

## THE ANALYSIS OF LINKAGE BETWEEN CORPORATE SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE: EVIDENCE FROM INDONESIAN BANKS

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### ABSTRACT

*Corporate Social Responsibility (CSR) has become one of the policies that the Indonesian Government uses to persuade companies to deal with various social problems. The Indonesian government has realized that this traditional mindset is supposed to have very important practical importance in the banking industry and has already stipulated a new regulation to change the local industry into a more modern mindset. This paper tackles the question on whether or not CSR should be forcefully implemented in Indonesian banks. Data from eight (8) banks, between 2013 and 2015, were gathered in order to see how CSR affects the Financial Performance (FP) in the Banking Sector in Indonesia. The analyzed data of FP consist of Return on Asset (ROA), Return on Equity (ROE), and Earnings per share (EPS). A new indicator called Corporate Social Disclosure Index (CSDI) is introduced to measure CSR activity. A bivariate analysis strategy is used to determine the significance level and correlation between CSR and FP. The results show an indubitable correlation between CSR and FP of the banking industry in Indonesia during 2013 till 2015, even though the FP is not appearing to be significantly impacted.*

Keywords: Corporate Social Responsibility, Financial Performance, ROA, ROE, EPS, CSR

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### INTRODUCTION

In developing countries, social and environmental issues have become challenging problems that Governments face. In Indonesia, Corporate Social Responsibility (CSR) has become one of the policy aspects that the Indonesian Government uses to persuade companies about modern practice in view of solving country social problems, - connecting CSR to environmental care activities. However, in Indonesia, only mining companies are obliged to consider CSR; for other companies, this includes banks, this is not necessary, with an exception for state owned banks. Nevertheless, it is thought, but hardly argued, that CSR can have a positive impact on the performance of local companies. Since bank investments make an enormous impact on the economic conditions, it seems of interest to discuss whether forcing CSR on banks would result in positive outcomes. Certainly, the banks intend to maintain their financial performance (FP) in a healthy regime, so that investors are likely to part with their money. Yet, one can admit at once that keeping a healthy FP is not so easy under CSR restrictive mandatory frame.

Generally speaking, CSR is one of many things' companies can do to show respect and commitment to society, not only to the environment but also to any organization or person connected to them (Anholon et al., 2016). What companies offer by implementing CSR seems to be a non-profit financial benefit, such as trust from their shareholders and other stakeholders and, which, in-turn, helps companies to maintain a fair relationship with their shareholders and other stakeholders. It can also help to improve the image of companies since they can claim that they care about the environment and are willing to solve numerous environmental problems.

In Indonesia, CSR is not compulsory for all companies. The government only sets regulations for mining companies because the work that they do surely affects the environment. This provision is mandated in Republic of Indonesia Law No.40/2017 article 74. For other organisations, the Government only suggests that CSR should be a part of a company's culture as stated in Republic of Indonesia Law No.47/2012 article 4. In this regulation, the Government also adds some information about how companies should spare their budget so they can partake in CSR. The Government does bind companies by imposing penalties if companies try to avoid this responsibility. Punishment such as restriction on business area and revocation on business activities and facilities are outlined in Republic of Indonesia Law No. 25/2007 article 34.

Whether or not banks should engage in corporate social responsibility activities has been controversial because of the concomitant high cost, even if banks would enjoy the benefits of a higher income as a result of their good reputation (Shen et al., 2016: p.207). Yet, Shen et al. (2016) state that there is "the need for banks to engage in CSR because banks benefit considerably from the society" (p. 207). In fact, the government even protects banks from bankruptcy (Iannotta et al., 2012) so that it can be a guarantee for banks to provide continued service for the society. Interestingly, the number of economic actors which provide sustainability reports has increased, showing that banks are becoming more aware that taking part in CSR can indeed attract more investors and customers. Thus, a CSR is perceived by banks as a strategic way to accelerate its performance, especially its Financial Performance, by reducing direct and indirect cost and by raising productivity and customer satisfaction (Loureiro et al., 2012)

Bearing upon these notices, this paper attempts to establish the links between CSR and FP in the Indonesia Banking Industry, expecting that such a case analysis provides some insight for other developing countries. With data from eight public banks holding the largest assets in Indonesia, this paper reports some answer to the following research questions:

1. Is there a correlation between Corporate Social Responsibility (CSR) and Financial Performance (FP) in the Banking Industry, in Indonesia? and if so,
2. How significant is the impact of CSR on FP in the Indonesian Banking Industry?

## REVIEW OF LITERATURE

A much-debated question is whether CSR has a substantial impact on FP on companies or not (Weber et al., 2014). It is generally admitted that CSR should be (or is already) a part of company culture: CSR will trigger companies to create good corporate governance (Carroll, 1979; Carroll, 1999). It is argued that CSR will be beneficial in the future for a company's longevity. Shareholders and other stakeholders will see these social activities as a tool to facilitate society's needs. This intention is essential for a company to answer the pressure that comes from society, especially after a financial crisis (Robins and Krosinsky, 2008).

Several researchers think that CSR can bring positive influence for corporate performance, especially in the financial sector. First, this idea arises from the core understanding of the purpose of making a well performing company. In fact, Waddock and Graves (1997) state that the purpose of building a company is not only to raise some financial outcome but also to answer social expectation. It means that stakeholders, especially people who run the business, think that this expectation, from a society, is important for the company in the future. One will add environmental concern as a strategy to compete and to achieve sustainability (Prahalad and Hamel, 1994).

Nowadays, investors think that companies should add CSR into their business core. Teoh and Shiu (1990) state that the number of investors increases rapidly when a company integrates CSR into its modus operandi. It makes a positive link between CSR and FP (Wokutch and Spencer, 1987). Thus, the company can expect to make a huge profit because of the increasing cash inflow.

Furthermore, CSR is considered to become one of the most valuable information that investors should know before they invest in one company (Teoh and Shiu, 1990). Belkaoui (1980) points out that a company should be careful with the accounting treatment related to the environment because it affects investment decisions. Investors will use this data upon deciding on strategic portfolio contents, whence impacting on the share price of the company (Spicer, 1978; Belkaoui, 1980). Waddock and Graves (1997) claim that companies could use this data and publicize them to attract investors.

Such a high correlation between good management practice and CSR had already been argued to occur by Freeman (1984); the correlation theoretically stems from the creation of positive perceptions inside (internal stakeholder) and outside (external stakeholder) the company. This good understanding will lead the company to achieve better sales or reduce the management cost according to Prahalad and Hamel (1994).

Practically, Yeung (2011) defines the essential element of CSR in the Banking Sector as understanding the complexity of financial services, risk management, strengthening ethics in the banking business, the implementation of strategies for financial crisis, protection of the rights of customers, and a channel setting for customer complaints. Indeed, these are the main ideas on which the banking sectors should pay attention before deciding to move forward with CSR. This can help banks to understand what stakeholders want, and hopefully fulfill their desires about the company aims (Pérez and Rodríguez, 2012).

Banks can also help other industries to solve their problems that are related to CSR. Sometimes non-governmental sectors and companies borrow money from the bank to help finance their sustainability projects (Weber et al., 2014). The Banking Industry can thus indirectly implement CSR by adding some sustainable development through their financial product, such as lending, investing, insurance (Scholtens 2009), or credit risk management process (Hugenschmidt et al., 1999; Thompson and Cowton, 2004; Weber, 2005; Nikolaou and Evangelinos, 2010). This innovation offers an opportunity for the financial industry to influence social aspects by creating new products, - known as Socially Responsible Investment (SRI) (Cerin and Scholtens, 2011; Weber, 2012).

Thus, on the positive side, implementing CSR in the banking industry can improve its reputation (Birindelli et al., 2015) and can also positively affect the banks FP. Furthermore, CSR provides a form of safety and insurance, according to Soana (2011), for the Banking Industry, preventing unpredictable situations in the future such as losing clients because of a financial crisis. Pérez and Rodríguez (2012) claim that incorporating CSR can help companies keep a positive reputation amongst stakeholders, while also appealing stakeholder's satisfaction (McDonald and Sharyn Rundle-Thiele, 2008, Munari et al., 2013).

Yet, the aim of the Banking Industry is to achieve adequate levels of Financial Performance. Thus, the decision maker should pay more attention as to whether CSR can give the desired benefit or if it is just for the short-term to strengthen the Bank's reputation (Paulík et al., 2015; Babiak and Trendafilova, 2011) and Banks's brand image (Pérez & del Bosque, 2013). Loureiro et al. (2012) claim that the concept of CSR can boost the Bank's Performance, especially its Financial Performance, by reducing direct and indirect cost and by raising productivity and customer satisfaction.

Other researchers also provide positive findings. Chatterjee and Lefcovitch (2009) claim that social performance is just as important as financial performance. It means that Banks do not need to worry about their Financial Performance as long as they can maintain their performance and still respond to social issues, their Financial Performance will increase. Scholtens (2009) adds weight to the previous argument, with his research showing the positive impact CSR has on Financial Performance.

Paulík et al. (2015) constructively state that four indicators can be used to determine financial performance (ROA, ROE, EPS and Price over Earning (P/E) Ratio). It is shown in their study that Banks with high social performance that show great concern about CSR tend to have better Financial Performance than banks that are less concerned with CSR or have no interest in CSR. However, Paulík et al. (2015) claim that the relationship between CSR and FP cannot be seen as just a positive or negative correlation only, but this relationship can affect the industry's financial performance and resolve some social issues.

The positive values that banks collect from the results of a good brand image will produce a reputation that would be characteristic of a bank (Forcadell & Aracil, 2017). The bank's good reputation will be a good indicator in the economy, influencing the investors to choose banks that have a trusted reputation as a place to invest. This is reasonable because it turns out that a good reputation has a positive relationship to financial accounting performance and a low risk profile although the relationships between reputation, corporate governance, and environmental performance are always negative (Dell'Atti et al., 2017).

Furthermore, banks will not only feel the impact on a short period of time as mentioned above, but also for a long period of time. One of the long-term benefits that can be felt by banks is the increase in income and the stability of financial cash flows (García-Sánchez & García-Meca, 2017). García-Sánchez & García-Meca (2017) state that the increase in profits experienced by banks is due to the existence of support in the form of regulations from the country where the banks are located. Existing regulations do support banks in carrying out CSR operations, increase the level of concern of banks to be more concerned about the environment, and become a protector for investors to make them sure to invest in banks that have carried out CSR activities.

More specifically, the Bank of Indonesia (as a central bank) says that banks are encouraged to change their mindset, and should start thinking about new strategies in order to increase their performance without forgetting about the society needs and problems. Bank Indonesia stipulates how the CSR of banks should operate in the Indonesia region. For state owned banks, CSR activities are required by the Regulation of Republic of Indonesia Ministry of State-Owned Enterprises No. PER-05/MBU/2007. All Indonesian Stated Owned Enterprises (SOEs) including stated owned banks have an obligation to conduct CSR called as Partnership Program between SOE and Small Company and Environment Guidance. For private banks, this CSR activity is not regulated explicitly. But these practices are perceived as a best practice, so that private banks are expected to conduct CSR in their own ways.

In Indonesia, the highest priority of CSR type is education – so that the Indonesian people benefit through education. Indonesian Banks are driven to contribute in the education sector by Bank of Indonesia as the central bank. Developing Indonesian human capital is an important initiative to prepare the future of Indonesia as a developing country. The banks' CSR activities can be conducted by giving some soft loan scheme for studying, for creating a special scholarship program, like for independent young entrepreneurs.

The next priority is accessible credit for Micro, Small, and Medium Enterprises (MSMEs). It is obvious that many MSMEs in Indonesia are unbanked friendly because of hard bank loan requirement (no collateral, no financial reporting) and high-risk credit. Thus, a bank's CSR program is an innovative lending platform for micro financing so that the MSMEs have a chance to grow. That is why the state-owned banks have had a partnership program which is financing and coaching selected MSMEs because that banks should carefully do investment screening (Ueda, 2004).

Furthermore, Indonesian banks also carry out many other social activities such as building infrastructure in rural areas, helping victims of natural disasters, but this is not done routinely and depend on the policies that each bank has. It is reflected in GRI report in the bank annual report. This raises the suspicion whether CSR activities carried out by banks have an influence on bank performance, especially in the financial perspective. In fact, it is known that CSR activities requires a lot of money.

Recent studies on CSR and its relationship with the Banking Industry's Performance have obtained two different results. Some researchers find that investing in CSR can improve the performance of the Banking Industry especially its Financial Performance (e.g. Spicer, 1978; Belkaoui, 1980; Freeman, 1984; Wokutch and Spencer, 1987; Teoh and Shiu, 1990; Prahalad and Hamel, 1994; Waddock and Graves, 1997; Hugenschmidt et al., 1999; Thompson and Cowton, 2004; Weber, 2005; McDonald and Sharyn Rundle-Thiele, 2008; Scholtens, 2009; Nikolaou and Evangelinos, 2010; Cerin and Scholtens, 2011; Soana, 2011; Loureiro et al., 2012; Weber, 2012; Munari et al., 2013; Birindelli et al., 2015; Paulík et al., 2015), while, other researchers have demonstrated that there are adverse effects when implementing CSR in the banking industry (e.g. Alexander and Buchholz, 1978; Aupperle et al., 1985; Ullmann, 1985; McWilliams and Siegel, 2000; Fassin and Gosselin, 2011; Pérez and Rodríguez, 2012; Weber et al., 2014).

Thus, based on theories and previous researches, this paper has developed premises in two hypotheses which are:

Hypothesis 1: There is a positive correlation between CSR and Financial Performance on Banking Industry in Indonesia (Following the existing result by Spicer, 1978; Belkaoui, 1980; Freeman, 1984; Wokutch and Spencer, 1987; Teoh and Shiu, 1990; Prahalad and Hamel, 1994; Waddock and Graves, 1997; Hugenschmidt et al., 1999; Thompson and Cowton, 2004; Weber, 2005; McDonald and Sharyn Rundle-Thiele, 2008; Scholtens, 2009; Nikolaou and Evangelinos, 2010; Cerin and Scholtens, 2011; Soana, 2011; Loureiro et al., 2012; Weber, 2012; Munari et al., 2013; Birindelli et al., 2015; Paulík et al., 2015).

Hypothesis 2: CSR has a significant impact on Financial Performance in the Banking Industry in Indonesia (Following the existing result by Scholtens, 2009; Loureiro et al., 2012; Paulík et al., 2015).

## METHOD

### Data

The data include time series data and cross-sectional data from banks listed in the Indonesian Stock Exchange (IDX). We have selected the eight largest banks in Indonesia according to their assets, between 2013 and 2015. During this period, the banks in Indonesia started compiling sustainability reports. Prior to this period, while they may have taken part in social activities within the community, there are no records for these activities. From these sustainability reports, information was taken to calculate the Corporate Social Disclosure Index (CSDI) and the Global Reporting Initiative (GRI) standard. The main sources to analyze the financial performance of the banks are the annual reports provided by these banks, with which the ROA, ROE, EPS can be calculated (Paulík et al., 2015).

### Dependent Variables

Profitability refers to the gain made on an investment. The profitability ratios are classically used to analyze profit made by a company over a certain period. Here below we, like others, restrict the analysis to ROA, ROE and EPS ratios.

### RETURN ON ASSET (ROA)

The Return on Asset (ROA) measures the profits earned by a company on its properties. It is the ratio of the company's net income to its total asset (Subramanyam, 2009),

$$ROA = \frac{Net\ Income}{Total\ Asset}$$

### RETURN ON EQUITY (ROE)

Return on Equity (ROE) measures the profits earned by a company on its stocks and shares; these may include equity capital, minority equity, preferred equity, and common equity. The ROE is a ratio of the company's net income to its shareholders' equity (Subramanyam, 2009),

$$ROE = \frac{Net\ Income}{Shareholders'\ Equity}$$

### EARNINGS PER SHARE (EPS)

The Earnings per Share (EPS) ratio (Subramanyam, 2009) is calculated from:

$$Earnings\ per\ Share = \frac{Net\ Income - Preferred\ Dividends}{Weighted\ average\ number\ of\ common\ shares\ outstanding}$$

### Independent Variable

The Corporate Social Disclosure Index (CSDI) is obtained by following the Global Reporting Initiative (GRI) standard. The GRI gives the list of activities that reflect good responsibility. In the newest standard (GRI-G4), the three (3) aspects that matter – that companies focus on – are the Economic, Environmental, and Social aspects. There are ninety-one (91) points that are important. The more points a company implements, the closer it is to achieving the ideal company, based on a social responsibility viewpoint. In the CSDI calculation, every point in the G4 list, earns a score of one, while every point not addressed by a company earns a score of zero. The formula used to calculate CSDI is

$$CSDi = \frac{\sum X_{ij}}{N_j}$$

where

- CSDi : Corporate Social Responsibility Index in one specific company
- N<sub>j</sub> : The total items in GRI-G4 for sustainability report, N<sub>j</sub> = 91
- X<sub>ij</sub> : Score points (0 or 1)
- i : Item i (#) in GRI-G4
- j : Company j

## ANALYSIS PROCEDURES

### Bivariate Analysis

The correlation between CSR and the FP in the Banking Industry in Indonesia is found through a simple linear regression model (Wright, 1997):

$$\begin{aligned} ROA &= \beta_{0,1} + \beta_{1,1} CSDI + \varepsilon_1 \\ ROE &= \beta_{0,2} + \beta_{1,2} CSDI + \varepsilon_2 \\ EPS &= \beta_{0,3} + \beta_{1,3} CSDI + \varepsilon_3 \end{aligned}$$

where as usual,

$\beta_0 - \beta_1$  : Estimated regression Coefficient, and  
 $\varepsilon$  : Error term

Furthermore, a correlation test was done to measure the correlation strength between the CSDI, as an independent variable, and each indicator of financial performance. The value of the correlation coefficient can be calculated using *Pearson's r* method (Bryman, 2012). The significance can be estimated from the F-test Analysis of Variance (ANOVA).

### Descriptive Analysis

The classical statistical characteristics, that is, mean, standard deviation, minimum, maximum, skewness, and kurtosis (Creswell, 2003; Gravetter, 2012) have been calculated for each ratio. We particularly insist on and discuss the skewness and kurtosis values in view of their interest as recently re-pointed out (Ausloos and Cerqueti, 2018). Recall that the significant level of the skewness and the kurtosis (Field, 2013) are obtained from

$$Z\text{-Skewness} = (S - 0)/SE$$

where

$S$  : Skewness Value  
 $SE$  : Standard Error

$$Z\text{-Kurtosis} = (K - 0)/SE$$

where

$K$  : Kurtosis Value  
 $SE$  : Standard Error

The criteria for Z-skewness and Z-kurtosis significance (Field, 2013) is set for 0.05 as the significance level. If the absolute value is greater than 1.96, it is significant at  $p < 0.05$

## RESULTS

First, let it be recalled that the five-state owned bank are BTN, MANDIRI, BNI, BRI, and BJB.

All eight (8) banks in Indonesia had a positive ROA, ROE, EPS value, which means they make profit. All the skewness and kurtosis values are normally distributed because the Z value of skewness, between 2013 and 2015, is within the range:  $-1.96 < x < 1.96$ . Here are the details:

### RETURN ON ASSET (ROA)

The Return on Asset's data of the top eight (8) banks between 2013 and 2015 is shown in Table 1. For completeness, the corresponding statistical characteristics are given in Table 2.

**Table 1 Return on Asset of Eight Banks between 2013 and 2015**

<b>BANKS</b>	<b>ROA 2013</b>	<b>ROA 2014</b>	<b>ROA 2015</b>
BTN	0.0179	0.0114	0.0161
CIMB	0.0276	0.0133	0.0047
DANAMON	0.0340	0.0190	0.0170
MANDIRI	0.0366	0.0357	0.0315
MAYBANK	0.0171	0.0069	0.0108
BNI	0.0340	0.0350	0.0260
BRI	0.0385	0.0372	0.0328
BJB	0.0261	0.0194	0.0204

Note: ROA = Return on Asset

**Table 2 Descriptive Statistics Return on Asset of Eight Banks between 2013 and 2015**

	Min.	Max.	Mean	Std. Dev.	Skewness	Kurtosis		
							Std. Error	Std. Error
ROA_2013	0.0171	0.0385	0.028975	0.008222	-0.513	-1.307	0.752	1.481
ROA_2014	0.0069	0.0372	0.022238	0.012066	0.240	-1.904	0.752	1.481
ROA_2015	0.0047	0.0328	0.019913	0.009821	-0.088	-0.930	0.752	1.481

### RETURN ON EQUITY (ROE)

The Return on Equity's data of the top eight (8) banks between 2013 and 2015 are shown in Table 3; for completeness, the corresponding statistical characteristics are given in Table 4.

**Table 3 Return on Equity of Eight Banks between 2013 and 2015**

<b>BANKS</b>	<b>ROE 2013</b>	<b>ROE 2014</b>	<b>ROE 2015</b>
BTN	0.1605	0.1095	0.1684
CIMB	0.1774	0.0766	0.0299
DANAMON	0.1450	0.0860	0.0740
MANDIRI	0.2223	0.2581	0.2303
MAYBANK	0.1618	0.0610	0.0847
BNI	0.2250	0.2360	0.1720
BRI	0.3010	0.2787	0.2439
BJB	0.2676	0.1892	0.2305

Note: ROE = Return on Equity

**Table 4 Descriptive Statistics Return on Equity of Eight Banks between 2013 and 2015**

	Min.	Max.	Mean	Std. Dev.	Skewness	Kurtosis		
					Std. Error	Std. Error		
ROE_2013	0.145	0.301	0.20758	0.05605	0.614	0.752	- 0.913	1.481
ROE_2014	0.061	0.2787	0.16189	0.08872	0.187	0.752	- 2.134	1.481
ROE_2015	0.0299	0.2439	0.15421	0.08184	-0.403	0.752	- 1.570	1.481

**EARNINGS PER SHARE (EPS)**

The Earnings per share’s data of the top eight (8) banks between 2013 and 2015 are shown in Table 5. For completeness, the corresponding statistical characteristics are given in Table 6.

**Table 5 Earnings per Share of Eight Banks between 2013 and 2015**

BANKS	EPS 2013	EPS 2014	EPS 2015
BTN	148	106	175
CIMB	170.4	93.21	17.02
DANAMON	421.68	271.69	249.70
MANDIRI	780.16	851.66	871.50
MAYBANK	26	11	17
BNI	486	578	487
BRI	857.8	980.0	1021.7
BJB	141.59	113.85	142.02

Notes: EPS = Earnings per Share Data is Expressed in Indonesian Currency – Rupiah (Rp).

**Table 6 Earnings per share (EPS) of Eight Banks between 2013 and 2015**

	Min.	Max.	Mean	Std. Dev.	Skewness	Kurtosis		
					Std. Error	Std. Error		
EPS_2013	26	857.8	378.9538	311.974	0.608	0.752	- 1.206	1.481
EPS_2014	11	980.0	375.6763	377.505	0.804	0.752	- 1.177	1.481
EPS_2015	17	1021.7	372.6175	386.102	0.951	0.752	- 0.639	1.481

Note: Data is expressed in Indonesian Currency – Rupiah (Rp)

In 2013, the minimum value for the EPSs was IDR26/share, as represented by MAYBANK bank, while the maximum was IDR857.80/share represented by BRI bank, with the standard deviation near 311.97. In 2014, the minimum value was IDR11/share, represented by MAYBANK while the maximum was IDR980/share, represented by BRI bank, with the standard deviation at 377.505. In 2015, the minimum value was IDR17/share, represented by MAYBANK while the maximum was IDR1021.70/share, represented by BRI bank, with the standard deviation at 386.102. The mean of the EPSs dropped steeply from IDR378.9537/share in 2013 to IDR372.6175/share in 2015. Based on Earnings per share, it can be said that the BRI bank was the most profitable of the eight (8) banks within this period, while MAYBANK was in the warning zone due to a small EPS value.

**CORPORATE SOCIAL DISCLOSURE INDEX (CSDI)**

The Corporate Social Disclosure Index’s data of the top eight (8) banks between 2013 and 2015 are shown in Table 7. The main statistical characteristics are given in Table 8.

**Table 7 Corporate Social Disclosure Index of Eight Banks between 2013 and 2015**

<b>BANKS</b>	<b>CSDI 2013</b>	<b>CSDI 2014</b>	<b>CSDI 2015</b>
BTN	0.3076	0.2747	0.6813
CIMB	0.4065	0.3846	0.4065
DANAMON	0.3736	0.4725	0.3846
MANDIRI	0.3296	0.4395	0.5714
MAYBANK	0.4175	0.4615	0.2857
BNI	0.4395	0.5494	0.3626
BRI	0.6483	0.6043	0.5164
BJB	0.7802	0.4395	0.1648

Note: CSDI = Corporate Social Disclosure Index

While BRI and BJB banks started off high, they consistently dropped in the following two years; a similar drop tendency was observed in DANAMON, MAYBANK, and BNI which, having increased between 2013 and 2014, decreased in 2015. CIMB showed a consistent fluctuation within the 3-year period, while BTN rapidly increased in 2015, having had a below standard value in 2013. The MANDIRI bank showed a consistent increase over the 3-year period, while the other banks, though having stable values, showed a tendency to drop overtime. Table 8 shows the results of a descriptive statistical analysis of the CSDIs.

**Table 8 Descriptive Statistics Corporate Social Disclosure Index of Eight Banks between 2013 and 2015**

	Min.	Max.	Mean	Std. Dev.	Skewness	Std. Error	Kurtosis	Std. Error
CSDI_2013	0.3076	0.7802	0.46285	0.16506	1.323	0.752	0.782	1.481
CSDI_2014	0.2747	0.6043	0.45325	0.09962	- 0.323	0.752	0.826	1.481
CSDI_2015	0.1648	0.6813	0.421663	0.16404	0.086	0.752	- 0.242	1.481

**BIVARIATE ANALYSIS**

A linear regression approach can be also used here (below) because there are only two variables of interest about which to search for a correlation: the CSDI and one of the financial performance indicators – the ROA, ROE or EPS. Using the SPSS software, the ANOVA table computation and results show the aspects in which the model is significant, - and those in which it is not.

**REGRESSION MODEL AND CORRELATION TEST BETWEEN CORPORATE SOCIAL DISCLOSURE INDEX (CSDI) AND RETURN ON ASSET (ROA)**

The ANOVA results were used to determine the significance of the CSDI as a good predictor of ROA. The p-value of CSDI was used as a predictor for the ROA in 2013, 2014, and 2015 as 0.689, 0.065, and 0.516 respectively. These numbers show that the CSDI is not a good predictor of the changes of the ROA because the p-value in those three years is greater than 0.05, since a model is not significant if the p-value is greater than 0.05.

$$ROA_{2013} = 0.025 + 0.008 CSDI_{2013}$$

$$ROA_{2014} = -0.015 + 0.082 CSDI_{2014}$$

$$ROA_{2015} = 0.013 + 0.016 CSDI_{2015}$$

The correlation tests show, from the Pearson Correlation coefficient, how strong the independent variable in this case (CSDI) correlates with ROA as the dependent variable. With a value of 0.169 and 0.271 in 2013 and 2015 respectively, the correlation is found to be “weak”, as opposed to 2014 when the value is 0.678.



**REGRESSION MODEL AND CORRELATION TEST BETWEEN CORPORATE SOCIAL DISCLOSURE INDEX (CSDI) AND RETURN ON EQUITY (ROE)**

Again, the ANOVA results are used to determine the significance of the CSDI as a good predictor of ROE. The p-value of CSDI is used as a predictor for ROE in 2013, 2014, and 2015 are 0.022, 0.13, and 0.664 respectively. These numbers show that the CSDI is not a good predictor of the changes of the ROE in 2014 and 2015 because the p-values in those years are greater than 0.05; however, it is significant and a good predictor of the changes of the ROE in 2013 as the p value is less than 0.05.

$$\begin{aligned} \text{ROE}_{2013} &= 0.085 + 0.266 \text{ CSDI}_{2013} \\ \text{ROE}_{2014} &= -0.073 + 0.518 \text{ CSDI}_{2014} \\ \text{ROE}_{2015} &= 0.116 + 0.092 \text{ CSDI}_{2015} \end{aligned}$$

The Pearson Correlation test points to a fairly strong correlation between the independent variable (CSDI) and ROE, the dependent variable. The correlation was is strong in 2013 with a value of 0.783, moderate in 2014 with a value of 0.582, and weak in 2015 with a value equal to 0.183.

**REGRESSION MODEL AND CORRELATION TEST BETWEEN CORPORATE SOCIAL DISCLOSURE INDEX (CSDI) AND EARNINGS PER SHARE (EPS)**

Finally, the ANOVA results are used to determine the significance of the CSDI as a good predictor of EPS. The p-value of CSDI is used as a predictor for EPS in 2013, 2014, and 2015 as 0.910, 0.083, and 0.274 respectively. These numbers show that the CSDI is not a good predictor of the changes of the EPS within the 3-year period as their p-values were greater than 0.05.

$$\begin{aligned} \text{EPS}_{2013} &= 336.93 + 90.796 \text{ CSDI}_{2013} \\ \text{EPS}_{2014} &= -735.57 + 2451.74 \text{ CSDI}_{2014} \\ \text{EPS}_{2015} &= -65.375 + 1038.73 \text{ CSDI}_{2015} \end{aligned}$$

The results point to a rather weak correlation in 2013, due to a value of 0.048, but strong in 2014 with a value of 0.647, and moderate in 2015 with a value of 0.441.

**DISCUSSION**

In this paper we examine the effect of (partially unenforced) CSR, using the CSDI, on FP through the three important indicators – ROA, ROE, and EPS, in the Indonesian banking industry. Eight banks were selected based on their assets (and available reports) between 2013 and 2015. A descriptive statistical analysis, correlation tests and regression model approaches have been used to investigate the correlation between CSR and FP, and how significant the former was in influencing the latter. This work has attempted to answer the following research questions:

- 1) *Is there a correlation between Corporate Social Responsibility and Financial Performance in the Banking Industry, in Indonesia?*
- 2) *How significant is the impact of CSR on FP of the Indonesian Banking Industry?*

The discussion started with identifying key factors and indicators, the CSDI for CSR, and the ROA, ROE and EPS for financial performance. The CSDI was introduced by the Global Reporting Initiative (GRI) which indicates how much a company is involved in social activities. For a short period, the financial performance condition of banks in Indonesia was unsteady. The fluctuations of the ROA, ROE, and EPS have been made visible through a descriptive statistical analysis. While the ROA values were high in 2013, there was a consistent drop in 2014 and 2015, apparently tending to continue. The ROE has a similar behavior, with few banks able to raise their value in 2015. It caused a domino effect in the EPS values, producing a decreasing profit between 2013 and 2015. Only three out of the eight banks had values above the standard, - only two having a positive profit trend in the 3-year period.

The results convincingly show that there is a correlation between CSR and FP. The highest correlation value between CSDI and ROA is 0.678 in 2014; between CSDI and ROE it is 0.783 in 2013; between CSDI and EPS it is 0.647 in 2014. The CSDI, as the indicator of CSR, had a strong correlation to the three indicators with these conditions (Tolmie, 2011). The correlation between the CSDI and these three indicators is between a weak-to-moderate level, the range of the value is between 0.37 and 0.51. It can be concluded that the increase (or the decrease) of financial performance in the banking industry in Indonesia can be thought to be correlated with CSR activity. However, given the “not-too-strong correlation” values, so far found, one may conjecture that other factors besides CSR are of course involved in FP. CSR is not the only factor, - as should be expected indeed. The search for which factors is outside the present aim.

To sum up, this paper provides clear answers to two specific research questions. First, it is showed that a correlation between CSR and financial performance in the banking industry in Indonesia is supported by correlation analysis carried out with the four key indicators – three that were dependent variables and one that was independent. This correlation, however, did not show a significant impact of CSR on financial performance, whatever the increase or decrease of the CSDI value.

## CONCLUSION

Based on the above findings, it can be concluded that Indonesia banking industry in general does not give a high consideration to CSR: there is no significant effect of CSR on FP (ROA, ROE, and EPS). We consider that this reflects the general business perception toward CSR activities in Indonesia banking industry as not being a priority investment nor concern. The most priority of banks is making a high profit. People and planet are perceived as additional considerations to show that the bank is a good corporate citizen. The two items are just supplementary, since the CSR has no impact on the bank's FP yet. Among the eight surveyed banks, there are five state owned bank, i.e., BTN, MANDIRI, BNI, BRI, and BJB banks. These state-owned banks seem to conduct their CSR activities merely just for fulfilling their legal obligation as SOE as mandated on Regulation of Republic of Indonesia Ministry of State-Owned Enterprises No. PER-05/MBU/2007.

Currently, CSR activities are still assumed as expenses by most Indonesian banks. Thus, it will not give any benefit for banks for the future. It just gives a short-term advantage. This perception is a very traditional concept. In more modern concept, every disbursement on CSR activities has to be planned well, because it is business investment for long term benefit. Banks must have a strategy on this kind investment. CSR activities are not only for short term reputation of the bank, but also for the sustainability of the bank. The three "bottom lines" (profit, people, and planet) must be kept continuously balanced (Pearce & Barbier, 2000) in order to ensure a bank's sustainability. To transform the traditional mindset into more modern approach, the Republic of Indonesia Financial Service Authority (FSA) has issued FSA Regulation No.51/POJK.03/2017 concerning the implementation of sustainable finance for financial service institutions, Initial Public Offering (IPO) issuers, and public companies.

This new FSA regulation will be an obligation for every "Commercial Bank Based on Business Activities" (BUKU) categorized as BUKU 3, BUKU 4, and foreign banks since 1 January 2019. For completeness, let us recall the definition: BUKU 3 is a bank with core capital IDR5-30 trillion and BUKU 4 is a bank with core capital at least IDR30 trillion. Whereas it will be obliged for every commercial bank categorized as BUKU 1 and BUKU 2 since 1 January 2022. (BUKU 1 is a bank with core capital less than IDR1 trillion and BUKU 2 is a bank with core capital IDR1-5 trillion.) There are incentives provides by FSA for any sustainable finance implementer such as participation in human capital competency development program, sustainable finance award, and other incentives. This is a valuable aim of the Indonesian government in order to increase the awareness of banking industry about the importance of CSR activities.

## FUTURE RESEARCH

CSR is a relatively new concept in the Indonesian banking industry; this proved an obstacle in data analysis as supplied data was not continuous from year to year, leading to gaps in the data for banks' sustainability reports. These reports were few, leading to a reflection from this number of banks that provide them. Retrospectively, a complementary way of collecting data would be to conduct interviews with the bank managers in Indonesia to get the details of their CSR projects, as well as the possible difficulties encountered in implementing CSR or making use of the GRI standard as a guide.

From this research, what can be learned by other countries is an assessment of their readiness in preparing and explaining how important CSR is by adding other factors that may have beneficial impact for companies. It is reflected by this research that doing CSR has less impact on the companies' profits. Therefore, the government, both in Indonesia and in other countries, can think of strategies to make this CSR program look attractive, especially by showing the short-term and long-term benefits to companies so the participation in doing CSR can raise significantly in many sectors not in some specific sectors only.

One of the factors that is interesting to be further investigated is the government policy factor in determining CSR policies in the companies. In Indonesia, CSR policy is still intended for companies that interact directly. The purpose is to make CSR as a responsibility for companies to take a good care of nature. This needs to be further investigated, regarding the influence of this factor in determining the decisions of CSR activities undertaken by the company and the difference of regulation between other countries will create a different action at companies. This issue may be related to the financial performance of the company.

Due to the research gaps, this paper only focuses on the impact of CSR on FP. Future research can focus on other factors. Furthermore, the number of participants and the duration of research can be increased for a broader work. Similar investigations in other emerging countries may be of interest in order to have a broader view on the level of correlations. There is no doubt, nevertheless, that a better recording of CSR activities and sustainability reports, using the GRI standard, will lead to better and more complete data for exploring other direction in further research.

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