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Firm Performance: A Longitudinal Study of Corporate Social Responsibility and its Societal Impact

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Abstract

The goal of this study is to investigate how social impact, corporate social responsibility (CSR) reporting practices, and firm performance relate to one another in the context of ASEAN (Association of Southeast Asian Nations) banking. The sample was screened from 27 publicly listed banks in five ASEAN member countries (i.e., Indonesia, Malaysia, Singapore, the Philippines, and Thailand), with the period of observations ranging from 2011 to 2019 fiscal year. Social impact is a measure of social performance pillar scores provided by the ASSET4 CSR ranking companies. While, CSR reporting practices used three surrogate indicators: (i) the presence of CSR report; (ii) the existence of CSR assurance; and (iii) the adoption of the Global Reporting Initiatives (GRI) disclosure framework. Firm performance used accounting-based (i.e., return on asset and revenue) and market-based (i.e., market capitalization) measures. This study used longitudinal panel data analysis, including the fixed effect model with robust standard errors. The obtained empirical evidence shows that social impact is positively and significantly associated with three proxies of firm performance (ROA, REVENUE, and MCAP), while the proxies of CSR reporting practices show a partial positive and significant association with the proxies of firm performance. The additional analysis using lagged independent variables and an alternate measure of firm performance (ROE) shows slightly more consistent results relative to the main analysis, suggesting that firm performance needs some time lag so as to allow the impact of CSR reporting practices to be reflected in the variance of firm performance. The empirical tests using the ASEAN

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setting suggest that the idea of CSR has consistently evolved from being noticed as one of the detrimental factors to banks' profitability to being deemed as one of the prerequisite conditions for gaining more potential benefits as strategic initiatives and objectives. Given that, banks should consider the importance of mandatory non-financial information publication to their stakeholders. This research paper advances the works of literature by enriching the limited empirical evidence in the context of social impact, CSR reporting practices, and firms' performance in Non-Environmentally Sensitive Industries (NESIs). Apart from that, to the best of the authors' knowledge, this is among the first studies that elaborate on the particular interplay between the so-called "social impact," CSR reporting practices, and firms' performance in ASEAN.

Keywords*:* Social impact, CSR reporting practice, and firm performance, banks
JEL Classifications: M1, M40, M41.

1. Introduction

A plethora of studies show that a firm's financial performance is affected by the existence of relevant information in the market. It has already been studied in previous works of literature that, apart from the role of financial information, non-financial information (i.e., environmental, social, and governance) should also be taken into consideration if the companies aspire to maintain good performance (Amir & Lev, 1996; Simpson, 2010; Dhaliwal et al., 2011; 2012; 2014; Lys et al., 2015; Platonova et al., 2018). This line of research particularly presumes that non-financial information is value-relevant and serves as incremental information not only for the stakeholders and market participants but also for the company in maintaining its financial performance in the future (Waddock & Graves, 1997; Brooks & Oikonomou, 2018; Kim & Oh, 2019). To date, the study of non-financial information, typically in the form of CSR studies, has reported that companies in the Environmentally Sensitive Industries (ESIs; energy, chemicals, industrials, materials, and so forth) focus more on CSR issues while companies operating in the Non-Environmentally Sensitive Industries (NESIs; financial and other miscellaneous service industries) focus less on CSR information (Aerts et al., 2008). Notwithstanding the fact that non-financial information disclosure has been regulated and is mandatory (e.g., in Europe, America, and North America), there are a lot of firms that have not yet complied with the regulation, particularly due to the non-existence of explicit punishment for non-compliance firms for not reporting on their non-financial-related information to the public. On top of that, a growing number of studies have solely focused on highlighting the environmental impact on firm performance (Cormier & Magnan, 2015). Yet, little is known when it comes to how companies operating in the NESIs industry (i.e., banking) deal with social impact and CSR reporting practices. The lack of empirical archival research in this area is mostly due to data limitations, as in most of the countries in the western world, CSR reporting practices are still deemed voluntary disclosure activities. However, such a requirement is recently in practice in Southeast Asian companies (Arena et al., 2018), which may enable further exceptional empirical investigation compared to previous studies in developed countries.

The previous research of Waagstein (2011), Sadou et al. (2017), Lawrence & Thomas (2018), Liu et al. (2019), and Issarawornrawanich & Wuttichindanon (2019) highlighted ASEAN's (Association of Southeast Asian Nations) CSR-related institutional setting of studies. They reported that Indonesia has introduced and enacted CSR regulations. Indonesian publicly listed companies have to comply with Bapepam-LK Rule X.K.6 on 7th December 2006, which concerned the obligation of information disclosure regarding the "description of the activities and expenditures related to corporate social responsibility towards society and environment". A year later, this regulation was further improved through Law No. 40/2007 concerning Limited Liability Companies Law, which mandated companies to report their environmental and social programs (Waagstein, 2011). In Malaysia, the regulation which requires publicly listed companies operating on the Malaysia Stock Exchange (MSE) to disclose CSR information was introduced in December 2007. It was finally turned into full mandatory disclosure in 2015, which demands all publicly listed companies in MSE to provide sustainability statements in their annual reports (Sadou et al., 2017; Liu et al., 2019). Meanwhile, in the Philippines, the regulation was enacted on 15th February 2019. The Philippines Securities Exchange Commission (SEC) released Memorandum Circular No. 4, Series of 2019, on the Sustainability Reporting Guidelines for Publicly-Listed Companies (SEC, 2019). The Memorandum Circular took effect on 8th March 2019 and

would apply to the 2019 Annual Reports that should be submitted in 2020 (Philippines SEC, 2019). The Singapore Exchange (SGX) has made it mandatory for all listed companies to report their environmental, social, and governance actions from the financial year ending on December 31st, 2017, onwards (Liu et al., 2019). In Thailand, the national policies and regulations for CSR disclosure were promoted in 2006 through the Thailand SEC (Issarawornrawanich & Wuttichindanon, 2019). In 2017, the Thai government enacted the Corporate Governance Code for publicly listed companies, which integrated the essence of G20/OECD principles and delineated the board's roles and responsibilities for companies' long-term sustainable value creation (Lawrence & Thomas, 2018).

Given the interesting dynamics of ASEAN's CSR-related institutional setting backgrounds, our study deliberately uses a dataset from the ASEAN region to explore whether social impact and CSR reporting practices are related to firm performance in non-environmentally sensitive industries (i.e., the banking industry). We base and advance our research questions on studies that have established the association between CSR impact, CSR reporting practice, and firm performance in the manufacture, mining, or other sectors of the Environmentally Sensitive Industries (ESIs). Recent works of literature have also considered that, either voluntarily or mandatorily, the publication of CSR information is value-relevant for stakeholders, which may lead to potential economic benefits for companies in terms of their financial performance. However, in this context, the identification of whether the same propensity applies in the banking industry remains an open question, as the business model of financial institutions is different from that of those companies in the ESIs. The banking sector is supposed to be more socially responsible, as the previous study noted that the banking industry is considered the heart of society (Platonova et al., 2016). Henceforth, it is widely accepted that being socially responsible has been seen as a deep-rooted concept in the banking industry. For this reason, the existing works of empirical evidence to some extent have shown unexplored links on the nexus between social impact firm performance and CSR reporting practice firm performance in the ASEAN banking industry. To fill in this research gap, we thus propose two research questions: 1) whether the social impact is associated with firm performance? and 2) whether CSR reporting practice is associated with firm performance.In the first research question, we propose an investigation of the relationship between social impact and firm performance. Social impact is defined as the consequence of a firm's decision to publicly publish social-related information that relates to its performance, standards, or activities under the social responsibility umbrella (Brooks & Oikonomou, 2018). Whilst the concept of firm performance refers to financial performance. The empirical research to date has produced mixed results. It is possible to argue for a positive, negative, or no link at all between social impact and firm performance. A positive link between social impact and firm performance may occur if a firm with positive social impact, for instance, better able to communicate its social performance information (initiatives and actions) to professional stakeholders (e.g., financial analyst, institutional investors). It may benefit from the recommendation of the analyst to gain better access to finance (Cheng et al., 2014), lower cost of capital (Dhaliwal et al., 2014), price premium (Espinosa & Trombetta, 2004), and higher reputation (Axjonow et al., 2016). A negative link might occur if expenditures on the socially related activities (e.g., charity projects and promoting staff welfare) is value-destroying, given the expensive resource spending may give rise to administrative burden (Barnett & Salomon, 2012), and is not met by increased revenue, returns, that could be distractive for managers in intensifying firm's core business (Brooks & Oikonomou, 2018). Meanwhile, no discernible link between social impact and firm performance could be the result if the social-related activities, are irrelevance with trivial impacts on both

cost and revenue compared to other parameters that may have more direct impact on firm performance (Waddock & Graves, 1997; Brooks & Oikonomou, 2018).

In the second research question, we conjecture that CSR reporting practice is associated with firm performance. Despite the growing popularity of CSR practice, there is also growing support for the notion that CSR reporting practice helps to resolve some of the problems of organizational legitimacy (Neu et al., 1998; Michelon et al., 2015), which helps the firm maintain its relationship with the relevant stakeholders (Brammer & Pavelin, 2006). Thereupon, it is eventually expected to generate better financial performance. The previous study by Michelon et al. (2015) broke down CSR reporting practices into three surrogate indicators (i.e., CSR report, CSR assurance, and GRI adoption). They tested whether these three variables corresponded to higher CSR disclosure quality. However, our study is different from their study as we employ a direct test between CSR reporting practice and firm performance. We thus adapt their measures of CSR reporting practice and test them on three proxies of firm performance (return on assets, revenue, and market capitalization). Based on the prior empirical evidence, the direction of the aforementioned relationship is mixed. The relationship between CSR reporting practice and firm performance can be positive, negative, or insignificant; thus, inconclusive results have been attained. Take, for instance, GRI adoption as one of the proxies of CSR reporting practice in the study of Michelon et al. (2015), was found to be positively associated with CSR disclosure quality., While, the availability of stand-alone CSR reports and CSR assurance is not associated with CSR disclosure quality. These results imply that, on the one hand, the presence of a CSR report and its assurance cannot guarantee the high quality of information disclosure since the reported information could be perceived as less credible and reliable (Mercer, 2004; Manurung & Basuki, 2010). On the other hand, those sample groups with GRI adoption indicate a significantly higher disclosure quality as the reported information is published in a more structured, measurable, and comparable format. This finding also indirectly implies a double-edged "sword" indication, where on one side, CSR reporting practices that are positively associated with higher disclosure quality may facilitate stakeholders to better use and comprehension of the information. However, on the other side, those companies with a negative association between CSR reporting practice and disclosure quality could mislead the stakeholders in using and interpreting the reported CSR information. This, in turn, finally leads to ineffective corporate narrative communication, which in the long-term may result in negative firm financial performance (Muslu et al., 2019). Meanwhile, the inconclusive result might occur due to the presence of many intervening variables, which could potentially hamper the direct relationship between CSR reporting practice and firm performance (Waddock & Graves, 1997; Platonova et al., 2018).

Our study contributes to the literature in accounting and finance in several ways. First, we test the association between social impact-firm performance and CSR reporting practice-firm performance, which receives little empirical attention in the setting of the ASEAN banking industry. In this regard, we investigate the idea that the variance of a firm's performance is the function of social impact and CSR reporting practice. Second, to the best of our knowledge, this paper stands among the first evidences that elaborate on the particular interplay between the so-called "social impact", CSR reporting practice, and firm performance. Previous empirical studies have considered the application of environmental, social, and governance (ESG) impacts on firm performance in the Environmentally Sensitive Industries (ESIs). Yet, our research is different as we only take into account the "social impact" given the nature of the banking industry, which is categorized as a Non-Environmentally Sensitive Industry (NESIs).

We structure the remainder of this paper into several sections. The section on literature review and hypotheses development contains prior relevant studies in the areas

of social impact, CSR reporting practice, and firm performance. The research method section highlights the data, sample selection procedure, and regression modeling. The section on results elaborates on the obtained empirical univariate and multivariate analysis outputs. The last section is the concluding remarks, which briefly compiles and summarizes the overall findings of the study.

2. Literature Review and Hypotheses Development

3.1 Theoretical Framework and Research Model

The idea of Corporate Social Responsibility (CSR) has consistently evolved from being noticed as one of the detrimental factors to a firm's profitability to being deemed one of the prerequisite conditions for gaining more potential benefits as strategic initiatives and objectives (Porter & Kramer, 2011; Cheng et al., 2014). In line with the shifting concept of how firms view CSR practice, recent literature has shown a number of studies documenting that companies' engagement with CSR activities is growing profoundly (Patten & Zhao, 2014; KPMG, 2017). The concept of Corporate Social Responsibility (CSR) refers to the responsibility that organizations have towards society, beyond their economic and legal obligations. It encompasses the voluntary actions and initiatives that businesses take to address social, environmental, and ethical concerns, aiming to make a positive impact on stakeholders and society at large (Patten & Zhao, 2014). The idea of CSR is based on the understanding that businesses are not solely profit-making entities but also have broader responsibilities towards various stakeholders, including employees, customers, communities, the environment, and society as a whole (Kamaludin et al., 2022). The previous studies in this area indicate that companies' involvement in CSR-related activities and its reporting is necessary, as it can help the companies obtain or expand their operation activities, as well as legitimize business operations, and maintain their legitimacy within the community (Cormier & Magnan, 2015).

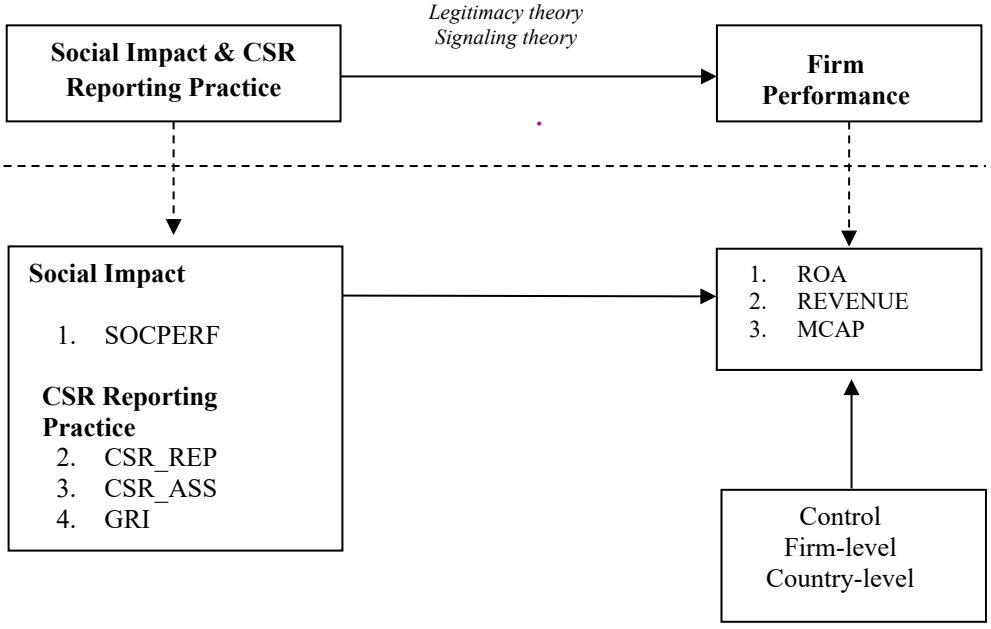
From a theoretical point of view, a firm propensity to engage in CSR can be related to legitimacy (Cormier et al., 2005; Aerts et al., 2008) and signaling theory (Cho et al., 2014; Lys et al., 2015; Bagnoli & Watts, 2017). In this context, we deliberately use these two main theories, which closely explain the relevance of the ideas behind the relationship of our proposed concept. First, we use legitimacy theory. In a widely cited paper by Suchman (1995), legitimacy is defined as "a generalized perception or assumption that the action of an entity is desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions." The extensive research in CSR studies has shown that firms need legitimacy as a license to operate, and firms with poor CSR performance are expected to deal with better CSR practices (Cho & Patten, 2007; Rodrigue et al., 2013). Cormier et al. (2005) and Aerts et al. (2008) also highlighted the importance of the implicit social contract between society and business entities as the major key factor for firms to obtain their license to operate. With the same spirit, Patten (1991) had previously documented that the type of industry can also affect and lead CSR publications to minimize criticism and pressure from society.

Meanwhile, with respect to the relevance of signaling theory, Stiglitz (2002) pointed out that "some individuals wish to convey information and others wish not to have information conveyed, but in other cases, the fact that actions to convey particular information lead people to alter their behavior". The signaling theory could be linked to CSR studies given its ability to explain the corporate actions taken by companies through CSR-related initiatives. The literature in signaling theory notes that companies' willingness and seriousness in dealing with CSR activities are considered signals to

differentiate their position from other competitors in the same industry (Toms, 2002; Cho et al., 2014). In addition to this, Deegan et al. (2006) and Mahoney et al. (2013) noted that a company's decision to deal with CSR practice is based on the manager's discretion, particularly in selecting CSR focus actions and choosing the most appropriate form of CSR publication[1]. Correspondingly, Lys et al. (2015) and Bagnoli & Watts (2017) further suggested that CSR reporting practice, through its direct expenditures, is also deemed a channel through which outsiders may infer private information about companies' future performance.

As previously highlighted by the literature in the legitimacy and signaling streams, we argue that legitimacy and signaling theory have a close relationship, which provides a unique, practical, and testable perspective in a social science setting of study. In addition to the immediate external environment and institutional influences that affect firms' CSR activities, legitimacy theory and signaling theory also take these factors into account. These theories take into account the fact that corporations' functions in a social, cultural, and legal environment influence their CSR actions. While signaling theory acknowledges the significance of external stakeholders' views and interpretations of CSR signals in influencing organizational behavior, legitimacy theory aids in identifying the institutional norms and expectations that firms must follow to achieve legitimacy (Brown & Deegan, 1998; Tandelilin & Usman, 2023). More in detail, companies' efforts to obtain legitimacy and their purpose in delivering a positive signal to the public can be observed from the level of their social impact and engagement with CSR reporting practices. Given that, we conjecture that social impact and CSR reporting practices might play a particular role in explaining the variation in firm performance. Hence, we propose the following research model: Figure 1 displays.

Figure 1: Research Model



Source: Author's own study.

[1] The study by Bagnoli & Watts (2017) noted various types of CSR documents available to the public, such as CR report, Sustainability report, Environmental report, ESG report, Triple Bottom Line report, and so forth.

Figure 1 presents the overall research model, which depicts the conceptualization as well as the operationalization of variables. In this context, we study the idea of whether social impact and CSR reporting practices are associated with firm performance. To empirically test these associations, we deliberately adopt the legitimacy and signaling theory as the underlying ideas to link the proposed concept. The utilization of these two theories is comprehensively justified in the following subsection of hypothesis development. More in detail, under the dotted line, we present the proxies of the main variable of interest. The concept of social impact is measured using the social performance score (SOCPERF). While, CSR reporting practice is measured using three surrogate indicators: 1) the presence of a CSR report (CSR_REP), 2) the presence of CSR assurance (CSR_ASS), and 3) the adoption of the Global Reporting Initiative disclosure framework (GRI). Meanwhile, the operationalization of the dependent variable is represented by three main dependent variables: 1) return on asset (ROA), 2) annual revenue (REVENUE), and 3) market capitalization of banks (MCAP).

2.2. Social Impact and Firm Performance

Existing works of literature have well documented that firms' decisions to deal with CSR-related activities are deemed strategic initiatives and objectives (Porter & Kramer, 2011). Among them, voluntary disclosure documents such as CSR publications have been associated with higher analyst coverage (Dhaliwal et al., 2014), lower forecast error (Dhaliwal et al., 2012; Lee, 2017), better access to finance (Cheng et al., 2014), lower cost of capital (Dhaliwal et al., 2011), higher firms' financial attributes (Usman, 2020), price premiums (Espinosa & Trombetta, 2004; Chen et al., 2018), and higher corporate reputation (Brammer & Pavelin, 2006; Pérez et al., 2015). The perceived benefits as consequence of dealing with CSR publication are higher if the reported information indicates a positive CSR impact. For this purpose, CSR impact is measured and evaluated by considering three aggregate aspects, i.e., environmental, social, and governance. However, a particular stream of literature on social impact points out that social responsiveness is deemed to play a significant role in promoting a favorable relationship with primary stakeholder groups than the environmental and governance aspects (Brammer & Pavelin, 2006; Brooks & Oikonomou, 2018). A group of stakeholders consisting of shareholders, employees, consumers, pressure groups (e.g., media, society, non-governmental organizations), government, and regulators demand attention from corporate management and expect that the manager, as the agent, could behave in accordance with their expectations. In this sense, social responsiveness might also play a role in encouraging constructive contributions from related stakeholders. When the expectations of both managers and stakeholders are satisfied, it is worth expecting that firm performance will increase as a result of positive social impact. For this reason, Brammer & Pavelin (2006) and Brooks & Oikonomou (2018) highlighted three possible explanations in respect of the importance of social disclosure. First, it is related to a sense of social contract, which is meant to enhance business legitimacy and firm valuation (financial performance). Second, to proactively give the impression of doing good to stakeholders and the public. Third, to influence the perceptions regarding the firms' future financial prospects in the minds of stakeholders.

On the contrary, in the spirit of critical perspective, a thread of the literature argues that CSR activities, i.e., social initiatives and actions, are viewed as a wasteful discretionary act of management, in which social activity such as charity, philanthropy expenditures, enhancements in employment quality, health and safety, diversity, and community investments are commonly considered an altruistic impulse to manage the perceptions of companies among stakeholders (Brammer & Millington, 2005; Brammer & Pavelin, 2006). In this regard, social performance is deemed to have nothing to do with

sustainability and its implication on firm performance (Moneva et al., 2006), but rather reflects the attempt to camouflage inappropriate activities (Michelon et al., 2016) or strategically manage firm reputation (Bebbington et al., 2008). Given that, one might expect that the effort of boosting social impact might be detrimental to firm performance (financial). The tendency for social investment (e.g., charity, philanthropy, training, and development) is more likely to obstruct firm financial resources. Thus, the manager, through his discretion, should be able to meticulously identify whether social impact via social investment is outweighed by the opportunity cost associated with diverting financial resources away from other activities (Bondy et al., 2012). However, as prior works of empirical evidence show that social impact is suggestive of strategic use of CSR policy (Porter & Kramer, 2011), we, therefore, expect that the overall propensity to be a socially responsible business entity is more likely to enhance firm performance. For the most part, companies could also legitimate their business operations through social-related activities through the venue of CSR publication and, at the same time, promote a signal to stakeholders that they have a superior social strategy. Hence, we develop Hypothesis 1 as follows:

Hypothesis 1: Social impact and firm performance are positively associated.

2.3. CSR Reporting Practice and Firm Performance

Hypothesis 2 mainly focuses on investigating the potential relationship between CSR reporting practice and firm performance. As documented by the prior studies, there is growing and widespread interest in CSR, which may help generate the dissemination of CSR practice by firms of all types (Michelon et al., 2015). Recent studies also consider CSR reporting practice as a choice-based decision, which is deemed by the companies as one of the strategic actions at the corporate level (Porter & Kramer, 2011; Lennox et al., 2012). In its practice, the implementation of CSR needs meticulous cost and benefit analysis (Bondy et al., 2012; Ferguson & Pündrich, 2015), which eventually leads to the economic consequences of increased disclosure (Leuz & Verrecchia, 2000). To empirically see the economic consequences (firm financial performance) of dealing with CSR reporting practice, a previous study by Michelon et al. (2015) suggested three surrogate indicators of CSR reporting practice (i.e., CSR report, GRI adoption, and CSR assurance). We further use these three indicators and therefore investigate the relationship between CSR reporting practice and firm performance by sequentially distinguishing the logic of our hypothesis development into hypotheses 2a, 2b, and 2c.

Hypothesis 2a is developed with the notion that the presence of a CSR report is positively associated with firm performance. In relation to the presence of CSR-related information documents and their publication to the public, the underlying theories have well documented that CSR reports are associated with the motive of obtaining legitimacy (Bhattacharyya, 2015) and signaling an attempt to reach the public (Lys et al., 2015). To appropriately deliver this information to the public, companies, to some extent, have the choice of having it published in the form of a stand-alone report or combined in the annual report (Cho et al., 2015). The recent phenomenon shows that there is an increasing number of CSR reports published at the global level. For instance, KPMG (2017) global survey of Corporate Responsibility (CR) reports revealed a significant increase in the quantity of CSR reports published by the G250 companies, 93% higher from 1993 to 2017. Meanwhile, in the same period, this number was 75% higher for N100 companies worldwide. Given the high quantity of reported CSR reports, the social accounting literature has appeared to critically evaluate the presentation of CSR reports. Apart from its function to increase transparency and mitigate potential asymmetry information, many critics of the presentation of the CSR report see this report as little more than a

public relations tool, which raises Unerman et al.'s (2007) concerns that the CSR report is deliberately designed to manage stakeholder perception and to maintain stakeholder approval of business survival. In addition to this, a study by Thorne et al. (2014) also raised the awareness that a firm's motivation to publish a CSR report is to merely manage political and media visibility.

Furthermore, Hypothesis 2b is designed by proposing the idea that the presence of CSR assurance is positively associated with firm performance. In this context, we build an initial argument that companies' decision to publish CSR reports is insufficient, as this practice might be driven by misappropriation of CSR reports. Among them, the potential misappropriation could be linked to impression management actions (Rutherford, 2003), hypocrisy motives (Michelon et al., 2016), CSR reports as camouflaging or green-washing tools (Moneva et al., 2006), reputation risk management tools (Bebbington et al., 2008), CSR as window dressing tools (Xu & Yang, 2019), and solely ticking the box of CSR dimensions that might harm and reduce the substantive purpose of CSR function as the source of value-relevant information (Junior & Best, 2017). Given the presence of misappropriation actions that reflect the opportunistic behavior of companies as report preparers, it is presumably apparent that the reported CSR information might be far from credible, reliable, and trustworthy (Hodge et al., 2009; Briem & Wald, 2018). Therefore, there is also a high possibility that the report preparers may obfuscate the information to make the negative news less recognizable. As a result of this, the information in the CSR report cannot be fully understood by stakeholders (Neu et al., 1998; Rutherford, 2003; Muslu et al., 2019).

Bagnoli & Watts (2017) pointed out that it is the company that knows very well their actual level of CSR engagement. As this practice is merely based on the manager's discretion, the company, through the managers' decision, may select a certain preferable set of information to be disclosed. Meanwhile, in actual practice, stakeholders can only observe companies' engagement via the final CSR reports distributed to the public. To reduce the potential asymmetrical information between companies as report preparers and stakeholders as report users, companies are expected to legitimate their CSR reports and send the signal to the public that they have dealt with proper and truthful CSR-related activities by having it assured by an independent third party (Mercer, 2004; Moroney et al., 2011; Cho et al., 2014; Romero et al., 2014). When the reported CSR information was assured, a company had to be ready for scrutiny. During the assurance engagement, a company's CSR report was further evaluated and cross-checked by the assurance providers[2]. This practice is considered an effort and commitment that companies want to be positively valued by stakeholders (Manurung & Basuki, 2010; Moroney et al., 2011; Lys et al., 2015). As a result of this, companies are viewed as able to maintain the credibility and reliability of the reported CSR information, which thus facilitates the CSR reports as value-relevant and might contribute as incremental information in explaining the firm's performance.

Additionally, Hypothesis 2c is formulated with the argument that Global Reporting Initiative (GRI) adoption positively corresponds to firm performance. GRI is a global disclosure framework that can be adopted by companies when reporting their environmental, social, and governance-related information (GRI, 2014). As CSR reporting is voluntary and, in some countries, unregulated, companies may use non-binding disclosure frameworks in dealing with the reporting of their non-financial

[2] The assurance service providers of the CSR report can be professional accountants (i.e., BigN vs. NonBigN) and non-accountants (e.g., consultancy firm; environmental consultant, environmental and engineering consultant, environmental research organization, and so forth) (Deegan et al., 2006; Manurung & Basuki, 2010; Simnett et al., 2009; Moroney et al., 2011).

information metrics. For instance, Pope & Wæraas (2016) noted several disclosure guideline frameworks available to the public, such as the United Nations Global Compact (UNGC), the IFC Sustainability Framework, the Global Reporting Initiative (GRI), the Fair Labor Code, and the Carbon Disclosure Project. In the US, the Sustainability Accounting Standards Board (SASB) develops and disseminates industry-specific disclosure standards for environmental, social, and governance topics (Khan et al., 2016). However, among them, GRI is considered a widely accepted global framework, with thousands of reporters in over 90 countries using GRI's standard (Brown et al., 2009; Hahn & Lulfs, 2014). This claim is deemed relevant as GRI has been modified, developed, and evolved over time by taking into consideration the inputs and needs of stakeholders. Thus, the formulas of non-financial metrics parameters in GRI are considered better to be taken as alternative tools in quantifying and justifying non-financial information calculation, which also leads to more measurable and comparable sets of non-financial information (Mahoney et al., 2013).

Apart from its eminence as a disclosure framework, the work of literature has also pointed out that GRI adoption is not free from potential critique. Among them, the use of GRI as reporting guidelines is incurred by a potentially abusive CSR reporting practice. In this context, the use of GRI is associated with cherry-picking with the data, in which companies may deliberately set their focus only on a certain dimension of CSR topics without presenting a balanced publication of CSR dimensions (Moneva et al., 2006). Another potential problem is related to the "tick-box technique," which is more likely to lead to an act of imposing the codes of conduct by merely taking into account the regulatory requirements without implementing any substantive actions (Prieto-carrón et al., 2006; She, 2019). Given the critiques faced by GRI, we see those companies with GRI adoption express the signal as having a higher level of commitment to CSR compared to their peers without GRI adoption. Therefore, we argue that the information disclosure by following the GRI framework presents more relevant information for stakeholders, as it provides more measurable and comparable information across industries. The expectation is that stakeholders might easily follow what type of information is being reported and how it is reported through more measurable and comparable non-financial metrics. Perhaps a more structured and standardized set of information disclosures might lead to more relevant and valuable information for stakeholders and eventually result in better firm performance.

Overall, this information is considered to be helpful for stakeholders, such as professional and non-professional stakeholders, in the situation where CSR reporting practice (i.e., CSR report, CSR assurance, and GRI adoption) has been made public knowledge (Odriozola & Baraibar-Diez, 2017). The prospective performance and risk of associated firms are therefore more likely to be assessed and evaluated by stakeholders using these reports. Based on the findings of previous studies, the direction between CSR reporting practice and firm performance is mixed. This relationship can be positive, negative, or inconclusive. The study by Michelon et al. (2015) showed that GRI adoption as a proxy for CSR reporting practice is positively associated with CSR disclosure quality. While the presence of a CSR report and CSR assurance are deemed irrelevant in explaining CSR disclosure quality, their results suggest that, on the one hand, the presence of a CSR report and assurance cannot guarantee the high quality of information disclosure as the reported information could be perceived as less credible and reliable (Mercer, 2004). On the other hand, those samples with GRI adoption indicate a significantly higher disclosure quality as the reported information is published in a more structured, measurable, and comparable format. This finding is somehow dilemmatic, as on one side, CSR reporting practices that are positively associated with higher disclosure quality may facilitate stakeholders to better use of the information. However, on the other

side, those companies with a negative association between CSR reporting practice and disclosure quality could mislead the stakeholders in utilizing and interpreting the reported information. This, in turn, eventually leads to negative firm financial performance. Meanwhile, the inconclusive result might occur due to the presence of many intervening variables, which could potentially hamper the direct relationship between CSR reporting practice and firm performance (Waddock & Graves, 1997; Platonova et al., 2018; Usman et al., 2020). Taking onboard the above discussion on CSR report, CSR assurance, GRI adoption, and their association with firm performance, we sequentially propose Hypotheses 2a, 2b, and 2c as follows:

Hypothesis 2a: The availability of CSR report and firm performance are positively associated.

Hypothesis 2b: The presence of CSR assurance and firm performance are positively associated.

Hypothesis 2c: GRI adoption and firm performance are positively associated.

3. Research Methods

3.1. Data and Sample

This study attempts to identify the social impact, CSR reporting practice, and firm performance of the ASEAN banking industry. The banking industry is chosen as little empirical evidence is available in respect of the study in the area of Non-Environmentally Sensitive Industries (NESIs). Correspondingly, we argue that the banking industry provides a relatively more homogenous setting for studying the social impact and CSR reporting practices for the cross-country dataset. In relation to this, the data extraction is done in several steps based on the required number of variables. First, the data on social impact is extracted from the Thomson Reuters ASSET4 database. Second, the data with respect to CSR reporting practices (i.e., the availability of CSR or sustainability reports) is imported from the Corporate Register database (http://www.corporateregister.com) and the Global Reporting Initiative sustainability disclosure database (https://database.globalreporting.org/). These two databases are considered the most comprehensive directory of CSR and or sustainability reports worldwide. Third, the data regarding the firm's performance is taken from the Thomson Reuters EIKON database, while the data of the country-level is taken from World Bank - Database. To technically collect the related data, we screened 84 banks (a total population of 756 bank-year observations from five ASEAN countries) covering a nine-year period of observation 2011-2019). These samples are further constructed following the purposive sampling criteria, in which: 1) The sample should be publicly listed companies on one of the ASEAN member stock exchanges from 2011 to 2019. 2) The sample should be consistently registered in the ASEAN banking industry. 3) The sample should have published non-financial information documents (CSR information dedicated to the annual report or a stand-alone CSR report). 4) The sample should have had complete financial information . A more detailed sample selection procedure is available in Table 1.

Table 1: Sample Selection Procedure

	Sample construction procedure	Number of Banks	Bank-year observations	%
1	Publicly Listed Banks on the banking sector of IDX, BM, SES, PSE and SET.	84	756	100
2	Banks without CSR report data covered by ASSET4, Corporate Register, and GRI databases.	(57)	(513)	(67.85)
3	The final number of banks with complete observations and financial data (control variables).	27	243	32.15

Notes: IDX (Indonesian stock exchange), BM (Bursa Malaysia (Malaysia stock exchange)), SES (Stock exchange of Singapore), PSE (Philippine stock exchange), SET (Stock exchange of Thailand).

Source: Author's own study.

Information sources: Listed Banks in ASEAN, Corporate Register, GRI database, World Bank database, and Thomson Reuters EIKON.

In the end, we are finally able to extract 27 publicly listed banks in five ASEAN countries, with the total number of bank-year observations standing at 243, i.e., Indonesia (5 banks), Malaysia (8 banks), Singapore (3 banks), the Philippines (4 banks), and Thailand (7 banks). The categorization of banks according to their distribution by country is available as follows:

Indonesia: Bank Mandiri, Bank Rakyat Indonesia, Bank Central Asia, Bank Danamon Indonesia, Bank Negara Indonesia.

Malaysia: Hong Leong Bank, Hong Leong Financial Group Bhd, AMMB Holding Bhd, CIMB Group Holdings, Malayan Banking, Public Bank, RHB Bank Bhd, Alliance Bank Malaysia.

Singapore: Oversea-Chinese BKG, United Overseas Bank, DBS Group Holding.

Philippines: Security Bank, BDO Unibank Inc, Metropolitan BK.& TST, Bank of the Philippines Islands.

Thailand: Krung Thai Bank, Bank of Ayudhya, Tisco Financial Group, TMB Bank, Siam Commercial Bank, Kasikorn Bank, Bangkok Bank.

3.2. Operational Definition

To better understand the operationalization of each variable, we also present the definition of variables and their data sources. Table 2 explains.

Table 2: Definition of Variables Employed in the Analysis

No	Variable	Measures	Source
1	ROA	Net income / Total asset	EIKON
2	REVENUE	Logarithm Natural of the total annual revenue	EIKON
3	MCAP	Logarithm Natural of Market price per share × Total number of outstanding shares	EIKON
4	SOCPERF	Social pillar performance score	ASSET4
5	CSR_REP	1 if firm published a stand-alone, or CSR information in the annual report; 0 otherwise	Corporate register/GRI
6	CSR_ASS	1 if firms assured their CSR reports; 0 otherwise	ASSET4,
7	GRI	1 if CSR reports adopt GRI disclosure framework; 0 otherwise	ASSET4
8	CAR	Equity capital / Risk-weighted total assets	EIKON

No	Variable	Measures	Source
9	NPL	Non-performing loan / Total loan	EIKON
10	LOAN	Average of total loans / average total assets	EIKON
11	AGE	Company's yearly age from the first time of its establishment.	EIKON
12	INFLATION	The annual inflation rate (percentage)	World-Bank
13	I_RATE	The annual interest rate (percentage)	World-Bank

Source: Author's own study.

Information sources: Listed Banks in ASEAN, Corporate Register, GRI database, World Bank database, and Thomson Reuters EIKON.

3.3. Regression Model

We use longitudinal panel data analysis to empirically examine the relationship among variables of interest. As previously explained in the research model, we employ firm performance as the dependent conceptual idea, while social impact and CSR reporting practices are utilized as the independent conceptual ideas. To further proceed with the technical procedure, we measure firm performance using three proxies; two of them are the accounting-based measures (ROA and REVENUE), and the last one is the market-based measure (MCAP). Given that, we design three statistical notations in which ROA, REVENUE, and MCAP are presumed to be the functions of social impact (i.e., SOCPERF) and CSR reporting practice (CSR_REP, CSR_ASS, and GRI). Furthermore, in order to tackle the potential endogeneity problem (e.g., omitted correlated variable bias), we also perform panel regression analysis using a set of control variables, either at the firm level or country level. Furthermore, in the panel data form, the observations are clustered along a time dimension and/or individual dimension. This structure indicates that standard OLS is not suited to making correct inferences in longitudinal (panel) data and will produce misspecified test statistics when either form of correlation is present (Mertens et al., 2016). For this reason, the white test standard error correction is deemed able to address the heteroscedasticity issue, in which the size or value of the observed variable differs between units, but not the time or cross-sectional dependence in the data. Thus, we employ a fixed-effect model at the firm (bank) level with a robust standard error at the firm level in our estimation. The regression model for each different dependent variable is formulated as follows:

$$\mathrm{ROA}_{i,t} = \alpha + \beta_1 \mathrm{SOCPERF}_{i,t} + \beta_2 \mathrm{CSR\_REP}_{i,t} + \beta_3 \mathrm{CSR\_ASS}_{i,t} + \beta_4 \mathrm{GRI}_{i,t} + \beta \sum \mathrm{Controls}_{i,t} + \gamma \sum \mathrm{Year} + \gamma \sum \mathrm{Country} + \varepsilon \quad (1)$$

$$\mathrm{REVENUE}_{i,t} = \alpha + \beta_1 \mathrm{SOCPERF}_{i,t} + \beta_2 \mathrm{CSR\_REP}_{i,t} + \beta_3 \mathrm{CSR\_ASS}_{i,t} + \beta_4 \mathrm{GRI}_{i,t} + \beta \sum \mathrm{Controls}_{i,t} + \gamma \sum \mathrm{Year} + \gamma \sum \mathrm{Country} + \varepsilon \quad (2)$$

$$\mathrm{MCAP}_{i,t} = \alpha + \beta_1 \mathrm{SOCPERF}_{i,t} + \beta_2 \mathrm{CSR\_REP}_{i,t} + \beta_3 \mathrm{CSR\_ASS}_{i,t} + \beta_4 \mathrm{GRI}_{i,t} + \beta \sum \mathrm{Controls}_{i,t} + \gamma \sum \mathrm{Year} + \gamma \sum \mathrm{Country} + \varepsilon \quad (3)$$

3.4. Variables

3.4.1. Dependent Variables

The subscript i, as indicated in the statistical notation, means the information with respect to firm i. While subscript t denotes the information of a variable in year t, as can be seen in the above empirical notation, we propose three statistical models. Each statistical model represents a different test using a different proxy of firm performance. More in detail, the first proxy of firm performance is the return on assets (ROA). Second is firm revenue (REVENUE). Third is market capitalization (MCAP). The rationale to pick these three dependent variables as proxies of firm performance is taken by referring to the previous works of literature. Mostly, prior studies utilize accounting-based information, and ROA stands among the most popular indicators of firm performance (Platonova et al., 2018; Kim & Oh, 2019). To further advance the literature and to distinguish our research from the previous studies, we also consider including REVENUE and MCAP as the main dependent variables. These accountings and market-based information (REVENUE and MCAP) are believed to be representative proxies for firm performance because they are considered more consistent and stable (Ali et al., 2020).

3.4.2. Independent Variables

We propose two concepts as the main independent variables (i.e., Social impact, CSR reporting practice). First, social impact is measured by the value of the social performance score (SOSPERF) calculated by Thomson Reuters ASSET4. The social performance score is calculated by weighing the social indicators with respect to: 1). employment quality; 2) health & safety; 3) training & development; 4) diversity; 5) human rights; 6) community; and 7) product responsibility. The data on these social indicators is further collected from the available CSR-related documents (e.g., CSR reports, sustainability reports, ESG reports, stock exchange filings, and non-governmental organization reports). Groups of trained research analysts were assigned to extract and proceed with the information based on a default, equally weighted framework. The collected data is further (mostly in the form of qualitative information) transformed into consistent units of quantitative data and aggregated based on certain framework categories (i.e., driver indicators, the availability of companies' commitment to information about policy and process). Outcome indicators (the availability of information on the results of companies' policies and actions) are grouped within the social pillar. The same procedure, but with different indicators, is performed for the environmental and governance performance scores as well.

Second, to technically manifest the concept of CSR practice, we use three different attributes of CSR reporting practice as adopted from the study of Michelon et al. (2015). First, the availability of a CSR report or sustainability report (CSR_REP). We mark 1 if the bank has published a stand-alone CSR report or CSR-related information provided in the annual report, 0 otherwise. Second is the presence of an assurance statement on the reported CSR document (CSR_ASS). We assigned value 1 if the assurance provider assured the reported CSR information to the public, and 0 otherwise. Third, the Global Reporting Initiative (GRI) was adopted when the companies were dealing with their non-financial information reporting. We marked 1 if the banks adopted the GRI guidelines for disclosure framework when providing the CSR information, and 0 otherwise.

3.4.3. Control Variables

Apart from the presence of the main independent variable of interest, we also consider the concern of the omitted correlated variable bias issue that could trigger the

inefficiency of our parameter. Given that, it is necessarily important to control for the time-invariant unobserved firm characteristics that might be correlated with our explanatory variable in the proposed model. The previous study has also suggested that the relationship between social impact, CSR reporting practice, and firm performance should be examined by controlling a certain group of variables at the firm level. To deal with this issue, we insert control variables that represent firm- and country-level characteristics. As the nature of the sample is homogenous (banking industry), we do not consider the industry effect. Otherwise, we consider the related bank performance ratios such as capital asset ratio (CAR), non-performing loan (NPL), loan ratio (LOAN), and firms' age (AGE) as the firm-level related control variables. Moreover, as the composition of the sample is extracted from five different countries, we include inflation (INF) and interest rate (I_RATE) information as the country-related control variables. In this respect, we do not include the exchange rate, as the dependent variables and other monetary-related estimators have been standardized in the dollar ($) unit. The decision to include these control variables is also given their significant support for the variation of firm performances, as previously documented in the literature.

3.4.5. Additional Analysis

As we are aware that endogeneity may potentially hamper the estimation of our results, we thus decide to perform additional analysis to convince ourselves that the obtained main analysis outputs provide us with a robust result. Besides, as our study only investigates the relationship, we could not claim that the endogeneity we tried to address in our research design relates to simultaneity or reverse causality. However, our result might deal with and potentially minimize the endogeneity issue related to measurement errors and omitted correlated variables bias. Thus, we do acknowledge that we could not address the overall type of endogeneity problems as our research design is not to find the causal effect but the potential relationship or association among our main variables of interest. However, as we performed statistical treatments such as cluster standard errors, industry fixed-effects, year fixed-effects, and firm fixed-effects, it might help address certain aspects of endogeneity in regression analysis, even though they could not directly solve the underlying endogeneity problem. Given that, we design two additional analyses by considering the lagged model (Xi,t-1) of independent variables and using return on equity (ROE) as the alternate measure of firm performance. In particular, we run the lagged independent model by using one-year lagged data. Imbens & Wooldridge (2009) highlighted that the independent variable that occurred in the previous time (t-1) cannot be correlated with the error term in the contemporaneous time (t0). The independent lagged variables are thus considered exogenous and deemed relevant and convenient factors in explaining the variation of the contemporaneous (t0) dependent variable. Moreover, we consider ROE to be an important measure of firm performance. We presume that the variance of this accounting-based variable could also be explained by the main independent variables. For this reason, we expect a consistent estimation output of the additional analysis in the contemporaneous and lagged regression models. The statistical notations of the lagged model and ROE as the alternate dependent variable are presented in the following regression models 4 and 5.

$$\text{Firm Performance}_{i,t} = \alpha + \beta_1 \text{SOCPERF}_{i,t-1} + \beta_2 \text{CSR}_{\text{REP}i,t-1} + \beta_3 \text{CSR}_{\text{ASS}i,t-1} + \beta_4 \text{GRI}_{i,t-1} + \beta \sum \text{Controls}_{i,t-1} + \gamma \sum \text{Year} + \gamma \sum \text{Country} + \varepsilon \quad (4)$$

$$\text{Firm Performance(ROE)}_{i,t} = \alpha + \beta_1 \text{SOCPERF}_{i,t} + \beta_2 \text{CSR\_REP}_{i,t} + \beta_3 \text{CSR\_ASS}_{i,t} + \beta_4 \text{GRI}_{i,t} + \beta \sum \text{Controls}_{i,t} + \gamma \sum \text{Year} + \gamma \sum \text{Country} + \varepsilon \quad (5)$$

4. Results and Discussion

4.1. Univariate Analysis

This section contains the empirical univariate analysis output, correlation test matrix, multivariate panel data analysis, and its interpretation. The following table illustrates the particular information in the univariate analysis with respect to the distribution of variables and the distribution of CSR practice by year and country.

Table 3: Univariate Analysis

Panel A. Distribution variable

Variable	obs	Mean	sd	p25th	p50th	p75th	Min	Max
Dependent variables								
ROA	243	0.015	0.007	0.010	0.013	0.017	0.005	0.037
REVENUE	243	14.716	0.906	14.132	14.804	15.446	12.743	16.587
MCAP	243	15.981	0.930	15.417	15.990	16.746	13.757	17.679
Independent variables of interest								
SOCPERF	243	52.947	20.119	37.100	53.490	69.890	8.720	88.490
CSR_REP	243	0.724	0.448	0.000	1.000	1.000	0.000	1.000
CSR_ASS	243	0.214	0.411	0.000	0.000	0.000	0.000	1.000
GRI	243	0.539	0.499	0.000	1.000	1.000	0.000	1.000
Control variables								
CAR	243	0.108	0.029	0.089	0.101	0.120	0.052	0.217
NPL	243	13.385	1.101	12.800	13.454	14.328	10.167	15.164
LOAN	243	0.628	0.097	0.592	0.631	0.678	0.156	0.835
AGE	243	65.333	31.071	50.000	58.000	73.000	7.000	166.000
INFLATION	243	2.488	1.800	0.885	2.185	3.598	-0.900	6.413
I_RATE	243	4.255	2.114	2.643	4.307	5.600	-0.472	9.224

Panel B. Distribution CSR reporting practice by year

Year	CSR_REP			CSR_ASS			GRI		
	No	Yes	Total	No	Yes	Total	No	Yes	Total
2011	13	14	27	26	1	27	21	6	27
2012	12	15	27	24	3	27	18	9	27
2013	9	18	27	23	4	27	17	10	27
2014	9	18	27	23	4	27	15	12	27
2015	9	18	27	22	5	27	14	13	27
2016	8	19	27	21	6	27	12	15	27
2017	3	24	27	19	8	27	7	20	27
2018	3	24	27	18	9	27	5	22	27
2019	1	26	27	15	12	27	3	24	27
Total	67	176	243	191	52	243	112	131	243

Panel C. Distribution CSR reporting practice by country

Country	CSR_REP			CSR_ASS			GRI		
	No	Yes	Total	No	Yes	Total	No	Yes	Total
Indonesia	5	40	45	29	16	45	20	25	45
Malaysia	19	53	72	58	14	72	41	31	72
Philippines	19	17	36	34	2	36	19	17	36
Singapore	15	12	27	24	3	27	15	12	27
Thailand	9	54	63	46	17	63	17	46	63
Total	67	176	243	191	52	243	112	131	243

Note: The continuous variables (ROA, REVENUE, MCAP, SOCPERF, CAR, NPL, LOAN, AGE) in our dataset have been winsorized at 1 and 99 percent level.

Source: Author's own study.

Information sources: Listed Banks in ASEAN, Corporate Register, GRI database, World Bank database, and Thomson Reuters EIKON.

Table 3 presents the univariate analysis output with respect to the mean value, standard deviation, 25th percentile, median, 75th percentile, and maximum value of each variable. To simplify the information processing, we divide the descriptive statistics outputs into three panels. Panel A elaborates on the overall characteristics of pooled data for the dependent variables, main independent variables, and control variables. Panel B shows the data distribution of CSR practice by years, and Panel C exhibits the data distribution of CSR practice by country.

More in detail, Panel A shows that the mean value of the first proxy of firm performance (ROA) is 0.015 on average. Meanwhile, the second proxy of performance (REVENUE) shows a mean value of 14.716, and the third proxy (MCAP) shows a mean value of 15.981 on average. With regard to the information of the first main independent variable, the surrogate indicator of social impact (SOCPERF) indicates a mean value of 52.947 percent on average. Meanwhile, three surrogate indicators of CSR practice show that 72.4 percent of the banks have dealt with CSR reporting, and they have published it in the form of a stand-alone report or CSR-related information published in the annual report. Among those CSR reports, 21.4 percent are assured by the third independent party. While, out of the total number of CSR reports published to the public, 53.9 percent of them have been reported as adopting the GRI disclosure framework.

Moreover, in Panel B, the trend of CSR reporting has increased over the years. It can be observed that the increase is stable, as in 2011, 14 banks out of 27 banks published their CSR reports to the public. In the following year, it increases to 15 banks. In the next consecutive years, the number of reporting banks is persistent (18 banks) and the highest number of CSR report is in 2019, with 26 banks publishing their CSR reports. In addition to this, the trend of having assurance services on the reported CSR information has also been growing during the observed years. In 2011, only a single bank engaged with assurance practice, and during that time, there were 12 banks that finally engaged with assurance practice in 2019. Regarding GRI adoption, we also notice that the banks in ASEAN have increasingly adopted the GRI disclosure framework to better deal with standardized CSR reporting.

4.2. Correlation Analysis

The correlation analysis output for each variable of interest is elaborated in the Pearson correlation matrix. Table 4 illustrates.

Table 4 provides the correlation analysis output. In regard to the correlation among the main variables of interest, we report that SOCPERF is insignificantly correlated with ROA ($p > 0.1$), while it is positively and significantly correlated with

REVENUE (r= 0.374; p < 0.01) and MCAP (r= 0.294; p < 0.01). CSR_REP is positively and significantly correlated with the three dependent variables (ROA: r= 0.192; p < 0.05, REVENUE: r= 0.174; p < 0.05, and MCAP: r= 0.146; p < 0.1). CSR_ASS also indicates a positive but insignificant correlation with ROA (p > 0.1), while it is positively and significantly correlated with the other two main dependent variables (REVENUE: r= 0.288; p < 0.01, and MCAP: r= 0.209; p < 0.05). The last main independent variable of interest (GRI) shows that it is only positively and significantly associated with a dependent variable (REVENUE: r= 0.172; p < 0.05), but not with the other two (ROA; p > 0.1 and MCAP; p > 0.1).

4.3. Multivariate Analysis and Hypotheses Testing

After dealing with the correlation analysis, we report that none of the employed independent variables (the main independent variable of interest and the control variable) has a multicollinearity issue (r value > 0.75). Thus, we further proceed with the multivariate panel data analysis to empirically test the proposed hypotheses.

Table 5 presents the main analysis output. Information in this table shows that the test on the relationship between social impact, CSR reporting practice, and firm performance was done separately, in which the multivariate panel data analysis was performed three times with different proxies of firm performance (ROA, REVENUE, and MCAP). In this test, social performance (SOCPERF) stands as a single proxy of social impact, while CSR reporting practice takes three surrogate indicators (CSR_REP, CSR_ASS, and GRI). More in detail to the hypothesis testing, hypothesis one conjectures that social impact and firm performance are positively related. The test using contemporaneous variables from 243 bank-year observations shows that SOCPERF indicates a positive and significant association with three different proxies of firm performance. First, SOCPERF is positively (β= 0.008) and significantly (p < 0.01) related to ROA. Second, SOCPERF is positively (β= 0.004) and significantly (p < 0.05) associated with REVENUE. Third, SOCPERF shows positive (β= 0.006) and significant (p < 0.05) relationship with MCAP. The empirical test shows that there are consistent results on the relationship between social impact and three proxies of firm performance, where firm performance gets higher as the social impact gets bigger. Hence, we infer that hypothesis one is statistically supported.

Furthermore, the developed notion of hypothesis two is, CSR reporting practice and firm performance are positively related. Thus, we break down CSR practice into three different surrogate indicators (CSR_REP, CSR_ASS, and GRI) and partially test these indicators as a single derivation of hypothesis two (H2a, H2b, and H2c). The first partial test (H2a) examines the association between the presence of CSR report (CSR_REP) and firm performance (ROA, REVENUE, and MCAP). The output of the statistical test shows that the presence of CSR_REP is only positively and statistically associated with ROA (β= 0.002; p < 0.01), while it shows a positive sign with REVENUE and MCAP but is statistically insignificant (p > 0.1) (see columns 6, and 10). The obtained empirical output indicates that H2a is weakly (partially) supported, suggesting that the presence of a CSR report, either provided in a stand-alone report or combined with the annual report, is value-relevant in increasing firm performance (i.e., return on asset.) The second partial test (H2b) seeks empirical evidence on the relationship between CSR assurance (CSR_ASS) and firm performance (ROA, REVENUE, and MCAP). Similar to the first partial test, CSR_ASS, as one of the CSR reporting practices, only shows a positive and statistical association with REVENUE (β= 0.184; p < 0.05). While the same relationship does not appear in the relationship between CSR_ASS-ROA and CSR_ASS-MCAP, given that, we report that H2b is

weakly (partially) supported. The third partial test (H2c) investigates the association between the adoption of the GRI disclosure framework (GRI) and firm performance (ROA, REVENUE, and MCAP). The multivariate panel data analysis result reports that GRI is not statistically associated with any proxies of firm performance, suggesting that H2c is statistically unsupported.

4.4. Robustness Check

4.4.1. Additional Analysis with Lagged (t-1) Independent Variables

To further confirm that the empirical evidence obtained in the main analysis is consistent and robust, we ran a different multivariate panel data analysis employing two different models. First, we generate lagged variables extracted from the data of independent time-variant variables in the previous year (one-year lag). Second, we employ return on equity (ROE) as an alternate proxy for firm performance.

Table 6 provides the information corresponding to the lagged model, which examines the relationship between the independent variable of interest and the dependent variable. More in detail, the coefficient value of SOCPERF in the previous year (SOCPERFi,t-1) as a proxy of social impact shows a consistent positive and significant association with three proxies of firms performance. In particular, the association between SOCPERFi,t-1 and ROA is positive, with a coefficient value of 0.0006 and significant at the one percent level ($p < 0.01$) of alpha. The association of SOCPERFi,t-1 is also reported to be positive and significant with the second proxy of firm performance, REVENUE ($\beta= 0.005$; $p < 0.05$). The same pattern occurs with the association between SOCPERFi,t-1 and the last proxy of firm performance, MCAP ($\beta= 0.006$; $p < 0.05$). The obtained empirical results using the lagged model confirm the result of hypothesis 1 in the main analysis, in which the higher social impact corresponds to higher firm performance.

Moreover, the test of Hypotheses 2a, 2b, and 2c can be seen from the coefficient and significance values of the prescribed variables. As can be seen in Table 6, the first proxy of CSR practice, CR_REPi,t-1, shows a positive and consistent significant association with three different measures of firm performance. In the first place, the association between CSR_REPi,t-1 and ROA is positive ($\beta= 0.0017$), and statistically significant ($p < 0.01$). While, the association of CSR_REPi,t-1 with REVENUE ($\beta= 0.119$; $p < 0.1$) and MCAP ($\beta= 0.137$; $p < 0.1$) also indicates positive and statistically significant results, which provide support for hypothesis 2a. In the second place, the coefficient value of the second proxy of CSR practice, CSR_ASSi,t-1, only indicates a positive and statistical association with REVENUE ($\beta= 0.250$; $p < 0.01$). Meanwhile, the other two proxies of firm performance (ROA and MCAP) do not show any statistical relations, which implies that hypothesis 2b is weakly (partially) supported. Likewise, in the third place, the last proxy of CSR practice (GRIi,t-1) shows no statistical relationship with any proxies of firm performance ($p > 0.1$), which confirms the main analysis that hypothesis 2c is statistically unsupported.

Table 4: Pearson Correlation Matrix

No	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ROA	1													
2	REVENUE	0.074	1												
3	MCAP	0.199**	0.905***	1											
4	ROE	0.798***	0.06	0.195**	1										
5	SOCPERF	0.112	0.374***	0.294***	-0.058	1									
6	CSR_REP	0.192**	0.174**	0.146*	0.133*	0.613***	1								
7	CSR_ASS	0.055	0.288***	0.209**	-0.097	0.451***	0.322***	1							
8	GRI	0.027	0.172**	0.095	-0.113	0.668***	0.667***	0.482***	1						
9	CAR	0.559***	0.015	0.03	0.024	0.236***	0.140*	0.206**	0.188**	1					
10	NPL	-0.292***	0.789***	0.628***	-0.214***	0.429***	0.218***	0.256***	0.247***	-0.225***	1				
11	LOAN	-0.085	-0.046	-0.109	0.034	0.278***	0.309***	0.108	0.138*	-0.148*	0.135*	1			
12	AGE	0.140*	0.034	0.112	0.12	0.085	0.082	0.229***	0.165*	0.079	-0.027	-0.116	1		
13	INFLATION	0.510***	-0.076	0.021	0.419***	-0.241***	-0.079	-0.049	-0.237***	0.292***	-0.302***	-0.104	-0.023	1	
14	I_RATE	0.498***	0.183**	0.180**	0.258***	0.088	0.07	0.095	0.023	0.494***	-0.076	-0.039	0.044	0.210***	1

*Note: Asterisks ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent level, respectively.*

Source: Author's own study.

Information sources: Listed Banks in ASEAN, Corporate Register, GRI database, World Bank database, and Thomson Reuters EIKON.

Table 5: Multivariate Main Panel Data Analysis

This Table reports the results of estimation using equations 1, 2, and 3. We do a partial test to examine the proposed hypotheses. The proxies of social impact (SOCPERF) and CSR reporting practice (CSR_REP, CSR_ASS, and GRI) are partially examined in relation to firm performance (ROA, REVENUE, and MCAP). All variables are defined in Table 2. In the partial test, it is documented that social impact and several surrogate indicators of CSR reporting practice (CSR_REP and CSR_ASS) display a positive and significant association with firm performance. All specifications are estimated using OLS regression and include year, firm fixed effect, and robust standard errors.

VARIABLE	ROA				REVENUE				MCAP			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SOCPERF	0.008***				0.004**				0.006**			
	(3.371)				(2.166)				(2.294)			
CSR_REP		0.00232***				0.087				0.128		
		(3.000)				(0.625)				(0.946)		
CSR_ASS			-0.000855				0.184**				0.031	
			(-0.688)				(2.438)				(0.160)	
GRI				0.000860				-0.019				-0.069
				(0.948)				(-0.147)				(-0.390)
CAR	0.009	0.0169	0.0156	0.0122	-0.787	-0.461	-1.022	-0.555	-0.982	-0.515	-0.771	-0.585
	(0.221)	(0.360)	(0.335)	(0.256)	(-0.278)	(-0.159)	(-0.359)	(-0.199)	(-0.209)	(-0.109)	(-0.163)	(-0.124)
NPL	-0.002***	-0.00126**	-0.000953	-0.00115**	0.602***	0.632***	0.617***	0.641***	0.513***	0.554***	0.561***	0.572***
	(-3.904)	(-2.746)	(-1.578)	(-2.288)	(7.333)	(8.513)	(8.902)	(9.008)	(4.244)	(5.364)	(5.960)	(5.750)
LOAN	-0.001	-0.000422	0.00222	0.00158	-0.812	-0.728	-0.693	-0.629	-0.522	-0.406	-0.284	-0.244
	(-0.307)	(-0.0896)	(0.448)	(0.315)	(-1.042)	(-0.962)	(-0.857)	(-0.750)	(-0.664)	(-0.519)	(-0.329)	(-0.274)
AGE	0.0002	0.0002	0.0003	0.0002	0.0004	0.0004	-0.0003	0.0006	0.003	0.003*	0.003*	0.003**
	(1.390)	(1.515)	(1.772)	(1.585)	(0.207)	(0.236)	(-0.020)	(0.359)	(1.504)	(1.733)	(1.872)	(2.106)
INFLATION	-0.0001	-0.002	-0.001	-0.001	0.028	0.026	0.023	0.022	-0.019	-0.022	-0.026	-0.029
	(-1.298)	(-1.362)	(-1.668)	(-1.509)	(1.206)	(1.112)	(0.894)	(0.867)	(-0.771)	(-0.891)	(-0.949)	(-1.007)
I_RATE	-0.002**	-0.004**	-0.005**	-0.004**	0.014	0.011	0.013	0.008	0.021	0.017	0.014	0.011
	(-2.239)	(-2.351)	(-2.710)	(-2.494)	(0.946)	(0.769)	(0.877)	(0.522)	(1.022)	(0.846)	(0.657)	(0.549)
Constant	0.047***	0.042***	0.038***	0.041***	7.098***	6.782***	7.087***	6.703***	9.545***	9.099***	9.082***	8.929***
	(5.471)	(4.595)	(3.810)	(4.413)	(5.084)	(5.005)	(5.308)	(5.054)	(4.371)	(4.456)	(4.765)	(4.443)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	243	243	243	243	243	243	243	243	243	243	243	243
R-squared	0.726	0.713	0.700	0.701	0.797	0.794	0.798	0.674	0.674	0.668	0.666	0.666

*Note: *** p<0.01, ** p<0.05, * p<0.1 indicate statistical significance at the 1%, 5%, and 10% level respectively (two-tailed). t values are available in parentheses.*

Source: Author's own study.

Information sources: Listed Banks in ASEAN, Corporate Register, GRI database, World Bank database, and Thomson Reuters EIKON.

Table 6: Regression with Lagged Independent Variables

This Table reports the results of the estimation using independent lagged variables in equation 4. We do a partial test to examine the proposed hypotheses. The proxies of social impact ($SOCPERF_{i,t-1}$) and CSR reporting practice ($CSR\_REP_{i,t-1}$, $CSR\_ASS_{i,t-1}$, and $GRI_{i,t-1}$) are partially examined for firm performance (ROA, REVENUE, and MCAP). In the partial test, it is documented that social impact and a surrogate indicator of CSR reporting practice ($CSR\_REP_{i,t-1}$ and $CSR\_ASS_{i,t-1}$) display a positive and significant association with firm performance. All specifications are estimated using OLS regression and include year, firm fixed effect, and robust standard errors.

VARIABLE	ROA				REVENUE				MCAP			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$SOCPERF_{i,t-1}$	0.0006***				0.005**				0.006**			
	(2.821)				(2.267)				(2.231)			
$CSR\_REP_{i,t-1}$		0.0017**				0.119*				0.137*		
		(2.615)				(1.833)				(1.633)		
$CSR\_ASS_{i,t-1}$			-0.001				0.250**				0.029	
			(-0.858)				(2.642)				(0.129)	
$GRI_{i,t-1}$				0.0005				-0.003				-0.067
				(0.651)				(-0.022)				(-0.373)
$CAR_{i,t-1}$	-0.0003	0.0036	0.005	0.0004	-1.383	-1.088	-2.093	-1.236	-2.703	-2.353	-2.627	-2.420
	(-0.007)	(0.081)	(0.132)	(0.009)	(-0.466)	(-0.360)	(-0.698)	(-0.417)	(-0.518)	(-0.447)	(-0.512)	(-0.458)
$NPL_{i,t-1}$	-0.0014***	-0.0012**	-0.0008	-0.001**	0.597***	0.626***	0.610***	0.638***	0.501***	0.538***	0.548***	0.558***
	(-3.119)	(-2.603)	(-1.600)	(-2.204)	(6.723)	(7.717)	(8.277)	(8.156)	(3.817)	(4.722)	(5.307)	(5.085)
$LOAN_{i,t-1}$	-0.0007	-0.0004	0.0015	0.0008	-0.678	-0.631	-0.616	-0.525	-0.520	-0.455	-0.344	-0.311
	(-0.170)	(-0.099)	(0.357)	(0.194)	(-1.105)	(-1.075)	(-0.967)	(-0.796)	(-0.712)	(-0.632)	(-0.433)	(-0.381)
$AGE_{i,t-1}$	0.0002*	0.0002*	0.0003*	0.0002*	0.0003	0.0003	-0.0001	0.0006	0.003	0.003	0.003	0.003*
	(1.752)	(1.899)	(2.174)	(1.948)	(0.179)	(0.187)	(-0.087)	(0.316)	(1.334)	(1.504)	(1.650)	(1.864)
$INFLATION_{i,t-1}$	-0.0002	-0.0003	-0.0003	-0.0003	0.041*	0.040*	0.037	0.036	0.015	0.014	0.009	0.007
	(-1.337)	(-1.392)	(-1.644)	(-1.450)	(1.772)	(1.764)	(1.412)	(1.441)	(0.710)	(0.658)	(0.407)	(0.287)
$I\_RATE_{i,t-1}$	-0.0002	-0.0002	-0.0002	-0.0002	0.003	0.003	0.003	-0.001	0.014	0.013	0.013	0.006
	(-0.819)	(-0.816)	(-0.814)	(-1.008)	(0.244)	(0.198)	(0.248)	(-0.082)	(0.746)	(0.679)	(0.736)	(0.356)
Constant	0.045***	0.0422***	0.0387***	0.0419***	7.304***	6.999***	7.411***	6.921***	10.04***	9.665***	9.636***	9.493***
	(5.186)	(4.570)	(4.299)	(4.537)	(4.878)	(4.784)	(5.286)	(4.854)	(4.139)	(4.207)	(4.535)	(4.200)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	216	216	216	216	216	216	216	216	216	216	216	216
R-squared	0.727	0.721	0.715	0.712	0.790	0.786	0.792	0.784	0.659	0.654	0.651	0.652

*Note: *** p<0.01, ** p<0.05, * p<0.1 indicate statistical significance at the 1%, 5%, and 10% level respectively (two-tailed). t values are available in parentheses.*

Source: Author's own study.

Information sources: Listed Banks in ASEAN, Corporate Register, GRI database, World Bank database, and Thomson Reuters EIKON.

4.4.2. Additional Analysis with ROE as the Dependent Variable

Apart from the additional robustness check using lagged independent variables, we also consider the importance of return on equity (ROE) as an alternate proxy for firm performance. Therefore, we designed a statistical panel data analysis using a contemporaneous and lagged model using ROE as the dependent variable (see Table 7). We included ROE in the Pearson correlation matrix analysis, as shown in Table 4, to make sure there is not a problem with multicollinearity. Since these two proxies were mostly constructed using the same piece of information (net income), there is a strong correlation (r= 0.789; p0.01) between ROA and ROE. However, since the two proxies were used as dependent variables, there is no reason to worry about multicollinearity in our subsequent study.

In detail, hypothesis one suggests that social impact is expected to be positively associated with firm performance. The obtained empirical test using ROE shows that the proxy of social impact (SOCPERF and SOCPERFi,t-1) indicate a positive (SOCPERF β= 0.0005; SOCPERFi,t-1 β= 0.0004) and significant ($p < 0.05$, $p < 0.1$) association with ROE (see columns 1 and 5). Furthermore, the first proxy of CSR practice (CSR_REP and CSR_REPi,t-1) also shows a positive coefficient value (CSR_REP β= 0.019; CSR_REPi,t-1 β= 0.016) and a significant association ($p < 0.05$, $p < 0.1$) with ROE (see columns 2 and 6). In addition to this, we report that there is no statistical relation ($p > 0.1$) between CSR_ASS-ROE and GRI. Considering the estimation output using ROE as the alternate accounting-based measure of firm performance, it can be inferred that the obtained results remain consistent with the main analysis, where Hypothesis 1 and 2a are positively and statistically supported.

4.5. Discussion

Our study has two main objectives. The first is to find empirical evidence that social impact is associated with firm performance. Our findings provide strong empirical evidence of a positive and significant association between social impact and three different measures of firm financial performance (i.e., return on asset, revenue, and market capitalization). It's important to note that the relationship between social impact and firm performance may vary across industries, contexts, and specific initiatives. The extent and nature of the impact can be influenced by factors such as industry norms, stakeholder expectations, regulatory frameworks, and the organization's commitment to and implementation of social impact initiatives. Therefore, it is crucial for firms to align their social impact efforts with their business strategies and monitor the outcomes to understand the specific impact on their performance. In addition, various studies have explored this relationship and have found both positive and nuanced connections between social impact and firm performance. A few ways in which social impact can relate to firm performance could be (i) engaging in activities that create positive social impact can enhance a firm's reputation and brand value. When a company is perceived as socially responsible and contributing to the well-being of society, it can strengthen its relationships with customers, employees, investors, and other stakeholders. (ii) a positive reputation and a strong brand image can lead to increased customer loyalty, improved employee morale and productivity, enhanced investor confidence, and ultimately, better financial performance. (iii) addressing social and environmental issues can help manage risks and strengthen relationships with stakeholders. Proactively managing social impact can mitigate reputational risks, regulatory risks, and operational risks. By engaging with stakeholders, including local communities, NGOs, and governments, firms can build collaborative relationships, reduce conflicts, and gain access to resources and knowledge that can positively impact their performance.

Table 7: Regression Using ROE as the Dependent Variable

This Table reports the results of estimation using independent lagged variables in equation 4 and using ROE as the alternate measure of firm performance in equation 5. We do a partial test to examine the proposed hypotheses. The proxy of social impact in contemporaneous and lagged models (SOCPERF, $SOCPERF_{i,t-1}$) and CSR reporting practices (CSR_REP, $CSR\_REP_{i,t-1}$, CSR_ASS, $CSR\_ASS_{i,t-1}$, GRI, and $GRI_{i,t-1}$) are partially examined in relation to firm performance (ROE). In the partial test, it is documented that social impact and a surrogate indicator of CSR reporting practice ($CSR\_REP_{i,t-1}$) display a positive and significant association with firm performance. All specifications are estimated using OLS regression and include year, firm fixed-effect, as well as robust standard errors.

Variable	(1)	(2)	(3)	(4)	Variable	(5)	(6)	(7)	(8)
SOCPERF	0.0005**				$SOCPERF_{i,t-1}$	0.0004*			
	(2.397)					(2.013)			
CSR_REP		0.019**			$CSR\_REP_{i,t-1}$		0.016*		
		(2.290)					(1.982)		
CSR_ASS			-0.0115		$CSR\_ASS_{i,t-1}$			-0.007	
			(-1.026)					(-0.661)	
GRI				0.005	$GRI_{i,t-1}$				0.006
				(0.487)					(0.630)
CAR	-0.923***	-0.869**	-0.870**	-0.905**	$CAR_{i,t-1}$	-0.922***	-0.890***	-0.884***	-0.919***
	(-2.851)	(-2.518)	(-2.563)	(-2.615)		(-3.196)	(-2.905)	(-3.072)	(-3.020)
NPL	-0.014**	-0.011**	-0.008	-0.009*	$NPL_{i,t-1}$	-0.011**	-0.009*	-0.007	-0.008*
	(-2.687)	(-2.267)	(-1.351)	(-1.893)		(-2.141)	(-1.985)	(-1.314)	(-1.756)
LOAN	0.018	0.022	0.045	0.039	$LOAN_{i,t-1}$	0.0201	0.019	0.035	0.031
	(0.347)	(0.414)	(0.806)	(0.681)		(0.422)	(0.415)	(0.752)	(0.618)
AGE	0.0002	0.0002	0.0003*	0.0002*	$AGE_{i,t-1}$	0.0002*	0.0002*	0.0002*	0.0002*
	(1.518)	(1.586)	(1.890)	(1.706)		(1.725)	(1.776)	(2.012)	(1.857)
INFLATION	-0.004*	-0.0037*	-0.004**	-0.004**	$INFLATION_{i,t-1}$	-0.003*	-0.003**	-0.004**	-0.004*
	(-1.863)	(-2.052)	(-2.193)	(-2.118)		(-1.835)	(-2.077)	(-2.098)	(-1.964)
I_RATE	-0.004**	-0.004**	-0.004**	-0.004**	$I\_RATE_{i,t-1}$	-0.003*	-0.003	-0.003*	-0.003*
	(-2.118)	(-2.318)	(-2.758)	(-2.487)		(-1.727)	(-1.677)	(-1.723)	(-1.898)
Constant	0.514***	0.477***	0.443***	0.472***	Constant	0.478***	0.455***	0.431***	0.453***
	(5.814)	(5.371)	(4.515)	(5.154)		(5.845)	(5.630)	(5.152)	(5.576)
Observations	243	243	243	243	Observations	216	216	216	216
R-squared	0.593	0.588	0.575	0.571	R-squared	0.604	0.603	0.591	0.591
Year FE	YES	YES	YES	YES	Year FE	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	Country FE	YES	YES	YES	YES

*Note: *** p<0.01, ** p<0.05, * p<0.1 indicate statistical significance at the 1%, 5%, and 10% level respectively (two-tailed). t values are available in parentheses*

Source: Author's own study.

Information sources: Listed Banks in ASEAN, Corporate Register, GRI database, World Bank database, and Thomson Reuters EIKON.

Prior studies have not focused on a particular role that could be played by the social impact in the context of Non-Environmentally Sensitive Industries (NESIs). Instead, prior studies focused more on the Environmentally Sensitive Industries (ESIs) setting of the study. This is surprising given the extensive number of studies investigating (with mixed evidence on) the role of non-financial information (e.g., CSR-related information) in the context of ESIs. A clear-cut and precise factor of what particular type of CSR reporting practice plays a pivotal role in explaining the variation of firm performance in the context of NESIs is still under-researched. In addition to this, the role of the financial service industry as the heart of society should be deeply rooted since the banking sector is deemed and supposed to be more socially responsible. For this reason, we picked the ASEAN banking sector and studied the relationship between bank social impact and their financial performance. Focusing on banks' social impact, the current research contributes to this debate by providing empirical findings consistent with ethical social practice in support of legitimacy and signaling theories. In particular, we report a positive and significant association between social impact and firm performance, either in the main analysis or in the additional analysis.

The second objective focuses on investigating the potential relationship between CSR reporting practices and firm performance. We find that CSR reporting practices are partially associated with firm performance. In particular, our findings document that, of the three proxies of CSR reporting practice (i.e., the presence of a CSR report, the presence of CSR assurance, and the adoption of the GRI disclosure framework), only the presence of a CSR report, either published as a stand-alone or provided in a dedicated section in the annual report, is positively associated with firm performance (i.e., return on assets, revenue, and market capitalization). The relationship between the presence of CSR reports and firm performance indicates a strong and consistent relationship when we run the lagged model on three dependent variables, while in the main analysis, CSR reports are only statistically associated with return on assets. Given this finding, our study also indirectly supports the prior studies of Bhattacharyya (2015) and Lys et al. (2015), who pointed out that CSR reports are most likely adopted as organizational tools to obtain organizational legitimacy and as a signaling attempt to the public. Yet, to some extent, as pointed out by Usman (2020), the reports need some time lags so as to allow the information properly to affect firm performance. From the perspective of best practices, our particular study of the banking industry also confirms the recent phenomenon of an increasing trend in CSR publications. As previously documented by KPMG (2017), there is a positive trend in CSR publications either by G250 companies or N100 companies worldwide.

On the contrary, we find that the remaining two CSR reporting practice proxies (i.e., the presence of assurance of CSR report, and the adoption of GRI disclosure framework) show a partial statistical relationship with firm performance. As previously indicated in the main analysis, the presence of CSR assurance is associated neither with return on asset nor market capitalization. However, it is positively and statistically associated with revenue. Moreover, when we run the analysis using the lagged model (one-year independent lagged variable), we find that the presence of assurance report remains positively and significantly associated with revenue. While, the additional analysis using return on equity does not show any statistical relation. This finding indicates that the presence of CSR assurance is not explicitly deemed by the stakeholders as absolute instrument of CSR reporting. Correspondingly, we document that GRI adoption shows no statistical relationship with any proxies of firm performance. We interpret the weak relationship between CSR reporting practices and firm performance as given the time lag needed by the CSR report and CSR assurance to be reflected in the accounting-based information (return on asset and revenue). Furthermore, the presence

of CSR assurance and whether the companies adopting GRI or not are deemed by the regulator and stakeholders as less necessary than the disclosure of CSR reports itself. In this context, companies with CSR publication to public have been perceived and valued positively by the regulators and stakeholders as they have engaged with the required CSR-related regulation. However, regardless of what has been reported in the CSR reports, regulators and the stakeholders might not consider whether the reported information was prepared truthfully and credibly, which in turn, implies that CSR report is seemed to be more symbolic than substantive.

Overall, our study provides consistent findings with the extant view of business ethics in social reporting from prior studies. Cheng et al. 2014 and Porter & Kramer (2011) noted that CSR has evolved from being noticed as detrimental to firms' profitability, to being considered as the prerequisite condition in generating potential benefits as strategic initiatives and objectives. Consistent with this idea, the previous empirical studies have well-documented that CSR reports have been used by the business entities as the organizational tool, and to some extent, have also been used as a signaling tool. Regardless of the main motive of the manager's decision to deal with CSR reporting, we have proven that a specific aspect of CSR impacts (i.e., social disclosure and its impact) has to be taken into account by the organization. As previously indicated by Brammer & Pavelin (2006), and Brooks & Oikonomou (2018), when the expectation of both managers and stakeholders are satisfied, it is worth expecting that firm performance is augmented as the result of positive social impact. The most relevant explanation regarding the pivotal role of social disclosure corresponds to; (i) the sense of social contract, which is meant to enhance business legitimacy and firm valuation (financial performance). (ii) proactively giving the impression of doing good to stakeholders and the public, (iii) influencing the perceptions regarding the firms' future financial prospects in the minds of stakeholders.

Even though this research provides several important implications for the social impact and CSR reporting of the banking industry, it is subject to several limitations. First, while the Thomson ASSET4 database is largely used and noticed by the researchers in CSR studies to construct the CSR (ESG; environmental, social, and governance) measure, the disclosure of this typical data is inherently qualitative and merely based on the assessment of the Thomson ASSET4 research analyst. As Thomson Database is also deemed a commercial database provider, there is a propensity that ASSET4 CSR (e.g., social impact) rankings focus on and concentrate more on covering relatively large companies. For this reason, there could be a problem with respect to selection sample bias, in which relatively small-size companies might have dealt with CSR or social reporting, but the data they published were not indexed or covered by the ASSET4. To corroborate the previous studies findings based on the ASSET4 database, we would suggest future research use alternate measures of social impact, which might provide a chance to further explore comparative studies with different database providers.

Second, due to the limited number of data points, we could only capture a number of banks in five countries that had at least one CSR or social report publication and had consistent financial data during the observed period. In this regard, each country has shown that they have different institutional settings, in which the mandatory CSR publication was enacted at various times. Given that, our study could not claim to provide causal evidence that social impact and CSR reporting practices are the main drivers of firm performance. We were unable to consider the enacted timing of mandatory CSR publication and capture it as an exogenous factor. This might limit the generalizability of our results to the international context of the study as the country-specific variation might play a particularly significant role in social impact and CSR

reporting practice. Thus, at this stage, the empirical evidence we have might potentially be appropriate to show that there is a strong and significant association between social impact and firm performance. Correspondingly, we also provide partial evidence in which CSR reporting practices are positively associated with firm performance in the ASEAN banking industry.

5. Conclusion

Our study examines the relationship between social impact, CSR reporting practice, and firm performance in the ASEAN banking industry. While the previous research examined the role of CSR impact and CSR reporting practice in Environmentally Sensitive Industries (ESIs), a particular investigation of CSR impact (i.e., social impact) and CSR reporting practice in Non-Environmentally Sensitive Industries (NESIs) remains under-researched. To the best of the authors' knowledge, this study is among the first to document empirical evidence of a positive association between social impact and firm performance and the CSR reporting practice and firm performance nexus in an ASEAN context. We empirically demonstrate a favorable link between our main variables of interest. Either in univariate or multivariate analysis, it is evident that firms with greater societal impact and more sophisticated CSR reporting practices are more likely to have more positive firm performance (as measured by accounting and market-based metrics). Our findings remain consistent with the legitimacy and signaling theory-based argument that firms with good social impact and CSR reporting practices might be able to obtain organizational legitimacy as well as send a signal to the public that they have dealt with proper business routines. As a result, it has a pivotal impact on firm financial performance.

References

Aerts, W., Cormier, D., & Magnan, M. (2008). Corporate environmental disclosure, financial markets and the media: An international perspective. *Ecological Economics*, *64*(3), 643–659.

Ali, R., Sial, M. S., Brugni, T. V., Hwang, J., Khuong, N. V., & Khanh, T. H. T. (2020). Does CSR moderate the relationship between corporate governance and Chinese firm's financial performance? Evidence from the Shanghai Stock Exchange (SSE) firms. *Sustainability (Switzerland)*, *12*(1),149.

Amir, E., and B. Lev. 1996. Value-relevance of nonfinancial information: The wireless communications industry. *Journal of Accounting and Economics*, 22 (1): 3–30.

Arena, C., Liong, R., & Vourvachis, P. (2018). Carrot or stick: CSR disclosures by Southeast Asian companies. *Sustainability Accounting, Management and Policy Journal*, *9(4)*, 422-454.

Axjonow, A., Ernstberger, J., & Pott, C. (2016). The impact of corporate social responsibility disclosure on corporate reputation: A non-professional stakeholder perspective. *Journal of Business Ethics*, *151* (429-450).

Bagnoli, M., & Watts, S. G. (2017). Voluntary assurance of voluntary CSR disclosure. *Journal of Economics and Management Strategy*, *26*(1), 205–230.

Barnett, M. L., & Salomon, R. M. (2012). Does it pay to be really good? Addressing the shape of the relationship between social and financial performance. *Strategic Management Journal*, *33*(11), 1304–1320.

Bebbington, J., Larrinaga, C., & Moneva, J. M. (2008). Corporate social reporting and reputation risk management. *Accounting, Auditing & Accountability Journal*, *21*(3), 337–361.

Bhattacharyya, A. (2015). Corporate social and environmental responsibility in an emerging economy: Through the lens of legitimacy theory. *Australasian Accounting, Business and Finance Journal*, *9*(2), 79–92.

Bondy, K., Moon, J., & Matten, D. (2012). An institution of corporate social responsibility (CSR) in multi-national corporations (MNCs): Form and implications. *Journal of Business Ethics*, *111*(2), 281–299.

Brammer, S, & Pavelin, S. (2006). Corporate reputation and social performance: The importance of fit. *The Journal of Management Studies*, *43*(3), 435–456.

Brammer, Stephen, & Millington, A. (2005). Corporate reputation and philanthropy: An empirical analysis. *Journal of Business Ethics*, *61*(1), 29–44.

Briem, C. R., & Wald, A. (2018). Implementing third-party assurance in integrated reporting: Companies' motivation and auditors' role. *Accounting, Auditing & Accountability Journal*, *31*(5), 1461–1485.

Brooks, C., & Oikonomou, I. (2018). The effects of environmental, social and governance disclosures and performance on firm value: A review of the literature in accounting and finance. *British Accounting Review*, *50*(1), 1–15.

Brown, H. S., de Jong, M., & Levy, D. L. (2009). Building institutions based on information disclosure: Lessons from GRI's sustainability reporting. *Journal of Cleaner Production*, *17*(6), 571–580.

Brown, N., & Deegan, C. (1998). The public disclosure of environmental performance information - A dual test of media agenda setting theory and legitimacy theory. *Accounting and Business Research*, *29*(1), 21–41.

Chen, Y. C., Hung, M., & Wang, Y. (2018). The effect of mandatory CSR disclosure on firm profitability and social externalities: Evidence from China. *Journal of Accounting and Economics*, *65*(1), 169–190.

Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, *35*(1), 1–23.

Cho, C. H., & Patten, D. M. (2007). The role of environmental disclosures as tools of legitimacy: A research note. *Accounting, Organizations, and Society,* 32(7-8), 639-647).

Cho, C. H., Michelon, G., Patten, D. M., & Roberts, R. W. (2014). CSR report assurance in the USA: An empirical investigation of determinants and effects. *Sustainability Accounting, Management and Policy Journal*, *5*(2), 130–148.

Cho, C. H., Michelon, G., Patten, D. M., & Roberts, R. W. (2015). CSR disclosure: The more things change?. *Accounting, Auditing & Accountability Journal*, *28*(1), 14–35.

Cormier, D., & Magnan, M. (2015). The economic relevance of environmental disclosure and its impact on corporate legitimacy: An empirical investigation. *Business Strategy and the Environment*, *24*(6), 431–450.

Cormier, D., Magnan, M., & Van Velthoven, B. (2005). Environmental disclosure quality in large German companies: Economic incentives, public pressures or institutional conditions?. *European Accounting Review*, *14*(1), 3–39.

Deegan, C., Cooper, B. J., & Shelly, M. (2006). An investigation of TBL report assurance statements: Australian evidence. *Australian Accounting Review*, *16*(2), 2–18.

Dhaliwal, D., Li, O. Z., Tsang, A., & Yang, Y. G. (2014). Corporate social responsibility disclosure and the cost of equity capital: The roles of stakeholder orientation and financial transparency. *Journal of Accounting and Public Policy*, *33*(1), 328–355.

Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Accounting Review*, *86*(1), 59–100.

Dhaliwal, D. S., Radhakrishnan, S., Tsang, A., & Yang, Y. G. (2012). Nonfinancial disclosure and analyst forecast accuracy: International evidence on corporate social responsibility disclosure. *The Accounting Review*, *87*(3), 723–759.

Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication. *International Journal of Management Reviews*, *12*(1), 8–19.

E & Y. (2017). *Is your nonfinancial performance revealing the true value of your business to investors?*. Retrieved from https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/purpose/purpose-pdfs/ey-nonfinancial-performance-may-influence-investors.pdf

Espinosa, M., & Trombetta, M. (2004). *The reputational consequences of disclosures*. *Name of Institute Working Paper* No. IVIE WP-EC 2004 - 10. Retrieved from http://www.ivie.es/downloads/docs/wpasec/wpasec-2004-10.pdf

Ferguson, A., & Pündrich, G. (2015). Does industry specialist assurance of non-financial information matter to investors? *Auditing: A Journal of Practice & Theory*, *34*(2), 121–146.

GRI. (2014). G4 Sustainability Reporting Guidelines - Reporting Principles and Standard Disclosures. *Global Reporting Initiative*, Retrieved from: https://www.globalreporting.org/resourcelibrary/G3-Guidelines-Incl-Technical-Protocol.pdf

Hahn, R., & Lulfs, R. (2014). Legitimizing negative aspects in GRI-oriented sustainability reporting: A qualitative analysis of corporate disclosure strategies. *Journal of Business Ethics*, *123*(3), 401–420.

Hodge, K., Subramaniam, N., & Stewart, J. (2009). Assurance of sustainability reports: Impact on report users' confidence and perceptions of information credibility. *Australian Accounting Review*, *19*(3), 178–194.

Imbens, G. W., & Wooldridge, J. M. (2009). Recent developments in the econometrics of program evaluation. *Journal of Economic Literature*, *47*(1), 5–86.

Issarawornrawanich, P., & Wuttichindanon, S. (2019). Corporate social responsibility practices and disclosures in Thailand. *Social Responsibility Journal*, *15*(3), 318–332.

Junior, R. M., & Best, P. (2017). GRI G4 content index: Does it improve credibility and change the expectation – performance gap of GRI-assured sustainability reports?. *Sustainability Accounting, Management and Policy Journal*, *8*(5), 571–594.

Kamaludin, K., Usman, B., Rusdi, M., & Susanti, W. (2022). CSR performance and CSR disclosure persistency: Empirical evidence of the US hypercompetitive industry. *Contaduría y Administración*, *67*(2), 278–303.

Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. *The Accounting Review*, *91*(6), 1697–1724.

Kim, W. S., & Oh, S. (2019). Corporate social responsibility, business groups and financial performance: A study of listed Indian firms. *Economic Research-Ekonomska Istrazivanja* , *32*(1), 1777–1793.

KPMG. (2013). *The KPMG survey of corporate responsibility reporting 2013: Executive summary*. Retrieved from https://assets.kpmg.com/content/dam/kpmg/pdf/2013/12/corporate-responsibility-reporting-survey-2013.pdf.

KPMG. (2017). *The KPMG survey of corporate responsibility reporting 2017*. Retrieved from. https://assets.kpmg.com/content/dam/kpmg/be/pdf/2017/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf.

KPMG International. (2015). *KPMG survey of corporate responsibility reporting 2015*. Retrieved from https://assets.kpmg.com/content/dam/kpmg/pdf/2015/12/KPMG-survey-of-CR-reporting-2015.pdf.

Lawrence, L., & Thomas, T. (2018). *Sustainability reporting in ASEAN countries*. Retrieved from https://www.asean-csr-network.org/c/images/Resources/Reports/2018_Sustainability_Reporting_in_ASEAN_Countries.pdf

Lee, D. (2017). Corporate social responsibility and management forecast accuracy. *Journal of Business Ethics*, *140*(2), 353–367.

Lennox, C. S., Francis, J. R., & Wang, Z. (2012). Selection models in accounting research. *The Accounting Review*, *87*(2), 589–616.

Leuz, C., & Verrecchia, R. E. (2000). The economic consequences of increased disclosure. *Journal of Accounting Research*, *38*(1), 91–124.

Liu, F. H. M., Demeritt, D., & Tang, S. (2019). Accounting for sustainability in Asia: Stock market regulation and reporting in Hong Kong and Singapore. *Economic Geography*, *95*(4), 362–384.

Lys, T., Naughton, J. P., & Wang, C. (2015). Signaling through corporate accountability reporting. *Journal of Accounting and Economics*, *60*(1), 56–72.

Mahoney, L. S., Thorne, L., Cecil, L., & LaGore, W. (2013). A research note on standalone corporate social responsibility reports: Signaling or greenwashing?. *Critical Perspectives on Accounting*, *24*(4–5), 350–359.

Manurung, A. M., & Basuki, H. (2010). An analytical assessment of assurance practices in social environmental and sustainable reporting in the United Kingdom and North America. *Gadjah Mada International Journal of Business*, *12*(1), 75–115.

Mercer, M. (2004). How do investors assess the credibility of management disclosures?. *Accounting Horizons*, *18*(3), 185–196.

Mertens, W., Pugliese, A., & Recker, J. (2016). Quantitative data analysis: A companion for accounting and information systems research. *Quantitative data analysis: A companion for accounting and information systems research*, (1-170). Switzerland.

Michelon, G., Pilonato, S., & Ricceri, F. (2015). CSR reporting practices and the quality of disclosure: An empirical analysis. *Critical Perspectives on Accounting*, *33*, 59–78.

Michelon, G., Pilonato, S., Ricceri, F., & Roberts, R. W. (2016). Behind camouflaging: Traditional and innovative theoretical perspectives in social and environmental accounting research. *Sustainability Accounting, Management and Policy Journal*, *7*(1), 2–25.

Moneva, M., Archel, P., & Correa, C. (2006). GRI and the camouflaging of corporate unsustainability. *Accounting Forum*, *30*(1), 121–137.

Moroney, R., Windsor, C., & Aw, Y. T. (2011). Evidence of assurance enhancing the quality of voluntary environmental disclosures: An empirical analysis. *Accounting and Finance*, *52*(March 2011), 903–939.

Muslu, V., Mutlu, S., Radhakrishnan, S., & Tsang, A. (2019). Corporate social responsibility report narratives and analyst forecast accuracy. *Journal of Business Ethics*, *154*(4), 1119–1142.

Neu, D., Warsame, H., & Pedwell, K. (1998). Managing public impressions: Environmental disclosures in annual reports. *Accounting, Organizations and Society*, *23*(3), 265–282.

Odriozola, M. D., & Baraibar-Diez, E. (2017). Is corporate reputation associated with quality of CSR reporting? Evidence from Spain. *Corporate Social Responsibility and Environmental Management*, *24*(2), 121–132.

Patten, D. M. (1991). Exposure, legitimacy, and social disclosure. *Journal of Accounting and Public Policy*, *10*(4), 297–308.

Patten, D. M., and Zhao, N. (2014). Standalone CSR reporting by U.S. retail companies. *Accounting Forum*, 38(2), 132–144.

Pérez, A., de los Salmones, M. del M. G., & López, C. (2015). Corporate reputation in the Spanish context: An interaction between reporting to stakeholders and industry. *Journal of Business Ethics*, *129*(3), 733–746.

Platonova, E., Asutay, M., Dixon, R., & Mohammad, S. (2018). The impact of corporate social responsibility disclosure on financial performance: Evidence from the GCC Islamic banking sector. *Journal of Business Ethics*, *151*(2), 451–471.

Pope, S., & Wæraas, A. (2016). CSR-washing is rare: A conceptual framework, literature review, and critique. *Journal of Business Ethics*, *137*(1), 173–193.

Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, *89*(1/2), 62–77.

Prieto-carrón, M., Lund-thomsen, P., Prieto-carrón, M., Lund-thomsen, P., Chan, A., Muro, A., & Bhushan, C. (2006). Critical perspectives on CSR and development: What we know, what we don't know, and what we need to know. *International Affairs*, *82*(5), 977–987.

Rodrigue, M., Magnan, M., & Cho, C. H. (2013). Is environmental governance substantive or symbolic? An empirical investigation. *Journal of Business Ethics*, *114*(1), 107–129.

Romero, S., Fernandez-Feijoo, B., & Ruiz, S. (2014). Perceptions of quality of assurance statements for sustainability reports. *Social Responsibility Journal*, *10*(3), 480–499.

Rutherford, B. A. (2003). Obfuscation, textual complexity and the role of regulated narrative accounting disclosure in corporate governance. *Journal of Management and Governance*, *7*(2), 187–210.

Sadou, A., Alom, F., & Laluddin, H. (2017). Corporate social responsibility disclosures in Malaysia: Evidence from large companies. *Social Responsibility Journal*, *13*(2), 177–202.

SEC. (2019). *Sustainability reporting guidelines for publicly listed companies*. Retrieved from Securities and Exchange Commission https://www.sec.gov.ph/wp-content/uploads/2019/10/2019MCNo04.pdf.

She, C. (2019). *Organisational use of social media and stakeholder engagement.* Doctoral dissertation, University of Exeter, United Kingdom, Retrieved from https://ore.exeter.ac.uk/repository/bitstream/handle/10871/40601/SheC.pdf?sequence=1&isAllowed=y

Simnett, R., Vanstraelen, A., & Chua, W. F. (2009). Assurance on sustainability reports: An international comparison. *The Accounting Review*, *84*(3), 937–967.

Simpson, A. (2010). Analysts' use of nonfinancial information disclosures. *Contemporary Accounting Research*, 27(1), 249– 288.

Stiglitz, J. E. (2002). Information and the change in the paradigm in economics information. *The American Economic Review*, *92*(3), 460–501.

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, *20*(3), 571–610.

Tandelilin, E., & Usman, B. (2023). Toward a better understanding of social impact, CSR reporting and firm performance: A look at the ASEAN banking industry. *Social Responsibility Journal*, *19*(3), 579–600.

Thorne, L., Mahoney, L. S., & Manetti, G. (2014). Motivations for issuing standalone CSR reports: A survey of Canadian firms. *Accounting, Auditing and Accountability Journal*, *27*(4), 686–714.

Toms, J. S. (2002). Firm resources, quality signals and the determinants of corporate environmental reputation: Some UK evidence. *The British Accounting Review*, *34*(3), 257–282.

Unerman, J., Bebbington, J., & O'Dwyer, B. (2007). Introduction to sustainability accounting and accountability. In J. Unerman, J. Bebbington, & B. O'Dwyer (Eds.), *Sustainability Accounting and Accountability*. London, UK: Routledge

Usman, B. (2020). CSR performance, firm's attributes, and sustainability reporting. *International Journal of Business and Society*, *21*(2), 521–539.

Usman, B., Bernardes, O. T. F., & Kananlua, P. S. (2020). On the nexus between CSR practices, ESG performance, and asymmetric information. *Gadjah Mada International Journal of Business*, *22*(2), 151–177.

Waagstein, P. R. (2011). The mandatory corporate social responsibility in Indonesia: Problems and implications. *Journal of Business Ethics*, *98*(3), 455–466.

Waddock, S. A., & Graves, S. B. (1997). The corporate social performance-financial performance link. *Strategic Management Journal*, *18*(4), 303–319.

Xu, B., & Yang, Y. C. (2019). *Does corporate social responsibility facilitate public debt financing?.* Retrieved from http://www.fmaconferences.org/Vietnam/Papers/CSR_DebtStructure 20181213.pdf