

## Article

# Doing Good with Creative Accounting? Linking Corporate Social Responsibility to Earnings Management in Market Economy, Country and Business Sector Contexts

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**Abstract:** The mandate of doing good with earnings management has been a subject of inconclusive findings from the past literature and leave issues on the benefits of socially responsible activities and financial reporting of the company. This study investigates the effects of corporate social responsibility (CSR) on accrual-based (AEM) and real-activities earnings management (REM). This study hypothesized that the trade-off exists between these two earnings management strategies, in light of increasing attention of CSR among Asian firms. In addition, this study examines whether the performance of firms in socially responsible activities exhibit different patterns of effect across the two measures of earnings management under the market economy, country, and business sector contexts. This study contemplates on 3906 firm-year observations from 2011 to 2017 of eleven countries in Asia. Our findings show that CSR conceals AEM while it constrains REM. These effects vary according to the market economy classifications, country, and business sector types. Each market, country and business sector has different standpoints in implementing CSR activities and earnings management relevant to the culture, macroeconomic considerations and demands from the stakeholders. Lastly, the discernment on the relevance of building corporate citizenship on financial reporting transparency is elaborated.

**Keywords:** corporate social responsibility; earnings management; asian market economies; business sectors; sustainability

## 1. Introduction

Investors, employees, the community, and other stakeholders have strong demands for consistent and greater transparency of all business aspects [1]. Recent accounting and financial scandals have resulted in a loss of confidence among firms, leading them to adopt more socially responsible patterns of corporate conduct as a protective shield against disciplinary actions and security of the firm's reputation. This instance is one of the main reasons why corporate social responsibility (CSR) awareness and engagements are trending topics in business [2].

The demand for transparency puts the managers under great pressure to address business issues and serve the interests of all stakeholders while maximizing their economic performance [3]. This

is a scenario where business firms do good through CSR activities, while they engage in creative accounting or earnings manipulation. CSR is the firms' corporate citizenship based on the demand for environmental protection, social engagements, and the emphasis of corporate governance [4]. On the other hand, earnings management or creative accounting is the purposeful intervention in the external financial reporting process, with the intention of obtaining some private gain [5]. Specifically, "it occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes which depend on reported accounting numbers" [6]. Management is motivated to conduct creative accounting from the pressure of meeting financial expectations of the company.

The mandate of doing good with earnings management has been the subject of contradicting views from past literature and leave issues on the benefits of socially responsible activities and financial reporting of the company. Prior studies provide evidence suggesting at the constraining role of CSR on earnings management [1,7–9]. However, there are studies proving the opportunistic and concealing role of CSR on earnings management [10–12]. The inconsistency in the mentioned relevant literature creates a good opportunity to systematically investigate the relationship between CSR and earnings management with detailed considerations and measurements.

To fill the gaps in the literature, the important neglecting factors from past literature are contemplated, like the lack of sufficient theoretical support, the use of different types of earnings management and varying methods of measuring CSR [13]. This study contemplates on the role of building corporate citizenship on earnings manipulation. Specifically, the impact of CSR on earnings management in Asia is investigated. This study reflects on the two types of earnings management: Accrual-based and real-activities earnings management. Most of the prior studies utilized managerial discretion through accrual-based earnings management (*AEM*) and a few studies on real-activities earnings manipulation (*REM*). *AEM* is a change in the accrual process while *REM* is a deviation from normal business activity [14].

Moreover, this study investigates the effects of CSR on earnings management in Asia under three contexts: The market economy classifications, country, and business sector types. Existing research on these issues mainly deal with the Western context and a few studies reflect on the Asian markets. Asia has a different outlook in implementing CSR activities compared to Western markets. Cheung, Tan, Ahn and Zhang [15] discussed that in comparison to listed firms in Western markets, firms in Asia are more illiquid. In addition, the separation of management and ownership is seldom seen with the greater non-transparent family ownership firms [8,15,16]. In addition, it is described as a region with relatively poor corporate governance [17]. The countries of Japan, Hong Kong, and Singapore are developed market economies in Asia, while Taiwan, South Korea, India, China, Malaysia, Singapore, Philippines, Thailand, and Indonesia are categorized as emerging market economies [18]. The emerging Asia remains the most dynamic region in the world and the strengthening of regional ties can play a key role in sustaining growth and building new opportunities for trade, investment and development in Southeast Asia, China and India [19]. The study of firms from each Asian country leads to a cross-border analysis of CSR and earnings management relationships relevant to culture. Moreover, this study analyzes the effects among sectors such as the financial, industrial, consumer services, technology, basic materials, consumer goods, utilities, health care, resources, and telecommunications services based on the sector codes from Thomson Reuters ESG database. This conjecture is relevant and important in investigating the effect of CSR in the sector level because its component may vary from one sector to another [20].

The remainder of the paper is organized as follows: The relevant literature is briefly discussed and the hypotheses are developed in Section 2. In Section 3, the methodology applied in this study is expounded. Section 4 presents the empirical results. Section 5 presents the discussions. Lastly, this study summarizes and concludes in the sixth section.

## 2. Literature Review and Hypotheses Development

Managers have an option to take advantage and be benefited from the manipulations of accounting information [5]. Earnings management is an intentional practice motivated from the opportunistic and/or informative objectives, carried out by the management to present attractive financial information, different from the actual results [21]. Some of the techniques used by managers to manage earnings include big bath charges, cookie jar reserves, and revenue recognition [22]. Big bath is a strategy which makes unfavorable results look even worse to make future financial performance favorable. Cookie jar accounting is usually utilized by companies to disentangle the effect of volatility in financial performance. Revenue recognition is the most common earnings management technique since a recognition basis, under generally accepted accounting principles (GAAP), is mostly general and indefinite. It is a principle which determines the specific conditions in which revenue is recognized or accounted for.

The corporate social behavior of the company contributes its positive image to its stakeholders. CSR is an act of doing good by firms to environment, social, and corporate governance [5]. The World Business Council for Sustainable Development defined CSR as “the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large” [23]. CSR is also linked to innovation. Yun and Liu [24] explained that innovation is an essential element to establish and strategically maintain an organization. This ensures sustainability and profitability caused by the enhanced competitive advantage of the company [24]. Recently, sustainability has an increasing demand from the firms’ stakeholders due to wide concern on the effect of the business on resources, the environment, and society [24].

Open innovation supports sustainability and continuity through the compliance of social requirements, culture creation, policy support, a green economy, responsibility, and technological advancement [24]. Yun, Won and Park [25] mentioned that “a modern economy can be modeled as Entrepreneurial Cyclical Dynamics of Open Innovation with three sub-economies such as market open innovation by SMEs and start-ups, closed open innovation by big business, and social open innovation.” According to its cyclical relationship, market open innovation causes an increase in developing big companies which conduct close open innovation [25,26]. Social open innovation will grow through the firms’ engagement on socially responsible activities, such as donations to the community and solving social problems [25]. Yun [26] explained that a closed innovation economy and the social innovation economy are the important requisites of CSR.

A firm is the basic agent of open innovation [27]. Yun, Won and Park [27] mentioned that corporate actions are based on the independent judgment of the firm, which can influence stakeholders and be influenced by the stakeholders. Aside from the benefits of socially responsible behavior of firms on open innovation, the true motive of doing CSR activities remains an unresolved issue. Innovation requires the firms’ engagement in CSR programs. However, firms are also facing a high demand for transparency. This issue puts the managers under great pressure to address business issues and serve the interests of all stakeholders while maximizing their economic performance [3], and the basis for creative accounting. Throughout the years, a vast amount of research in CSR, accounting, and ethics literature has found evidence on the impact of CSR on earnings management [1,7–12].

### 2.1. Opportunistic Effect of CSR on Earnings Management

A conflict of interest between the shareholders and managers is the main notion emphasized in agency theory [28]. Agency problems caused a stronger impact in the proportion of outside directors and CEO duality on earnings management [29]. Paiva et al. [30] explained the two types of agency problems: Type I and Type II agency problems. Type I explains the distinction between ownership and control which is relevant to the explanation of Jensen and Meckling [28], an issue common to USA. On the other hand, a Type II agency problem originates from the conflict between controlling and non-controlling shareholders, common in less developed countries [31]. Paiva et al. [30]

mentioned that the outcomes of these two agency problems are incentives and disincentives for accounting transparency and earnings management practice. In addition, Borralho, Vázquez and Hernández-Linares [32] explained that family business status mitigates the two agency problems.

Previous studies provide evidence that a firms' engagement with CSR activities manifest managerial opportunistic behavior which has caused a conflict of interest and managerial benefits at the expense of shareholders [33]. The declaration by the firms that they are a CSR engaged entity with an active program on social and environmental activities, caused a perception from stakeholders that their firms have integrity and transparency, organized by competent managers [34]. Cespa and Cestone [10] explained that socially responsible engagements of firms are effective entrenchment strategies for inefficient CEOs while Prior et al. [12] mentioned that CSR and earnings management have positive connections which damage the collective interests of stakeholders. Managers tend to smooth income to lessen the income discrepancy reported in the financial statements to gain personal or contractual advantages [35]. Moreover, Chih et al. [11] conjectured that socially responsible firms have high-level of earnings aggressiveness. The earnings management scheme of public companies is motivated from the managers' market and contractual factors [35].

## 2.2. Stakeholder's Effect of CSR on Earnings Management

Under the stakeholder's theory, the implementations of company policies and strategies should satisfy not just shareholders, but also include the workers, customers, suppliers, and community organizations [36]. The moral and ethical dimensions of this theory are affirmed in the foundation of CSR. Socially responsible activities build citizenship culture among the stakeholders' satisfaction and create positive outcomes for the enterprise [37]. Landry, Deslandes and Fortin [23] conjectured that the firm's corporate social behavior is an avenue to achieve a positive reputation to its stakeholders. Hence, the firms engaged in socially responsible practices create healthy and long-term relationships with the stakeholders through stable performances and sustainable development [13]. Other prior studies reveal that the engagement of firms towards socially responsible activities are used to constrain earnings management, promote a good image to the stakeholders and deliver high-quality accounting reports. The firms with a strong commitment to socially responsible practices are less involved in earnings manipulations, as it is unethical to the majority [38]. Kim et al. [1] explained that the management's moral obligations and ethical values lead them to refrain from managing earnings. CSR builds a corporate culture of ethical and moral commitment to producing high-quality financial information.

## 2.3. AEM and REM Trade-Off

The inconclusive evidence from prior studies is associated with different methods in estimating earnings management. Earnings management can be categorized into two aspects: Accrual-based earnings management (AEM) and real-activities earnings management (REM). Healy and Wahlen [6] explained that managers applied AEM with biased estimates to conceal the real economic performance. AEM is a change in the accrual process, while REM is a deviation from normal business activity [14]. Roychowdhury [39] defined REM as management actions that are not in line with normal business practices and with the main objective of meeting certain earnings thresholds. It also reduces the firm's value in the future resulting from reprehensible attitudes from the stakeholders [40]. Real-activities manipulation may cause different problems, such as high uncollectible accounts, an increase in the carrying costs of inventories, and less competitive advantages in the future. Gunny [41] argued that the relative high cost of implementing REM strategies can be outperformed when a firm reaches its target earnings threshold. Prior studies revealed that managerial discretion is the most common strategy employed by the company in earnings management based on opportunistic behavior.

Zang [42] explained that there is a trade-off between discretionary accruals and real-activities operating decisions based on the relative cost adhered to these strategies. Bozzolan et al. [43] investigated whether the CSR orientation of a firm affects its reporting incentives from 5863 firm-year observations based on 1141 unique firms, covering 24 different countries from year 2003 to 2009. Their

study revealed that CSR-oriented firms are less likely to engage in REM than in AEM. Their study suggested that the CSR orientation acts as a constraint for REM and in doing so, contributes to the value creation of the company. Similarly, Jordaan, De Klerk, and de Villiers [40] investigated the relationship among CSR performance, CSR disclosures and earnings management through real-activities earnings manipulation and accrual-based earnings management of listed South African companies. Their study divulged that firms with better CSR performance are more likely to engage in earnings management by income-increasing discretionary accruals. On the other hand, the firms with better CSR performance are less likely to engage in REM, suggesting that managers utilize accrual-based earnings manipulation more than managing earnings through actual company resources. In addition, the firms with CSR disclosure are less engaged in income decreasing discretionary accruals.

This study contemplates the trade-off effects of CSR on AEM and REM, considering agency theory and stakeholder's theory, respectively. First, this study conjectures that firms in Asia with high-CSR engagements, take the opportunity to utilize discretionary accruals as a strategy for earnings manipulation and conceal the authentic performance of the company. Hence, the authors developed the following hypothesis:

**Hypothesis 1 (H1).** *CSR ratings have significant and positive effects on AEM.*

On the other hand, the authors conjecture that CSR engagements of the firms from Asian markets constrain their involvement on real-activities earnings manipulation as a substitute for discretionary accruals and build citizenship culture among the stakeholders. REM consists of three residuals: Abnormal cashflow from operations, abnormal production costs, and abnormal discretionary expenses [39]. Roychowdhury [39] and Cohen, Dey and Lys [44] explained that a low abnormal cashflow from operations and abnormal discretionary expenses may indicate a higher REM because they increase company sales that may not have been realized in cash, resulting in a lower accounting quality. In addition, a higher abnormal production may indicate a higher REM due to the overproduction of inventories resulting in a lower accounting quality. Lastly, when the combination of these three residuals of REM result in a higher (positive) value, it indicates lower earnings management resulting in a higher accounting quality. Hence, the authors developed the following hypothesis:

**Hypothesis 2 (H2).** *CSR ratings have significant and positive effects on REM.*

This study tests three additional hypotheses based on the market economy classifications, country, and business sector types. This approach addresses the inconclusive findings from past literature and differentiates the effects among different contexts for better cognizance of the phenomenon.

Li et al. [45] mentioned that there is extensive research regarding the application of CSR of firms in the developed market economies, while less is known about the implementation of CSR of firms in the emerging market economies. The firms from emerging markets implement CSR less than developed markets [46] due to the slow progress of its economic state [47]. Nowadays, CSR has become increasingly relevant to firms from both market economies. Previous studies contemplated the extent of the benefits which CSR can offer to firms in a specific market economy. In addition, each market considers different demands from its stakeholders and approaches in dealing with creative accounting. The authors conjecture that the relationship between CSR and earnings management of each market classification causes different findings. Hence, the authors developed the following hypothesis:

**Hypothesis 3 (H3).** *The relation of CSR on earnings management (AEM and REM) differs between developed market economies and emerging market economies.*

Chapple and Moon [48] mentioned that CSR varies from different countries which is explained by the penetration, extent, and profile as indicated by CSR ratings and issues. In addition, they mentioned that CSR can be perceived better through national factors, such as public policy profiles and national



business systems. The application of CSR includes typical charitable activities, voluntary works and business models which are influenced by diverse cultures of different countries in Asia [49]. For instance, Sharma [49] mentioned that Taiwan is known with its CSR supply chain, Thailand with sufficient economy, while Indonesia is known to its *gotong royong* CSR. The authors conjecture that the relationship between CSR and earnings management of each country identified in this study causes different findings. Hence, the authors developed the following hypothesis:

**Hypothesis 4 (H4).** *The relation of CSR on earnings management (AEM and REM) varies among countries in Asia.*

Jo and Na [50] explained that CSR reveals specific features depending on the sectors where a particular firm belongs, considering the different demands from the different stakeholders. CSR can be used as a strategic approach to conceal the true business operation [51]. El Ghouli, Guedhami, Kwok and Mishra [52] explained that CSR influences the cost of equity capital for each sector. The implementation of CSR programs in other sectors does not truly depict its purpose as part of the firms' core business to reduce the negative impacts and unfavorable public perception [50]. The authors conjecture that the relationship between CSR and earnings management of each business sector identified in this study causes different results. Hence, the authors developed the following hypothesis:

**Hypothesis 5 (H5).** *The relation of CSR on earnings management (AEM and REM) varies among business sectors in Asia.*

### 3. Research Methodology

#### 3.1. Data and Sample

This study utilized the standardized CSR index available from a secondary database with strong data consistency and biased opinion elimination through a scale-based rating of CSR disclosure. The Thomson Reuters ESG (Environment, Social, and Governance) index was used which covers the enhanced strategic ESG framework with minimal biases towards firm size and transparency in replacement to the existing ASSET4® Equal Weighted Ratings (EWR) [53]. It evaluates dimensions including the management, shareholders, CSR strategy, workforce, human rights, community, product responsibility, resource use, emissions and innovation based on company-reported non-financial information from publicly available data, such as sustainability reports, financial reports, and company websites [53]. An overall ESG combined score was further calculated which discounted the ESG score for news controversies that materially impacted the corporations. The scope of these controversies is composed of disputes across the 10 category scores from the environment, social and governance pillars.

This study used the firms listed in the Thomson Reuters ESG database and reflected on the firms from 11 countries in Asia. An initial sample of 753 firms from 2011 to 2017 was obtained after matching the CSR data with the Thomson Reuters Eikon database. This study excluded 195 financial firms due to their different approaches in the accrual method. This study examined a final sample of 558 firms from 11 countries with 3906 firm-year observations with sufficient information to determine the discretionary accruals, the estimates for real activities manipulation and the control variables.

The sample size was split into 270 firms from developed market economies with 1890 firm-year observations and 288 firms from emerging market economies with 2016 firm-year observations. Individually, this study examined the phenomenon with 1554 firm-year observations from Japan, 574 firm-year observations from Taiwan, 420 firm-year observations from South Korea, 315 firm-year observations from China, 343 firm-year observations from India, 175 firm-year observations from Hong Kong, 161 firm-year observations from Singapore, 203 firm-year observations from Malaysia, and 161 firm-year observations from Philippines, Thailand, and Indonesia. The last three countries were categorized as others because these are composed of a small number of firm-year observations.

Moreover, the firms were classified per sector according to Thomson Reuters Business Classification (TRBC). These include resources, basic materials, industrials, consumer services, consumer goods, health care, technology, telecommunications services and utilities. The resources sector consisted of 161 firm-year observations from industries such as oil and gas, oil and gas related equipment and services, coal, and renewable energy. The basic materials sector consisted of 595 firm-year observations from industries such as chemicals, paper and forest products, metals and mining, containers and packaging, and construction materials. The industrials sector consisted of 966 firm-year observations from industries, such as aerospace and defense, machinery, equipment and components, commercial services and supplies, industrial conglomerates, commercial services and supplies, transportation, ground, transport infrastructure, air freight and courier services, construction and engineering, diversified trading and distributing, marine services, and airline services.

Moreover, the consumer services sector consisted of 833 firm-year observations from industries, such as automobiles and auto parts, textiles and apparel, household goods, hotels and entertainment services, diversified retail, media and publishing, specialty retailers, homebuilding and construction supplies, and leisure products. The consumer goods sector consisted of 350 firm-year observations from industries, such as personal and household products and services, food and tobacco, food and drug retailing, and beverages. The health care sector consisted of 161 firm-year observations from industries, such as pharmaceuticals, biotechnology and medical research, healthcare equipment and supplies, and healthcare providers and services. Furthermore, the technology sector is composed of 406 firm-year observations from industries, such as computers and office equipment, semiconductors and semiconductor equipment, software and information technology services, communications equipment, computers, phones and household electronics, and electronic equipment and parts. Lastly, the telecommunications services sector is composed of 182 firm-year observations, while utilities the sector is composed of 252 firm-year observations from industries, such as electric utilities, multiline utilities, natural gas utilities, and water and other utilities.

### 3.2. CSR Ratings

This study contemplates the environment and social pillars of CSR with seven relevant dimensions, such as the workforce, human rights, community, product responsibility, resource use, emissions and innovation. The majority of these dimensions have also been used in the study of Kim, Park and Wier [1]. Their study used the aggregate net strength scores of each dimension after deducting the relevant concerns. However, their study utilized KLD data which is one of the most influential sustainability reports, especially in the US stock market [54]. On an international level, Thomson Reuters ESG database has an extended coverage, including the developed and emerging markets in Asia. This database was also considered in the study of Miralles-Quirós, Miralles-Quirós and Gonçalves [54], Aouadi and Marsat [55], Garcia, Mendes-Da-Silva and Orsato [56], Velte [57], and Tangjitprom [58]. The present study utilized the aggregate CSR rating based on the arithmetic average of the scores on environmental and social pillars. Corporate governance was excluded to disentangle its effect on the overall CSR computation [1]. Bergstresser and Philippon [59] mentioned that corporate governance and CSR are two distinct constructs widely used to explain earnings management. These two variables could be negatively associated based on the manager's motivation [1]. This conjecture has been supported from the results of Shen and Chih [60] that well governed firms were less engaged in earnings management.

### 3.3. Earnings Management Measures

This study utilized the discretionary accruals as first proxy measures of earnings management. The authors used the residuals from the annual cross-sectional regression model as estimates of the firm *i*'s discretionary accruals following DeFond and Subramanyam [61], and Kim et al. [1], based on the Jones model modified and developed by Dechow, Sloan and Sweeney [62]. The total accruals were based on the difference between the change in revenues and the change in receivables, the level of

property, plant and equipment, and cash flow from the operation scaled by lagged total assets for each year. This model is illustrated below:

$$TA_{i,t}/A_{i,t-1} = \alpha + \beta_1 (1/A_{i,t-1}) + \beta_2 (\Delta REV_{i,t} - \Delta REC_{i,t})/A_{i,t-1} + \beta_3 PPE_{i,t}/A_{i,t-1} + \beta_4 CFO_{i,t}/A_{i,t-1} + \epsilon_{i,t} \quad (1)$$

where discretionary accrual is computed as the residual ( $\epsilon$ ),  $TA$  is profitless cash flows from operations scaled by total assets at  $t - 1$ .  $\Delta REV$  is the change in revenue from the prior to the current year scaled by the total assets at  $t - 1$ ,  $\Delta REC$  is the change in trade receivables from the prior to the current year scaled by the total assets at  $t - 1$ ,  $PPE$  is the book value of the property, plant and equipment at the year-end scaled by the total assets at  $t - 1$ , and  $CFO$  is the cash flows from operations scaled by the total assets at  $t - 1$ .

This study also reflects on the real-activities earnings manipulation as a second proxy measure of earnings management. Roychowdhury [39] developed a widely accepted model to measure  $REM$  from three indicators namely: Abnormal levels of cash flows, production costs and discretionary expenses. Models for each indicator estimates include  $CFO_{i,t}/A_{i,t-1} = \alpha_1 + \beta_1^1(1/A_{i,t-1}) + \beta_2^1(S_{i,t}/A_{i,t-1}) + \beta_3^1(\Delta S_{i,t}/A_{i,t-1}) + \epsilon_{i,t}^1$  for abnormal cash flow from operation;  $PRD_{i,t}/A_{i,t-1} = \alpha_2 + \beta_1^2(1/A_{i,t-1}) + \beta_2^2(S_{i,t}/A_{i,t-1}) + \beta_3^2(\Delta S_{i,t}/A_{i,t-1}) + \beta_4^2(\Delta S_{i,t-1}/A_{i,t-1}) + \epsilon_{i,t}^2$  for abnormal production cost; and  $EXP_{i,t}/A_{i,t-1} = \alpha_3 + \beta_1^3(1/A_{i,t-1}) + \beta_2^3(S_{i,t-1}/A_{i,t-1}) + \epsilon_{i,t}^3$  for abnormal discretionary expense. These estimates are computed as the residual( $\epsilon$ ),  $CFO$  is the cash flow from operations,  $PRD$  is the sum of cost of sales and change in inventory from prior to current year,  $EXP$  is the sum of research and development and advertising expenditure,  $A$  is total lagged assets,  $S$  is sales for the year,  $\Delta S$  is change in sales from prior to current year. The model for the combined  $REM$  is presented below:

$$REM_{i,t} = AB\_CFO_{i,t} - AB\_PRD_{i,t} - AB\_EXP_{i,t} \quad (2)$$

where  $REM$  is the combined real-activities manipulation,  $AB\_CFO$  is the abnormal cash flow,  $AB\_PRD$  is the abnormal production cost,  $AB\_EXP$  is the abnormal discretionary expense.

### 3.4. Regression Models

This study employed multivariate regression models based on the studies of Kim et al. [1] and Jordaan et al. [40]. The variables that may affect earnings management are controlled during the regression analysis to address the other plausible alternative explanation in the causal relation of  $CSR$  on earnings management. These variables have been extensively used in previous studies and have confirmed the potential influence on earnings management. Following the methods employed from prior studies [1,39],  $AEM$  as a control variable was included for the  $REM$  regression, and  $REM$  as a control variable for the  $AEM$  regression. This approach addresses the alternate attribute of these two earnings management strategies [1]. The combination of discretionary and real activities manipulations is usually utilized by companies as a strategy to manage financial reports [1]. The firms can select between the two strategies taking into account the attached relative cost [39]. Moreover, this study included corporate governance [1], the return on assets as an indicator of profitability [8,40,63], the market to book ratio [40] leverage [1,8,63,64], and the natural logarithm of market capitalization to reflect firm size [8,11,39,65].

The following regression model (1) was run to test the relationship between  $CSR$  and  $AEM$ :

$$AEM_{i,t} = \alpha^{AEM} + \beta_1^{AEM} CSR_{i,t} + \beta_2^{AEM} REM_{i,t} + \beta_3^{AEM} GOV_{i,t} + \beta_4^{AEM} ROA_{i,t-1} + \beta_5^{AEM} MB_{i,t-1} + \beta_6^{AEM} LEV_{i,t-1} + \beta_7^{AEM} SIZE_{i,t-1} + \epsilon_{i,t}^{AEM} \quad (3)$$

Furthermore, the following regression model (2) was run to test the relationship between  $CSR$  and  $REM$ :

$$REM_{i,t} = \alpha^{REM} + \beta_1^{REM} CSR_{i,t} + \beta_2^{REM} REM_{i,t} + \beta_3^{REM} GOV_{i,t} + \beta_4^{REM} ROA_{i,t-1} + \beta_5^{REM} MB_{i,t-1} + \beta_6^{REM} LEV_{i,t-1} + \beta_7^{REM} SIZE_{i,t-1} + \epsilon_{i,t}^{REM} \quad (4)$$



where *AEM* is the measure of earnings management through discretionary accruals computed as the residual; *REM* is the measure of real-activities earnings manipulation; *CSR* is the measure of *CSR* performance based on environmental and social pillar ratings; *GOV* is the corporate governance pillar ratings; *MB* proxies for the growth calculated as the market-to-book equity ratio; *ROA* proxies for the performance calculated as profit before extraordinary items scaled by lagged total assets.; *LEV* is long-term debt scaled by the total assets; and *SIZE* is the natural logarithm of the market capitalization.

#### 4. Results

Table 1 shows that from 3906 Asian firms, *CSR* has an average value of 56.89. In addition, the firms from developing and emerging markets reported a mean value of 59.93 and 54.01, respectively. *AEM* and *REM* of the overall sample showed an average value of  $3.43 \times 10^{-6}$  and  $-5.38 \times 10^{-5}$ , respectively. The magnitude of *AEM* is lower for the firms from developed markets at a mean value of  $-7.81 \times 10^{-4}$ , while the firms from emerging markets have an average value of  $7.39 \times 10^{-4}$ . The mean values of *REM* for the firms from developed markets are higher than the firms from emerging markets as shown by  $3.94 \times 10^{-2}$  and  $-3.69 \times 10^{-2}$ , respectively.

**Table 1.** Descriptive statistics of the overall sample and market economy classifications.

		Overall Sample	Developed Markets	Emerging Markets
<i>AEM</i>	Mean	$3.43 \times 10^{-6}$	$-7.81 \times 10^{-4}$	$7.39 \times 10^{-4}$
	Median	$2.00 \times 10^{-3}$	$2.00 \times 10^{-3}$	$2.00 \times 10^{-3}$
	SD	$1.49 \times 10^{-2}$	0.02	0.01
<i>REM</i>	Mean	$-5.40 \times 10^{-5}$	$3.94 \times 10^{-2}$	$-3.69 \times 10^{-2}$
	Median	$-4.89 \times 10^{-2}$	$-2.67 \times 10^{-2}$	$-8.15 \times 10^{-2}$
	SD	$4.09 \times 10^{-1}$	0.33	0.47
<i>CSR</i>	Mean	56.89	59.93	54.01
	Median	57.65	64.45	52.25
	SD	16.67	16.52	16.31
<i>GOV</i>	Mean	33.88	31.92	35.71
	Median	32.5	29.4	35.8
	SD	13.07	12.2	13.59
<i>ROA</i>	Mean	5.66	4.32	6.93
	Median	4.57	3.79	5.55
	SD	7.27	5.11	8.65
<i>MB</i>	Mean	2.64	1.83	3.4
	Median	1.39	1.19	1.69
	SD	9.8	6.77	11.91
<i>LEV</i>	Mean	92.92	78.35	106.58
	Median	48.08	39.43	57.01
	SD	496.66	229.77	654.35
<i>SIZE</i>	Mean	177.37	62.87	284.7
	Median	21.35	26.12	13.22
	SD	969.2	135.01	1333.99
N		3906	1890	2016

Note: *AEM* is earnings management through discretionary accruals; *REM* is real-activities earnings management; *CSR* is *CSR* ratings; *GOV* is corporate governance ratings; *ROA* is proxy for performance, measured as profit before extraordinary items, scaled by lagged total assets; *MB* is market-to-book value as proxy for growth opportunities, measured as market value divided by book value of equity; *LEV* is leverage ratio, measured as long-term debt scaled by total assets; *SIZE* is market capitalization.

For the control variables, *GOV* shows a mean value of 33.88, indicating that the majority of the sampled firms have relatively poor corporate governance, consistent with the delineation of Welford [17]. The mean value of *ROA* is 5.66, indicating that Asian firms from our sample are profitable. On average, the growth opportunities proxied by *MB* shows 2.64, indicating that the firms utilize its assets well. In addition, it shows that the leverage of sample firms has a mean value of 92.92, indicating that firms are risky in reference to debt over equity. Lastly, market capitalization shows an average

value of 177.37, indicating that most of the firms are large companies pertaining to total values of outstanding shares. Furthermore, on average, the firms from emerging markets are more engaged in corporate governance, have larger, higher growth opportunities, have higher leverage, and are more profitable than the firms from developed markets.

Table 2 shows that among the 11 Asian countries, the firms from Japan and India report the highest CSR mean value of 61.62, while the firms from South Korea show 60.06 mean value. On the other hand, the firms from China show the lowest mean rating of 43.56. Moreover, the firms from India show the highest AEM mean rating of  $4.86 \times 10^{-3}$ , while the firms from China show the lowest AEM mean rating of  $-1.26 \times 10^{-3}$ . In terms of REM, the firms from Malaysia mark 0.10 as the highest mean rating, while the firms from China show  $-0.17$  mean rating. In terms of control variables, the firms from Singapore and Malaysia show the highest GOV mean ratings of 52.94 and 51.25, respectively. However, the firms from Japan, Taiwan and South Korea reveal the lowest GOV mean ratings of 27.80, 25.09 and 28.86, respectively. The firms from the others category report the highest ROA mean rating of 10.71, while the firms from Japan show the lowest at 3.66 mean rating.

Table 2. Descriptive statistics per country.

		JPN	TWN	KOR	CHN	IND	HKG	SGP	MYS	OTHERS
AEM	Mean	$2.51 \times 10^{-3}$	$1.93 \times 10^{-3}$	$2.89 \times 10^{-3}$	$-1.26 \times 10^{-3}$	$4.86 \times 10^{-3}$	$-2.85 \times 10^{-3}$	-0.03	-0.01	$2.92 \times 10^{-3}$
	Median	$2.10 \times 10^{-3}$	$1.70 \times 10^{-3}$	$2.70 \times 10^{-3}$	$-9.00 \times 10^{-4}$	$2.90 \times 10^{-3}$	$-2.60 \times 10^{-3}$	-0.03	-0.01	$2.70 \times 10^{-3}$
	SD	$2.38 \times 10^{-3}$	$2.95 \times 10^{-3}$	$2.19 \times 10^{-3}$	0.01	0.01	0.01	0.05	0.03	$2.00 \times 10^{-3}$
REM	Mean	0.05	$2.40 \times 10^{-3}$	-0.08	-0.17	-0.01	0.03	-0.12	0.10	0.06
	Median	-0.01	-0.04	-0.12	-0.13	-0.09	-0.03	-0.10	-0.05	$3.70 \times 10^{-3}$
	SD	0.33	0.23	0.25	0.66	0.72	0.26	0.37	0.52	0.28
CSR	Mean	61.62	50.46	60.06	43.56	61.62	53.90	50.14	53.64	55.64
	Median	67.30	47.20	67.20	42.80	59.60	54.10	47.70	52.90	54.00
	SD	16.30	17.26	17.40	8.98	14.66	15.29	15.02	11.64	14.71
GOV	Mean	27.80	25.09	28.86	41.71	45.05	49.13	52.94	51.25	40.24
	Median	27.25	24.80	29.00	42.30	45.20	47.40	51.40	49.10	39.40
	SD	7.98	9.54	9.26	7.80	12.68	9.72	10.16	9.00	9.81
ROA	Mean	3.66	5.73	4.84	5.23	9.54	6.86	7.90	9.83	10.71
	Median	3.39	5.03	4.11	4.44	8.24	5.65	6.63	6.18	9.00
	SD	4.65	7.42	5.55	4.34	11.80	6.03	5.90	12.30	8.73
MB	Mean	1.38	2.04	1.79	2.32	6.88	1.89	6.06	5.75	4.17
	Median	1.14	1.45	1.21	1.76	2.90	1.56	1.83	1.97	3.03
	SD	1.05	1.82	2.58	4.02	25.15	1.40	22.55	15.74	3.48
LEV	Mean	72.75	64.78	186.49	116.42	88.07	78.12	132.72	92.10	85.57
	Median	37.84	46.02	68.02	66.94	52.28	51.81	49.50	69.91	50.39
	SD	219.63	83.30	1400.03	262.89	155.49	180.13	341.36	87.71	112.87
SIZE	Mean	74.57	14.00	1084.05	6.15	93.59	15.95	0.98	2.06	473.11
	Median	33.15	6.27	471.03	3.92	38.26	5.92	0.61	1.39	20.84
	SD	145.81	20.06	2566.60	7.71	232.57	33.86	1.22	1.69	1653.67
N		1554	574	420	315	343	175	161	203	161

Note: JPN is Japan, TWN is Taiwan, KOR is South Korea, IND is India, CHN is China, HKG is Hong Kong, MYS is Malaysia, SGP is Singapore, OTHERS include Indonesia, Thailand and Philippines.

Moreover, the firms from India report a market-to-book value of 6.88 mean rating, the highest among the 11 countries in Asia. The firms from Japan show the lowest mean rating of the market-to-book value at 1.38. Moreover, the firms from South Korea show the highest financial leverage mean rating of 186.49, while the firms from Taiwan show the lowest mean rating at 64.78. Furthermore, South Korea revealed that most of its firms have high market capitalization.

Table 3 shows that among the nine business sectors in Asia, the firms from telecommunication services report a highest CSR mean value of 61.03. On the other hand, the firms from the health care sector show the lowest mean rating of 53.70. The firms from utilities show a highest AEM mean rating of  $6.54 \times 10^{-4}$ , while the firms from telecommunication services show the lowest AEM mean rating of  $-0.01$ . In terms of REM, the firms from consumer goods mark 0.33 as the highest mean rating while the firms from the resources sector show  $-0.25$  mean rating. In terms of control variables, the firms from telecommunication services show the highest GOV mean ratings of 46.19.

**Table 3.** Descriptive statistics per business sector.

		<i>RSC</i>	<i>BML</i>	<i>IND</i>	<i>COS</i>	<i>COG</i>	<i>HCR</i>	<i>TEC</i>	<i>TCS</i>	<i>UTS</i>
<i>AEM</i>	Mean	$-6.02 \times 10^{-4}$	$1.82 \times 10^{-3}$	$-1.52 \times 10^{-3}$	$-3.48 \times 10^{-6}$	$-1.06 \times 10^{-3}$	$4.42 \times 10^{-3}$	$2.84 \times 10^{-3}$	-0.01	$6.54 \times 10^{-4}$
	Median	$2.00 \times 10^{-3}$	$2.30 \times 10^{-3}$	$1.70 \times 10^{-3}$	$1.90 \times 10^{-3}$	$2.40 \times 10^{-3}$	$1.70 \times 10^{-3}$	$1.50 \times 10^{-3}$	$1.50 \times 10^{-3}$	$3.00 \times 10^{-3}$
	SD	0.01	$4.17 \times 10^{-3}$	0.02	0.01	0.02	0.02	0.01	0.02	0.01
<i>REM</i>	Mean	-0.25	-0.10	-0.13	0.03	0.33	-0.04	0.18	0.22	-0.09
	Median	-0.16	-0.10	-0.12	-0.01	0.22	-0.09	0.10	0.18	-0.11
	SD	0.92	0.14	0.22	0.22	0.75	0.32	0.49	0.27	0.11
<i>CSR</i>	Mean	58.78	58.48	56.56	55.31	56.82	53.70	56.73	61.03	57.63
	Median	58.80	62.40	57.10	56.50	55.90	47.40	57.50	65.50	55.65
	SD	16.27	17.20	15.88	17.95	15.16	17.89	17.88	14.89	13.56
<i>GOV</i>	Mean	40.31	32.59	33.81	30.48	35.17	36.18	30.33	46.19	37.83
	Median	40.00	31.60	32.15	29.00	34.45	35.60	28.00	48.00	38.20
	SD	13.44	11.84	12.65	11.71	12.65	12.21	13.01	13.11	14.37
<i>ROA</i>	Mean	5.57	4.75	4.01	6.24	8.21	5.99	6.45	8.70	5.09
	Median	5.41	4.07	3.63	4.75	4.75	5.56	5.55	7.21	4.82
	SD	5.41	5.58	4.99	6.74	10.01	13.82	8.35	8.67	5.08
<i>MB</i>	Mean	2.44	1.57	1.79	2.02	4.86	7.19	1.91	8.50	1.53
	Median	1.52	1.15	1.33	1.33	2.01	2.31	1.52	2.03	1.32
	SD	5.53	1.58	1.93	2.13	8.02	35.44	1.44	26.09	0.95
<i>LEV</i>	Mean	125.00	92.91	127.95	57.61	65.42	51.37	69.65	98.22	153.29
	Median	69.84	61.63	58.72	37.09	35.91	24.82	28.09	57.25	89.76
	SD	397.02	118.02	926.70	134.33	93.49	128.25	357.48	314.58	162.35
<i>SIZE</i>	Mean	98.53	259.17	89.15	341.87	112.51	101.77	94.34	168.67	107.44
	Median	25.32	24.23	15.58	25.16	26.79	36.13	8.63	23.54	18.42
	SD	190.04	964.32	198.24	1864.11	275.88	160.46	347.79	341.05	393.18
<i>N</i>		161	595	966	833	350	161	406	182	252

Note: *RSC* is resources, *BML* is basic materials, *IND* is industrial, *COS* is consumer services, *COG* is consumer goods, *HCR* is health care, *TEC* is technology, *TCS* is telecommunications services and *UTS* is utilities

However, the firms from technology and consumer services reveal the lowest *GOV* mean ratings of 30.33 and 30.48, respectively. The firms from telecommunication services and consumer goods report the highest *ROA* mean rating of 8.70 and 8.21, respectively. The firms from industrials show the lowest *GOV* at 4.01 mean rating. The firms from telecommunication services report a market-to-book value of 8.50 mean rating, the highest among the nine business sectors. The firms from utilities show the lowest mean rating of a market-to-book value at 1.53. Moreover, the firms from utilities show the highest financial leverage mean rating of 153.29, while the firms from the health care sector show the lowest mean rating at 51.37. Furthermore, consumer services reveal that most of its firms have high market capitalization.

Table 4 presents the Pearson correlation coefficients between the variables. The correlation matrix was examined to check for strong relationships between the variables of interest and other variables which may cause multicollinearity in our subsequent regressions. The correlation matrix reveals that *AEM* is negatively and significantly correlated to *REM*, *GOV*, *ROA*, and *MB*. This indicates that there is a trade-off between the earnings management strategy. It also indicates that well governed, profitable, high growth opportunity firms are less engaged in accrual-based earnings management. In addition, *AEM* is positively and significantly correlated to *CSR*, indicating that the firms engaged in *CSR* activities are likely to engage more on accrual-based management. Furthermore, the correlation matrix shows that *REM* is positively and significantly correlated to *GOV* and *ROA*, while it is negatively and significantly correlated to *LEV*, indicating that well governed and profitable firms are likely to engage less in real-activities earnings management, while risky firms are likely to engage more in real-activities earnings management.

Table 5 presents the multivariate regression results of *AEM* and *REM* on *CSR* of the overall sample of firms and the firms from developed and emerging markets. Overall, Asian firms show that there is a positive and significant relation between *CSR* and *AEM* at ( $p < 0.01$ ). In terms of the control variables, the multivariate regression results show that *REM* is positive and significantly associated with *AEM*. Furthermore, the larger firms (*SIZE*) are more likely to engage in earning manipulation, while well governed, profitable (*ROA*), risky (*LEV*), and better growth opportunities (*MB*) firms are less likely to engage in earning manipulation. In summary, the result of the multiple regression analysis supports the authors' conjecture that high engagement in *CSR* is associated with a greater involvement of earnings management using discretionary accruals, consistent with  $H_1$ .

Table 4. Correlation matrix among the variables.

	<i>AEM</i>	<i>REM</i>	<i>CSR</i>	<i>GOV</i>	<i>ROA</i>	<i>MB</i>	<i>LEV</i>	<i>SIZE</i>
<i>AEM</i>	1							
<i>REM</i>	−0.03 **	1						
<i>CSR</i>	0.03 **	0.02	1					
<i>GOV</i>	−0.25 ***	0.01	0.30 ***	1				
<i>ROA</i>	−0.28 ***	0.30 ***	−0.08 ***	0.17 ***	1			
<i>MB</i>	−0.08 ***	0.04 **	0.00	0.08 ***	0.13 ***	1		
<i>LEV</i>	−0.01	−0.10 ***	0.03	0.02	−0.11 ***	0.14 ***	1	
<i>SIZE</i>	0.04 **	0.02	0.11 ***	0.04 **	0.07 ***	−0.01	−0.01	1

Note: *AEM* is earnings management through discretionary accruals; *REM* is real-activities earnings management; *CSR* is CSR ratings; *GOV* is corporate governance ratings; *ROA* is proxy for performance, measured as profit before extraordinary items, scaled by lagged total assets; *MB* is market-to-book value as proxy for growth opportunities, measured as market value divided by the book value of equity; *LEV* is leverage ratio, measured as long-term debt scaled by total assets; *SIZE* is market capitalization. \*, indicates significance, two-tailed, at the 10% level; \*\*, indicates significance, two-tailed, at the 5% level; \*\*\*, indicates significance, two-tailed, at the 1% level.

Table 5. Multiple regression of earnings management on corporate social responsibility (CSR).

<Overall Sample>				<Developed Markets>				<Emerging Markets>			
	<i>AEM</i>		<i>REM</i>		<i>AEM</i>		<i>REM</i>		<i>AEM</i>		<i>REM</i>
<i>CSR</i>	0.08 (4.86)	<i>CSR</i>	0.07 (4.01)	<i>CSR</i>	0.13 (5.66)	<i>CSR</i>	0.01 (0.39)	<i>CSR</i>	0.06 (2.52)	<i>CSR</i>	−0.04 (−1.58)
	***		***		***				**		
<i>REM</i>	0.04 (2.28)	<i>AEM</i>	0.04 (2.28)	<i>REM</i>	0.05 (2.29)	<i>AEM</i>	0.06 (2.29)	<i>REM</i>	0.06 (3.04)	<i>AEM</i>	0.07 (3.04)
	**		**		**		**		***		***
<i>GOV</i>	−0.23 (−14.19)	<i>GOV</i>	−0.07 (−4.21)	<i>GOV</i>	−0.34 (−15.50)	<i>GOV</i>	−0.11 (−4.47)	<i>GOV</i>	−0.14 (−6.01)	<i>GOV</i>	0.08 (3.19)
	***		***		***		***		***		***
<i>ROA</i>	−0.25 (−15.52)	<i>ROA</i>	0.32 (19.51)	<i>ROA</i>	−0.12 (−5.12)	<i>ROA</i>	0.30 (12.61)	<i>ROA</i>	−0.42 (−19.94)	<i>ROA</i>	0.26 (11.00)
	***		***		***		***		***		***
<i>MB</i>	−0.03 (−1.71)	<i>MB</i>	0.01 (0.71)	<i>MB</i>	−0.18 (−7.88)	<i>MB</i>	0.11 (4.36)	<i>MB</i>	0.06 (2.88)	<i>MB</i>	−0.02 (−1.06)
	*				***		***		***		
<i>LEV</i>	−0.03 (−1.78)	<i>LEV</i>	−0.06 (−4.06)	<i>LEV</i>	0.02 (0.88)	<i>LEV</i>	−0.03 (−1.24)	<i>LEV</i>	−0.05 (−2.37)	<i>LEV</i>	−0.05 (−2.39)
	**		***						***		**
<i>SIZE</i>	0.05 (3.55)	<i>SIZE</i>	−0.01 (−0.56)	<i>SIZE</i>	0.03 (1.53)	<i>SIZE</i>	0.04 (1.68)	<i>SIZE</i>	0.06 (3.02)	<i>SIZE</i>	0.03 (1.16)
	***								***		
Adj. R <sup>2</sup>	0.13	Adj. R <sup>2</sup>	0.10	Adj. R <sup>2</sup>	0.20	Adj. R <sup>2</sup>	0.11	Adj. R <sup>2</sup>	0.19	Adj. R <sup>2</sup>	0.07
N	3906	N	3906	N	1890	N	1890	N	2016	N	2016

Note: Values per columns are standardized coefficient while t-stat values are in parenthesis. \*, indicates significance, two-tailed, at the 10% level; \*\*, indicates significance, two-tailed, at the 5% level; \*\*\*, indicates significance, two-tailed, at the 1% level.

Table 5 also presents the results of a multivariate regression analyses of *REM* which the estimated coefficient is positive and significantly associated to *CSR* at ( $p < 0.01$ ). Our results are obtained after controlling for *AEM*. The coefficient on the *AEM* is positive for *REM* at ( $p < 0.05$ ), consistent with Cohen et al. [44], Kim et al. [1], Jordaan et al. [40]. In terms of the control variables, *REM* coefficients are positive and significantly associated on *ROA* at ( $p < 0.01$ ). In addition, *REM* coefficients are negative and significantly associated with *GOV* and *LEV* at ( $p < 0.01$ ). These results suggest that profitable firms are less likely to engage in real-activities earning manipulation. However, well governed and high-risk firms are more likely to engage in real-activities earning manipulation. In summary, our evidence underpins the notion that the firms' engagement in *CSR* activities manipulate their earnings less through real-activities earnings manipulation, consistent with  $H_2$ .

Table 5 also shows that there is a positive and significant relation between *CSR* and *AEM* for the firms from developed markets at ( $p < 0.01$ ) and the firms from emerging markets at ( $p < 0.05$ ). In terms of the control variables, the multivariate regression results show that *REM* is positive and significantly associated with *AEM* for the firms from developed markets at ( $p < 0.05$ ) and for the firms

from emerging markets at ( $p < 0.01$ ). Furthermore, well governed (*GOV*), better growth opportunities (*MB*), and profitable (*ROA*) firms are less likely to engage in earning manipulation based on the firms from developed markets. From the perspective of firms from emerging markets, well governed (*GOV*), high risk (*LEV*), and financially performing (*ROA*) firms are less likely to engage in earnings manipulation while larger (*SIZE*) and better growth opportunities (*MB*) firms are more likely to engage in earning manipulation. In summary, our results support the conjecture that *CSR* firms manage their earnings more using accrual-based earnings management, consistent with  $H_1$ .

The hypothesis testing for  $H_1$  requires additional calculation for  $H_3$ . It was hypothesized that the effect of *CSR* on *AEM* varies between the firms from developed and emerging market economies ( $H_3$ ). Specifically, *t*-tests were conducted to examine if the coefficients were statistically and significantly different between the firms from the two market economies. The *t*-statistics were used to calculate the difference between any two estimated coefficients [66]. The *t*-statistics were calculated based on the equation:  $t = (\beta_A - \beta_B) / \sqrt{\sigma_A^2/n_A + \sigma_B^2/n_B}$ , where A are the firms from the developed market economy, B are the firms from the emerging market economy,  $\beta$  is the beta coefficient,  $\sigma^2$  is the variance and *n* is the number of observations. Table 5 shows that regarding *AEM*, the estimated coefficients under the firms from developed and emerging market economies are 0.13 and 0.06, respectively. These findings suggest that accrual-based earnings management to the firms from developed market economies is 13% for every *CSR* rating, while 5% to firms from emerging market economies.

The corresponding *t*-statistic is 1104.17 suggesting that the coefficient under the firms from developed markets are higher than the firms from emerging markets. Hence, our results reveal that the firms from developed market economies are likely to engage in earnings management through discretionary accruals more than the firms from emerging market economies, considering *CSR* activities. This evidence affirms the hypothesis that the relation of *CSR* on earnings management (*AEM*) differs between the firms from developed and emerging market economies ( $H_3$ ).

On the other hand, Table 5 shows that there is an insignificant positive and negative relation between *CSR* and *REM* for the firms from developed and emerging markets, respectively. These results were obtained after controlling for *AEM*. In terms of the control variables, the coefficients are positive and significantly associated with *ROA* and *MB* ( $p < 0.01$ ), while it shows a negative and significant association on *GOV* for the firms from developed markets. From the perspective of the firms from emerging markets, *REM* coefficients are positive and a significant association on *ROA* at ( $p < 0.01$ ), while it shows a negative and significant association on *LEV* at ( $p < 0.01$ ). This result suggests that profitable firms with better growth opportunities are less likely to engage in real-activities earning manipulation, but highly governed firms are more likely to engage in real-activities earning manipulation based on the firms from developed markets. It also suggests that profitable firms are less likely to engage in real-activities earning manipulation, but risky firms are more likely to engage in real-activities earning manipulation based on the firms from emerging markets. Overall, our findings do not support  $H_2$ . However, our results reveal that the relation of *CSR* on earnings management (*REM*) varies between the developed and emerging market economy, consistent with ( $H_3$ ).

Table 6 presents the multivariate regression results of the impact of *AEM* and *REM* on *CSR* per country. Only firms from Japan reveal that *CSR* has a positive and significant effect on *AEM* at ( $p < 0.01$ ), consistent with  $H_1$ . In addition, it supports the hypothesis that the relation of *CSR* on earnings management (*AEM*) varies among countries in Asia, consistent with ( $H_4$ ).

In terms of manipulating operating decisions, the firms from Taiwan and South Korea show that *CSR* has a positive and significant effect on *REM* at ( $p < 0.05$ ) and ( $p < 0.10$ ), respectively. These findings suggest that the firms from these countries are conservative in manipulating real-activities operating decisions in consideration of building corporate citizenship, consistent with  $H_2$ . However, the firms from Japan, Hong Kong and Singapore reveal that *CSR* has negative and significant findings on *REM* at ( $p < 0.05$ ). These countries are categorized as developed markets. These findings support our conjecture that the relation of *CSR* on earnings management (*REM*) varies among countries in Asia, consistent with ( $H_4$ ).



**Table 6.** Multiple regression of accrual-based earnings management (*AEM*) and real-activities earnings manipulation (*REM*) on *CSR* per country.

	<i>JPN</i>	<i>TWN</i>	<i>KOR</i>	<i>CHN</i>	<i>IND</i>	<i>HKG</i>	<i>SGP</i>	<i>MYS</i>	<i>OTHERS</i>
< <i>AEM</i> >									
<i>CSR</i>	0.13 (4.27) ***	0.04 (0.61)	0.00 (0.02)	0.07 (1.47)	−0.04 (−0.68)	−0.14 (−1.60)	0.05 (0.40)	0.05 (0.75)	−0.07 (−0.78)
<i>AEM</i>	0.19 (7.15) ***	−0.14 (−3.44) ***	0.13 (2.60) **	0.38 (2.63) ***	0.07 (1.41)	−0.21 (−2.63) ***	0.02 (0.19)	−0.06 (−1.25)	−0.15 (−1.64)
<i>GOV</i>	−0.09 (−3.07) ***	−0.06 (−1.05)	0.03 (0.44)	0.00 (−0.06)	−0.09 (−1.61)	0.03 (0.32)	−0.18 (−1.61)	0.11 (1.89) *	−0.04 (−0.54)
<i>ROA</i>	−0.24 (−8.51) ***	−0.58 (−12.81) ***	−0.24 (−3.92) **	−0.61 (−10.68) ***	−0.22 (−4.40) ***	−0.41 (−5.31) ***	−0.13 (−1.40)	−0.72 (−12.19) ***	−0.79 (−7.46) ***
<i>MB</i>	0.12 (4.36) ***	0.31 (6.92) ***	0.70 (6.76) **	0.11 (0.84)	0.37 (7.62) ***	−0.03 (−0.38)	−0.27 (−1.77) *	−0.06 (−1.00)	0.58 (6.49) ***
<i>LEV</i>	0.03 (1.17)	−0.11 (−2.63) ***	−0.60 (−5.68) **	−0.15 (−1.37)	−0.05 (−1.02)	−0.01 (−0.12)	0.15 (1.08)	0.01 (0.31)	0.07 (1.13)
<i>SIZE</i>	−0.10 (−3.90) ***	−0.17 (−4.57) ***	0.02 (0.43)	−0.22 (−4.53) ***	−0.04 (−0.82)	−0.01 (−0.17)	−0.15 (−1.76) *	−0.16 (−3.54) ***	0.51 (8.65) ***
<i>Adj.R<sup>2</sup></i>	0.09	0.30	0.11	0.37	0.23	0.28	0.08	0.65	0.51
<i>CSR</i>	−0.09 (−3.05) ***	0.16 (2.53) **	0.10 (1.69) *	0.03 (1.31)	−0.04 (−0.73)	−0.25 (−3.24) ***	−0.37 (−3.18) ***	0.13 (1.52)	0.04 (0.55)
<i>REM</i>	0.17 (7.15) ***	−0.15 (−3.44) ***	0.12 (2.60) ***	0.06 (2.63) ***	0.09 (1.41)	−0.19 (−2.63) ***	0.01 (0.19)	−0.12 (−1.25)	−0.12 (−1.64)
<i>GOV</i>	0.05 (1.63)	0.01 (0.21)	0.01 (0.17)	0.04 (2.02) **	0.05 (0.86)	0.12 (1.58)	0.32 (3.01) ***	0.00 (−0.02)	−0.13 (−1.90) *
<i>ROA</i>	0.26 (10.13) ***	0.01 (0.25)	0.35 (6.05) ***	0.12 (4.86) ***	0.22 (3.82) ***	0.09 (1.11)	0.08 (0.92)	0.33 (3.08) ***	0.48 (4.58) ***
<i>MB</i>	0.21 (8.27) ***	0.41 (9.06) ***	0.08 (0.81)	−0.64 (−17.53) ***	−0.02 (−0.32)	0.37 (5.37) ***	0.41 (2.83) ***	0.17 (1.96) *	0.33 (3.83) ***
<i>LEV</i>	−0.03 (−1.27)	−0.20 (−4.71) ***	−0.05 (−0.45)	−0.28 (−7.02) ***	−0.03 (−0.57)	−0.12 (−1.80) *	−0.01 (−0.08)	−0.11 (−1.64)	−0.01 (−0.13)
<i>SIZE</i>	−0.01 (−0.24)	−0.13 (−3.41) ***	0.08 (1.53)	0.02 (1.18)	−0.01 (−0.26)	0.27 (4.03) ***	0.23 (2.78) ***	−0.15 (−2.25) **	0.04 (0.64)
<i>Adj.R<sup>2</sup></i>	0.19	0.22	0.18	0.91	0.03	0.37	0.17	0.32	0.60
<i>N</i>	1554	574	420	315	343	175	161	203	161

Note. Values per columns are standardized coefficient while t-stat values are in parenthesis. \*, indicates significance, two-tailed, at the 10% level; \*\*, indicates significance, two-tailed, at the 5% level; \*\*\*, indicates significance, two-tailed, at the 1% level.

Table 7 presents the multivariate regression results of *AEM* and *REM* on *CSR* per business sector. The firms from basic materials, industrial and consumer services reveal that *CSR* has a positive and significant effect on *AEM* at ( $p < 0.01$ ) while *CSR* is positive and significant to the health care sector at ( $p < 0.10$ ), consistent with  $H_1$ . However, the firms from the technology sector show that *CSR* has a negative and significant effect on *AEM*. This result suggests that the firms from this sector with high engagement on socially responsible activities are likely to engage less in earnings manipulation through discretionary accruals. These findings affirm the hypothesis of the study that the relation of *CSR* on earnings management (*AEM*) varies among business sectors in Asia, consistent with ( $H_5$ ).

Moreover, Table 7 shows that in terms of manipulating operating decisions, the firms from basic materials, industrial, consumer services and health care show that *CSR* has a positive and significant effect on *REM* at ( $p < 0.01$ ). These findings suggest that the firms from these countries are conservative in manipulating their real-activities operating decisions in consideration of building corporate citizenship, consistent with  $H_2$ . However, the firms from the resources sector reveal that *CSR* has negative and significant findings on *REM* at ( $p < 0.05$ ). These findings affirm the hypothesis of the study that the relation of *CSR* on earnings management (*REM*) varies among business sectors in Asia, consistent with ( $H_5$ ).

Table 7. Multiple regression of AEM and REM on CSR per business sector.

	RSC	BML	IND	COS	COG	HCR	TEC	TCS	UTS
<AEM>									
CSR	−0.04 (−0.42)	0.26 (6.23) ***	0.13 (4.16) ***	0.24 (6.67) ***	0.01 (0.26)	0.17 (1.85) *	−0.23 (−3.48) ***	−2.46 × 10 <sup>−3</sup> (−0.04)	−0.05 (−0.85)
REM	0.43 (1.95) *	0.03 (0.77)	0.04 (1.35)	0.04 (1.19)	0.06 (1.35)	−0.28 (−2.97) ***	0.01 (0.25)	0.14 (1.87) *	−0.28 (−4.36) ***
GOV	−0.24 (−2.84) ***	−0.21 (−4.71) ***	−0.35 (−11.20) ***	−0.32 (−9.52) ***	−0.08 (−1.70) *	−0.10 (−1.24)	0.28 (4.19) ***	−0.30 (−4.84) ***	−0.13 (−2.13)
ROA	−0.47 (−4.88) ***	−0.25 (−5.43) ***	−0.13 (−3.44) ***	−0.29 (−6.38) ***	−0.84 (−13.61) ***	−0.17 (−2.20) **	−0.10 (−1.67)	−0.26 (−3.15) ***	−0.25 (−3.55) ***
MB	0.13 (0.57)	0.13 (2.86) ***	−0.04 (−0.84)	0.12 (2.88) ***	0.34 (5.77) ***	0.27 (3.62) ***	−0.12 (−2.06) **	−0.52 (−4.98) ***	−0.05 (−0.75)
LEV	−0.08 (−0.58)	0.11 (2.59) ***	0.03 (0.57)	−0.04 (−1.12)	−0.20 (−4.47) ***	0.03 (0.38)	0.00 (0.06)	0.08 (0.94)	−0.11 (−1.69) *
SIZE	0.13 (1.85) *	0.21 (5.15) ***	0.05 (1.55)	0.08 (2.36) **	0.13 (3.01) ***	−0.01 (−0.15)	0.02 (0.43)	0.03 (0.56)	0.02 (0.34)
Adj.R <sup>2</sup>	0.24	0.15	0.17	0.18	0.42	0.22	0.04	0.48	0.24
<AEM>									
CSR	−0.08 (−2.80) ***	0.21 (4.85) ***	0.12 (3.71) ***	0.11 (2.88) ***	−0.01 (−0.20)	0.58 (9.35) ***	−0.03 (−0.52)	−0.01 (−0.21)	−0.04 (−0.71)
AEM	0.06 (1.95)	0.03 (0.77)	0.05 (1.35)	0.04 (1.19)	0.09 (1.35)	−0.19 (−2.97) ***	0.01 (0.25)	0.14 (1.87) *	−0.26 (−4.36) ***
GOV	0.08 (2.66) ***	−0.17 (−3.65) ***	−0.05 (−1.40)	−0.09 (−2.59) ***	−0.04 (−0.72)	−0.05 (−0.84)	−0.14 (−2.11)	−0.22 (−3.36) ***	0.04 (0.59)
ROA	0.25 (8.07) ***	0.10 (2.05) **	0.22 (5.77) ***	0.31 (6.70) ***	0.32 (3.36) ***	0.17 (2.68) ***	0.22 (3.90) ***	0.61 (8.55) ***	0.18 (2.59) ***
MB	−0.78 (−16.58) ***	−0.05 (−0.98)	−0.03 (−0.50)	0.15 (3.56) ***	−0.02 (−0.21)	−0.08 (−1.17)	0.14 (2.51) **	0.28 (2.55) **	0.19 (3.09)
LEV	−0.06 (−1.27)	−0.02 (−0.51)	0.03 (0.62)	−0.01 (−0.28)	−0.07 (−1.27)	0.04 (0.75)	−0.03 (−0.69)	−0.06 (−0.62)	−0.13 (−2.16) **
SIZE	0.02 (0.86)	0.16 (3.66) ***	−0.20 (−6.29) ***	0.03 (1.01)	−0.06 (−0.99)	0.12 (1.96) *	0.05 (1.07)	0.01 (0.21)	−0.04 (−0.60)
Adj.R <sup>2</sup>	0.90	0.09	0.07	0.16	0.06	0.47	0.10	0.46	0.30
N	161	595	966	833	350	161	406	182	252

Note: Values per columns are standardized coefficient while t-stat values are in parenthesis. Values per columns are standardized coefficient while t-stat values are in parenthesis. \*, indicates significance, two-tailed, at the 10% level; \*\*, indicates significance, two-tailed, at the 5% level; \*\*\*, indicates significance, two-tailed, at the 1% level. 5. Discussions

This article offers several interesting findings. First, the CSR of Asian firms creates healthy and long-term relationships with the stakeholders and constrains the real-activities earnings manipulation strategy of managers, but it exhibits concealing effects on the accrual-based earnings management strategy. The firms consider the relative cost before implementing a particular earnings management strategy [42]. Our results suggest that the firms engaged in socially responsible activities are likely to engage more in earnings manipulation through discretionary accruals to conceal the firms' real performance business and attract the positive attention of stakeholders. Chih et al. [11] conjectured that managers of socially responsible firms have high engagement to conduct the reporting discretion to conceal the actual performance of the company. This firm's engagement damages the collective interests of the stakeholders [12] because the main objective is not out of social responsibility and caring [67]. The majority of Asian firms are family owned companies which utilize socially responsible practices to manipulate earnings and divert the stakeholder's attention [68]. This evidence contradicts the conjecture of prior studies in Asian economies that CSR plays a significant role in moderating earning management [8].

Moreover, Asian firms avoid earnings management through real operating activities due to their adversity in the future financial performance [35,42,43]. Hence, the managers prefer to employ discretionary accrual because all accruals can be reversed in the next or future accounting period than to engage in REM with actual company resources at stake. It is also argued that regardless of the intensity of CSR engagement, Asian firms are conservative as to operating decisions because REM damages the stakeholders' satisfaction if the normal operating cycle is distorted and impairs the firm's value, consistent with Cho and Chun [63].

Second, our results showed that CSR had a consistent positive effect on earnings management through discretionary accruals, but revealed insignificant effects when the sample size was split into the firms from developed and emerging markets. CSR has become increasingly relevant to the firms from both market economies. The results of t-statistics reveal that the firms from developed market economies are likely to engage in earnings management through discretionary accruals more than the firms from emerging market economies, considering CSR activities. The emerging market economies usually have low economic development which cause less implementation of CSR activities [42]. The firms from developed markets are facing high demands from their stakeholders and utilize accrual-based earnings management to reflect attractive financial reports. These findings affirm the hypothesis that the relation of CSR on earnings management (*AEM* and *REM*) varies between the developed and emerging market economies. Furthermore, the insignificant effect of CSR on *REM* to the firms from both market economy classifications can be explained through individual country analysis.

Third, this study reveals that the firms from Japan with high engagement on socially responsible activities are likely to seize more earnings manipulation using discretionary accruals and real-activities operations to conceal the firms' real financial performance and attract positive attention of the stakeholders. On the other hand, the firms from Taiwan and South Korea show evidence of high preservation in manipulating real-activities operating decisions in consideration of building corporate citizenship among the stakeholders. However, the firms from developed market economies such as Japan, Hong Kong and Singapore reveal evidence of aggressiveness towards real-activities earnings management to meet the demands and expectations of the stakeholders. These countries are categorized as developed market economies. This study found insignificant findings when the aggregate values were tested from these countries and the effect may vary when tested individually. The firms from these countries have greater expectations of achieving the target earnings threshold to outperform the effect of the *REM* strategy [41]. Each country has different stances in implementing CSR activities and earnings management relevant to the culture and macroeconomic considerations. CSR varies from different countries which is explained by the penetration, extent, and profile as indicated by CSR ratings and issues [48]. In addition, CSR can be perceived better through national factors, such as public policy profiles and national business systems [48].

Lastly, our findings show that in terms of the types of business sector, the firms from basic materials, industrial and consumer services are engaged in socially responsible activities to manipulate earnings through discretionary accruals, while the firms from the technology sector show that high engagement on socially responsible activities constrains earnings manipulation through discretionary accruals. Furthermore, the firms from basic materials, industrial, consumer services and health care are conservative in manipulating their real-activities operating decisions in consideration of building corporate citizenship. However, the firms from the resources sector are aggressive towards real-activities earnings management. CSR reveals specific features depending on the sectors where a particular firm belongs, considering the different demands from the different stakeholders [50]. The implementation of CSR programs of other sectors does not truly depict its purpose as part of the firms' core business to reduce the negative impact and unfavorable public perception [50]. Each sector has different priorities in implementing CSR based on the liability, compliance, regulatory risks and demands from its stakeholders.

## 5. Conclusions

This study investigated the effects of CSR on earnings management through managerial discretion and operating decisions. Specifically, this study examined its effects on the firms from developed and emerging market economies in Asia. This study also examined its impact on 11 countries and nine business sectors to identify the individual effects based on different contexts. It was hypothesized that attaining ethical expectations and building citizenship culture through CSR engagements caused manipulations on discretionary accruals to create a good company image but low-quality financial reports. However, it was further hypothesized that the firms' CSR engagements cause avoidance of

the manipulations on real-activity factors to meet the demands of the stakeholders. The trade-off exists between accrual-based earnings management and real-activities earnings management among Asian firms.

This study infers several implications from the findings. First, this research addresses the issues from the inconclusive findings from prior literature, such as the lack of sufficient theoretical support, the use of different types of earnings management and the varying methods of measuring CSR. This issue was examined using different estimates of earnings management and this study did not consider estimates, such as earnings smoothing and earnings aggressiveness [8]. The present study interacts with past literature using the estimates of *AEM* and *REM* and provides findings that the trade-off between these two earnings management measures exists in this region. This study accentuates the opportunistic effects of CSR engagement in concealing precise and high-quality financial reports through *AEM* to avoid perusal from the stakeholders. It also accentuates the stakeholder's effect of CSR engagement in building citizenship culture for the stakeholders through *REM*.

Second, the effects of CSR on *AEM* and *REM* to firms were documented from each market economy, country and business sector in Asia. Our findings contribute to the literature on the phenomenon in Asian settings to deviate and categorize this region as it has different institutional environments and culture from the Western region [63,69]. Most of the prior studies analyze the phenomenon in a Western context and a few studies in Asia. The present study fills the gap and analyzes this issue from an Asian perspective, considering its differences regarding CSR performance. This study leads to a cross-border analysis of earnings management practices relevant to culture. This study analyzed the firms from countries which represent emerging and developed Asian markets.

Third, our findings may serve as guide for investors and shareholders to understand the firms' participation in socially responsible activities, creative accounting practices and its impact on financial reporting. It is suggested that the credibility of the firms' CSR policies should be assessed thoroughly with caution because these policies might motivate managers to manipulate earnings and provide less transparent financial reports to the shareholders. Lastly, our study findings can help policy-making institutions and regulatory committees to be cautious about these managerial practices and enhance monitoring to enforce social compliance. The guidelines are likely to be formulated and introduced to uphold the real motivation of socially responsible programs, such as addressing ethical and moral issues and building a strong and relevant citizenship culture through shared values without the stakeholders' deception.

This study examines the phenomenon in specific contexts and accentuates the effect of CSR on earnings management. This study suggests that future research contemplates other contexts in analyzing the phenomenon, such as the stock market and economics perspectives for the better cognizance of the underlying and conflicting relationships. This study contemplates on the data from ESG reports provided by an independent rating company which limits this study from the inclusion of other firms not included in their database. The firms from countries, such as Philippines, Thailand, and Indonesia are marginalized, while other Asian countries, such as Vietnam and Cambodia, are not included due to incomplete and the lack of CSR information. The data also face limitations like other data from other sustainability databases (e.g. measurement and indexing issues). In addition, it is acknowledged that the findings are subject to some errors in estimating earnings management through the model utilized in this study. Hence, the authors suggest that future studies contemplate other variables that might influence the phenomenon through the mixed methods of research to address the inconclusive findings. Furthermore, this study suggests that other scholars investigate other boundary conditions in CSR and earnings management relations for a clear picture of the circumstances for ethical and sustainable business practices.

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## References

- Kim, Y.; Park, M.S.; Wier, B. Is earnings quality associated with corporate social responsibility? *Account. Rev.* **2012**, *87*, 761–796. [CrossRef]
- Jo, H.; Harjoto, M.A. Corporate Governance and Firm Value: The Impact of Corporate Social Responsibility. *J. Bus. Ethics* **2011**, *103*, 351–383. [CrossRef]
- Rodriguez-Fernandez, M. Social responsibility and financial performance: The role of good corporate governance. *BRQ Bus. Res. Quart.* **2016**, *19*, 137–151. [CrossRef]
- Schipper, K. Earnings management. *Account. Horiz.* **1989**, *3*, 91.
- Wang, Y.G. Corporate social responsibility and stock performance—evidence from Taiwan. *Mod. Econ.* **2011**, *2*, 788. [CrossRef]
- Healy, P.M.; Wahlen, J.M. A review of the earnings management literature and its implications for standard setting. *Account. Horiz.* **1999**, *13*, 365–383. [CrossRef]
- Hong, Y.; Andersen, M.L. The relationship between corporate social responsibility and earnings management: An exploratory study. *J. Bus. Ethics* **2011**, *104*, 461–471. [CrossRef]
- Scholtens, B.; Kang, F.C. Corporate social responsibility and earnings management: Evidence from Asian economies. *Corp. Soc. Res. Environ. Manag.* **2013**, *20*, 95–112. [CrossRef]
- Gras-Gil, E.; Manzano, M.P.; Fernández, J.H. Investigating the relationship between corporate social responsibility and earnings management: Evidence from Spain. *BRQ Bus. Res. Quart.* **2016**, *19*, 289–299. [CrossRef]
- Cespa, G.; Cestone, G. Corporate social responsibility and managerial entrenchment. *J. Econ. Manag. Strategy* **2007**, *16*, 741–771. [CrossRef]
- Chih, H.L.; Shen, C.H.; Kang, F.C. Corporate social responsibility, investor protection and earnings management: Some international evidence. *J. Bus. Ethics* **2008**, *79*, 179–198. [CrossRef]
- Prior, D.; Surroca, J.; Tribó, J.A. Are socially responsible managers really ethical? Exploring the relationship between earnings management and corporate social responsibility. *Corp. Govern. Intern. Rev.* **2008**, *16*, 160–177. [CrossRef]
- Ehsan, S.; Abbas, Q.; Nawaz, A. An inquiry into the Relationship between Earnings' Management, Corporate Social Responsibility and Corporate Governance. *Abasyn Univ. J. Soc. Sci.* **2018**, *11*, 104–116.
- Enomoto, M.; Kimura, F.; Yamaguchi, T. Accrual-based and real earnings management: An international comparison for investor protection. *J. Contem. Account. Econ.* **2015**, *11*, 183–198. [CrossRef]
- Cheung, Y.L.; Tan, W.; Ahn, H.J.; Zhang, Z. Does corporate social responsibility matter in Asian emerging markets? *J. Bus. Ethics* **2010**, *92*, 401–413. [CrossRef]
- Claessens, S.; Djankov, S.; Lang, L.H.P. The separation of ownership and control in East Asian corporations. *J. Financ. Econ.* **2000**, *58*, 81–112. [CrossRef]
- Welford, R. Corporate governance and corporate social responsibility: Issues for Asia. *Corp. Soc. Res. Environ. Manag.* **2007**, *14*, 42–51. [CrossRef]
- Morgan Stanley Capital International. MSCI Annual Market Classification Review. Available online: <https://www.msci.com/market-classification> (accessed on 20 August 2019).
- Organization of Economic Cooperation and Development. Business Insights on Emerging Markets. Available online: <https://www.oecd.org/dev/development-philanthropy/Consolidated> (accessed on 20 August 2019).
- Soana, M.G. The relationship between corporate social performance and corporate financial performance in the banking sector. *J. Bus. Ethics* **2011**, *104*, 133. [CrossRef]
- García, B.; Gill de Albornoz, B.; Gisbert, A. La investigación sobre earnings management. *Span. J. Financ. Account. Revista Española de Financiación y Contabilidad* **2005**, *34*, 1001–1034.
- ElMoatasem Abdelghany, K. Measuring the quality of earnings. *Manag. Audit. J.* **2005**, *20*, 1001–1015. [CrossRef]
- Landry, S.; Deslandes, M.; Fortin, A. Tax aggressiveness, corporate social responsibility and ownership structure. *J. Account. Ethics Public Policy* **2013**, *14*, 611–645. [CrossRef]
- Yun, J.J.; Liu, Z. Micro- and Macro-Dynamics of Open Innovation with a Quadruple-Helix Model. *Sustainability* **2019**, *11*, 3301. [CrossRef]
- Yun, J.J.; Won, D.; Park, K. Entrepreneurial cyclical dynamics of open innovation. *J. Evol. Econ.* **2018**, *28*, 1151–1174. [CrossRef]



26. Yun, J.J. How do we conquer the growth limits of capitalism? Schumpeterian Dynamics of Open Innovation. *J. Open Innov. Technol. Mark. Complex.* **2015**, *1*, 17. [CrossRef]
27. Yun, J.; Won, D.; Park, K. Dynamics from open innovation to evolutionary change. *J. Open Innov. Technol. Mark. Complex.* **2016**, *2*, 7. [CrossRef]
28. Jensen, M.C.; Meckling, W.H. Theory of the firm: Managerial behavior, agency costs and ownership structure. *J. Financ. Econ.* **1976**, *3*, 305–360. [CrossRef]
29. Kvaal, E.; Langli, J.C.; Abdolmohammadi, M. Earnings Management Priorities of Private Family Firms. Available online: <http://ssrn.com/abstract=1532824> (accessed on 20 August 2019).
30. Paiva, I.S.; Lourenço, I.C.; Branco, M.C. Earnings management in family firms: current state of knowledge and opportunities for future research. *Rev. Account. Financ.* **2016**, *15*, 85–100. [CrossRef]
31. Wang, D.; Yung, K. Do state enterprises manage earnings more than privately owned firms? The case of China. *J. Bus. Financ. Account.* **2011**, *38*, 794–812. [CrossRef]
32. Borralho, J.M.; Vázquez, D.G.; Hernández-Linares, R. Earnings management in private family versus non-family firms. The moderating effect of family business generation. *Span. J. Financ. Account. Rev. Española de Financ. y Contab.* **2019**, 1–24. [CrossRef]
33. Tan, C.; Robinson, T.R. *Asian Financial Statement Analysis: Detecting Financial Irregularities*; John Wiley & Sons: Hoboken, NJ, USA, 2014.
34. Petersen, H.L.; Vredenburg, H. Morals or economics? Institutional investor preferences for corporate social responsibility. *J. Bus. Ethics* **2009**, *90*, 1–14. [CrossRef]
35. Prencipe, A.; Bar-Yosef, S.; Mazzola, P.; Pozza, L. Income smoothing in family-controlled companies: Evidence from Italy. *Corp. Govern. Int. Rev.* **2011**, *19*, 529–546. [CrossRef]
36. Freeman, R.E. *Strategic Management: A Stakeholder Perspective*; Cambridge University Press: Cambridge, UK, 1984.
37. McWilliams, A.; Siegel, D.S.; Wright, P.M. Corporate Social Responsibility: Strategic implications. *J. Manag. Stud.* **2006**, *43*, 1–18. [CrossRef]
38. Shleifer, A. Does competition destroy ethical behavior? *Am. Econ. Rev.* **2004**, *94*, 414–418. [CrossRef]
39. Roychowdhury, S. Earnings management through real activities manipulation. *J. Account. Econ.* **2006**, *42*, 335–370. [CrossRef]
40. Jordaan, L.A.; De Klerk, M.; de Villiers, C.J. Corporate social responsibility and earnings management of South African companies. *S. Afr. J. Econ. Manag. Sci.* **2018**, *21*, 1–13. [CrossRef]
41. Gunny, K.A. The relation between earnings management using real activities manipulation and future performance: Evidence from meeting earnings benchmarks. *Contem. Account. Res.* **2010**, *27*, 855–888. [CrossRef]
42. Zang, A.Y. Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *Account. Rev.* **2011**, *87*, 675–703. [CrossRef]
43. Bozzolan, S.; Fabrizi, M.; Mallin, C.A.; Michelon, G. Corporate social responsibility and earnings quality: International evidence. *Int. J. Account.* **2015**, *50*, 361–396. [CrossRef]
44. Cohen, D.A.; Dey, A.; Lys, T.Z. Real and accrual-based earnings management in the pre-and post-Sarbanes-Oxley periods. *Account. Rev.* **2008**, *83*, 757–787. [CrossRef]
45. Li, S.; Fetscherin, M.; Alon, I.; Lattemann, C.; Yeh, K. Corporate social responsibility in emerging markets. *Manag. Int. Rev.* **2010**, *50*, 635–654. [CrossRef]
46. Welford, R. Corporate social responsibility in Europe and Asia: Critical elements and best practice. *J. Corp. Citiz.* **2004**, *13*, 31–47.
47. Baughn, C.C.; Bodie, N.L.; McIntosh, J.C. Corporate social and environmental responsibility in Asian countries and other geographical regions. *Corp. Soc. Res. Environ. Manag.* **2007**, *14*, 189–205. [CrossRef]
48. Chapple, W.; Moon, J. Corporate Social Responsibility in Asia: A seven-country study of CSR web site reporting. *Bus. Soc.* **2005**, *44*, 415–441. [CrossRef]
49. Sharma, B. Contextualizing CSR in Asia: Corporate Social Responsibility in Asian Economies. Available online: [http://ink.library.smu.edu.sg/lien\\_reports](http://ink.library.smu.edu.sg/lien_reports) (accessed on 20 August 2019).
50. Jo, H.; Na, H. Does CSR reduce firm risk? Evidence from controversial industry sectors. *J. Bus. Ethics* **2012**, *110*, 441–456. [CrossRef]
51. Palazzo, G.; Richter, U. CSR business as usual? The case of the tobacco industry. *J. Bus. Ethics* **2005**, *61*, 387–401. [CrossRef]

52. El Ghouli, S.; Guedhami, O.; Kwok, C.C.; Mishra, D.R. Does corporate social responsibility affect the cost of capital? *J. Bank. Financ.* **2011**, *35*, 2388–2406. [[CrossRef](#)]
53. Thomson Reuters. ESG Methodology. Available online: <https://financial.thomsonreuters.com/content/dam/openweb/documents/pdf/financial/esg-scores-methodology.pdf> (accessed on 20 August 2019).
54. Miralles-Quirós, M.; Miralles-Quirós, J.; Valente Gonçalves, L. The value relevance of environmental, social and governance performance: The Brazilian case. *Sustainability* **2018**, *10*, 574. [[CrossRef](#)]
55. Aouadi, A.; Marsat, S. Do ESG controversies matter for firm value? Evidence from international data. *J. Bus. Ethics* **2018**, *151*, 1027–1047. [[CrossRef](#)]
56. Garcia, A.S.; Mendes-Da-Silva, W.; Orsato, R.J. Sensitive industries produce better ESG performance: Evidence from emerging markets. *J. Clean. Prod.* **2017**, *150*, 135–147. [[CrossRef](#)]
57. Velte, P. Women on management board and ESG performance. *J. Glob. Responsib.* **2016**, *7*, 98–109. [[CrossRef](#)]
58. Tangjitprom, N. The role of corporate governance in reducing the negative effect of earnings management. *Int. J. Econ. Financ.* **2013**, *5*, 213–220. [[CrossRef](#)]
59. Bergstresser, D.; Philippon, T. CEO incentives and earnings management. *J. Financ. Econ.* **2006**, *80*, 511–529. [[CrossRef](#)]
60. Shen, C.H.; Chih, H.L. Earnings management and corporate governance in Asia's emerging markets. *Corp. Govern. Int. Rev.* **2007**, *15*, 999–1021. [[CrossRef](#)]
61. DeFond, M.L.; Subramanyam, K.R. Auditor changes and discretionary accruals. *J. Account. Econ.* **1998**, *25*, 35–67. [[CrossRef](#)]
62. Dechow, P.M.; Sloan, R.G.; Sweeney, A.P. Detecting earnings management. *Account. Rev.* **1995**, *70*, 193–225.
63. Cho, E.; Chun, S. Corporate social responsibility, real activities earnings management and corporate governance: evidence from Korea. *Asia Pac. J. Account. Econ.* **2016**, *23*, 400–431. [[CrossRef](#)]
64. Kim, Y.; Park, M.S. Pricing of seasoned equity offers and earnings management. *J. Financ. Quant. Anal.* **2005**, *40*, 435–463. [[CrossRef](#)]
65. Kim, J.B.; Yi, C.H. Ownership structure, business group affiliation, listing status and earnings management: Evidence from Korea. *Contem. Account. Res.* **2006**, *23*, 427–464. [[CrossRef](#)]
66. Lee, J.S.; Yen, P.H.; Chan, K.C. Market states and disposition effect: Evidence from Taiwan mutual fund investors. *Appl. Econ.* **2013**, *45*, 1331–1342. [[CrossRef](#)]
67. Suteja, J.; Gunardi, A.; Mirawati, A. Moderating effect of earnings management on the relationship between corporate social responsibility disclosure and profitability of banks in Indonesia. *Int. J. Econ. Financ. Issues* **2016**, *6*, 1360–1365.
68. Gavana, G.; Gottardo, P.; Moisello, A.M. Earnings management and Corporate social responsibility disclosure. Family vs. non-family firms. *Sustainability* **2017**, *9*, 2327. [[CrossRef](#)]
69. Dhaliwal, D.S.; Radhakrishnan, S.; Tsang, A.; Yang, Y.G. Nonfinancial disclosure and analyst forecast accuracy: International evidence on corporate social responsibility disclosure. *Account. Rev.* **2012**, *87*, 723–759. [[CrossRef](#)]

