quality of sustainability disclosure.

External Primary Stakeholder

Apart from the internal primary groups, the external primary groups also become key stakeholders who have a major influence on companies to conduct the quality of sustainability reporting (Huang and Kung 2010; Dong et al. 2014). There are two groups of stakeholders to be tested as external primary stakeholders in this study: international consumers and creditors.

International consumers as stakeholders in foreign countries also exert pressure on companies to be socially responsible (Andrew et al. 1989; Haniffa and Cooke 2005). As one of the important stakeholders, consumers have certain expectations for the company regarding its social responsibility (Podnar and Golob 2007). Explained by the managerial branch of stakeholder theory and the salient stakeholder theory, international consumers can be a salient stakeholder for the company through their power and legitimacy in the market mechanism with their buying decisions and their ratings to a product in many aspects, including the assessment of CSR. Thus, international buyers can often influence corporate behavior through the exercise of bargaining/buying power in contractual relationships (Chiu and Wang 2015). Consumers concerned with global CSR issues will encourage companies operating in international markets, particularly those from developing countries, to conduct quality sustainability disclosures (Branco and Rodrigues 2008) to fulfill the needs of CSR information for their consumers. Additionally, a study from Belal and Owen (2007) indicated that domestic companies in Bangladesh, particularly those who are competing in export markets, provided considerably particular attention to pressure emanating from international buyers regarding their CSR reporting. Thus, the hypothesis is as follows.

H2a: International consumers have a positive effect on the quality of sustainability disclosure.

The creditor as a provider of funds for business operations is one of the stakeholders that can affect the activity and disclosure of the company (Hossain et al. 1994; Lu and Abeysekara 2014). Applying the concept of salient stakeholder theory, the creditor obtains their power and legitimate claim to the company through its loan agreement with the company. Moreover, Huang and Kung (2010) argued that the creditors of a firm with higher financial leverage become more influential, and managers will step up the response to their demands for corporate social activities information. Consistent to Lu and Abeysekara (2014), this study has also predicted a positive relationship between creditors and quality disclosures, considering the growing concept of sustainable finance and social banking in the business world. The concept suggested that a company’s social and environmental aspects turn into one of the considerable factors for funding decision as a commitment to safeguarding the environment and better social life (Weber and Remer 2011; OJK, 2014).
This is important to the creditor since they will face default risk if the firm is penalized when generating a negative impact on society/the environment (Huang and Kung 2010). Thus, the next hypothesis is stated as follows.

**H2b:** Creditors have a positive influence on the quality of sustain-ability disclosure.

**Secondary Stakeholder**

Secondary stakeholders also have an effect on CSR reporting, although they do not exert great influence on the going concern of the company such as the primary group. The sustainability of a firm depends on the sustainability of its stakeholder relationships, not only to its shareholders, employees, and customers— as primary stakeholders— but also to public authorities, civil society in general, etc (Perrini and Tencati 2006). There are two groups of stakeholders to be tested as secondary stakeholders in this study: the mass media and auditors.

As the secondary stakeholder, the mass media plays an important role in shaping the firm’s reputation in society. The influence of media is explained by the media setting agenda theory. The visibility of a firm depends on the quantity of media coverage on the firm (Gamerschlag et al. 2011). Companies with high visibility will receive greater media attention, so they tend to be careful with their corporate image (Lindgreen et al. 2008). Empirical studies from Chiu and Wang (2015) and Gamerschlag et al. (2011) found that the mass media became one of the considerations of firms in conducting disclosure related to social aspects. Through the power of media in shaping public opinion, companies may use their CSR disclosure as an effective way to improve their positive image (Zylidopoulos et al. 2012) and to manage their exposure to media and public pressures (Patten, 1991; Garcia-Sanchez et al., 2014). This is evidenced in a number of studies, such as Deegan (2000), Reverte (2009), and Garcia-Sanchez et al. (2014) who found an increase in the amount of CSR information disclosed as a consequence of media pressure. Therefore, the hypothesis is as follows.

**H3a:** Media exposure has a positive influence on the quality of sustainability disclosure.

Auditors, as an independent and professional party, can provide a role in influencing and directing their clients to initiate the evolving accounting practices, such as the concept of CSR (Lu and Abeysekara 2014). Even though it acts as an external-intermediary party that does not have a major influence on the company’s operational activities, an auditor plays its role by providing assurance services to the credibility of financial statements (Huang and Kung 2010). As one of the company’s stakeholders, auditors can encourage the company to enact full disclosure on firm performances, both in economic, social, and environmental aspects (Ahmad et al. 2003). A study from Wallace et al. (1994) found that large public accounting firms have more expertise and experience in influencing firms to disclose broader information. A similar research result was obtained by Ahmad et al. (2003), who found that Malaysian firms which are audited by Big 5 tend to report higher environmental disclosure. Therefore, the next hypothesis is stated as follows.

**H3b:** Firms that are audited by the Big 4 tend to enhance their quality of sustainability disclosure.

**Regulatory Stakeholder**

As the regulatory stakeholder, the government or other regulatory bodies related to CSR/sustainability reporting also becomes a salient stakeholder by influencing the companies on such reporting practices. Based on the result of a survey by KPMG, the main factor causing the increasing number of sustainability reporting is related to regulations (KPMG 2015) stipulated by the government or related institutions, such as the stock exchange. As
described in the managerial branch of stakeholder theory and salience stakeholder theory, the government and other regulatory bodies have a power attribute by setting the rules which must be obeyed by the company and also a legitimacy attribute by setting the norms and standards of sustainability reporting practice and its guidance (Mitchell et al. 1997, Dong and Xu 2016). Research conducted by Dam and Scholtens (2008) found that there is a significant relationship between the strength of environmental regulations on CSR activities conducted by multinational companies. A similar study from Dong and Xu (2016) also found that the government, through its CSR regulations, became one of the influential stakeholders in increasing the extent of the disclosure of environmental aspects in mining companies in China. Thus, the last hypothesis is as follows.

**H1:** The strength of CSR/sustainability regulation has a positive influence on the quality of sustainability disclosure.

**RESEARCH METHODOLOGY**

This study uses a quantitative approach with Ordinary Least Square (OLS) regression for testing the hypothesis. Data required in this study were taken from the firm’s website, the stock exchange’s website, and the Thomson Reuters Database. The object was chosen based on primary industry groupings on the Global Industry Classification Standards, provided by the Thomson Reuters database. In this method, there were 255 companies listed as primary sector companies in the observation year 2016. A total of 31 companies were eliminated as research samples because there were 20 companies who did not publish their annual/sustainability report, 6 companies who published their report in their national language only (not in English), and 5 companies with incomplete data. In the end, 224 companies were selected as the final samples, which consisted of mining (111), agricultural (58), oil and gas (40), and husbandry companies (15).

The dependent variable in this study is the quality of the company’s sustainability disclosure. This study uses sustainability reporting guidelines published by the GRI G4 as a basis for conducting content analysis on each aspect, both disclosed in the annual or sustainability report. Under the GRI G4 guidelines, there are 149 disclosure items which consists of 58 general disclosures and 91 specific disclosures comprising of three categories: economic (9 items), social (48 items), and environmental (34 items). As for the social category, there are 4 sub-categories that must be reported by the company: labor practice (16 items), human rights (12 items), society (11 items), and product responsibility disclosure (9 items).

This study employs a disclosure quality measurement model adapted from Dong et al. (2014) and Vuontisjärvi (2006). Considering the differences in the type of information, general disclosure and specific disclosure will be assessed from a distinct dimension. For general disclosure which contains general company-related information, strategies and risks encountered, as well as corporate governance, the disclosure will be assessed from an accuracy dimension (score of 0-3) and substance dimension (score of 0-3). For accuracy dimension assessment, we observed how each item was disclosed, whether it was not disclosed (0), expressed in only descriptive/narrative form (1), expressed in quantitative form (2), or expressed in monetary units (3). For substance dimension assessment, we observed whether it was not disclosed (0), expressed only as a normative value/aims to be achieved (1), as the action practiced (2), or as a quantitative measure reflecting the company’s achievement of the practice (3). Therefore, the maximum score for general disclosure is 348 ((58×3) + (58×3)).

The specific disclosure which contains the company’s performance on three aspects of sustainability: economic, social
Table 1

Sustainability Disclosure Scoring Index

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Type of Disclosure</th>
<th>Score</th>
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<tbody>
<tr>
<td>For General Disclosure</td>
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<tr>
<td>Accuracy (ACC)</td>
<td>Not disclosed</td>
<td>0</td>
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<tr>
<td></td>
<td>Disclosed as narrative</td>
<td>1</td>
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<tr>
<td></td>
<td>Disclosed as quantitative (non-monetary)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Disclosed as monetary</td>
<td>3</td>
</tr>
<tr>
<td>Substance (SUB)</td>
<td>Not disclosed</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Disclosures that provide information on stated aims/value</td>
<td>1</td>
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<td></td>
<td>Disclosures that covers how the company addresses a given issue by describing the</td>
<td>2</td>
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<td></td>
<td>action/practice adopted</td>
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<td></td>
<td>Disclosures that reflects actual achievements by providing quantitative measures</td>
<td>3</td>
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<tr>
<td>For Specific Disclosure</td>
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<td></td>
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<tr>
<td>Performance Indicator (PI)</td>
<td>Performance data is not presented</td>
<td>0</td>
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<tr>
<td></td>
<td>Performance data is presented</td>
<td>1</td>
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<tr>
<td></td>
<td>Performance data is presented relative to peers/rivals or industry</td>
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</tr>
<tr>
<td></td>
<td>Performance data is presented relative to previous periods (trend analysis)</td>
<td>3</td>
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<tr>
<td></td>
<td>Performance data is presented both in absolute and normalized form</td>
<td>4</td>
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<td></td>
<td>Performance data is presented relative to target</td>
<td>5</td>
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<td></td>
<td>Performance data is presented at disaggregate level (i.e., plant, business unit,</td>
<td>6</td>
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<td></td>
<td>geographic</td>
<td></td>
</tr>
</tbody>
</table>

Source: Dong et al. (2014) and Vuontisjärvi (2006)

Figure 1

4-Quadrant Model of Regulatory Stakeholder shares held by strategic investors) to the

and environmental, will be assessed from its performance indicator disclosed on a 0-6 scale (Clarkson et al. 2008). Thus, the maximum score for specific disclosure is 546 (91 × 6). As a result, the maximum score that can be achieved by a company for its general and specific disclosure is 894. The detailed scoring index can be seen in Table 1.

There are five independent variables in the research model. The first variable is the shareholder’s diffusion rate (SOD), measured by the number of shares of public ownership, calculated by dividing free float (shares outstanding - treasury shares - shares held by strategic investors) to the outstanding shares (Chiu and Wang 2015). The next variable of employees (EMPL) is
proxied by the labor intensity ratio, by dividing total labor-related costs to total fixed assets owned by the company (Schmenner 1986). The international consumer (CONS) is proxied by the export proportion of the total sales (total export / total sales of the company), and the creditor (CRED) is proxied by the financial leverage ratio of the company, by dividing total long-term debt to total assets. The auditor (AUD) is proxied by dummy variables (Lu and Abeysekara 2014). A value of 1 is given for firms audited by the Big 4, while a value of 0 is given for firms audited by non Big 4. Media exposure (MEDX) is proxied by the number of news items related to the firm on the Google search engine in the reporting year. This proxy refers to Garcia-Sanchez et al. (2014) to determine the visibility of firms by mass media.

The regulatory group (REG) is proxied by analyzing the strength of regulations related to sustainability reporting in each ASEAN-5 country as for year ended 2016. This study adopts the 4-quadrant model formulated by Waverman and Koutrompis (2011). There are two aspects that are considered in determining the strength of the regulation: the sustainability reporting enforcement level and the presence of sustainability reporting guidelines provided by the stock exchange. The 4-quadrant model is presented in Figure 1.

The five sample countries in this study are placed according to the 4-quadrant model of regulatory stakeholder. Countries in Zone 4 would obtain a score of 4, countries in Zone 3 would get a score of 3, and so on. Information on the sustainability reporting regulations in each country was obtained from the United Nations – Sustainable Stock Exchange (SSE) Initiative and study of Loh et al. (2016), who conducted an analysis of sustainability reporting in the ASEAN region. The regulation summary and assessment are presented in Table 2.

In addition to the variables, this study also used two control variables: the size of the firm (SIZE), proxied by the natural logarithm of total sales, and the firm’s profitability (ROA), which is proxied by the return on assets (Huang and Kung 2010). Both control variables are included to obtain a better research model.

We tested the research hypotheses by estimating the following regression:

$$QSD_{it} = \beta_0 + \beta_1 SOD_{it} + \beta_2 EMPL_{it} + \beta_3 CONS_{it} + \beta_4 CRED_{it} + \beta_5 MEDX_{it} + \beta_6 AUD_{it} + \beta_7 REG_{it} + \epsilon_{it}$$

Table 2
Sustainability Reporting Regulations in ASEAN-5 Countries & Assessment of Regulatory Stakeholders

<table>
<thead>
<tr>
<th>Sustainability Reporting Enforcement Level</th>
<th>Indonesia (IDX)</th>
<th>Malaysia (Bursa)</th>
<th>Singapore (SGX)</th>
<th>Thailand (SET)</th>
<th>Philippines (PSE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR disclosure as a part of listing rule from FY 2012</td>
<td>Sustainability statement disclosure as a listing requirement from 2007</td>
<td>‘Comply or explain’ basis as a part of listing rule from FY 2017*</td>
<td>CSR disclosure as a part of listing rule, effective from 1 Jan 2014</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>Sustainability Reporting Guidance</td>
<td>Nil</td>
<td>Bursa Malaysia ‘Sustainability Reporting Guide’</td>
<td>SGX’s ‘Guide to Sustainability Reporting for Listed Companies’</td>
<td>CSR Institute’s (CSRI) ‘Guidance for Sustainability Reporting’</td>
<td>No, just offer the CG Guidance</td>
</tr>
</tbody>
</table>

*In 2016, Singapore does not have mandatory CSR-reporting regulation

Source: UN-SSE Initiative (2016), Loh et al. (2016)
### Table 3
The Results of Quality of Sustainability Disclosure

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Type of Disclosure</th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Philippines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For General Disclosure (58 Items)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy (ACC)</td>
<td>Not disclosed</td>
<td>29</td>
<td>28</td>
<td>30</td>
<td>21</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Disclosed as narrative</td>
<td>23</td>
<td>24</td>
<td>22</td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Disclosed as quantitative (non-monetary)</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Disclosed as monetary</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Substance (SUB)</td>
<td>Not disclosed</td>
<td>29</td>
<td>28</td>
<td>30</td>
<td>21</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Disclosures that provide information on stated aims/value</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Disclosures that cover how the company addresses a given issue by describing the action/practice adopted</td>
<td>23</td>
<td>24</td>
<td>22</td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Disclosures that reflects actual achievements by providing quantitative measures</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td><strong>For Specific Disclosure (91 Items)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Indicator (PI)</td>
<td>Performance data is not presented</td>
<td>75</td>
<td>80</td>
<td>83</td>
<td>62</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>Performance data is presented</td>
<td>11</td>
<td>9</td>
<td>7</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Performance data is presented relative to peers/rivals or industry</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Performance data is presented relative to previous periods (trend analysis)</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Performance data is presented both in absolute and normalized form</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Performance data is presented relative to target</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Performance data is presented at disaggregate level (i.e., plant, business unit, geographic)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

### Average Score of Quality of Sustainability Disclosure

<table>
<thead>
<tr>
<th></th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Philippines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Sustainability Disclosure (Total)</td>
<td>0.1403</td>
<td>0.1415</td>
<td>0.1272</td>
<td><strong>0.1980</strong></td>
<td>0.1378</td>
</tr>
<tr>
<td>General Aspect (GEN)</td>
<td>0.2920</td>
<td>0.2929</td>
<td>0.2815</td>
<td><strong>0.3603</strong></td>
<td>0.2884</td>
</tr>
<tr>
<td>Specific Aspect (SPEC)</td>
<td>0.0429</td>
<td>0.0433</td>
<td>0.0288</td>
<td><strong>0.0946</strong></td>
<td>0.0418</td>
</tr>
<tr>
<td>Economic (EC)</td>
<td>0.0382</td>
<td>0.0459</td>
<td>0.0240</td>
<td><strong>0.0855</strong></td>
<td>0.0264</td>
</tr>
<tr>
<td>Environment (EN)</td>
<td>0.0528</td>
<td>0.0496</td>
<td>0.0154</td>
<td><strong>0.1207</strong></td>
<td>0.0456</td>
</tr>
<tr>
<td>Labor Practice (LA)</td>
<td>0.0882</td>
<td>0.0968</td>
<td>0.0631</td>
<td><strong>0.1572</strong></td>
<td>0.0825</td>
</tr>
<tr>
<td>Human Right (HR)</td>
<td>0.0112</td>
<td>0.0143</td>
<td>0.0064</td>
<td><strong>0.0437</strong></td>
<td>0.0112</td>
</tr>
<tr>
<td>Society (SO)</td>
<td>0.0509</td>
<td>0.0557</td>
<td>0.0344</td>
<td><strong>0.0815</strong></td>
<td>0.0443</td>
</tr>
<tr>
<td>Product Responsibility (PR)</td>
<td>0.0150</td>
<td>0.0154</td>
<td>0.0105</td>
<td><strong>0.0582</strong></td>
<td>0.0121</td>
</tr>
</tbody>
</table>
The research model refers to Huang and Kung (2010), with several adjustments to the stakeholders’ framework of Buysse and Verbeke (2003) used in this study.

**RESULTS AND ANALYSIS**

**The Scoring Result: Quality of Sustainability Disclosure in ASEAN-5 Countries**

Before turning to the regression results to analyze the influence of stakeholder groups, here is the scoring result which is expected to reflect the quality of sustainability disclosure in ASEAN-5 countries. Table 3 presents the detail of sustainability disclosure assessment conducted in this study. As summarized in Table 3, there is a similar trend among the ASEAN-5 countries. Based on the accuracy dimensions, the majority of items are descriptively disclosed, given that disclosure in general aspects is dominated by qualitative information, such as organizational profiles, corporate strategy, stakeholder engagement, and information related to corporate governance practices. Meanwhile, based on the substance dimension, the majority of items are expressed by describing the action/practice adopted by the company. A small number of disclosures (5-7 items) are disclosed in quantitative measure of sustainability practice. However, many items in the general aspect are not disclosed by the company. These results indicate that the level of disclosure in general aspects is still quite low and needs to be improved because this aspect consists of fundamental information related to the company’s profile and corporate governance practice. Meanwhile, the disclosure of specific aspects is also low. Of the total 91 items in specific aspects, there are 8-29 items disclosed by companies. The disclosures were also dominated by descriptive disclosure. A small amount of disclosures is presented with trend analysis and presented in detailed level (break down per geographic area, per division, etc).

Therefore, from the average score of quality sustainability reporting we can see that the aspect of labor practice has the highest average quality score. Employment issues have become one of the most frequently-noticed issues in ASEAN. This attention is also encouraged by the cooperation between ASEAN and ILO (International Labour Organization) in disseminating issues related to labor practices in the ASEAN region (ASEAN Service Employees Trade Union Council 2013). This result also relates to the characteristics of the primary sector industry, where labor-related issues and occupational safety regulations have become the main issues in this sector.

Much attention has been devoted to Thailand for having the highest average disclosure score in all aspects of sustainability, followed by Malaysia and Indonesia. Indeed, based on the review of
sustainability/CSR reporting regulations in each country, Thailand has strong regulations related to CSR. This is evidenced by a strong commitment from the Thai government and stock exchange authorities in Thailand that requires CSR reporting for public listed companies and intensively promoting and providing training to corporate executives regarding sustainability reporting guidelines such as the GRI Guidelines (Sharma 2013; The Stock Exchange of Thailand 2017). Graph 1 and 2 illustrate these findings.

Tables 4 and 5 show descriptive statistics and the Pearson correlation of all research variables. The data presented is the final data with normalization from outliers, by performing the winsorization technique. The data that is normalized with winsorization not more that 5% of the total sample.

Table 4 provides descriptive statistical result for variables used in this study. The sustainability disclosure quality of the sample companies is quite low, indicated by the low mean value of the QSD variable. The low value of QSD standard deviation means that the companies’ quality of sustainability disclosure scores range near to the QSD mean value. Meanwhile, the mean value of the diffusion rate of share...
Table 5

Pearson Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>QSD</th>
<th>SOD</th>
<th>EMPL</th>
<th>CONS</th>
<th>CRED</th>
<th>MEDX</th>
<th>AUD</th>
<th>REG</th>
<th>SIZE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>QSD</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOD</td>
<td>0.07</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMPL</td>
<td>-0.08</td>
<td>0.06</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONS</td>
<td>0.07</td>
<td>0.03</td>
<td>0.03</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRED</td>
<td>0.11*</td>
<td>0.02</td>
<td>-0.17**</td>
<td>0.01</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEDX</td>
<td>0.52**</td>
<td>0.07</td>
<td>-0.13*</td>
<td>0.10</td>
<td>0.24**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUD</td>
<td>0.28**</td>
<td>0.07</td>
<td>-0.01</td>
<td>0.13*</td>
<td>0.02</td>
<td>0.13*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REG</td>
<td>0.14*</td>
<td>-0.03</td>
<td>-0.10</td>
<td>-0.03</td>
<td>0.11</td>
<td>-0.00</td>
<td>-0.07</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>0.56**</td>
<td>0.02</td>
<td>-0.28**</td>
<td>0.22**</td>
<td>0.41**</td>
<td>0.51**</td>
<td>0.29**</td>
<td>0.22**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.11</td>
<td>-0.18**</td>
<td>0.08</td>
<td>0.08</td>
<td>-0.01</td>
<td>0.09</td>
<td>0.04</td>
<td>0.06</td>
<td>0.22**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

QSD = quality of sustainability disclosure; SOD = shareholder diffusion rate; EMPL = labor intensity; CONS = international consumer ratio; CRED = financial leverage ratio; MEDX = number of news items related to the firm on Google News; AUD = dummy variable, value of 1 if the firm is audited by Big 4, 0 if by others; REG = assessment of sustainability reporting in each country (1-4); SIZE = natural logarithm of total sales; ROA = Net Income / Total Assets

**significant at α = 1% (two tailed test)
* significant at α = 5% (two tailed test)

Ownership (SOD) implies that on average, the proportion of total public shares of the total sample is 38.9%. The mean value of the labor intensity (EMPL) means that the average ratio of the employee's expenses per unit of fixed assets is 0.114. The high standard deviation value compared to the average indicates that the variation of the labor intensity ratio is quite high among the entire sample.

From the mean value of international consumer (CONS), it was found that the export value made by the sample companies is 19.9% of its total sales. The creditor pressure variable (CRED) is proxied with the company's financial leverage rate. On average, the company has a long-term debt ratio of 13.5% of its total assets. The mean value of media exposure variable (MEDX) implies that the average number of news items related to the company is 41 times per year. The mean score of the auditor variable (AUD) indicates that the majority of the sample companies were audited by the Big 4. As the result of the global price decline of oil-gas and mine commodities in 2015 and early 2016 (Stocker et al. 2018), the return on assets (ROA) variable has a negative mean value, which means that on average the overall sample suffered losses of 1.9% of its total assets.

Based on the Pearson correlation presented in Table 5, in general there is a positive correlation between QSD and all the independent variables, except for the employee intensity variable (EMPL). There are significant relationships between several independent variables. This can be seen in the interaction of firm size (SIZE) with all other independent variables, except for the shareholder ownership diffusion (SOD) variables. However, SIZE has a negative correlation with the level of employee intensity (EMPL). This indicates that large companies are capital-intensive companies. In addition, there is also a negative correlation of EMPL to the creditor variable (CRED) and media exposure (MEDX). This indicates that companies with a high level of employee intensity tend to have a lower level of leverage and attract less attention from the media. The MEDX also has a positive correlation with the auditor variable (AUD), which indicates that high visibility companies tend to be audited by the Big-4. The CRED and MEDX also have a positive
Table 6
Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Prediction</th>
<th>Coefficient</th>
<th>t-statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOD</td>
<td>+</td>
<td>0.0077</td>
<td>0.44</td>
</tr>
<tr>
<td>EMPL</td>
<td>+</td>
<td>0.0256</td>
<td>1.64*</td>
</tr>
<tr>
<td>CONS</td>
<td>+</td>
<td>-0.0161</td>
<td>-1.26</td>
</tr>
<tr>
<td>CRED</td>
<td>+</td>
<td>-0.0573</td>
<td>-3.07***</td>
</tr>
<tr>
<td>MEDX</td>
<td>+</td>
<td>0.0004</td>
<td>3.46***</td>
</tr>
<tr>
<td>AUD</td>
<td>+</td>
<td>0.0184</td>
<td>2.72***</td>
</tr>
<tr>
<td>REG</td>
<td>+</td>
<td>0.0052</td>
<td>1.57*</td>
</tr>
<tr>
<td>SIZE</td>
<td>+</td>
<td>0.0157</td>
<td>4.59***</td>
</tr>
<tr>
<td>ROA</td>
<td>+</td>
<td>-0.0065</td>
<td>-0.35</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>-0.1898</td>
<td>-3.17***</td>
</tr>
</tbody>
</table>

N 224
R-squared 0.437
Prob (F-statistic) 0.000

QSD = quality of sustainability disclosure; SOD = shareholder diffusion rate; EMPL = labor intensity; CONS = international consumer ratio; CRED = financial leverage ratio; MEDX = number of news items related to the firm on Google News; AUD = dummy variable, value of 1 if the firm is audited by the Big 4, 0 if by others; REG = assessment of sustainability reporting in each country (1-4); SIZE = natural logarithm of total sales; ROA = Net Income / Total Assets

***significant at α = 1% (one tailed test)
**significant at α = 5% (one tailed test)
* significant at α = 10% (one tailed test)

correlation that indicates companies with a high ratio of long-term debt tend to get high attention from the media.

Regression Results

Regression test results can be seen in Table 6 below. Based on the classical assumption test, there was a heteroscedasticity problem in the research model, but it was solved by using the robust treatment in the regression model. Therefore, it can be concluded that the research model has fulfilled the classical assumption test, both normality, multicollinearity, and heteroscedasticity test.

Hypothesis 1 examines the influence of internal primary stakeholder groups on the quality of sustainability disclosures. From the regression results, H1a (SOD) is rejected. This result indicates that the company perceives relatively little pressure from shareholders in developing countries. This indication is alleged due to the situation of the international mining and coal industries which are not yet fully stable after massive price decline during 2015 and early 2016 (World Bank 2017). This price decline became one of the largest oil-price shocks in modern history (Stocker et al. 2018), it was no wonder that it affected the results, given that most of the samples (49.5%) were oil & gas and mining companies. Under these conditions, investors may be tempted to focus on the company's financial performance to stabilize the company's performance after the decline. The H1b (EMPL) can be accepted at the level of significance of 10%. The result shows that firms with a higher level of employee intensity tend to perform quality sustainability disclosure compared to firms with lower level of employee intensity (capital-intensive company). In line with salience stakeholder theory and...
the results of previous studies (Huang and Kung 2010; Fernandez-Fejoo et al. 2014), the company discloses more sustainability information as a manifestation of its responsibilities to employees, given that they are one of the salient stakeholders for the company. Thus, Hypothesis 1 is partially accepted, but only for employee groups (H1a).

Furthermore, Hypothesis 2 examines the external primary stakeholder groups: international consumers and creditors. The result shows that H2a (CONS) is rejected. Based on the review of the export activities of the sample companies, only 36% of the companies conducted export trading activities. In addition, the majority of this activity, with an average export value of 85.2%, is conducted only between ASEAN countries and some countries in Asia, such as China, Hongkong, Japan, or South Korea. Only a few companies exported their products to European and American countries, which tend to have higher social and environmental awareness than Asian countries in the last 5 years (KPMG 2015). A contrary result appears for H2b. There is a significant negative impact of the creditor group (CRED) on the quality of sustainability disclosure. Although this result contradicts some previous studies, it is in line with Cormier and Magnan (2003), which suggest that firms with a better financial condition (indicated by low leverage ratio) are encouraged to carry out social and environmental disclosures compared to firms with higher debt ratios. Hence, hypothesis 2 is not accepted.

Results showed that the hypotheses which examine the influence of primary stakeholders are rejected, both for the internal and external primary groups, except for H1b. On the contrary, based on the managerial branch of stakeholder theory and the salience stakeholder theory, the primary stakeholder - who have significant influence to the continued viability and success of the business (e.g. shareholder, international consumer, creditor) – possess prominent power and legitimacy to influence the companies to meet their expectations, including those related to CSR. Putting aside some possible reasons explained above, these findings show that the primary stakeholders in the ASEAN context do not seem to put pressure on management to perform quality disclosures.

For the secondary stakeholder group (Hypothesis 3), the result shows that media exposure (MEDX) significantly impacts the quality of sustainability dis-closure, thus H3a is accepted. This result is in line with the media agenda setting theory and a number of previous studies (Zygli-dopoulos et al. 2012; Pollach 2014) who found that firms with high media attention tend to reveal more information about their CSR activities. Through their power in shaping public opinion, mass media can play an important role in encouraging firms to conduct extensive sustainability disclosure. H3b (AUD) is also accepted. This indicates that firms audited by the Big 4 tend to perform quality-sustainability disclosures compared to firms audited by Non-Big 4. Big-4 auditors tend to encourage their clients to develop CSR activities and ask them to disclose more information in order to maintain their reputation and avoid future litigation opportunities (Huang and Kung 2010). Thus, we can conclude that Hypothesis 3 is fully acceptable.

Contrary to the result of primary stakeholders, significant positive results were obtained from the secondary stakeholders. These results are quite interesting since the secondary stakeholders can influence companies to enhance their sustainability disclosure instead of the primary stakeholders. Explained by the media agenda setting theory, this result indicates that mass media can be the salient stakeholder for the company regarding its important role in shaping the firm’s reputation in society. Based on the correlation analysis in Table 5, there are interrelated positive correlations between the media exposure (MEDX), size of the
company (SIZE), and auditor (AUD) variables. In addition, there is a significant positive effect of SIZE as a control variable on the quality of sustainability disclosure. This result indicates that large companies tend to have high visibility and receive high media attention. Since there are significant positive correlations of MEDX, SIZE, and AUD, it is possible that the H3b (AUD) is accepted because the majority of companies that are audited by the Big 4 are the companies with high public visibility. Therefore, the influence of secondary stakeholder groups in this study is prominently explained by the media agenda setting theory.

The last hypothesis, H4 (REG) is accepted at the 10% significance level. However, the company's return on assets does not affect the quality of sustainability disclosure. In line with the salience stakeholder theory, this finding (H4) reveals that the regulator possesses power to encourage companies to contrive quality sustainability disclosures. The regulator plays its role as a salient stakeholder who has the authority to coerce companies to enhance their sustainability reporting through mandatory and supplementary rules and regulations. The company certainly seeks to meet these rules to fulfill its responsibility and to avoid penalties that may be imposed by the regulator. This instrument seems to be quite effective in the context of ASEAN countries, as exemplified by Thailand. Looking back to the sustainability disclosure scoring result presented in Table 3, the regulatory instruments stipulated by the Thai government have succeeded in making the country achieve the highest score among the ASEAN-5 countries. Other than requiring CSR disclosure as a part of a listing rule since 2014, the Thai government also set up the Sustainability Reporting Guidance and conducts training for corporate executives. Hence, the regulation set by the regulator groups can be an effective way to intensify the companies’ concern on sustainability reporting.

From the result and analysis discussed, we find that the managerial branch of stakeholder theory and the salience stakeholder theory is relevant in explaining the sustainability reporting practice in the ASEAN context, proven by the existence of the limited number of salient stakeholders (the employees, mass media, auditor, and regulator) who have significant influence to encourage companies to conduct quality sustainability disclosure. The companies’ rationale to conduct sustainability reporting is also explained by the media agenda setting theory. This is evidenced by the positive influence of media exposure on the quality of sustainability disclosure.

**CONCLUSION**

This study was carried out to examine the quality of sustainability disclosures and investigates the influence of stakeholder groups on the quality of sustainability disclosure upon primary sector companies among the ASEAN-5 countries. To investigate the matter, this study divided stakeholder groups into internal primary stakeholders, external primary stakeholders, secondary stakeholders, and regulatory stakeholders. Through content analysis methods under the GRI G4 guidelines and the scoring index developed by Dong et al. (2014) and Vuontisjärvi (2006), the assessment of sustainability disclosures was conducted on 224 sample companies in 2016.

Based on the results, it was revealed that the quality of sustainability reporting among the ASEAN-5 countries is still low and needs to be improved. The employees as internal primary stakeholders, mass media and auditors as secondary stakeholders, and regulators have significant roles in encouraging companies to conduct quality sustainability disclosure. There was no significant pressure from the shareholders and international consumers. This study also figured out a negative influence of the creditor group on the quality of sustainability disclosure.
This study may have important implications for the future development of concepts and practices of sustainability reporting. First, regarding theoretical implication, the findings support the managerial branch of stakeholder theory, the salience stakeholder theory, and media agenda setting theory in explaining the motivation of companies to conduct quality sustainability disclosures. These results place the employees, mass media, auditors, and regulators as salient stakeholders who have power to encourage companies to conduct quality sustainability disclosure. The media agenda setting theory also support this study, evidenced by the results that companies with high visibility and high media attention tend to be active in social and environmental activities as an effort to improve their public image.

The second is about the practical implications of this study. The role of stakeholders in encouraging companies to enhance the quality of sustainability disclosure is not only possessed by primary stakeholders as the most influential stakeholder, but can also be claimed by secondary and regulatory stakeholders. Therefore, given that the quality of sustainability disclosure is still low, global awareness and public attention to sustainability issues are highly required to encourage companies to pay more attention to their sustainability business practice.

Third, these findings also demonstrate that regulations related to sustainability reporting and corporate CSR activities play a major role in encouraging companies to conduct quality disclosures. Based on the result, countries with stronger regulations of CSR reporting (such as Thailand) have a higher average quality score. The mandatory regulation is more effective if supported by sustainability reporting guidelines and other facilities initiated by related regulators, such as seminars and training in the preparation of sustainability reports for company executives, as well as giving rewards to companies for their sustainability performance. It seems that these instruments can effectively build a strong commitment from the top management regarding the sustainability issue of the company.

This study has several limitations. First is the small number of samples within this research, which only covers primary sector companies in the ASEAN-5 countries. Each type of industry has unique characteristics and a different emphasis on each aspect of sustainability. Business characteristic differences may cause varying results regarding the quality of each aspect of sustainability disclosures, depending on which aspects are important to each industry. The fact is that some stakeholder groups may be influential for companies in the primary sector, yet it may not necessarily affect the service sector companies, and vice versa. The single-year data used in this study may also restrict the generalization of the results. Thus, it is therefore argued that further efforts should be made in order to expand sample coverage by taking samples from other industrial sectors or expanding the observation year.

Secondly, most samples were oil-gas and mining companies, where there was a global price decline of oil-gas and mine commodities in 2015. This may potentially affect the results because the financial conditions of these companies were not fully stable in 2016. Further study may conduct an event study to compare the quality of sustainability disclosures between normal and abnormal/crises periods to examine the impact of macroeconomic factors on sustainability disclosures.

By way of conclusion, we would like to draw attention to the fact concerning the nature of the content analysis method to assess the quality of sustainability disclosure. Although this study employs an extensive disclosure index that might present a more reliable score of quality of sustainability disclosure rather than dichotomous scoring, it cannot be denied that there is an opportunity for the subjectivity in carrying out the assessment. However, this has been minimized by designing a detailed and
comprehensive rule to facilitate consistent assessment and structured working papers that require page references and a brief justification for each disclosure assessment.

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