RESEARCH ARTICLE

The Role of Corporate Social Responsibility on the Link of Real Earnings Management With Financial Performance and Firm Value of Publicly Listed Companies in the Philippines

Rina A. Abner¹ and Rodiel C. Ferrer^{2*}
¹Partido State University, Philippines
²De La Salle University, Philippines
*rodiel.ferrer@dlsu.edu.ph

Abstract: Shareholder value maximization is one of the main objectives of a corporation; however, the management may not always achieve such an objective that may force them to employ some earnings management practices to manage reported earnings. This study deals with the opportunistic perspective where managers are suspected to perform some earnings management practices using cash flows from operations (CFO), production costs (PROD), and discretionary expenses (DISEXP), and further utilize their company's corporate social responsibility (CSR) activities to shield the real earnings management (REM) performed. This study primarily investigates the role of CSR on the relationship of REM with financial performance and firm value. It examined 90 publicly listed companies in the Philippines for a five-year period from 2012 to 2016. Real earnings management is evaluated through deviations from normal operations which is termed as "abnormal" operations. Results show that when the company employs REM and uses CSR to shield such, the significant association between the two causes of improvement in the company's financial performance. This study provides evidence of the benefits of using REM to manage company earnings. Employing REM and using CSR (to shield the earnings management performed) benefits not just the community but also serves the economic objectives of the firm. This study concludes that the public companies in the Philippines may have CSR activities on different dimensions and areas; however, the intention is not purely to fulfill their social obligations to the community but also to strategically achieve some economic objectives. Corporate social responsibility is used by the management not just to shield REM but also to improve the company's financial performance.

Keywords: Corporate Social Responsibility, Real Earnings Management, Financial Performance, Firm Value, Structural Equation Modeling

For the past years, researchers have shown interest in studying Earnings Management (EM) which can be both opportunistic and efficient (Cornett, Marcus, & Tehranian, 2008; Siregar & Utama, 2008).

Earnings management, whether opportunistic or efficient, is expected to make financial reports more appealing to stakeholders. Exploring the opportunistic perspective of EM, management is not always a good

steward of a corporation; thus, they may resort to managing company earnings to meet some standards, benchmarks, or expectations. In management's fear of experiencing disciplinary actions from shareholders with regard to the EM practices performed, they may devise some means to entrench themselves. One of their entrenchment strategies is improving their corporate social responsibility (CSR; Gao & Zhang, 2015; Prior, Surroca, & Tribo, 2007).

CSR is one of the most researched topics around the world and would probably continue to be so because the business trend is not anymore about merely earning a profit for business owners but earning a profit while keeping the welfare of the entire community. However, CSR is also believed to be used as a mechanism to cover up some corporate manipulation practices.

At times when firms are not able to achieve its shareholder value maximization objective, they may engage in earnings manipulation activities to meet the expectations of shareholders and other stakeholders (Joosten, 2012). Earnings management may result in grave consequences that may ultimately lead to business failure. Rooted on the assumptions of the agency theory, the manager may devise some mechanisms of self-defense as an entrenchment strategy after reporting an unsatisfactory performance, and one of the strategies is strengthening the company's CSR program (Rahmawati, Honggowati, & Supriyono, 2014). Rahmawati et al. (2014) further noted that literature and studies posit a suspicion that CSR activities are used by companies as self-defense when they do things that harm or may harm the interest of the stakeholders.

Studies conducted proved that CSR has a significant association with the company's financial performance and value (Tsoutsura, 2004; Becchetti, Ciciretti, Hasan, & Kobeissi, 2012; Zeng, 2016; Chen & Lee, 2017), and there are also studies claiming the association between CSR and EM (Gao & Zhang, 2015; Martinez-Ferrero, Banerjee, & Garcia-Sachez, 2016), and EM could also be associated with financial performance and firm value. Previous studies have documented the direct relationships between REM and CSR, CSR and financial performance, and CSR and firm value, but no study has ever examined the mediating role of CSR on the relationship between REM and financial performance and firm value. When the management of the firm uses CSR to shield the REM performed, there could be some effects on the financial performance and value of the firm, and that is the main objective this study seeks to address. Using structural equation modeling (SEM), this study aims to examine the mediating role of CSR on the relationship of REM with financial performance and firm value.

Theoretical Background

The assumptions of this study are grounded on some established theories such as the agency theory, signaling theory, legitimacy theory, and stakeholder theory.

As established in the paper of Jensen and Meckling (1976), agency theory assumes a principal-agent relationship. There is a contract that involves principals (shareholders) and agents (management); the agents act on behalf of the principal to achieve some economic objectives. However, if both the principal and agent are utility maximizers, "there is good reason to believe the agent will not always act in the best interests of the principal" (Tricker, 2003, p. 25). Founded on the agency theory, this study assumes that managers perform earning management to shield REM and maximize their self-interests, which are contrary to the objectives of the shareholders.

Signaling theory is useful when two parties have access to different information, which is called the information asymmetry. The sender must choose whether (and how) he is going to communicate (or signal) or not, whereas the receiver must choose how to interpret the information (Connelly, Certo, Ireland, & Reutzel, 2010). Information asymmetry denotes that one party has access to some information but opts not to disclose so that the other party has no access to such. The assumptions of signaling theory could be true in this study. Coupled with the agency theory, managers may have access to some economic information that the shareholders do not know about, and they may exhibit a tendency to exploit such information to access and manipulate company earnings for self-interest at the expense of the stakeholders.

Under the legitimacy theory, the organization and society are inseparable as there is congruence between the behaviors of the organization and the shared and assumed beliefs of pertinent social groups. Further, this theory assumes that legitimacy is "possessed objectively yet created subjectively" (Suchman, 1995, p. 574). Market forces and community expectations are some factors that determine the survival of an

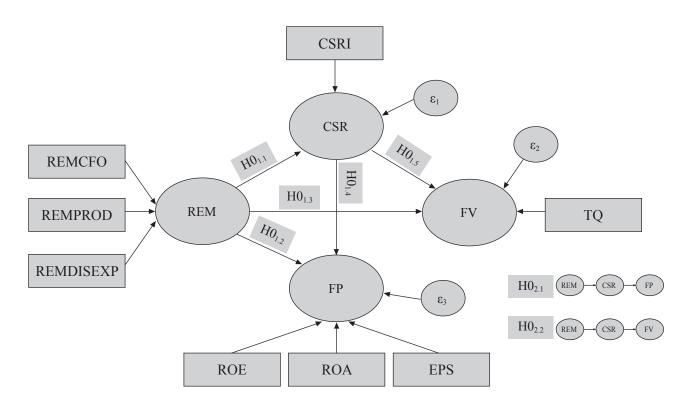
organization (Che-Ahmad & Osazuwa, 2015). Thus, the organization must act in accordance with what could please the society to maintain its long-term existence. CSR could gratify the community, which may lead to building a good relationship with a corporation's stakeholders, and good relationship with stakeholders can provide economic benefits (Tsoutsoura, 2004; Zeng, 2016). CSR may be used by managers to establish a good company image not just for bottom-line benefits but also to achieve some strategic financial objectives.

This study takes the perspectives under the instrumental and normative stakeholder theory. As an implication, the management tries to balance all the interests of the corporation's stakeholders. They develop and apply moral and philosophical principles to not just fulfill the aims of managerial capitalism but also to make the corporation a functional social institution. As Donaldson and Preston (1995)

emphasized, "stakeholder theory of the firm must redefine the purpose of the firm.... to serve as a vehicle for coordinating stakeholder interests" (p. 79). The use of REM by the management can be a tool to achieve the financial objectives of the shareholders (instrumental stakeholder theory), and the CSR of the firm can be a means for the management to shield REM and fulfill their opportunistic behavior (agency theory). On the other hand, it can also be one of the moral guidelines implemented by the corporation to accommodate the interests of other stakeholders (normative stakeholder theory).

Using the assumptions of the theories previously discussed, the following framework is formulated.

.As can be seen in Figure 1, there are four latent variables—real earnings management (REM), CSR, financial performance (FP), and firm value (FV). The model is a formative measurement model with directional arrows pointing from indicator variables



Where: REM – Real Earnings Management, CSR – Corporate Social Responsibility, FP – Financial Performance; FV – Firm Value; REMCFO – Real Earnings Management through Cash Flows from Operations; REMPROD - Real Earnings Management through Productions Costs; REMDISEXP - Real Earnings Management through Discretionary Expenses; CSRI – CSR Index; ROE – Return on Equity; ROA – Return on Assets; EPS – Earnings per Share; and TQ – Tobin's Q

Figure 1. Structural equation model of the role of corporate social responsibility on the link of real earnings management with financial performance and firm value.

to constructs which indicate a causal or predictive relationship. The REMCFO, REMPROD, and REMDISEXP predict the real earnings management performed by the corporation; CSRI represents CSR; ROE, ROA, and EPS indicate financial performance; and Tobin's Q represents firm value.

Hypotheses of the Study

This study hypothesized direct and mediating relationships discussed in the following subsections:

Direct Relationship Between Real Earnings Management and Corporate Social Responsibility

Prior et al. (2007) noted that managers manage earnings as an entrenchment strategy to hedge against disciplinary actions from shareholders. CSR is a "powerful tool that can be used to garner support from stakeholders and, therefore, provides an avenue for entrenchment to those managers that manipulate earnings, so as to reduce significantly their chances of being fired" (Prior et al., 2007, p. 1). The management may not always exhibit good stewardship, thus may use some earnings management practices to make their financial reports more appealing to shareholders, with their fear of experiencing disciplinary actions from the shareholders, they may use CSR as an entrenchment strategy. Thus, this study hypothesizes the following:

- H0_{1.1}: Real earnings management has no significant relationship with corporate social responsibility.
- Ha_{1.1}: Real earnings management has a significant relationship with corporate social responsibility.

Direct Relationship Between Real Earnings Management and Financial Performance

Real activities manipulation or management are "departures from normal operational practices, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations" (Roychowdhury, 2006, p. 337). This study focused on three means of real earnings management which are through cash flow from operations (CFO), production costs (PROD), and discretionary expenses (DISEXP). These departures are hypothesized to have some effects

on the firm's financial performance and value. Hence, the following:

- H0_{1,2}: Real earnings management has no significant relationship with financial performance.
- Ha_{1.2}: Real earnings management has significant relationship with financial performance.

Direct Relationship Between Real Earnings Management and Firm Value

With the manipulation of cash flows from operations, production costs, and discretionary expenses, company operations deviate from the normal (Joosten, 2012; Roychowdhury, 2006). As such, this might have negative effects on company value in the long run. The studies of Farooqi, Harris, and Ngo (2014) and Leggett, Parsons, and Reitenga (2016) provided evidence that the shareholders suffer economic losses from the manipulation of the firm's real activities to manage earnings, and it is reflected on the value of the company. Hence, this study came up with the following hypotheses:

- H0_{1.3}: Real earnings management has no significant relationship with firm value.
- Ha_{1.3}: Real earnings management has a significant relationship with firm value.

Relationship Between Corporate Social Responsibility and Financial Performance

The CSR activities of a company can help build a good market image and reputation especially if such activities are disclosed and made known to the public. Several studies have been conducted proving that the god image and reputation built and enhanced by CSR programs contribute positively to a company's economic performance (Gregory, Tharyan, & Whittaker, 2014; Habbash, 2017; Jo & Harjoto, 2011; Zeng, 2016). Thus, this study took this as a priori and developed the following hypotheses:

- H0_{1.4}: Corporate social responsibility has no significant relationship with financial performance.
- Ha_{1.4}: Corporate social responsibility has a significant relationship with financial performance.

Relationship Between Corporate Social Responsibility and Firm Value

The link between CSR and firm value has been the interest of many studies in the past; however, results are inconclusive. The costs of CSR may be justified by its economic benefits especially with enhanced customer satisfaction (García-Madariaga & Rodríguez-Rivera, 2017; Habbash, 2017), but there are studies noting a negative relationship between CSR and firm value (Nekhili, Nagati, Chtioui, & Rebolledo, 2017). Some even argued that CSR has no direct relationship with firm value (Dagiliene, 2013; Surroca, Tribó, & Waddock, 2009). In the Philippines, where CSR, in general, is still far from ideal, the market may not put so much emphasis in making their market-related decisions, and the economic benefits of social disclosure and performance may not yet even reflect on the value of the firm. Thus, the following are hypothesized:

H0_{1.5}: Corporate social responsibility has no significant relationship with firm value.

Ha_{1.5}: Corporate social responsibility has a significant relationship with firm value.

The Role of CSR on the Link of REM with Financial Performance and Firm Value

Several studies have proven the association between REM and CSR and CSR and financial performance, and Roychowdhury (2006) has also explained the possible effects of REM on financial performance. Earnings management is primarily geared towards making financial reports more appealing to the stakeholders, and CSR (which is also assumed to have a direct association with financial performance) is hypothesized to mediate the relationship between REM and financial performance when such CSR is used as an entrenchment strategy by the management. Hence, the following:

H0_{2.1}: Corporate social responsibility does not significantly mediate the relationship between real earnings management and financial performance.

Ha_{2.1}: Corporate social responsibility significantly mediates the relationship between real earnings management and financial performance.

Same concepts with the previous section, the following are also hypothesized:

H0_{2.2}: Corporate social responsibility does not significantly mediate the relationship between real earnings management and firm value.

Ha_{2.2}: Corporate social responsibility significantly mediates the relationship between real earnings management and firm value.

Review of Related Literature

Real Earnings Management

"Real activities manipulation is a purposeful action to alter reported earnings in a particular direction, which is achieved by changing the timing or structuring of an operation, investment, or financing transaction, and which has suboptimal business consequences" (Zang, 2012, p. 676). To deviate from normal operating and investing activities, the manipulation can be done by altering the level of discretionary expenses such as research and development (R&D), and selling, general and administrative expenses (SG&A; Joosten, 2012). Additional means of deviating from normal operating and investing activities include overproduction (to build up inventory and lower the cost of sales) and providing price reduction to boost (Cohen, Dey, & Lys, 2008; Roychowdhury, 2006). Roychowdhury (2006) found evidence on real earnings manipulation by temporarily increasing sales through discounts, lowering the cost of goods sold through overproduction, and improving reported margins by reducing discretionary expenditures. Roychowdhury (2006) has further emphasized that the postponement of R&D, manipulation on the level of SG&A, offering temporary discounts, and lowering COGS can have a positive short-term effect on the company's bottom-line figures but can negatively affect firm value in the long-run.

Corporate Social Responsibility

CSR is one of the most researched topics around the world and would probably continue to be so because the business trend is not anymore about merely earning a profit for business owners but earning a profit while keeping the welfare of the entire community.

The Organisation for Economic Co-operation and Development (OECD, 2001) emphasized that corporate responsibility is the effective "fit" or "mutual dependence" between businesses and the society which are demonstrated through the actions taken by the businesses to nurture and enhance the symbiotic relationship it has with the society where it operates.

In the Philippines, CSR is described to be "hopeful, but developing" as the country is one of the fastgrowing economies among ASEAN-5 countries in 2013, and large businesses support CSR, but the general definition of CSR in the country is rather philanthropic and charitable and not responsible and sustainable (Taylor, n.d.). Giant corporations in the Philippines hold about 90% of the country's wealth and resources and it is good that the richest families owning these giant corporations are very much supportive of the welfare and interest of the Filipinos, especially for the underprivileged (Sison, 2016). A survey conducted in 2011 found that a favorable enabling environment remains in Philippine companies and "goodwill" is one main motivation for the companies to improve their CSR performance for business economics motives (Rimando, 2012).

Real Earnings Management and Corporate Social Responsibility

Earnings management and CSR have been interesting subjects for researchers for the past few years, noting that the two influence each other. The studies of Hong and Andersen (2011), Chih, Shen, and Kang (2008), Scholtens and Kang (2013), and Shafer (2015) documented that firms with high commitment to CSR are less likely to manipulate earnings. On the other hand, Almahrog, Marai, and Knezevic (2015) noted that there are mixed and contradictory results about the impact of EM on CSR, as such, they have presented two perspectives in their paper. The first perspective argues that firms with a strong commitment to CSR are less likely to manipulate their financial statements, whereas the second perspective emphasized that CSR can be used as an effective tool for managers to manipulate earnings.

Roychowdhury (2006) found substantial evidence that executives engage in earnings management. Rooted on the assumptions of the agency theory, the manager may devise some mechanisms of self-defense as an entrenchment strategy after reporting an unsatisfactory performance, and one of the strategies

is strengthening the company's CSR program (Prior et al. 2007; Rahmawati et al., 2014). The CSR activities contribute to the good image of the company (Orlitzky, Schmidt & Rynes, as cited by Rahmawati et al., 2014) which, strategy-wise, help the company in so many ways. Prior et al. (2007) has also found the existence of earnings management's positive influence on CSR, and noted that managers manage their company earnings for two reasons. First, to satisfy stakeholders' interest through CSR and avoid activism, and second, to use CSR as an entrenchment strategy hedging against disciplinary actions from shareholders.

Real Earnings Management, Firm Performance, and Firm Value

Studies documenting the association between earnings management and company performance are few, and results were inconclusive. Taylor and Xu (2010) found that real earnings management do not have, on average, significant negative effect on the subsequent operating performance of a firm. They justified their findings by its consistency with the study of Tan and Jamal (2005) where they argued that firms carefully evaluate the costs and benefits of real earnings management so as not to hurt future operating performances. The findings of Taylor and Xu (2010) and Tan and Jamal (2005) suggest that management does perform real earnings management; however, the manipulation is only up to the extent where the subsequent financial performance of the firm is not negatively affected. In a separate study conducted by Sutrisno (2017), it was found that real earnings management through manipulation on sales and discretionary expenses is positively associated with subsequent financial performance as represented by return on assets. However, Sutrisno (2017) also noted that although real earnings management can bring economic advantages to the firm for the current period, it can also bring several disadvantages on the operating performance of the company in the future and this has been proven by another study. Leggett et al. (2016) noted strong evidence that REM is negatively related to future financial performance in terms of return on assets. The findings of Leggett et al. (2016) is consistent with that of Farooqi et al. (2014) where they documented a strong negative relation between real earnings management and firm value and further noted that "shareholders suffer real economic losses from managers' endeavors to

use operational activities to manipulate earnings" (p. 149). This is also consistent with the arguments of Roychowdhury (2006) and Joosten (2012) about the future negative consequences of deviating from the normal business operations.

Corporate Social Responsibility, Firm Performance, and Firm Value

Literature is rich in linking CSR with financial performance and firm values. However, despite such extant abundant CSR literature, it is still unclear whether CSR actually enhances financial performance and firm value. Many studies documented the positive relationship of CSR with firm performance and firm value (Habbash, 2017; Jo & Harjoto, 2011; Lev, Petrovits, & Radhakrishnan, 2010), but there are also some studies arguing that CSR is negatively associated with firm performance and value (Price & Sun, 2017). Some studies even say that CSR has nothing to do with a firm's financial performance and value (Dagiliene, 2013; Surroca et al., 2009). Mediating relationships between CSR and firm performance have also been tested, such as the role of customer satisfaction in the relationship between the two. The CSR activities can enhance customer satisfaction and make them more willing to purchase or patronize a firm's products/or services. Under certain circumstance, CSR can lead to higher firm value because of customer satisfaction that mediates the relationship between the two (García-Madariaga & Rodríguez-Rivera, 2017).

Limited studies documenting the association between real earnings management and financial performance and value provide inconclusive results about whether REM enhances or damages financial performance and firm value. This study did not find any previous studies examining the role of CSR on the link of REM with financial performance and firm value. Moreover, no study has investigated the relationship between REM, CSR, financial performance, and firm value as a whole. It is in this context that this study can contribute — examine the mediating role of CSR on the relationship between (1) REM and financial performance and (2) REM and firm value.

Methods

This study is an explanatory research type. It covers all the companies listed in the Philippine

Stock Exchange (PSE), except financial institutions and holding firms, with annual reports published from the year 2010 to 2016. As of 2017, there are 324 public companies in the PSE and 33 of which belong to the Financial Sector and 59 are holding firms. However, this study sets some sampling criteria which yielded fewer samples. The companies must contain complete annual reports from 2009 to 2016 with complete necessary information (data were gathered from the year 2009 for lagging purposes). They also have to pass the REM testing (abnormally high/low CFO, abnormally high production costs, or abnormally low discretionary expenses) to qualify firms suspected of employing some REM practices. Applying the sampling criteria, this study yielded a final sample of 90 companies or a total of 450 observations.

Annual reports of companies from the year 2009 to 2016 were downloaded from COMPUSTAT and company websites to obtain information about the CSR practices and programs of the sample companies as contained in their disclosures. The checklist developed by (Habbas, (2017) based from International Organization for Standardization (ISO) (2014) Standard 26000 is used in this study to evaluate the CSR practices of the companies and develop CSR Indexes (CSRI). Manual content analysis is used to measure the CSR practices of the sample companies. The sample annual reports are analyzed and items that met the statement in the checklist are ticked 1 and 0 otherwise, then, CSRI is computed by getting the ratio of the actual social items disclosed in the reports to the maximum number of items contained in the checklist.

Deviations from normal business operations are termed in this paper as "abnormal operations" which were quantified by computing "abnormal operations cash flow," "abnormal productions costs," and "abnormal discretionary expenses" using the formula used by Roychowdhury (2006) and Rahmawati et al, (2014) in their papers. The estimated normal operations were deducted from the actual which yielded the estimated "abnormal operations" or the REM performed by the firm. The models are written as follows:

$$CFO_{t}/A_{t-1} = \alpha_{0} + \alpha_{1}(1/A_{t-1}) + \beta_{1}(S_{t}/A_{t-1}) + \beta_{2}(\Delta S_{t}/A_{t-1}) + \varepsilon_{t}$$
(1)

$$\begin{aligned} PROD_{t}/A_{t-1} &= \alpha_0 + \alpha_1(1/A_{t-1}) + \beta_1(S_{t}/A_{t-1}) \\ &+ \beta_2(\Delta S_{t}/A_{t-1}) + \beta_3(\Delta S_{t}/A_{t-1}) + \epsilon_t \end{aligned} \tag{2}$$

DISEXP_t/A_{t-1} =
$$\alpha_0 + \alpha_1(1/A_{t-1})$$

+ $\beta(S_t/A_{t-1}) + \varepsilon_t$ (3)

where CFO is the normal cash flows from operations, PROD is the normal production costs, DISEXP is the normal discretionary expenses, A_t is the total assets at the end of period t, S_t is the sales during period t, and $\Delta S_t = S_t - S_{t-1}$.

Several descriptive measures such as means, medians, and standards deviations are computed first to analyze the basic features of the sample companies. This study also used linear regression to run the models of Roychowdhury (2006) to estimate normal operations. Lastly,(SE) is used to test the hypotheses of this study. SEM is a powerful technique that is used to analyze relationships with observed and latent variables (Hox & Bechger, 2007). It is a useful advanced statistical analysis technique that combines factor analysis and regressions (Hair, Hult, Ringle, & Sarstedt, 2014).

Hair et al. (2014) noted two widely-used approaches to conduct SEM covariance based (CB-SEM) and variance-based partial least squares SEM (PLS-SEM). This study employed PLS-SEM for three main reasons: (1) there is little a priori knowledge on the role of CSR on the relationship between REM and financial performance and firm value; (2) data used in this study is not normally distributed; and (3) there are latent constructs with only one indicator variables.

Results

Real Earnings Management Performed by Philippine Public Companies

Tables 1 shows the actual, estimated normal, and abnormal operations of the sample companies in terms of cash flow from operations, production costs, and discretionary expenses for a five-year period, 2012–2016. The term "abnormally high" means that the actual cash flows from operations, productions costs, or discretionary expenses is higher than the estimated normal level, and "abnormally low" means the other way.

The sample companies had an average positive actual cash flow from operations of about ₱4.11 billion and estimated normal CFO of about ₱995 million. The figures may denote the presence of earnings management through sales by offering price discounts and having more lenient credit terms (Roychowdhury, 2006). The table also shows that the sample companies spent as much an average of ₱16.20 billion for the costs of the goods and services they produce. If we compare the actual productions costs of ₱16.20 billion with the estimated normal production costs of ₱15.3 billion, we may suspect that the companies may have performed earnings management through overproduction. The figures of the actual change in inventory of ₱184 million and normal change in inventory of ₱178 million denote overproduction because the companies have higher actual ending inventories. However, the actual COGS, which is higher than the estimated normal COGS, do not confirm the pattern on the change in inventory. It seems like there are other factors that affect the COGS in addition to overproduction which makes COGS to be abnormally higher than the normal.

Further, actual discretionary expenses (DISEXP) has a mean of ₱2.92 billion whereas the estimated normal DISEXP has a mean of ₱1.96 billion. This abnormally high discretionary expenses is not consistent with the hypothesis of Roychowdhury (2006) where he assumed that firms practicing real earnings management tend to have abnormally low discretionary expenses. This study suggests that the sample companies do not have real earnings manipulation done through discretionary expenses.

Corporate Social Responsibility of Philippine Public Companies

Table 2 shows the summary of descriptive statistics for the CSR index, financial performance, and firm value.

It can be seen from Table 2 that the sample companies have a mean of .37 which means that the Philippine public companies disclosed almost 40% of the checklist items. Further, the .88 maximum index computed means that some of the companies disclosed up to 88% of the checklist items, and 0 index implies that there are companies that do not disclose any CSR at all. Reporting social responsibility initiatives have become mandatory in the Philippines in 2012 as part of the Annual Corporate Governance Report (ACGR); however, some of the reports do not have contents

 Table 1

 Descriptive Statistics for Actual, Normal, and Abnormal Operations (In Philippine Peso)

Onesations	Variables							
Operations	CFO	COGS	COGS ChInv		DISEXP			
ACTUAL								
Mean	4,110,000,000	16,000,000,000	184,000,000	16,200,000,000	2,920,000,000			
Std. Dev.	10,300,000,000	45,800,000,000	1,940,000,000	45,900,000,000	7,370,000,000			
Min	(4,150,000,000)	0	(24,700,000,000)	(21,600,000,000)	0			
Max	80,400,000,000	462,000,000,000	13,000,000,000	463,000,000,000	62,700,000,000			
NORMAL								
Mean	995,000,000	15,100,000,000	178,000,000	15,300,000,000	1,960,000,000			
Std. Dev.	2,590,000,000	35,900,000,000	1,180,000,000	36,300,000,000	4,660,000,000			
Min	(3,920,000,000)	(3,568,083)	(14,700,000,000)	(576,000,000)	1,844,627			
Max	33,800,000,000	305,000,000,000	17,700,000,000	307,000,000,000	39,600,000,000			
ABNORMAL								
Mean	3,110,000,000	901,000,000	5,515,774	907,000,000	960,000,000			
Std. Dev.	9,200,000,000	15,300,000,000	1,900,000,000	15,100,000,000	5,410,000,000			
Min	(31,900,000,000)	(52,300,000,000)	(24,600,000,000)	(52,900,000,000)	(32,600,000,000)			
Max	74,000,000,000	157,000,000,000	15,100,000,000	156,000,000,000	41,600,000,000			

No. of observations = 540 (2011–2016)

 Table 2

 Descriptive Statistics for CSR, Financial Performance, and Firm Value

Variable	Obs	Mean	Std. Dev.	Min	Max	
CSRI	450	0.3657516	0.2452476	0	0.8823529	
ROE	450	0.0228963	0.8422147	-16.13865	2.332255	
ROA	450	0.0413857	0.0869121	-0.4566843	0.5506791	
EPS	450	17.12697	129.504	-6.2118	1981.339	
TQ	450	1.715418	1.757133	0.16	19.62146	

 $CSRI = CSR \ Index, \ ROE = Return \ on \ Equity; \ ROA - Return \ on \ Assets; \ EPS = Earnings \ per \ Share; \ TQ = Tobin's \ Q$

^{*}Normal operations are estimated using the formula of Roychowdhury (2006) developed from Dechow (1998). The coefficients used are presented in Appendix

under the CSR Initiatives section or are noted to be still under company considerations. Despite the mandatory reporting of CSR initiatives, there are public companies that do not disclose their CSR activities.

Structural Equation Modeling Results

This study employed SEM using SMART PLS, and Table 3 shows the summary of the results and the following subsections discuss the results based on the table.

The results shown in Table 3 suggest that real earnings management through manipulation on cash flows from operations, productions costs, or discretionary expenses has a significant influence on corporate social responsibility. Thus, we reject H0_{1.1}. Further, looking at the positive coefficient of 0.413, it seems that as the company employs more REM practices. There is also a corresponding increase in the CSR activities of the company. This result is

consistent with the findings of Prior et al. (2007) about the positive influence of REM on CSR. This implies that companies may, in fact, engage in socially responsible activities and projects. However, the purpose is not purely to extend help and services to the community but motives that are still founded on economic objectives of the company. The fulfillment of such economic objectives can be through increased sales, continued customer patronization, and some discounts granted by suppliers because of the good image and reputation built through CSR, while at the same time, the management is trying to shield the real earnings management they have performed. On the other side, when the management performs REM, it could be beneficial to the community when CSR is used to shield such REM as it means more social activities are extended to larger stakeholders.

Table 3 shows that REM is negatively associated with financial performance in terms of ROE, ROA, and

Table 3Structural Equation Modeling Results for the Role of Corporate Social Responsibility on the Link of Real Earnings Management with Financial Performance and Firm Value

Madala	Coef	Confidence Intervals		T C4 - 4 * - 4 *	D.Valaas	
Models		2.5%	97.5%	T Statistics	P Values	
Direct Relationship (N = 450)						
$H0_{1.1}$: REM -> CSR	0.413	0.359	0.470	14.082	0.000	***
H0 _{1.2} : REM -> FP	-0.017	-0.062	0.256	0.179	0.858	
$H0_{1.3}$: REM -> FV	0.034	-0.016	0.107	1.125	0.261	
$H0_{1.4}$: CSR -> FP	0.212	0.036	0.300	3.452	0.001	***
H0 _{1.5} : CSR -> FV	0.010	-0.105	0.099	0.196	0.845	
Mediating Relationship (N = 450)						
$H0_{2.1}$: REM -> CSR -> FP	0.088	0.014	0.132	3.265	0.001	***
$H0_{2,2}$: REM -> CSR -> FV	0.004	-0.041	0.043	0.193	0.847	
Model Fit Summary						
SRMR	0.033					
Chi-Square	10.554					
NFI	0.984					

^{*}REM – Real Earnings Management; CSR – Corporate Social Responsibility; FP – Financial Performance; FV – Firm Value; SRMR - Standardized Root Mean Square Residual; NFI - Normed Fit Index or Bentler and Bonett Index

EPS as evidenced by the negative coefficient of 0.062.; However, the association is not significant (p > 0.05); thus we fail to reject $H0_{1.2}$. This result is consistent with the findings of Taylor and Xu (2010) where they noted that, on average, REM does not have a significant negative effect on firm performance. Supported by the study of Tan and Jamal (2005), Taylor and Xu (2010) suggested that the management weighs and evaluates the costs and benefits of using REM so as not to negatively affect financial performance.

This study fails to reject $\mathrm{H0}_{1.3}$ (p > 0.050) and concludes that REM has a direct negative relationship with firm value in terms of Tobin's Q, but such a relationship is insignificant. This study provides evidence that REM has no significant relationship with firm value and that the employment of REM techniques does not affect the value of the firm. The result supports the arguments of Tan and Jamal (2005) that the management carefully evaluates the advantages and disadvantages of using REM to avoid hurting the value of the firm.

This study found strong evidence to reject H0_{1.4} and conclude that CSR is positively and significantly associated with financial performance in terms of ROE, ROA, and EPS. The positive and significant relationship found suggests that improvement in the company's CSR causes increased financial performance (positive coefficient of 0.212). Results of this study contribute to the literature documenting the positive relationship between CSR and financial performance (Habbash, 2017; Lev et al., 2010). It seems that for a country where CSR is hopeful and still developing (Taylor, n.d.), social responsibilities and performance of a company already play significant roles in enhancing company performance. This significant and positive relationship between CSR and financial performance can be an inspiration for companies to extend more to the community and their stakeholders at large, and at the same time, an avenue towards improved economic performance.

This study also fails to reject $\mathrm{H0}_{1.5}$ because results suggest that CSR has no significant direct relationship with firm value (p > 0.05). This result could be a manifestation of the timing difference in measuring Tobin's Q. This study used the market value of the companies at year-end where there is no financial information leakage yet, and the market does not know how the firms performed financially. Hence, the market value of the companies did not entirely capture

the effects of CSR on firm value. Ideally, the market value of the companies should have been measured on the date of the issuance of the financial statements. Hopefully, future studies will address this issue.

The Mediating Role of Corporate Social Responsibility on the Link of REM with Financial Performance and Firm Value

Result in Table 3 suggests that REM has no direct association with financial performance, only an association mediated by CSR. The management performed earnings management through manipulation on cash flows from operations (such as offering more discounts and lenient credit terms) or production costs (overproduction) and used CSR to shield the REM which improved the financial performance of the companies. The significant direct relationships found in this study proves that REM enhances CSR and CSR enhances financial performance, and now the path from REM to CSR to financial performance is also found to be significant. This result implies that REM is beneficial not just to the company but also to the community. REM enhances CSR (which is good for larger stakeholders), and this association has positive effects on the company's financial performance. This study provides evidence of the benefits of performing REM.

The REM triggered the increased CSR activities which ultimately reflected on the financial performance of the companies. The CSR that shields the REM could have improved the financial performance of the companies through increased sales, customer patronization, and purchase discounts. The management can establish a good company image that may gratify the community and at the same time improve the bottom-line benefits (Tsoutsoura, 2004; Zeng, 2016).

Results of this study are consistent with the assumptions of the agency, legitimacy, voluntary disclosure, and stakeholder theories. This study is founded on the suspicion that the managers of the corporation perform REM and use CSR to shield the manipulation; however, results show not the burden of agency costs on the part of the stakeholders of the corporation but a good principal-agent relationship instead. The management may have used CSR to shield REM or entrench themselves and avoid disciplinary actions from shareholders, but they made sure that it does not negatively affect the financial performance of the firm. In fact, financial performance is enhanced.

Thus, on one perspective, the agent (management) still acts on behalf of the principal (shareholders). In addition, the firms disclosed their CSR information to mitigate information asymmetry and show that they have good social performance. Lastly, the result is consistent with the assumptions of both instrumental and normative stakeholder theory. The management used REM to achieve certain ends and CSR to shield their REM or for entrenchment purposes while balancing the interests of the stakeholders. The management also recognized CSR as part of the moral and philosophical guidelines which are necessary for the corporation to effectively function as a social institution.

Table 6 also shows that there is a positive relationship between REM and firm value when mediated by CSR as proven by the positive coefficient of 0.004, but the relationship is insignificant (p > 0.05). Thus, this study fails to reject $H0_{2,2}$ and provides evidence that CSR is not a mediator variable between REM and firm value. As previously noted, this insignificant path from REM to CSR to firm value could be attributed to the timing difference in measuring the Tobin's at year-end, which could be addressed by future studies.

Discussion

This study primarily investigates the role of CSR on the link between (1) REM and financial performance and between (2) REM and firm value. It examined 90 publicly listed companies in the Philippines for a five-year period from 2012 to 2016. REM is evaluated through deviations from normal operations which is termed as "abnormal" operations. The models developed by Roychowdhury (2006), based on Dechow, Kothari & Watts (1998), was used to estimate normal operations. The checklist used by Habbash (2017), based on ISO 26000, is used in this study to develop CSR indices for the sample companies. Financial performance is proxied by return on equity (ROE), return on assets (ROA), and earnings per share (EPS), whereas the firm value is represented by Tobin's Q. All financial data were gathered from COMPUSTAT.

Structural equation models were developed to illustrate the entire relationships between REM, CSR, financial performance, and firm value, and the model is analyzed using SMART PLS.

This study found that the REM employed by the public companies in the Philippines has been focused more on manipulating cash flows from operations evidenced by the abnormally high CFO. Lesser REM, through production costs and discretionary expenses, were performed by the companies as seen in the abnormally high ending inventories, high COGS, and high discretionary expenses. This study also notes that despite the mandatory reporting of CSR initiatives in the Philippines, there are companies that do not disclose CSR. There are firms that disclosed their conduct of CSR on different areas and dimensions, but the impact of their disclosures is not enough to counter the low and non-disclosures of most of the sample companies.

The relationship between REM and CSR is the first direct relationship tested in this study. Results found that as the REM increases, the CSR of the companies is also improved, suggesting that CSR is used to shield the REM performed by the management. On the other side, this result provides evidence that when the management performs REM, it could be beneficial to the community if CSR is used to shield the REM employed as it means more social activities extended to larger stakeholders. Further, results also show the insignificant association of REM with financial performance which means that the management may have carefully evaluated the advantages and disadvantages of performing REM so as not to negatively affect financial performance. The insignificant relationship between REM and firm value could be due to the timing difference in measuring Tobin's Q at year-end.

Further, this study found strong evidence that CSR enhances the financial performance of a firm in terms of ROE, ROA, and EPS. It seems that for a developing country, like the Philippines, where CSR, in general, is at its hopeful stage, the fulfillment of the social responsibilities of the corporations already contribute to financial performance. The positive and significant relationship between CSR and financial performance reveals the corporations as social institutions where the company itself and the society work together to benefit each other. The gratification given by the corporations to the society is compensated with improved financial performance. Such gratification could be in the form of increased sales, continued customer patronization, and some discounts from suppliers.

This study found that CSR mediates the relationship between REM and financial performance but not between REM and firm value. A good principal-agent relationship is shown as the management used REM while improving the financial performance of the firm and not hurting firm value. The companies used REM and CSR to shield such and avoid disciplinary actions from shareholders while balancing the interest of the firm's stakeholders. The companies also included CSR as part of the moral guidelines necessary for them to function as a social institution. The increased CSR as a tool to shield REM and the significant association between CSR and REM have improved the financial performance of the companies. This result shows that REM can be used to benefit the community and at the same time fulfill some financial objectives of the firm as corporate social responsibility is used by the management not just to shield REM but also to improve the company's financial performance.

Future studies may include nonpublic companies and investigate not just on REM but on accrual-based earnings management as well. The efficient perspective of earnings management may also be explored. Further, an improved version of CSR checklists can be used in conducting manual analysis like checklists on from the instruments used by the OECD. Moreover, in addition to gathering information from the company's annual reports and websites, future researches may also include actual verification of CSR activities to determine the veracity of disclosures. Verification may include observation, interviews, and additional surveys.

Further, future studies may consider having more indicator variables for firm value and CSR. Book- and market-based values may also be included as indicator variables for firm value. Market value may also be measured on the date the financial statements are issued. Social disclosure and performance may also be separated in two—social disclosure being the CSR initiatives disclosed by the corporation in their annual reports and social performance measured from the feedbacks of both the corporation and its stakeholders.

Ethical clearance:

The study was approved by the institution.

Conflict of interest:

None.

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