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# INDONESIAN CAPITAL MARKET REVIEW

## The Influence of Corporate Social Responsibility Disclosures on Investment Efficiency in the Asian Emerging Markets

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The aim of the research was to determine the efficiency of investing in companies that report on their corporate social responsibility (CSR) in developing markets. Companies that won the Asia Sustainability Reporting Awards 2020 were chosen for the study. We evaluate the correlation utilizing data from 36 firms from year observations of 2018 to 2020, using modified OLS estimation and regression analysis with modified panel data for heteroskedasticity and/or autocorrelation. In the emerging market, the sample period under examination is quite recent. Research findings show that CSR reporting has a significant negative effect on the company's investment efficiency (IE) and that CSR reporting influences IE in the overinvestment scenario. The findings from this paper provide several implications for related parties and managers to enhance CSR disclosure and IE. They also contribute significantly to the existing literature about the relationship between CSR and IE when providing evidence from the ASEAN context.

**Keywords:** *Corporate social responsibility; Investment efficiency; Emerging market; Asia*

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### Introduction

Today, CSR disclosures present an excellent image within the community, which can provide long-term benefits for the firms that provide them. Stakeholders see nonfinancial disclosures as a critical tool for identifying sustainability concerns and enhancing investor and consumer trust. Elberry and Hussainey (2020) conclude that the efficiency of corporate investment improves as a result of corporate transparency because it can decrease information asym-

metry by conveying more extensive information (Elberry & Hussainey, 2020). IE contributes to market development, which is a subject of particular concern in emerging economies (Zamir, Shailer, & Saeed, 2020). The keys to improving investment efficiency (IE) are increasing information transparency, lowering information asymmetry, and reducing agency costs (Khuong, Anh, Quyen, & Thao, 2022).

IE represents a consequence of an asset management system's risk, return, and overall cost, subject to fiduciary and other constraints

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imposed on investors (Ho, Li, & Gong, 2022). Theoretically, an efficient investment is one that prevents overinvestment (i.e., investing more than the optimal level) and underinvestment (i.e., investing less than the optimal level). Today's global businesses operate using a strategy to gain stakeholders' trust with a goal of reaching IE. As a result, if CSR disclosure is helpful, it may further companies' strategy to build a good reputation, such as improving the image of the company as well as its shareholders and building consumer loyalty (Benlemlih & Bitar, 2016; Erawati, Sutrisno, Hariadi, & Saraswati, 2021; Khediri, 2021; Lin, Li, Cheng, & Lam, 2021; Samet & Jarboui, 2017; Zamir et al., 2020).

While the issue of CSR has long been a matter of concern, the problem of CSR disclosure still mainly attracts attention in developed countries in Europe, North America, etc. (Thuy, Khuong, Anh, & Quyen, 2022). In developing countries, CSR disclosure usually stops at the voluntary level, and there is a lack of strict regulations in terms of disclosing problems related to society and the environment for businesses (Khuong & Anh, 2022b), especially in ASIAN countries. Furthermore, existing studies about CSR in developing countries have been conducted only on individual countries. Therefore, to explore this research gap a study must be implemented with a multi-national research sample from ASIAN countries. On the other hand, according to recent studies, CSR disclosures significantly influence IE (Benlemlih & Bitar, 2016; Khediri, 2021; Lin et al., 2021; Zamir et al., 2020; Zhao, 2021). This is because CSR disclosure contains valuable data to assist organizations in eliminating asymmetric information and accomplishing their efficiency goals (Zhong & Gao, 2017). According to previous studies, information asymmetry and agency issues are the key elements that affect a firm's IE (Ho et al., 2022). However, the findings of previous studies regarding CSR and IE relationship are still inconsistent; some support a positive link

(Benlemlih & Bitar, 2016; Khediri, 2021; Lin et al., 2021; Zamir et al., 2020; Zhao, 2021), while other researchers indicate the opposite relationship (Lin et al., 2021; Liu & Tian, 2019). As a result, this study contributes to the existing literature by providing empirical evidence about the association between CSR and IE through the emerging ASEAN market research context.

This study investigates how a company's investment effectiveness is affected by its CSR reporting. This inquiry makes several significant contributions. First, the theoretical link between CSR disclosure and IE is still questionable. Previous research has primarily focused on the connection between CSR and IE in every emerging market. As a result, more research in the context of emerging markets with an indicator such as companies that won the Asia Sustainability Reporting Awards is required to re-evaluate this link. This study adopts such a scope. Second, CSR has become a trend and can establish a link between business and social and economic growth in emerging markets. Research on the function of CSR disclosure in the emerging market context will aid policymakers in building a disclosure framework that benefits both the company and its stakeholders.

The rest of the investigation is divided into the following sections: Section 2 develops the study hypotheses, Section 3 discusses the research methodology, Section 4 summarizes and analyzes the empirical data, and Section 5 concludes and provides recommendations.

## Literature Review

In this modern era in which competition is very tight, companies contend with each other to attract investors, and one of the ways they do so is by disclosing non-financial disclosures. CSR disclosure as non-financial data has become popular recently among companies. CSR disclosure significantly impacts stakeholder trust, and when done correctly, it can help organizations stay afloat (Buallay, Kukreja, Ald-

<sup>1</sup> The Asia Sustainability Reporting Awards recognise and honour sustainability reporting leaders in Asia. The Awards celebrate best practices in sustainability reporting and communications. The Asia Sustainability Reporting Awards are a once-in-a-year opportunity for all types of organisations to build trust and awareness amongst their stakeholders by showcasing their corporate social responsibility initiatives.

haen, Al Mubarak, & Hamdan, 2020). Agency theory is considered the foundation theory in this research. Prior research by Zamir et al. (2020) showed that, in growing Asian markets, high asymmetry of information and agency conflicts involving insiders and foreign investors are common. Agency theory describes various control mechanisms, like CSR initiatives, as a benefit to ease managers' opportunistic conduct and reduce asymmetric information (Samet & Jarboui, 2017).

In addition to potential financial benefits, CSR reporting is crucial because it eliminates informational asymmetries between management and stakeholders, allowing investors to analyze performance more accurately and comprehensively (Huang & Watson, 2015). This expectation is a logical extension of agency theory (Jensen & Meckling, 1976). According to this concept, CSR reporting could be considered a tool or instrument for businesses to establish effective stakeholder relationships, hence improving IE and minimizing informational inequities. IE refers to directing capital flows to the most practical use (Zamir et al., 2020). It is created if the level of information asymmetry is low enough to enable managers to make appropriate investment decisions and avoid underinvestment and overinvestment situations.

Many prior studies have documented considerable evidence of the influence of CSR disclosures on IE (Zamir et al., 2020; Zhong & Gao, 2017). However, several empirical investigations including Benlemlih and Bitar (2016) and Khediri (2021) show either a positive or negative association. Our study illustrates that research results based on the current setting might be entirely different from what has been documented previously because of changing situations in emerging markets and specifically for companies that won the Asia Sustainability Reporting Awards 2020. CSR proposes that businesses, particularly (but not exclusively) companies, consider the interests of consumers, employees, shareholders, communities, and environmental concerns in all parts of their operations (Deepa Gokulsing, 2011). Recent research on the use of agency theory, in particu-

lar, sheds new light on the current relationship between CSR disclosures and IE (Benlemlih & Bitar, 2016; Khediri, 2021; Zamir et al., 2020).

Much research has been conducted on the link between CSR transparency and IE. According to previous research, investors may assign more efficient investment to firms with CSR disclosures (Zhong & Gao, 2017). Those firms may encounter a higher cost of capital (Thuy et al., 2022). According to previous research (Zhong & Gao, 2017), companies usually have a risk of experiencing over- and under-investment. Zhong and Gao (2017) assessed the connection between CSR and efficient investment in Chinese trade between 2010 and 2013. The correlation technique was used in this study. The correlation method's findings suggest that the more CSR activities a company engages in, the more efficient the investment becomes.

CSR is the responsibility of the firm for its impact on the environment due to the company's business activities. CSR is an important and major contribution to economic development and how companies reflect their commitment to the environment (Broadstock, Matousek, Meyer, & Tzeremes, 2020; Khuong & Anh, 2022b; Khuong, Rahman, et al., 2022; Thuy et al., 2022; Yang, 2015). Investment inefficiency arises due to various internal conflicts within the company, the most important of which is the existence of a moral hazard and adverse selection that occurs due to information asymmetry between managerial and outside investors. This can be avoided by increasing the extent of the company's financial and non-financial disclosures, namely CSR reports. The great influence of CSR disclosure on company IE has been investigated by Benlemlih and Bitar (2016), Samet and Jarboui (2017), and Zhong and Gao (2017). Upon disclosing CSR, the company does not get a direct profit, but from these activities, a firm can expect an improved company image. CSR disclosure is one way to signal to investors about the company's condition to increase the company's credibility and maximize the value of its shares (Khuong & Anh, 2022b; Khuong, Rahman, et al., 2022). This kind of disclosure significantly impacts the company's stakeholders because the disclosure shows the purpose of

the firm and what it has done for the welfare of society. This suggests that CSR disclosure affects IE and investor assessment (Benlemlih & Bitar, 2016; Khediri, 2021; Zamir et al., 2020).

Companies with a high level of CSR are generally more open to disclosing their financial activities than companies with a low level of CSR (Deepa Gokulsing, 2011; Dhaliwal, Li, Tsang, & Yang, 2009). This generates a positive image in the eyes of investors and stakeholders (Benlemlih & Bitar, 2016). CSR data can supplement financial data significantly when minimizing information asymmetry between corporations and non-financial stakeholders (Dhaliwal et al., 2009). Non-financial disclosures like CSR can help additional information that sensible market participants can exploit, thereby helping to reduce information asymmetry (Zhong & Gao, 2017). Huang and Watson (2015) compared the level of information asymmetry of companies listed in China around the beginning of the period when the regulation on obligatory CSR reporting was implemented and found that information asymmetry decreased significantly after the enactment of the relevant mandate in the emerging markets. This finding is in line with the research by Zhong and Gaom (2017), who stated that CSR disclosure provides adequate information to reduce information asymmetry. In light of the above studies, the authors propose the following hypothesis:

Hypothesis 1. CSR disclosure has a positive effect on the company's IE.

CSR reporting eliminates information asymmetry and raises money from investors' sources by providing additional information. Frequently, engaging in CSR activities improves the company's image within the community and can also attract additional funding from outside. This financial support will also result in increased CSR demands from non-stakeholders (Zhong & Gao, 2017). However, the impact of CSR transparency is a double-edged sword. On the one hand, from the agency theory perspective, CSR disclosure can be considered a tool for managers to solve problems related the transparency in society and environmental

issues along with pressure from stakeholders (Thuy et al., 2022). On the other hand, agency theory also indicates that CSR can reduce the agency problem by eliminating the asymmetric information between shareholders and executives (Khuong, Anh, Quyen, et al., 2022). From this perspective, the advantage of CSR derives from reasonable goals and benefits companies.

Research conducted by Aerts, Cormier, and Magnan (2008) using a selection of companies in Europe and North America shows that the precision of analyst earnings forecasts is more significant for companies with environmental transparency. Companies that perform well in terms of CSR tend to invest more efficiently (Samet & Jarboui, 2017). The study's results further show the informative role of CSR disclosure in the over and under investment prospect.

If firms have good CSR performance, they can attract more investors as well as shareholders. However, this advantage of implementing CSR can have a detrimental effect when companies are simultaneously under pressure from other stakeholders (Thuy et al., 2022). When firms have excess funds, they tend to overinvest in potential projects for profit earnings targets. These projects generally have a high rate of return but also imply high risk at the same time. If companies face failure, the loss from overinvestment might bring them financial distress (Khuong & Anh, 2022a; Khuong, Anh, & Van, 2022). In this case, CSR expenditure accounts significantly for the firm's operational costs. However, these kinds of companies cannot reduce disclosing CSR because they also must deal with pressure from other related parties. Consequently, the second hypothesis is proposed:

Hypothesis 2. There is a negative effect between CSR reporting on IE in the overinvestment scenario.

## Research Method

### Data Collection

This study relied on documentary data to

create a research sample in the form of an annual sustainability report obtained through the website of the company. When choosing the data for the research sample, we selected large companies to represent the stock market of ASEAN countries and demonstrate good CSR performance along with financial statements. Annual statements have adequate information, which are the three critical criteria for the author's choice. As a result, the research data covers firms that won the Asia Sustainability Reporting Awards 2020. There are 36 companies from the period 2018 – 2020 that have already been observed. All data sources originating from the official website have been approved by all interested parties in their publication, and all processed financial reports have been audited by public accountants.

### Research Models

Following past research, we quantified the impact of CSR disclosure on IE (Elberry & Hussainey, 2020; Li & Liao, 2014). The model is estimated:

$$\text{INVEST}_{i,t} = \beta_0 + \beta_1 \times \text{CSR}_{i,t-1} + \beta_2 \times \text{LEV}_{i,t-1} + \beta_3 \times \text{ROA}_{i,t-1} + \beta_4 \times \text{SIZE}_{i,t-1} + \beta_5 \times \text{TANG}_{i,t-1} + \beta_6 \times \text{SLACK}_{i,t-1} + \varepsilon_{i,t}$$

#### Dependent variables

In this study, following Elberry and Hussainey (2020) and Li and Liao (2014), the IE is determined as the optimum value of the residuals from the theory by Biddle, Hilary, and Verdi (2009). This model estimates the investment normal stage as:

$$\text{INVEST}_{i,t} = \beta_0 + \beta_1 \times \text{NEG}_{i,t-1} + \beta_2 \times \text{Growth}_{i,t-1} + \beta_3 \times \text{NEG}_{i,t-1} + \beta_4 \times \text{Growth}_{i,t-1} + \varepsilon_{i,t}$$

While:

$\text{INVEST}_{i,t}$  equals the company's investment expenditure during year t divided by the book value of assets at the start of the year and multiplied by 100;

$\text{NEG}_{i,t-1}$  is a dummy variable with a value of 1 for unfavorable sales growth and 0 for positive sales growth;

$\text{GROWTH}$  is the change in sales from year t-2 sales to year t-1 divided by sales in year t-2.

The variable INVEST is then calculated from the residuals of the model. Under-investment situations are described by poor residuals and overinvestment situations by pleasant residuals. To convert the dependent variable into a positive index, we multiply the absolute worth of the residuals by -1. Greater values correlate to higher levels of IE.

### Independent variables

CSR: The equivalent CSR ALL is the social responsibility disclosure score for economic, environmental, and social actions, with the average value (GRI, 2016).

The following is the calculating formula:

$$\text{CSR\_ALL}_i = \frac{\sum X_i}{n_i}$$

$X_i$  If the company meets criteria i, then the recorded value is 1; if not, the recorded value is 0.  $n_i$  is the expected number of criteria for firm i; the value is in the range [1;6] for economic topics (GRI 200); the value is in the interval [1;8] for environmental topics (GRI 300), and values in the range [1;19] denote social topics (GRI 400).

### Control variables

In this study, following the work of Benlemlih & Bitar (2016), Erawati et al. (2021), Khediri (2021), Lin et al. (2021), Liu & Tian (2019), and Zamir et al. (2020), the authors utilize control variables that might have an impact on IE. LEV is the ratio of total liabilities to total assets, ROA is net profit to total assets, Size is the firm size calculated as the natural logarithm of total assets, TANG stands for tangibility of assets (established as the fixed-assets-to-total-assets ratio), and SLACK is defined as the ratio of cash to tangible assets and is a measure of financial resources or restrictions.

### Methodology

To assess the research findings, the authors utilized the OLS estimate technique. OLS estimations, however, will not be efficient in the

Table 1. Descriptive statistics of variables

Variable	Obs	Mean	Std. Dev.	Min	Max
INV	108	0.064	0.138	-0.622	0.890
CSR	108	0.562	0.155	0.333	0.893
LEV	108	0.505	0.260	0.126	0.975
ROA	108	0.042	0.075	-0.114	0.385
SIZE	108	22.463	3.235	17.912	27.972
TANG	108	0.464	0.302	0.003	0.994
SLACK	108	0.841	2.147	0.007	17.373

Source: Data processed using STATA software.

Table 2. The Correlation Matrix

	INV	CSR	LEV	ROA	SIZE	TANG	SLACK
INV	1.000						
CSR	-0.170	1.000					
LEV	-0.315	-0.051	1.000				
ROA	0.055	0.028	-0.174	1.000			
SIZE	-0.230	-0.137	0.469	-0.157	1.000		
TANG	0.004	0.222	-0.242	0.245	-0.038	1.000	
SLACK	0.001	-0.226	0.191	-0.108	0.168	-0.420	1.000

Source: Data processed using STATA software.

presence of heteroskedasticity issues. Furthermore, autocorrelation causes the t-value (or the p-value) to be higher than it should be and the regression coefficients to be statistically significant with the decision criteria. If  $\text{sig} \leq 0.05$ , then the hypothesis is accepted. In this scenario, based on the study of Benlemlih and Bitar (2016), and Khuong, Anh, Quyen et al. (2022), the authors perform (feasible generalized least squares (FLGS)) to handle the data with heteroskedasticity and/or autocorrelation issues.

## Results and Discussions

### Descriptive Statistics

Table 1 summarizes the descriptive statistics for the study variables.

Table 1 shows that the variable INV has a positive mean value of 0.064, and its variation appears to be in line with the figures given in Benlemlih and Bitar (2016). These figures show that all sample companies have fairly good management in processing investments to be efficient, almost the same as previously reported (Khediri, 2021). The CSR variable has a median value of 0.562 and a standard deviation of 0.155, which means that, in general, the sample companies have made the maximum disclosure of CSR. Lev has an average value of 0.505,

implying that total debt accounts for about half of total assets. The average ROA in the sample is 0.042, with a standard deviation of 0.075, expressing that the firms have growth potential on average. Size has a median score of 22.463 and a standard deviation of 3.235. Tangibility has an average value of 0.464 and a standard deviation of 0.302. Slack has an average value of 0.841 with a standard deviation of 2.147. The characteristics of the sample are generally similar with those of previous research (Zhong & Gao, 2017).

### Correlation Analysis

Table 2's correlation matrix reveals that, at the 5% level of significance, the variables ROA, Tangibility, and Slack have a favorable relationship with IE, while the CSR, leverage, and size variables are negatively correlated with IE. The maximum correlation among the variables does not exceed 0.60. Furthermore, we observe no significant association between all explanatory variables, showing that our regressions are not affected by multicollinearity.

### Main Results

Table 3 shows the regression analysis findings. As shown in Table 3, the results confirm a negative relationship between CSR disclosure

Table 3. Regression Result

Variables	OLS Robust	GLS
	INV	INV
CSR	-0.173** [-2.00]	-0.118*** [-6.58]
LEV	-0.143** [-2.34]	-0.102*** [-7.13]
ROA	-0.003 [-0.02]	0.115* [1.65]
SIZE	-0.006 [-0.88]	-0.007*** [-3.61]
TANG	-0.006 [-0.13]	-0.012 [-1.25]
SLACK	0.002 [0.62]	0.001* [1.76]
_cons	0.364* [1.96]	0.341*** [6.35]
N	108	108
R-sq	0.149	
Modified Wald test		0.000
Wooldridge test		0.3447

t statistics in brackets. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01

Source: Data processed using STATA software.

and IE. Specifically, the coefficient of the CSR variable is negative but numerically significant (-0.175,  $p < 0.05$ ), implying that a greater degree of CSR disclosure does not translate to more efficiency in investment. The bulk of the other control variables have coefficients similar to those of previous studies.

The outcome of this study is not in accordance with previous research carried out by Zhong and Gao (2017) which shows a positive result for CSR disclosures (0.863) significant at the 1% level. Those researchers state that companies who report their CSR have a better level of IE compared to companies that do not publish CSR reports. This is due to the decreasing level of information asymmetry that occurs among stakeholders. According to the agency theory perspective, CSR reporting could be considered a tool or instrument for businesses to establish effective stakeholder relationships. However, this tool is usually utilized for bad goals and to improve managers' interests. In this scenario, firms implement CSR at a moderate level to deal with the pressure from related parties or enhance managers' public image to

help them earn more benefits and bonuses. Furthermore, Hypothesis H1 proposes that CSR disclosure has a positive effect on the company's IE. As a result, the authors' hypothesis H1 is not confirmed. These findings do not support Hypothesis 1, which claims that a company's IE improves as a result of CSR disclosure. CSR disclosure helps to improve the transparency of financial and non-financial information for investors and stakeholders, which helps to reduce information asymmetry and lemon problems. Transparency and enhanced multi-dimensional information help to increase the efficiency of capital raising and investment, especially in emerging markets.

The sample is divided into sub-samples from companies with strong and weak CSR. Table 4 represents the influence of high CSR disclosures and low CSR disclosures on IE. I classify a firm as having strong CSR by creating a CSR dummy variable for above the mean CSR (0.562). These results suggest that high CSR has a negative consequence on IE and low CSR is the opposite, which supports the result of Hypothesis 1. Table 4 illustrates that CSR disclo-

Table 4. Robustness results

Variables	GLS INV	GLS INV
HI_CSRDUMMY	-0.034*** [-9.70]	
LOWES DUMMY		0.034*** [9.70]
LEV	-0.133*** [-15.53]	-0.133*** [-15.53]
ROA	0.019 [0.39]	0.019 [0.39]
SIZE	-0.005*** [-4.22]	-0.005*** [-4.22]
TANG	-0.019** [-2.39]	-0.019** [-2.39]
SLACK	0.002** [2.05]	0.002** [2.05]
_cons	0.271*** [8.02]	0.237*** [7.00]
N	108	108

t statistics in brackets. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01

Source: Data processed using STATA software.

Table 5. Regression Result for over and under investment scenario.

Variables	GLS OVERINV	GLS UNDERINV
CSR	-0.395** [-2.24]	0.395** [2.24]
LEV	-0.552*** [-3.71]	0.552*** [3.71]
ROA	0.9 [1.57]	-0.9 [-1.57]
SIZE	-0.050*** [-3.25]	0.050*** [3.25]
TANG	-0.419*** [-4.21]	0.419*** [4.21]
SLACK	-0.01 [-1.20]	0.01 [1.20]
_cons	2.102*** [5.46]	-1.102*** [-2.86]
N	108	108

t statistics in brackets. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01

Source: Data processed using STATA software.

sure has a favorable impact on IE even when divided into high and low groups. We used a variety of metrics and classifications, but the research results remained consistent, indicating that the findings were stable.

As shown in the first and second columns of Table 5, the GLS regression results are calculated separately for underinvestment (UNDERINV) and overinvestment (OVERINV). Based on the outcome of the estimation, we confirm this negative relationship. Specifically, the coefficient of the CSR variable is negative but statistically significant (-0.395,  $p < 0.05$ ). The

results of this study are in accordance with previous research conducted by Zhong and Gao (2017), which show a positive and significant result for overinvestment and state that the increase in IE related to CSR disclosure was more significant in the overinvestment condition. Because the margin impact of CSR reporting could be lost as a result of rising resource consumption and competitiveness as a result of CSR disclosure, non-shareholder demand to boost CSR investment in the company may arise. Hypothesis H2 suggests a negative effect between CSR reporting on IE in the overinvest-

ment scenario. As a result, the authors' study hypothesis H2 is confirmed. We conclude that, in the over-investment situation, the improvement in IE connecting with CSR disclosure is not as significant.

### Conclusions and implications

The purpose of this research is to evaluate how CSR disclosure influences the IE of a corporation. This study uses 36 companies that won Asia Sustainability Awards Reporting 2020 with the research data period from 2018 to 2020. Derived from the findings of the prior research and discussion, we find that CSR reporting has a significant negative effect on the company's IE and that IE arises in the overinvestment scenario.

According to the findings of this research, we can conclude that CSR disclosures have a considerable impact on IE. Using these results, financial managers can consider raising the standard of CSR reporting because it can affect the company's level of IE. Companies can also consider publishing a separate CSR report from their annual report so that company information is more transparent and can improve the company's image in the eyes of the public and attract investors to invest in the company. Managers must also pay greater attention to CSR in order to improve and complete CSR reports, which will send a signal to investors and attract them to invest in the company. Investors can consider and pay attention to the quality of the company's CSR reporting as a consideration

in making investment decisions. Furthermore, based on the results of this research, CSR reporting influences the level of IE so that investors are expected to benefit from investing.

Our research also has policy implications. For some emerging markets, the regulator has previously mandated some CSR-related disclosures. In Indonesia, CSR disclosure has become an obligation for companies. This is based on the enactment of the Limited Liability Company Law Number 40 of 2007, which is explained in article 66 paragraph (2) which states that all companies are required to report on the implementation of these responsibilities in the annual report.

This research has limitations that can be used as consideration for future researchers to get better research results. This study is limited to companies that won the Asia Sustainability Reporting Awards 2020 with a research period of only 3 years from 2018 to 2020. This study only uses CSR reporting variables, leverage, ROA, size, tangibility, and slack to determine the factors that affect the company's IE.

Based on the results of this research that has been done, we propose the following suggestions that can be used as recommendations for further researchers. Further research should increase the research sample and expand the research period to more than 3 years. Future study can analyze CSR disclosure in greater depth by using a separate social responsibility report in the sustainability report, and future research can use other proxies as a measure of IE.

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