CSR Performance and Profitability of the Banking Industry in Southeast Asia Nations (ASEAN)

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Abstract: Research Question: Is non-financial information in CSR reports associated with the banking profitability? Is CSR performance related to profitability of public banks in ASEAN? **Motivation:** Literature have provided comprehensive empirical findings with respect to the relationship between CSR performance and its economic consequences for companies operating in the Environmentally Sensitive Industries (ESIs). However, little is known when it comes to the context of Non-Environmentally Sensitive Industries (i.e., banks) in ASEAN. **Idea:** This study aimed to investigate the relationship between CSR performance and profitability in the banking industry of Southeast Asia Nations (ASEAN), which is of interest to practitioners and academics in accounting finance as it relates to driving a company's value. **Data:** The study used data from the banking industry of ASEAN (i.e., Indonesia, Malaysia, Singapore, the Philippines, and Thailand). **Method/Tools:** The study used panel data regression analysis to examine observations from 2011 to 2021. The results showed that CSR performance is not positively related to profitability in the banking industry in ASEAN. This was due to the use of CSR information availability and banks' CSR performance scores as the main proxies of CSR performance, which were tested against the banking industry's profitability measured using the market profitability value and the accounting net interest margin. Additionally, the study selected an appropriate model, clustering error standards, and several company-specific attributes as control variables to minimize estimation bias. **Findings:** The results contravened the proposed hypothesis, necessitating an intellectual discussion and a literature review. This means that CSR practices in the ASEAN banking industry have not met the expectations regarding non-financial information reporting. However, non-financial information reporting is an effort to show the public that the company is operating ethically and sustainably. Additionally, CSR practice is often considered symbolic rather than substantive in the ASEAN banking industry. **Contributions:** This study is among the first investigating the CSR performance and bank profitability nexus in ASEAN. Thus, it contributes to the new empirical evidence of CSR studies in the Non-Environmentally Sensitive Industry (NESI).

Keywords: CSR, profitability, banking, ASEAN.
JEL Classification: M1, M14, M41

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1. Introduction

Studies on Corporate Social Responsibility (CSR) have developed significantly, attracting the government, investors, suppliers, employees, communities, as well as academics in accounting and finance. This has triggered competition among companies to disclose financial and non-financial performance information annually. Non-financial information is relevant because it helps the company improve its future economic performance. Additionally, the information demonstrates the company's commitment to social and environmental sustainability.

CSR refers to financial information commonly studied in accounting and finance. CSR reports contain information on environmental, social, and governance impacts, often abbreviated as ESG (Usman and Yennita, 2018; Yoon *et al.*, 2018). This non-financial information is usually expected to boost the company's future economic performance. The company's attention to environmental, social, and corporate governance sustainability is sensitive for stakeholders (GRI, 2014). However, inappropriate CSR optimization can make the company's expenditure on this information unproductive, reducing profitability, where involvement in CSR activities does not positively impact the company's value.

The company's involvement in CSR activities is a strategic decision that impacts its reputation. In this context, the banking industry was chosen as the study setting because of its significant role in supporting the national economy. The industry also serves as a financial intermediary between parties with excess and insufficient funds, which makes the social impact of the banking industry relevant to this study. Banks should contribute positively to the public because many actors in this industry manage public funds and thus are subject to policy regulations. This implies that CSR policies implemented by banks provide social impact and contribute back to the public. However, decisions regarding CSR policies must be made through a comprehensive cost-and-benefit analysis (Cormier and Magnan, 2015). This is necessary because such decisions are considered charity activities as well as an effort to gain and increase the company's public legitimacy (Lys *et al.*, 2015). Therefore, management should analyse the positive impact of CSR activities on the bank's overall value in terms of both economic motivation and social legitimacy (Cormier and Magnan, 2015; Bagnoli and Watts, 2017).

Studies have shown that businesses implementing CSR policies enjoy many conveniences and benefits, especially for those incorporating into Environmentally Sensitive Industries (ESIs). However, the same propensity may not always be applicable to companies operating in Non-Environmentally Sensitive Industries (NESIs), such as banks and other diversified service sectors. ESIs are those that have a significant impact on the environment, either through their operations or their products (e.g., Oil and gas extraction, Mining, Agriculture, Manufacturing, Power generation). NESIs, on the other hand, have a relatively low impact on the environment (e.g., Finance, Retail, IT, Services, Logistics). Firms operating in the ESIs are subject to more stringent environmental regulations than NESIs. This is because the potential environmental impacts of these industries are more significant (Arena *et al.*, 2018). Meanwhile, Non-environmentally sensitive industries are also subject to environmental regulations, but these regulations are typically less stringent. This is because the potential environmental impacts of these industries are lower (Tandelilin and Usman, 2023).

According to Dhaliwal *et al.* (2012), companies that publish non-financial CSR information to the public help financial analysts reduce information asymmetry by minimizing errors in estimating potential earnings. Cheng *et al.* (2014) also found that publicly disclosed non-financial information helps companies access financing sources easily. As a result, companies gain community social recognition and legitimacy as a license to operate (Bebbington *et al.*, 2008a). Usman *et al.* (2020) identified conditions in which CSR information could help the public reduce information asymmetry. However, excessive CSR

information could obscure other substantial information, indicating that CSR reporting could contain managers' motives for making reputation through risk management. Afeltra *et al.* (2021) used a bibliometric analysis of previous literature published in reputable CSR journals. The results showed that current studies on CSR have proliferated into five distinct clusters. These clusters include: (i) factors influencing companies to disclose social information, (ii) CSR assurance practices and reporting, (iii) integrated reporting and sustainability reports, (iv) the relationship between intellectual capital disclosure and corporate governance, and (v) the relevance of developing theories on the latest CSR topics.

Previous studies on the benefits of engaging companies with social responsibility activities have rarely examined the role of social responsibility in the banking industry. Therefore, studies on the banking industry in Southeast Asia (ASEAN) are interesting. This industry is highly dynamic and heavily depends on rapid regulatory changes. For this reason, banks need to increase their social impact by empowering the community through disbursing funds and implementing CSR-based activities. The potential for broader market penetration and efforts to improve the banks' strategic reputation could also be optimized by implementing ASEAN market integration through the ASEAN Economic Community (AEC). A better reputation and increased organizational legitimacy through CSR activities could positively impact the banking profitability. This would be reflected in positive public perceptions, views of the banking business model, and CSR practices. However, this assumption requires an in-depth study by asking two questions: (i) Is non-financial information in CSR reports associated with the banking profitability? and (ii) Is CSR performance related to profitability of public banks in ASEAN?

2. Literature Review and Hypotheses Development

2.1 Legitimacy Theory

This study used the theory of legitimacy defined by Suchman (1995, p. 574) as a general perception of an action or entity deemed to fit within a socially constructed system, values, beliefs, and definitions. Referring to the legitimacy theory, the company is trying to gain public sympathy to maintain business operations continuity. This means the company's main motives could be grouped into conducting charity activities to gain, increase, or maintain social legitimacy (Milne and Patten, 2002; Afeltra *et al.*, 2021).

The issue of social legitimacy sometimes overlaps with some of the company's motives and goals. As decision-makers in every company activity, managers view charity or CSR activities from a different perspective. For instance, sometimes CSR activities are implemented to gain social legitimacy from the community or get a good impression. The implementation could also aim to hide actual events related to CSR activities for strategic corporate reputation management (Neu *et al.*, 1998; Bebbington *et al.*, 2008b; Michelon *et al.*, 2016; Usman *et al.*, 2020).

2.2 Drivers of Non-Financial Information Disclosure as A Reflection of CSR Performance

Previous studies showed that many factors drive companies to take policies in disclosing non-financial information. According to Dhaliwal *et al.* (2011), voluntary disclosure of non-financial information helps companies lower capital costs. Investors or stakeholders interested in the company's sustainability perceive that disclosing non-financial information helps reduce the information asymmetry between them and the company. Furthermore, Dhaliwal *et al.* (2012) found that voluntarily disclosed non-financial information helps financial analysts reduce the error rate in estimating potential earnings. This finding supports Cheng *et al.* (2014) that the availability of non-financial information increases the company's opportunities to gain better financial access from the capital and the money markets.

Axjonow *et al.* (2016) showed that information disclosure as well as sound and correct CSR activities help companies gain a positive reputation from professional stakeholders. This is relevant because more individual and institutional investors are realizing the importance of economic, social, and environmental sustainability. Additionally, this is reflected in the increasing stock indexes or portfolios made for companies focusing on sustainability issues.

In Europe, companies have several motivations to publish CSR reports, an obligation stated in European Directive No. 94 of 2014 (European Commission, 2014). In line with this, Park and Brorson (2005) identified several motives for companies to be involved in CSR activities. The motives include i) The company conducts bench-marking by imitating other companies that implement CSR and feel positive results from these activities. ii) In Europe, awards are given to companies that perform well in environmental sustainability. Companies also have a reason not to conduct CSR activities. In Sweden, several new companies with no sizeable operational scope think that CSR activities are unnecessary because they are related to cost and benefit analysis. The allocation of CSR funds is considered a cost item, not an investment. Small companies also perceive CSR activities as unnecessary because the benefits cannot be felt directly. Therefore, Park and Brorson (2005) stated that most companies in Sweden only conduct CSR activities after attaining financial stability.

2.3 The Relationship Between CSR Performance and Company Profitability

Non-financial information has a positive association with the company's future value or profitability (Devine and Halpern, 2001; Manchiraju and Rajgopal, 2017; Yoon *et al.*, 2018). However, several studies state that the company's involvement in CSR activities does not significantly impact its profitability (Buallay, 2019; Tandelilin and Usman, 2023). This contradicts the consensus shown by previous studies that involvement in CSR activities positively relates to the company's long-term profitability. For instance, Famiyeh (2017) found a positive relationship between CSR implementation and company performance. In this case, companies directly involved with CSR activities have the opportunity to manage costs more flexibly. Based on the legitimacy theory and empirical findings of the previous literature, this study hypothesized a relationship between the company's involvement in CSR activities and future profitability. Therefore, the first hypothesis was formulated as follows:

Hypothesis 1: The availability of CSR reports positively impacts the banking industry's profitability in ASEAN.

The second hypothesis suggested an association between CSR scores and company profitability. In this case, the third party evaluates the amount of non-financial information distributed to the public. The third party does not provide assurance services but conducts independent analyses of the economic, environmental, social, and organizational governance impact of the company's involvement in CSR activities. According to a previous study, CSR performance scores could be relevant information for stakeholders and investors. This is important because only a few stakeholders or investors directly interpret and extract useful information from CSR reports (Cho *et al.*, 2013). Therefore, third-party services such as rating agencies Bloomberg, Thomson Reuters ASSET4, and KLD (MSCI) provide an objective ranking weight to reflect the company's CSR performance. This study also examined whether the performance of CSR activities could be relevant information in viewing variations in banks profitability. In this regard, a second hypothesis that uses information on the average performance of CSR activities as a function of changes in banks profitability was proposed as follows:

Hypothesis 2: A high CSR performance score positively relates to the banking industry's profitability in ASEAN.

2.4 Research Model

The research model was clarified by visualizing the relationship between the variables proposed for testing and those used as proxies in the following framework.

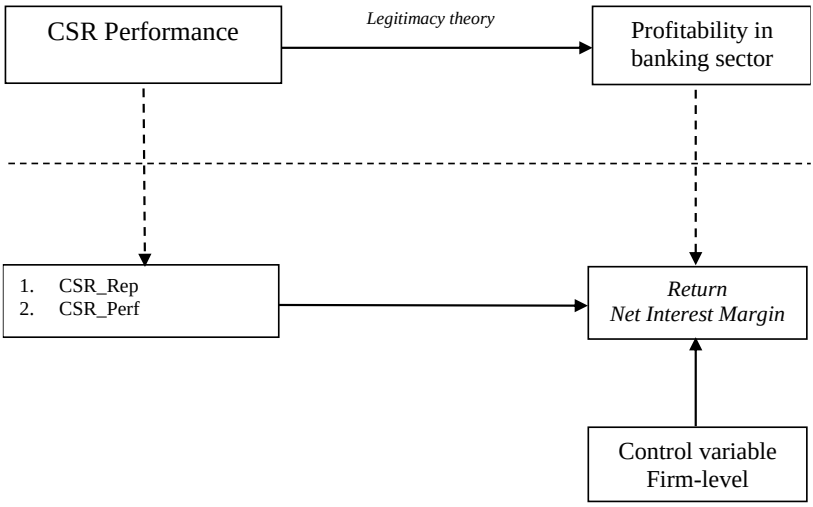

Figure 1: Research Framework

The framework Figure 1 shows the associations between the concepts proposed for testing. Dotted lines separate the framework, while the two boxes above the line are the main concepts proposed for testing. CSR performance was assumed to be associated with the banking industry's profitability. Furthermore, the boxes below the dotted line are a technical measure of the variables proposed. The two variables are the availability of CSR reports and CSR performance measured by ranking scores provided by 3rd parties.

The construct of the banking CSR performance was measured using the results of CSR score ranking prepared by the ASSET4 database. The banking industry's profitability was measured using two proxies based on stock returns and net interest margin.

3. Methods

3.1 Data and Sample

This study used data and samples from public banks in ASEAN capital market. The sample comprised the banks registered in the banking industry in the capital markets of Indonesia, Malaysia, Singapore, Thailand, and the Philippines. The financial industry was chosen because public banks have exposure and a strong social impact on national economic development. Furthermore, CSR contribution from banks is remuneration to the public. This is due to the banks' intermediary financial function using third-party funds channelled as credit to debtors.

Table 1: Sampling procedures

No	Sampling procedures	Total bank	Observation (bank x 11 years)	%
1	Total publicly listed banks in the Indonesian capital markets (IDX), Malaysia (BM), Singapore (SES), Thailand (SET) and the Philippines (PSE) during the observation period from 2011 to 2021.	84	924	100
2	The number of with no CSR reports data from ASSET4 database.	(57)	(627)	(67.85)
3	The final sample of banks with sufficient observations of CSR information and complete financial information during the observation period from 2011 to 2021.	27	297	32.15

Notes: The final sample of 27 banks consists of 5 banks from Indonesia, 8 banks from Malaysia, 3 banks from Singapore, 7 banks from Thailand, and 4 banks from the Philippines.

Data on financial and non-financial information were extracted from the Thomson Reuters EIKON and ASSET4 databases, respectively. Samples were sorted using several criteria. The sample must be a public bank that has disclosed non-financial information in CSR reports and ranking scores, should be indexed on the ASSET4 database and must have annual data from 2011 to 2021. With respect to the particular components of CSR performance score, Refinitiv (2020) reported that it is based on a number of factors, including Environmental, Social, and Governance (ESG) performance. The ASSET4 CSR performance score is made up of three components; (i) Environmental: which measures a company's environmental performance, such as its greenhouse gas emissions, water use, and waste management. (ii) Social: the component that measures a company's social performance, such as its employee relations, community engagement, and human rights record, and (iii) Governance: components that measures a company's governance performance, such as its board composition, executive compensation, and risk management. The ASSET4 CSR performance score is further calculated using a proprietary methodology developed by Refinitiv (2020). The methodology is based on a number of factors, including the company's environmental, social, and governance performance. As mentioned by Bătae *et al.* (2021), the score is then scaled from 0 to 100, with a score of 100 representing the highest CSR performance. The formula for CSR performance score construction is written as follows:

$$\text{CSR score} = (\text{Environmental score} + \text{Social score} + \text{Governance score}) / 3 \quad (1)$$

3.2 Operational Definition

Table 2 describes tests on the association between CSR performance and profitability of the banking industry in ASEAN.

Table 2: Definition of operational variables

No	Variables	Definition	Data form	Data source
1	RET	Stock return	Continuous	EIKON
2	NIM	Net interest margin	Continuous	EIKON
3	CSR_Report	Availability of bank CSR reports	Categorical	ASSET4
4	CSR_Perf	Banking CSR performance	Continuous	ASSET4
5	ROE	Return on equity	Continuous	EIKON
6	CAR	Capital Adequacy ratio	Continuous	EIKON
7	NPL	Non-performing loan	Continuous	EIKON
8	AGE	Firms' age	Continuous	EIKON
9	SIZE	Natural logarithm of total assets	Continuous	EIKON

Notes: The research variables were adopted from various previous literature

Table 2 shows the operational definitions of variables, data forms, and data sources used in statistical analysis. This aimed to determine the association between CSR performance and the banking industry's profitability in ASEAN. The two main variables were CSR reports and

CSR performance scores. Furthermore, the study used other financial information variables strongly suspected to be the basis for considering the benefits and costs analysis. The financial information Represents Profitability Ratios (ROE), Capital Adequacy Ratios (CAR), Non-Performing Loans ratio (NPL), banks age (AGE), and banks size (SIZE).

3.3 Econometric Model

The study model used cross-sectional and time-series data. Panel data analysis has a better predictive ability because variations of data between objects with different periods produce efficient estimation results (Baltagi, 2008). The analysis model with the panel data approach used in this study is as follows:

$$\begin{aligned}\text{Banking profitability} = {} & \alpha + \beta 1\text{CSR}_{\text{Rep}_{i,t}} + \beta 2\text{CSRperf}_{i,t} + \beta 3\text{ROE}_{i,t} \\ & + \beta 4\text{CAR}_{i,t} + \beta 5\text{NPL}_{i,t} + \beta 6\text{Age}_{i,t} + \beta 7\text{SIZE}_{i,t} \\ & + \sum \beta \text{Year}_{i,t} + \varepsilon_{i,t}\end{aligned} \quad (2)$$

3.3.1 Dependent Variable

The main dependent variables in this study are related to banks profitability. The measuring instrument that represents market profitability is the stock return (RET). Profitability is represented by accounting information such as Net Interest Margin (NIM). The two proxies are variables with continuum data in the ratio form. More specifically, we use NIM as the proxies of accounting-based measure. Net interest margin (NIM) is a metric of a bank's profitability that shows the difference between the interest income it earns on loans and the interest it pays on deposits. We do not used Return on assets (ROA) and return on equity (ROE) as the measure of profitability since the previous studies have used them in the empirical tests. Also, the literature mentions that ROA and ROE are not as specific to banks as NIM. ROA measures the return on all of a bank's assets, including all type of assets that are not necessarily related to the banks' core business operations. Whilst, ROE measures the return on the equity invested in the bank. NIM is deemed as a more specific measure of profitability for banks because it focuses on the income that banks earn from their core business activity (i.e., lending money). Therefore, NIM was chosen as the accounting-based measure because it describes the banking industry's profitability and its efficiency, as explained by the previous studies of Demirgüç-Kunt and Levine, (2001) and Douissa and Azrak (2021).

3.3.2 Independent Variable

This study used CSR information availability and CSR report scores as independent variables. CSR report availability (CSR_Rep) was measured using categorical variables. Banks issuing and not issuing CSR reports during the observation period were labelled 1 and 0, respectively. Furthermore, CSR score was measured using the ranking results made by Thomson Reuters analysts. The results were used as considerations in preparing CSR ranking by the ASSET4 database. This variable was labelled CSR_PERF containing a ratio between 0 and 100 for low and high CSR performance, respectively. The two main independent variables were used in hypotheses testing as stated in the analytical framework.

3.3.3 Control Variable

The control variable is needed to neutralize the effect of the main independent variable on the dependent variable. Endogeneity problems cannot ignore other factors outside the study model. Therefore, the banking financial characteristics were used as a control variable to

minimize the potential for endogeneity problems. CSR activities and reporting must be conducted with a comprehensive cost and benefit analysis. For this reason, the study used financial information deemed important and relevant in managerial decision-making. The financial information comprised the ratio of ROE, CAR, NPL, AGE, and SIZE.

4. Results and Discussion

4.1 Statistical Descriptive Analysis

This section begins by describing the statistical results of the dependent, independent, and control variables as follows.

Table 3: The output of descriptive statistics analysis

Variables	count	mean	sd	p25	p50	p75	min	max
RET	297	0.030	0.255	-0.134	0.009	0.230	-0.581	0.576
NIM	297	0.034	0.019	0.021	0.029	0.038	0.013	0.095
CSR_REP	297	0.724	0.447	0	1	1	0	1
CSR_PERF	297	50.601	14.318	39.57	51.7	62.13	18.6	78.07
ROE	297	0.137	0.050	0.104	0.126	0.159	0.030	0.326
CAR	297	0.107	0.028	0.089	0.101	0.119	0.052	0.216
LNNPL	297	13.385	1.101	12.799	13.453	14.328	10.166	15.164
AGE	297	65.333	31.071	50	58	73	7	166
SIZE	297	17.829	0.925	17.359	17.861	18.347	15.761	19.774

Notes: Each continuous variable has gone through the stages of winsorization at the level of 1 and 99%.

Table 3 describes the distribution of data through the winsorization stage. This stage is essential in ensuring that the model is free from estimation bias problems caused by outlier data. The Winsor2 function in the STATA syntax code treated outlier data. Each non-dichotomous variable received the same treatment to ensure normal data distribution. The indicators are proxies for the dependent variables of RET and NIM. The return value for the market profitability performance shows a RET average for each annual sample of 27 companies measured from 2011 to 2021. In this case, the 297 companies-year observation is 0.03 or 3%. This average value means that banks generate a positive return, with a standard deviation of 0.255 or 25.5%. The data set also shows that some banks have a minimum negative and maximum positive return performance of -0.581 (58.1%) and 0.576 (57.6%), respectively. Profitability performance was measured through the performance of the NIM. The average NIM value is 0.034 (3.4%), with a low standard deviation of 0.019 (1.9%). Additionally, the lowest minimum and highest maximum values are 0.013 (1.3%) and 0.095 (9.5%), respectively.

CSR performance was the main independent variable represented by CSR reports availability (CSR_REP) and CSR performance (CSR_PERF). The average value of CSR_REP was 0.724 (72.4%), with a standard deviation of 0.447 (44.7%). This information shows that almost half of the sample adopted non-financial CSR information reporting published independently or incorporated in the annual financial report during the 11-year observation period. Moreover, CSR_PERF variable obtained an average value of 0.60 percent. This figure implies moderate CSR_PERF in the ASEAN banking sector. The minimum and maximum values for CSR performance are 18.6% and 78.07%, respectively. This variation implies that the standard deviation value after winsorization is 14.31%. More information on the use of control variables is shown in Table 3.

4.2 Correlation Analysis

The next step was to perform a correlation analysis.

Table 4: The output of correlation matrix

Variable	RET	NIM	CSR_REP	CSR_PERF	ROE	CAR	LNNPL	AGE	SIZE
RET	1								
NIM	0.065	1							
CSR_REP	-0.027	0.169**	1						
CSR_PERF	-0.014	0.160*	0.592***	1					
ROE	0.145*	0.452***	0.136*	-0.015	1				
CAR	0.055	0.755***	0.140*	0.270***	0.024	1			
LNNPL	-0.019	-0.239***	0.218***	0.396***	-0.222***	-0.225***	1		
AGE	0.039	0.081	0.082	0.096	0.116	0.079	-0.027	1	
SIZE	-0.006	-0.335***	0.090	0.280***	-0.125	-0.298***	0.812***	0.002	1

Notes: An asterisk means * p<0.05, **p<0.01, ***p<0.001.

Correlation analysis was performed to justify the findings on the potential relationship between the dependent variable (RET, NIM) and the main independent variable (CSR_REP, CSR_PERF). The correlation matrix results show a varied relationship between the measurement proxies used. First, the market value measurement using RET indicated that CSR_REP and CSRPERF are negatively but insignificantly correlated. Second, accounting value measurements were used as a proxy for company profitability in the form of NIM. the results showed that CSR_REP and CSR_PERF are positively and significantly correlated at alpha levels of 1 and 5%. This indicates that the market value measurement of profitability performance and accounting information shows a different correlation when associated with CSR_PERF.

The study also analysed the relationship between the control and dependent variables. The control variable was included to control some of the company's internal characteristics to obtain unbiased estimation results. Furthermore, this study investigated the multicollinearity problem with the use of independent and control variables. Studies in statistics have shown that a correlation value >0.70 between two independent variables implies a high potential for multicollinearity. In this case, one variable must be excluded from the model. The CAR variable showed a very strong positive correlation of 0.967 with NIM, with a significant p<0.01. However, this is not a problem because the CAR and NIM are control and dependent variables. The next step was the main analysis and hypotheses testing.

4.3. Hypothesis Testing and Panel Data Regression Analysis

Hypotheses were tested using panel data regression analysis. The observations recorded were 297 banks years obtained by 27 companies x 11 years. Table 5 shows the results of testing the association between CSR performance and banks profitability in ASEAN.

Table 5 presents the results of hypothesis testing using panel data regression analysis with the Fixed-Effect model at Company FE and Year FE levels. Panel data analysis inserts a clustered Standard Error (SE) function to reduce potential overestimation in the standard error. The results show that the main independent variable (CSR_REP) negatively but insignificantly relates to company profitability as measured by the RET proxy. CSR_REP was also tested against profitability measured using accounting information performance. The results showed that the beta coefficient of CSR_REP variable was positive but insignificant. These results contradict the first hypothesis that CSR performance positively relates to the banking profitability in ASEAN.

Table 5: The output of hypothesis testing

VARIABLES	Return			NIM		
	(1)	(2)	(3)	(4)	(5)	(6)
CSR_REP	-0.0260		-0.0278	0.0004		0.0007
	(-0.812)		(-0.789)	(0.365)		(0.559)
CSR_PERF		-0.0002	0.0001		-1.01e-05	-2.05e-05
		(-0.210)	(0.119)		(-0.250)	(-0.531)
ROE	1.228***	1.178**	1.217***	0.0485**	0.0508**	0.0497**
	(2.748)	(2.539)	(2.606)	(2.397)	(2.438)	(2.331)
CAR	0.658	0.712	0.637	0.201***	0.202***	0.203***
	(0.728)	(0.776)	(0.690)	(5.662)	(5.703)	(5.696)
LNNPL	0.0098	0.0076	0.0088	0.0023*	0.0024*	0.0024*
	(0.318)	(0.240)	(0.274)	(1.668)	(1.680)	(1.663)
AGE	-0.0002	-0.0002	-0.0002	1.74e-05	1.80e-05	1.75e-05
	(-0.608)	(-0.657)	(-0.609)	(1.171)	(1.215)	(1.175)
SIZE	-0.0140	-0.0122	-0.0138	-0.0036**	-0.0036**	-0.0036**
	(-0.368)	(-0.322)	(-0.362)	(-2.376)	(-2.386)	(-2.367)
Constant	0.0776	0.0729	0.0868	0.0664***	0.0653***	0.0653***
	(0.201)	(0.189)	(0.226)	(5.317)	(5.053)	(5.045)
Observations	297	297	297	297	297	297
R-squared	0.623	0.622	0.623	0.886	0.886	0.886
Year FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES

Notes: The value of the t statistic is in parentheses. Each asterisk in the sequence means *** p<0.01, **p<0.05, *p<0.1.

Testing the second independent variable (CSR_PERF) against two proxies of the banking profitability obtained similar results. The second hypothesis suggests that a high CSR_PERF positively correlates with company profitability. In proving this hypothesis, CSR_PERF was tested against the performance of market profitability as measured by RET. The results showed that CSR_PERF is not positively and significantly associated with RET. Similar results were obtained in the second dependent variable (NIM) test. These results contravene the second hypothesis that CSR performance positively relates to the banking profitability. Moreover, several control variables indicated varying relationship patterns, as shown in Table 5.

4.4. Additional Analysis (Robustness Check)

Additional analysis was performed using each independent variable's lag construct determined one year back. The assumption is that CSR performance takes time to be reflected in the banking profitability measured using market performance (RET) and accounting information performance (NIM). The results of the additional analysis are shown in Table 6.

The results in Table 6 were obtained through a test procedure similar to the main analysis in Table 5. However, the independent variable used was a lag variable determined one year back. Some previous analyses (i.e., Wu and Shen, 2013; Maqbool and Hurrah 2020; Tandelilin and Usman 2023) found that this procedure is necessary to determine whether the past performance of reports availability and their impact are associated with profitability. However, the results showed that the coefficient values of the main independent variables tested on the two proxies of profitability significantly differed. The difference was seen in the sign of the reduction in the magnitude of the beta coefficients CSR_REP (-1) and CSR_PERF (-1) tested against RET and NIM.

Table 6: The additional analysis using independent lag variables

VARIABLES	Return			NIM		
	(1)	(2)	(3)	(4)	(5)	(6)
CSR_REP(-1)	0.0096		0.0032	0.0002		0.0001
	(0.291)		(0.0929)	(0.185)		(0.0974)
CSR_PERF(-1)		0.0006	0.0005		1.13e-05	9.25e-06
		(0.520)	(0.450)		(0.277)	(0.230)
ROE(-1)	0.132	0.111	0.106	0.0303	0.0300	0.0298
	(0.305)	(0.261)	(0.243)	(1.435)	(1.412)	(1.357)
CAR(-1)	-0.624	-0.692	-0.687	0.172***	0.171***	0.171***
	(-0.628)	(-0.686)	(-0.683)	(4.482)	(4.416)	(4.396)
LNNPL(-1)	-0.0114	-0.0141	-0.0142	0.0011	0.0010	0.0010
	(-0.399)	(-0.491)	(-0.489)	(0.798)	(0.737)	(0.729)
AGE(-1)	-3.63e-05	-3.47e-05	-3.71e-05	1.58e-05	1.59e-05	1.58e-05
	(-0.0929)	(-0.0887)	(-0.0946)	(1.078)	(1.074)	(1.072)
SIZE(-1)	-0.0013	-0.0009	-0.0009	-0.0023	-0.0023	-0.0023
	(-0.0363)	(-0.0276)	(-0.0267)	(-1.481)	(-1.477)	(-1.472)
Constant	0.504	0.526	0.527	0.0666***	0.0670***	0.0670***
	(1.231)	(1.286)	(1.282)	(4.885)	(4.795)	(4.790)
Observations	297	297	297	297	297	297
R-squared	0.606	0.606	0.606	0.887	0.887	0.887
Year FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES

Notes: The value of the t statistic is in parentheses. Each asterisk in sequence has the meaning *** p<0.01, **p<0.05, *p<0.1.

4.5. Discussion

This study aimed to examine the association between CSR performance and the banking sector's profitability in ASEAN. The legitimacy theory was adopted to hypothesize that banks are responsible for community and regional economic success as financial intermediaries and public fund collectors. Therefore, a bank's impact is seen in the performance of non-financial information in CSR reports. The company's commitment to CSR activities was considered a cost through revenue depletion. However, studies have shown that involvement in CSR activities is an investment reflecting the company's long-term commitment to corporate environmental, social, and economic sustainability.

Studies on CSR performance and profitability have been conducted in sensitive industries. For instance, Dhaliwal (2012) found that the company's decision to issue a non-financial stand-alone CSR report gives a positive impression to financial analysts. This has implications for investors' willingness to pay more for the shares of companies committed to environmental, social, and governance sustainability. The findings are consistent with the theory that companies incorporated in the more advanced capital market are more committed to environmental and social aspects. However, other studies (Usman *et al.*, 2020; Tandelilin and Usman 2023) have shown inconsistencies regarding the relationship between CSR_PERF and the company's short and long-term profitability. Usman *et al.* (2020) found differences in implementing the mandatory non-financial report issuance policy between Portugal and Indonesia. The study showed that countries with clear systems and regulations consider non-financial information relevant to stakeholders. In this context, Portugal is part of the European Union that has required non-financial information reporting since 2014, especially for companies with environmentally sensitive (ESI) characteristics. On the contrary, some countries do not require the issuance of CSR_REP. These countries do not prioritize practices related to company involvement in environmental, social, and corporate governance. Indonesian regulations require the reporting of non-financial information for all public companies. However, not all companies falling into the criteria must publish such information to comply with the rules for issuing CSR_REP.

The results showed that CSR_PERF of the banking industry in ASEAN is not positively related to profitability. This was evidenced by the previous studies (e.g., Wu and Shen, 2013; Buallay, 2019; Tandelilin and Usman, 2023) using CSR information availability and CSR_PERF scores as the main proxies of CSR_PERF. The two proxies were tested against the banking industry's profitability measured using the market return and net interest margin. The results were also evaluated through the panel data regression testing procedure. Potential estimation bias was avoided by selecting an appropriate model, clustering error standards, and controlling several company specific attributes. However, the findings contradicted the two hypotheses proposed in this study. This means that CSR practices in the ASEAN banking industry have not met expectations regarding non-financial information reporting. However, non-financial information reporting is still an effort to show the public that the company has attempted to operate ethically and sustainably. This practice is also symbolic rather than substantive in the ASEAN banking industry.

5. Conclusion

The results showed no significant association between CSR performance and profitability in the ASEAN banking industry. Two proxies each of CSR performance and the banking industry's profitability showed beta coefficients and a statistically unsupported significance probability. The results indicate that non-financial report issuance data is not the main commitment for measuring CSR performance by the banking industry. This is marked by the many banks in five ASEAN countries that were not screened as samples. Therefore, variations in CSR performance do not explain the banking industry's profitability measured by market returns and net interest margin.

The results also showed that not all the banking industries in sample countries are committed to ESG (CSR). This implies the absence of a mechanism for implementing non-financial information reporting in the five ASEAN countries studied. There are diverse variations in applying non-financial information reporting obligations. However, there is no procedure for implementing rewards and punishments for not reporting non-financial information. This means the government should devise a suitable mechanism for leading companies to commit to environmental, social, and governance sustainability.

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