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The interaction of corporate social responsibility (CSR) materiality and explicit assessment on willingness to invest: perception of financial analysts

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Abstract

Purpose – Recent research finds that the effect of corporate social responsibility (CSR) information, especially when CSR is not related to core business activities (immaterial CSR issues), on investment decisions will be eliminated when it is explicitly assessed. As CSR expectations from investors appear to be different across specific cultures and countries (Van der Laan Smith *et al.*, 2010), we aim to investigate (1) the effect of CSR materiality on investors' willingness to invest and (2) how the explicit assessment of CSR information moderates the effect of explicit assessment and CSR materiality on investment judgment by professional investors in Thailand.

Design/methodology/approach – A 2 × 2 between-subject experiment was conducted based on 136 professional investors.

Findings – Overall, the results suggest that an investor's willingness to invest is greater when CSR is material than when CSR is immaterial. In addition, the assessment of willingness to invest in a firm's stock is not affected by the presence or absence of explicit assessment of the material CSR. However, the results suggest that when CSR issues are immaterial, explicit assessment significantly removes the effect of CSR performance on the investor's investment judgment. Consistent with the findings from Guiral *et al.* (2019), professional investors seem to process CSR information in a similar way as nonprofessional investors.

Practical implications – The findings suggest that material CSR information has a significant impact on the investment decisions of professional investors. This is consistent with the materiality guidance provided by the Sustainability Accounting Standard Board (SASB) as helpful in improving the value of CSR information for investors. These results should be of interest to both business people and regulators because, despite differences in the cultural and audit environment, the results confirm that professional investors in Thailand use CSR information in an experimental setting, thereby providing some evidence of value creation from CSR activities and nonfinancial disclosures.

Originality/value – While recent experimental research has primarily examined how nonprofessional investors evaluate CSR information in Western countries, this study extends the literature by focusing on professional investors in emerging capital markets and how they use CSR information in their investment decisions (Coram *et al.*, 2009). The study also addresses the call for research on differences in CSR reporting and practices in different cultures and countries (Van der Laan Smith *et al.*, 2010; Coram *et al.*, 2009) to provide insights into how professional investors in Thailand use CSR information to formulate investment judgments.

Keywords Disclosure, Corporate social responsibility, Emerging market, Investment decision, Professional investor

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1. Introduction

Corporate social responsibility disclosure is widespread and has become a common practice in business (KPMG, 2020). KPMG (2020) conducted a survey and reported that 80% of leading firms in 49 countries disclosed environmental and social responsibility information. Moreover, research findings also suggest that investors, both professional and nonprofessional, also incorporate CSR information into their investment decisions (Guiral *et al.*, 2019; Cohen *et al.*, 2011; Amel-Zadeh and Serafeim, 2018). This is also confirmed by Chartered Financial Analyst's (CFA) survey results, which suggested that 73% of institutional investors consider CSR performance in their decision-making process (CFA, 2017).

Although firms generally disclose only the activities that benefit stakeholders, or so-called positive CSR activities, it does not necessarily mean that those positive CSR activities are related to firms' core businesses. For example, managing environmental risk might be relevant to the strategy of some firms, while employees' safety concerns may be strategically important for other firms. Since a firm's financial condition and operating performance are influenced by its core business activities, CSR information related to such activities is more likely to be seen as material by investors (Guiral *et al.*, 2019, the Sustainability Accounting Standard Board [SASB], 2017). Following the SASB (2020), CSR issues that are related to core business activities are referred to as "material CSR" and CSR issues that are distant from the core business are referred to as "immaterial CSR".

Past studies have focused on how investors process firms' CSR activities before reaching any investment decision. Elliot *et al.* (2014) found that the effect of CSR information on investment decisions could be unintentional, as investors tend to use their feelings or formally called "an affect-as-information heuristic" when they assess a firm's fundamental value. They further noted that when CSR information is deliberately processed, such a process would reduce the unintended influence of feelings in assessing firms' fundamental value. This is consistent with the "heuristic-systematic" model introduced in Chaiken and Maheswaran (1994), in which the affect is used as information to form an investment judgment when processed heuristically, while systematic processing involves deliberate processing of CSR information. As suggested in Schwarz and Clore's (2007) study, feelings can be used as a source of information; therefore, positive CSR performance is considered affect-inducing information. Schwarz and Clore (2007) further addressed the idea that the affect-as-information heuristic is substantially used to form a judgment when affect-induced information is related to the target. When investors are exposed to positive CSR information that is related to the firm's core business or material CSR, it activates their affect heuristics; therefore, they are willing to invest more than when the CSR activities are immaterial to the firm.

To test the strength of this heuristic in evaluating CSR information, researchers have introduced "explicit assessment" into the experiment. In the explicit assessment, experiments' participants or subjects are guided by questions that facilitate critical thinking on how the disclosed CSR information relates to the firm's core business. In contrast, in the nonexplicit assessment, investors are simply asked to promptly evaluate firms' CSR performance.

This study explores how explicit assessment influences the heuristics of investors' willingness to invest. When CSR is material, heuristics play an important role in investment decision-making. In such cases, when investors express a "positive feeling" toward the firm's CSR, there should be no difference in terms of their willingness to invest under explicit and nonexplicit assessments. However, when CSR is immaterial, an explicit assessment forces investors to critically analyze and realize that firms' activities are not directly related to their core businesses. This triggers "negative feelings" and assigns a certain discount to the firm's value. Specifically, the nature of the explicit assessment makes investors analyze CSR information more critically, enabling them to attribute their feelings to the right source and, consequently, mitigating any bias that their feelings may have on their judgment (Elliot *et al.*, 2014).

Our study contributes to the literature in the following ways. First, in Guiral *et al.* (2019) study, the focus was on the retailing industry and university students were utilized as subjects in their investigation. Generalization could be a concern when CSR activities and disclosure are industry specific, as Sweeny and Coughlan (2008) noted that there is a significant difference between how organizations in different industries report on CSR to be consistent with stakeholders' views of CSR. Specifically, for environment-related industries such as oil and gas, mining, and pulp and paper, the environmental dimensions are rated as "material CSR" in SASB. With the sustainability megatrends that are witnessed globally, this study has turned its focus to environmentally sensitive industries. Therefore, it is relevant and vital to investigate the effect of CSR in different sectors because its effects could vary from one sector to another.

Second, our study contributes to the literature in terms of the subject choice and emerging economy's focus. The study investigates the effect of CSR in an emerging market. Existing research in this area mainly focuses on the Western context, with only a few studies regarding this issue in emerging markets, especially in Southeast Asia (Van der Laan Smith *et al.*, 2010). Cheung *et al.* (2010) noted that Asian firms have implemented different CSR activities than Western firms and that the Asian business environment is characterized by a low separation of ownership and control and a lack of transparency. This could explain why CSR has gained a slow start in Asia. However, over recent years, many emerging market firms have placed sustainability at the core of their corporate philosophy and business model (OECD, 2021). As for Thailand, the Thai Security and Exchange Commission (SEC) continuously encourages the voluntary sustainable disclosures of Thai listed firms. Currently, Thailand is ranked 43rd worldwide in the 2021 Sustainable Development Goal index (SDG index), having the highest ranking in Southeast Asia. SDGs are also included in the Thai National Economic and Development Plan. Moreover, the Bank of Thailand recently noted that there is an increasing demand for Thai investors as environmental, social, and governance (ESG)-related mutual funds grew by approximately 96% in 2021 (Bank of Thailand, 2021). Therefore, it is of interest to investigate how professional investors in this emerging capital market incorporate CSR information into their investment decisions. Moreover, while recent experimental research has primarily examined how nonprofessional investors evaluate CSR information (Guiral *et al.*, 2019; Elliot *et al.*, 2014; Hoang and Trotman, 2021), this study extends the literature by focusing on sophisticated investors' investment judgments with regard to CSR performance. We focused on this user group, because how they use CSR information in their investment decisions remains underresearched. This is critical because their decisions could determine market outcomes.

2. Theory and hypothesis

2.1 Heuristic CSR processing and CSR materiality

2.1.1 Heuristic CSR processing under affect-as-information theory. As people cannot always operate at their full processing capacity, they often rely on decision-making shortcuts or heuristics when making decisions. Affect-as-information theory was initially developed by Schwarz and Clore (1983) to conceptualize the role of moods (i.e. happy and sad) in making judgments. The theory assumes that people use their feelings as a source of information and that those different feelings should provide different types of information. The use of feelings as a source of information follows the same principles as the use of any other information. In this manner, people are likely to perceive their feelings as being about the "target" of the judgment unless their attention is drawn to other plausible sources. In particular, Schwarz and Clore (1983) indicated that individuals who are reminded about the state of the weather, which is the source of the affect, no longer use their weather-related affect as an indicator of general life satisfaction in their judgment.

In this study, as positive CSR evokes positive affect reactions in investors (Elliot *et al.*, 2014), investors should use this feeling to incorporate CSR performance in making judgments as if it is informative about the "target", which is the firm's value in this context. However, an explicit assessment of CSR performance should theoretically remind investors of the source of their affective reaction. Once investors attribute their positive feeling to its source, its effect on decision-making tends to diminish or vanish.

2.1.2 The effect of CSR material on investors' judgments. As investors and other stakeholders increasingly demand that firms be more responsible and accountable for the impacts of their decisions and activities on the environment and society, a large number of firms identify CSR issues as part of their strategy (Khan *et al.*, 2016). The materiality of the different CSR issues tends to vary across firms and industries (Eccles *et al.*, 2013). Correspondingly, investors recognize that a given sustainability issue is unlikely to be equally material for firms in distinct industries. For guidance on this materiality, the SASB provides the Materiality Map™, which identifies sustainability issues that are likely to affect the financial conditions or operating performances of firms within a particular industry. As a result, CSR issues that directly relate to core business activities are more likely to be considered important for investment judgments and are, therefore, "material". In contrast, CSR issues that are considered firms' peripheral practices are viewed as "immaterial" (Guiral *et al.*, 2019).

Recent research concerning the materiality of sustainability issues and returns on portfolios indicates that firms with good ratings on material sustainability issues significantly outperform firms with poor ratings on these issues. This is consistent with the findings of Khan *et al.* (2016) and Grewal *et al.* (2021), who also adopted the SASB classification of investor-relevant sustainability issues to investigate the relation between the SASB-materiality issue and stock price informativeness. The results confirm that investors can analyze the implication of these disclosures in determining a firm's value, suggesting that the SASB-materiality sustainability issue contains firm-specific information that is relevant to the valuation of stock prices. In contrast, firms with good ratings on immaterial sustainability issues do not significantly outperform firms with poor ratings on the same issues (Khan *et al.*, 2016). Therefore, pursuing immaterial CSR may create unnecessary costs that lead to the inefficient resource allocation of a firm (Wang and Bansal, 2012). In addition to the fact that investors perceive material and immaterial CSR activities as being unequally important across industries, the effect of positive and negative CSR on its materiality was further investigated in Guiral *et al.* (2019). Their findings suggest that positive CSR performance is likely to influence investment decisions more than negative CSR performance.

In our study, only positive CSR information is investigated, as it was evidenced in prior studies that it activates affect feelings and has a greater impact on investment judgment than negative CSR information (Elliot *et al.*, 2014; Coram *et al.*, 2009; Guiral *et al.*, 2019). Under affect-as-information theory, it is predicted that investors will use their affective reaction toward positive CSR performance to make investment judgments. Therefore, CSR information is presumed to have value relevance, as investors perceive that it is useful in their investment decisions (Francis and Schipper, 1999). The first hypothesis is developed as follows:

H1a. An analyst's willingness to invest is higher when positive CSR issues are material and lower when they are immaterial.

H1b. A higher willingness to invest is driven by the relevance of CSR performance when CSR is material than when CSR is immaterial.

Despite the fact that investors incorporate CSR information when assessing firm value (e.g. Coram *et al.*, 2009; Amel-Zadel and Serafeim, 2018), prior research documented that such an effect is unintentional (Elliot *et al.*, 2014).

Affect-as-information theory also indicates that prompting people to attribute affect to its source reduces its unintended influence on subsequent judgments because it is expected to change how the "affect feeling" is interpreted and used in their judgments. Thus, when the source of affective reaction is made salient, its influence on judgment tends to decrease or disappear (Schwarz and Clore, 1983; Elliot *et al.*, 2014). Based on this theory, when individuals are asked to explicitly assess a firm's CSR performance (i.e. source of affective reaction), the influence of CSR information on investment judgment is likely to disappear (Elliot *et al.*, 2014; Guiral *et al.*, 2019). This is because individuals are promptly asked to relate their affects to the source (e.g. CSR performance) and consider whether this information truly affects a firm's value. It is, therefore, predicted that when investors attribute their affective reaction to the source, the effect of CSR-related affect on judgment should decrease greater in the case of immaterial CSR than material CSR. To examine the effect of the explicit assessment of CSR information on investors' willingness to invest, Hypothesis 2 is stated as follows:

H2. When positive CSR is material, an analyst's willingness to invest is unaffected when CSR performance is explicitly assessed. When positive CSR is immaterial, the willingness to invest is lower.

3. Research method

3.1 Participants

A total of 136 participants were included in the sample of this study. They are finance-related professionals, with the largest proportion being financial analysts, credit rating analysts and investment bankers.

The average ages and years of work experience for the participants were 38.05 and 12.19 years, respectively. Participants are affiliated with different financial firms and are thus likely to represent a broad range of views regarding CSR. More than 50% of them work as financial analysts, 69.85% are female and 30.15% hold a master's degree. Each experiment was designed to take approximately 20–30 min to complete. All participants completed the research instruments online with cash compensation for their participation.

3.2 Design of the experiment

To test our hypotheses and research questions, we conducted a 2 × 2 between-subject experiment. The participants are financial professionals who serve as proxies for professional investors. All participants were randomly assigned one of the four available conditions: (1) Material CSR/Explicit assessment; (2) Material CSR/No explicit assessment; (3) Immaterial CSR/Explicit assessment; and 4) Immaterial CSR/No explicit assessment. This method was adapted from Guiral *et al.* (2019) and Haji *et al.* (2021). Since CSR issues tend to be different across different industries, this study selected the pulp and paper industry. In the material CSR condition, the CSR issues related to the firm's financial performance included GHG emissions, energy management, water and waste management and ecological impact (SASB, 2017). For the immaterial CSR condition, the salience dimensions were employee and community welfare, as these issues are related to noncore business activities in this industry. The presentation of the CSR dimension in the instrument was randomized to prevent any potential order effect.

To investigate the effect of the explicit assessment of CSR information on investors' judgments, we manipulated the assessment into two conditions: explicit assessment and no explicit assessment. In the explicit assessment condition, participants were asked to assess the CSR performance of the hypothetical firms, while in the no explicit condition, no assessment of CSR performance was needed. In the explicit assessment condition, participants had to assess the firm's CSR performance in each of the five dimensions before providing their judgments on the willingness to invest. The five CSR dimensions consist of employees, customers, community, environment, and green policy.

For the dependent variable, the participants provided responses regarding their willingness to invest using an 11-point scale ranging from 0 (not willing to invest at all) to 10 (highly willing to invest). By asking participants to assess their overall willingness to invest, we collapsed the investment judgment into a simple question (Cheng *et al.*, 2015; Backof *et al.*, 2020).

3.3 Experimental procedures

All conditions were given the same background and key financial information about the hypothetical firm for which the CSR information was being manipulated. The research instrument consisted of two main parts. The first part contained the consent form, the hypothetical firm's background, key financial information, and CSR performance. Financial performance had a neutral trend across conditions. The five CSR performance dimensions consisted of employees, customers, community, environment and green policy. Before reviewing the instrument, participants were required to rank the CSR activities that they thought were relevant to the core business of pulp and paper. After they had finished reading the case, they rated their willingness to invest in the firm's stock. While rendering their judgments, the case material could be revisited at any time.

To this end, they proceeded to the second part, which contained the manipulation check, post-task and demographic questions. For the post-task questions, participants were asked to rate the questions on an 11-point scale with regard to the extent to which the CSR information was relevant to their investment decision. In addition, they were also asked to respond to the questions relating to their socially and environmentally responsible investment attitude (Dilla *et al.*, 2013) as well as to rank the CSR activities that they perceived as relevant to the pulp and paper industry. Using an 11-point scale adapted from Dilla *et al.* (2013), the three questions related to (1) the importance of including socially and environmentally responsible investments in the portfolio; (2) the belief that firms that are socially and environmentally aware yield higher returns for their shareholders; and (3) whether they would continue to invest in a firm in which the CSR performance was one of the best in its industry even if its financial performance was average or below average.

4. Results and discussions

To ensure that participants understood the manipulations for CSR materiality, they were required to indicate the extent to which they thought that the CSR issues directly related to the firm's financial performance in the pulp and paper industry. The average rating in the material CSR issues condition (mean = 8.05) was significantly greater than that of the immaterial CSR issue condition (mean = 4.63, t = 14.31, p < 0.001, one-tailed). For manipulation of the explicit assessment, approximately 90% (136 of 150) of the participants correctly indicated that the CSR performance was separately assessed. The 12 participants who were unsuccessful in this identification for explicit assessment were removed from the full sample. For the participants' perception of CSR issues relating to the pulp and paper industry, approximately 81% of them either ranked environmental impact and green policy as their first or second choice. These results confirm that participants' existing beliefs regarding the CSR issue in the pulp and paper industry are consistent with the SASB materiality map.

Table 1 provides the overall mean and standard deviation in all experimental conditions, while panel A of Table 2 presents the results from the two-way ANOVA. The interaction effect of materiality and explicit assessment is statistically significant ($p < 0.001$, one-tailed), indicating that explicit assessment moderates the effect of CSR materiality on investors' willingness to invest. H1a predicts that the analyst's willingness to invest is higher when positive CSR issues are material. Consistent with this prediction, the results from ANOVA as well as the simple effect reported in panel A of Table 2 demonstrate a significant main effect of CSR materiality ($F = 75.01$, $p < 0.001$), suggesting that the investor's willingness to invest is higher when the CSR is material (Mean = 7.00) than when CSR issues are immaterial (Mean = 5.82).

Hypothesis 1b predicts this outcome because investors consider the performance of material CSR to be aligned with firms' underlying core activities; thus, this information is relevant to their investment decision. To further examine whether CSR materiality increases the relevancy of CSR in investment decisions, a simple mediation analysis was performed. In the post-experiment questionnaire, participants were also asked to rate, based on an 11-point scale, the extent to which CSR information was relevant to their investment decision.

As shown in Figure 1, the direction and significance of the path coefficients support the mediation predicted in H1b. The results using the PROCESS procedure introduced by Hayes (2013) indicate that when the mediator, which is the relevance of CSR performance, is not included in the model, the direct effect of CSR materiality on willingness to invest is significant ($\beta = 1.181$, $p < 0.001$). However, when the relevance of CSR performance is included in the model as a mediator, the magnitude of the coefficient decreases to 0.487 with a lower statistically significant p-value of 0.003. These results show a partial mediation effect, suggesting that when CSR performance is related to core business, the relevance of the CSR information increases in the investment decision.

Hypothesis 2 predicts that when CSR performance is explicitly assessed, investors can attribute their feelings to the source; therefore, the effect of positive CSR performance on investment decisions should be removed. As expected, the significant interaction effect is documented in panel A of Table 2 ($F = 13.63$, $p < 0.001$, one-tailed). Panel B of Table 2 also provides the results of Hypothesis 2 using a planned contrast. Similarly, the planned contrast results in Panel B of Table 2 also confirm the prediction of Hypothesis 2 that when positive CSR is material, explicit assessment of CSR performance has no impact on the investment decision ($p = 0.09$). However, the explicit assessment of immaterial CSR performance significantly lowers the willingness to invest in the firm's stock when compared to no explicit assessment ($p < 0.001$). Figure 2 depicts the observed effect of explicit assessment and CSR materiality on willingness to invest in Hypothesis 2.

Descriptive statistic –Willingness to invest

Conditions	Material CSR Mean (standard deviation)	Immaterial CSR Mean (standard deviation)	Total
Explicit assessment	7.19	5.41	6.21
	(1.02)	(0.76)	(1.25)
	$n = 26$	$n = 32$	$n = 58$
No explicit assessment	6.87	6.15	6.50
	(0.88)	(0.69)	(0.86)
	$n = 38$	$n = 40$	$n = 78$
Total	7.00	5.82	6.38
	(0.94)	(0.81)	(1.05)
	$n = 64$	$n = 72$	$n = 136$

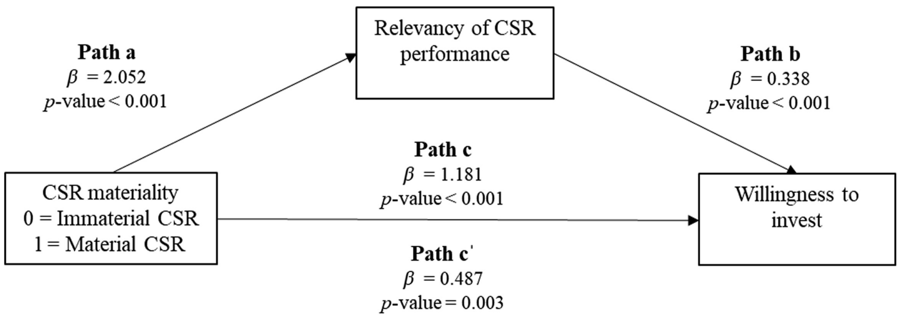
Table 1.
All participants' willingness to invest

Source of variation	*df*	*F*-stat	*p*-value*
Panel A two-way ANOVA model of willingness to invest			
Materiality	1	75.01	<0.001
Explicit assessment	1	2.11	0.07
Materiality x Explicit assessment	1	13.63	<0.001

Contrasts	*t*-test	*p*-value
Panel B planned contrast		
Material CSR		
No explicit assessment > Explicit assessment	1.36	0.09
Immaterial CSR		
No explicit assessment > Explicit assessment	−4.32	<0.001

Note(s): *Given our directional predictions, all *p*-values are one-tailed unless otherwise specified

Table 2. Effect of CSR materiality and CSR assurance on willingness to invest



Note(s): One-tailed significance for directional prediction

Figure 1. The mediating role of relevancy of CSR performance on willingness to invest

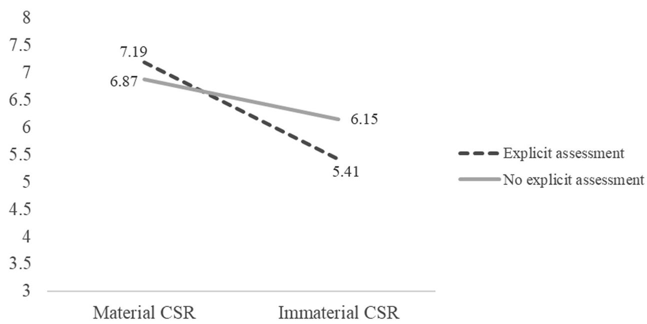


Figure 2. Observed effects of explicit assessment of CSR performance and CSR materiality on willingness to invest

Using the theoretical mitigating mechanism, participants were asked to assess CSR performance explicitly (Elliot *et al.*, 2014) to turn off the use of the affect-as-information heuristic. In fact, explicit assessment pushes them to relate their affect to the source (i.e. CSR performance) and consider whether it is related to their investment judgment. In this context, when there is a difference in the mean of willingness to invest between explicit assessment and no explicit assessment, the results provide support for the notion that investors use the affect heuristic when evaluating CSR information, especially in the immaterial CSR condition.

In contrast, in the CSR material condition, the means of the investor's willingness to invest do not differ between explicit and no explicit assessments, suggesting that their judgments for material CSR are likely to be systematically based rather than heuristically based. This implies that, whether or not CSR performance is explicitly assessed, professional investors perceive CSR activities that are related to the core business to create value for firms. Despite using different groups of users, audit environments, and CSR cultures, our results confirm Guiral *et al.*'s (2019) finding that both nonprofessional and professional investors use similar information processing modes when assessing CSR information.

Last, a robustness test was performed to ensure that participants were randomized and that their personal investment attitudes did not alter the main findings of this study. Individual differences between investors with regard to their social and environmental investment attitudes could affect how environmental performance disclosure and assurances influence investment decisions. The results show no significant differences in these responses across all conditions ($F = 0.17$, $p = 0.914$, two-tailed), indicating that the randomization is successful and that the willingness to invest is unlikely to be correlated with an individual's social and environmental attitude. In addition, the results from ACOVA (untabulated) suggest that these demographic variables and environmental attitudes do not significantly affect the willingness to invest, while the main effect of explicit assessment ($F = 1.60$, $p = 0.104$, one-tailed), CSR materiality ($F = 72.14$, $p < 0.001$, one-tailed), and the interaction effect of explicit assessment and CSR materiality ($F = 11.73$, $p < 0.001$, one-tailed) remain the same.

5. Conclusions and limitations

Investor's processing of CSR information is conditional on the materiality of CSR and forms of assessment. Our study extends the findings of Guiral *et al.* (2019) by demonstrating how explicit assessment and CSR materiality influence professional investors' investment decisions. A similar decision-making pattern was observed between nonprofessional and professional investors, particularly in the case of firms in an environmentally sensitive industry. The findings suggest that material CSR information has a significant impact on the investment decisions of professional investors. It also confirms that the objectives of materiality guidance concerning the increase in the value of CSR information have been achieved. These results should be of interest to businesses and regulators because the fact that professional investors are found to use this information in an experimental setting provides some evidence of the value creation of CSR activities and disclosures since there is an increasing demand for environmental, social, and governance (ESG) information and ESG-related mutual fund investment in Thailand.

For the objective of value maximization, firms should allocate their limited resources to CSR activities that investors value, in this case, material CSR activities. In addition, they might communicate such positive CSR information to investors in a way that facilitates an implicit assessment by investors. Our findings are relevant to the current debate regarding the format of CSR reports – specifically, whether standalone or integrated reports are more effective. Previous studies recommended that depicting CSR information in a separate CSR report increased the visibility of this information and could potentially activate a subconscious heuristic cue (i.e. the affect heuristic) (Haji *et al.*, 2021). Given that individuals struggle to process multiple pieces of information simultaneously due to limited processing capacity (Schwarz, 2004; Shah and Oppenheimer, 2007), standalone CSR reports, would make it difficult for investors to associate CSR with financial performance, thus discouraging the explicit assessment of CSR information.

A limitation of this study, beyond the usual limitations of behavioral experiments, is that the "willingness to invest" is measured by the overall investment decision rather than by having investors assess the fundamental value of firms. Several previous studies have included an additional test using both dependent variables, but the results appear to be indifferent (e.g. Guiral *et al.*, 2019; Cheng *et al.*, 2015; Hoang and Trotman, 2021). Future research should extend the coverage to other industries, particularly highly regulated industries such as banking and finance or other service industries in which their CSR activities focus on employee and customer dimensions. Although our findings confirm previous studies regarding the greater willingness to invest in the case of material CSR, future research may be conducted in the contexts of other emerging economies.

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