



Article

A Moderated Mediation Model for Board Diversity and Corporate Performance in ASEAN Countries

Sahar E-Vahdati *, Norhayah Zulkifli and Zarina Zakaria

Department of Accounting, University Malaya, 50603 Kuala Lumpur, Malaysia; norhayah@um.edu.my (N.Z.); zarinaz@um.edu.my (Z.Z.)

* Correspondence: ss_vahdati@yahoo.com

Received: 17 October 2017; Accepted: 30 November 2017; Published: 23 February 2018

Abstract: Despite the major investigations in prior studies for direct links among board diversity and corporate performance, the literature has not covered many indirect associations among them. This article analyzes the association between board diversity (gender and foreigner) and corporate performance by focusing on the mediating role of corporate social responsibility reporting (CSRR) and the moderated mediation role of South East Asian (ASEAN) countries through new institutional theory, which consists of legitimacy and institutional theories. According to a sample of 264 corporates from all industries by using GRI G3 guideline from 2011 to 2013, we found that foreign and gender diversity have partial and full mediation effects in ASEAN countries. The main conclusion of the current article indicates that board diversity affects directly with corporate performance and indirectly with CSRR through moderated path analysis. The implications are valuable for academics, managers, and policy makers who are interested to determine the impact of intervening variables on the board diversity and corporate performance relationship in ASEAN countries.

Keywords: CSRR; GRI; ASEAN; diversity; corporate performance

1. Introduction

Recent corporate scandals and failures prompted companies to focus on corporate governance, ethics, trust, and accountability [1,2], which is reflected in increased studies pertaining to ethical management studies [3]. Due to the fact that problems associated with corporate governance have yet to be solved and the room for its improvement is prevalent [4], corporate governance is seen as being imperative in the context of practical importance. The quality of corporate governance could do with a few improvements, alongside its economic and legal aspects, both of which changes are based upon political actions. These improvements would benefit most international and multinational organizations [4].

The diversity of the board is usually heterogeneous and encompasses infinite number of dimensions, including age, sex, nationality, foreigners, religion, and education [5]. Due to the importance of the multivariate nature of corporate social responsibility reporting (CSRR) in boards, the combination of different diversity characteristics has recently been investigated [6,7].

Board diversity is a noteworthy issue among board characteristics of corporate governance. Generally, it has a variety of categories such as age, foreigners, education, and gender among board members [5]. It also promotes both creativity and innovation [8,9] and demonstrates the management's willingness to serve the wishes of their employees and customers [10]. Gender debatably remains one of the most long-sting and discussed elements of board structure among other diversity factors [11] faced by managers, directors and shareholders of the modern business world [12] to make value creation in businesses, as it improves problem solving by making available increased number of options [13]. A series of competitive benefits [14] has been explained for a firm which considers employing women

on the board of directors. The Presence of both men and women in corporations' board increases the quality of decision-making and contributes to increased board competence. Literatures on gender differences suggests that there are no common contrasts in competence between ladies and men, however, there are some differences in terms of behavior and abilities in a few circumstances [15]. Similarly, the role of women on boards is receiving increasing attention in South East Asian Nations (ASEAN) countries [16]. As a case in point, in Singapore professional-based organizations like BoardAgender have been appointed raise and comfort the advancement of women into board and senior management positions [17]. In addition, gender diversity prompts positive and creative discussions. Recommendations pertaining to good governance emphasize the importance of attributes other than independence required from board members.

While attention is increasingly paid to ethnic or gender diversity as a topic of active policymaking in many countries, non-national, or foreigner diversity reflects the demand for international competencies in universal market. These differences in leadership styles may have important implications for board effectiveness [18]. ASEAN countries with the aim of economic growth increasingly follow international guidelines to be particular in a global market [16,19]. Because of the significance of board diversity variety attributes in corporate social responsibility reporting (CSRR), as of late, many researches have engaged in testing the integration of them [6,7,20]. CSRR is an extension of firm's effort to move towards effective board diversity. Ensuring firm's sustainability through perfect business practices promotes accountability and transparency [20]. Better-governed firms are more likely to engage in CSRR as a credible way of signaling their corporate governance especially their diversity quality [21]. CSRR is not only important for governance, but also for corporate performance [22], which is vital reaching long term value that will help to promote a business continued acceptance and existence.

The issue of engaging CSRR in both corporate governance and corporate performance constitutes a high public profile due to the large number of popular press reports, shareholder proposals from advocacy groups, and policy statements from major institutional investors [12]. In view of the compelling issues, this study focuses on investigating the impact of gender and foreigner diversity on corporate performance throughout the companies in the ASEAN region that report their CSRR based on Global Reporting Initiative (GRI), which is currently considered the most credible framework for disclosing sustainability information [23]. The usage of GRI has been increasing recently, from both academics and industrial practitioners, due to the fact that a number of co-existents, the framework of non-financial reporting, guidelines, norms, standards and codes was disordered [24]. According to [25,26], the GRI Sustainability Reporting Guidelines is the dominant reporting guideline, and its adoption is increasing, especially in the business sector especially because of its unique multi-stakeholder composition characteristic. The voluntary reporting guidelines have been developed through discussions with stakeholders at meetings held in Asia, Europe and the Americas. Global reporting initiative has developed the leading standards or guidelines for CSRR [26,27]. Because the GRI has been initiated and supported by the United Nation, it has the potential to gather a consensus from all countries globally and it has been used as the dominant framework in various research. Six key execution domains of GRI index comprises Environment (EN), Economic (EC), Labour (LA), Human Rights (HR), Society (SO), and Product Responsibility (PR). Global reporting initiative has an international network of organizational stakeholders which constitutes a framework that incorporates reporting guidelines empowering more noteworthy for organizational accountability and transparency enabling companies to form stakeholders' trust in organizations [28].

Various initiatives have been used by countries in the ASEAN region to encourage the practice of CSRR, including stock exchange rules, reporting awards, and legislation [29]. However, in most cases, the practice is voluntary, and unregulated. The main national CSR initiatives in ASEAN can be found in Malaysia, Indonesia, Singapore, and the Philippines [30], with the main aims of accelerating economic growth, social progress, and cultural developments in the region, along with adhering to the rule of law in the relationship between countries [31].

Sustainability **2018**, *10*, 556 3 of 20

Most prior studies investigate the direct association between two factors, such as corporate governance and corporate social responsibility (CSR) [32], corporate governance (CG) and corporate performance [33,34], and corporate social responsibility and corporate performance [35]. There are few studies that investigate inter-relationship between the three areas of CSR, CG, and corporate performance without accounting for the potential mediating role of CSRR in the relationship between CG and corporate performance, which could result in some degree of inconsistency in the reported results [36]. In 2008, ASEAN leaders asserted the importance of promoting CSRR by including it as part of its strategic objectives [19]. However, this aspect of the study on how this region responds to CSRR is still limited [16,31]. In view of this situation, due to the differences in terms of culture and language in these areas, the number of corporates involved in CSRR in ASEAN is unsatisfactory. In addition, as English is not prevalent in some of these areas, the absence of CSRR is unbecoming. Nevertheless, the fact that the practice of CSR in a few ASEAN countries such as Malaysia and Indonesia are mandatory, it is pertinent to use GRI as an international framework to report CSR [19,37] and to realize greater reliability and accuracy in form of disclosing CSR information. Moreover, organizations might report higher stock returns if they apply GRI guidelines responsibility reporting is a portion of a firm's communication implements in order to diminish information asymmetry between investors and managers [38]. In other words, GRI can produce a more precise market valuation of a firm Thus, it is apparent that more research is relevant in using GRI as a framework for ASEAN countries to determine their responsibility reports.

A good corporate governance leads to CSR extension [39]; however, there is a gap in the literature in which if the good CG effect on CSRR and corporate performance concurrently. Meanwhile the way of CSRR influence on CG and corporate performance should be considered. Therefore, establishing CSRR as a mediator in the relationship between CG and corporate performance is pertinent, which is neglected in previous research works.

There is a need to make a comparison among ASEAN countries to determine the interaction results of CSRR on board diversity and corporate performance in trying to enhance and promote ASEAN economic growth as whole. Each of the countries in this region should be promoted separately while building the aggregate financial development as a whole. Therefore, it is important to determine the effect, role, and strength of a country as a moderating variable on the relationship between CG and CSRR, CG and corporate performance, CSRR and corporate performance, as well as the mediating effect of CSRR in the relationship between CG and corporate performance among the ASEAN countries.

To date, research, largely neglected the board's main functions of reporting CSR-related issues and corporate performance. Apparently the board is responsible for the development of sustainable business strategies and managing the company. It may naturally decides on company's CSR policy, which could influence its earnings [35,40].

In this paper, we report a moderated mediation model of CSRR as a mediator of corporate governance and corporate performance in ASEAN countries with the aim to provide meaningful and additional insights into the general understanding of CG mechanisms, CSRR, and corporate performance. Figure 1 details a conceptual model of the current study.

Sustainability **2018**, *10*, 556 4 of 20

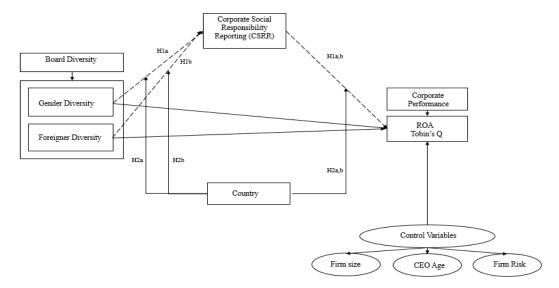


Figure 1. Research model of the current study.

2. Theoretical Background

2.1. Board Diversity and Corporate Performance

Diversity, in general, is defined as heterogeneity among members of the board. It has an infinite number of dimensions, encompassing age, nationality, religions and functional background, and workforce/relational skills, political and sexual preferences [5]. It could be visible/observable (racial/ethnic background, nationality, gender, and age) or less visible (educational, functional and professional background, industry experience, and organizational membership). One of the latest and emerging themes, as reported by academics and practitioners, is the board's diversity [41]. It is well documented in literature that the board diversity could influence financial performance and reporting [12]. The relating board diversity factors that can have effect on corporate performance concentrates on gender and non-national or foreigner diversity [21].

Various research reports on an increase in female members on corporate boards [8,13]. Given that the number of women on corporate board is increasing, several researchers tried to elucidate the contribution of women on the performance of a company. Some studies reported that the presence of women on corporate boards resulted in improved company performance. A positive link between the ratio of female-to-male board members on Tobin's Q in Spanish firms is reported by [13]. Similarly, the proportion of women on board is positively linked to Tobin's Q in Fortune 1000 companies [12]. Another study [42], posited a positive association between the proportion of female board members and corporate performance return on assets (ROA) and return on investment (ROI). However, according to [43], the proportion of women board members was not a significant predictor of ROA, return on equity (ROE), and return on investment of listed companies in the Wall Street Journal.

From the perspective of the agency theory, it is for the board of directors to fully cover economic values [44]. Therefore, merging agency and institution theories creates a basis that redefines a model of corporate governance [45]. The enforcement of the rules/regulations positively influence corporate performance.

In order to support the lack of a definite relationship between foreigner diversity and corporate performance in ASEAN countries, [46] selected the top 100 companies of the region for five years from 2009 to 2013. Based on the agency theory and regression method, they failed to find a definite link between foreigner diversity and corporate financial performance. They claimed that this insignificant association was due to corporate governance policies in ASEAN countries, which were customized for international practices, making it a vulnerability in the region [47,48].

Sustainability **2018**, *10*, 556 5 of 20

Therefore, this study selects two important relevance of board diversity which is gender and foreigner to test the hypotheses in the ASEAN region to compare it to corporate performance. As per the aforementioned literature, an insignificant relationship is expected between gender diversity and corporate performance and foreigner diversity and corporate performance due to the adjustment of corporate governance to international practices and the different cultures of ASEAN countries.

2.2. Board Diversity and CSRR

As far as the fleet's diversity and CSRR are concerned, research suggests that diversity in boards can influence the social and environmental aspects of businesses [7,49]. Some studies focus on the effect of the board on the whole CSR [21], while others focus on specific components of CSR, such as the environment, philanthropy, or donations [50].

However, the majority of the research associating the diversity of the board to CSRR reported similar motivations. One of the most widely used diversity characteristic in literature is gender diversity representing the most pressing issue faced by modern companies [12]. Recently, its focus has shifted beyond diversity literature to politics, the economy, environmental, and other societal settings. Despite the increased number of female directors occupying boards and senior positions [51], there is significant pressure towards increasing this occurrence resulted in codifying this effort into law by several countries.

The presence of women on corporate boards resulted in improved sensitivity and participatory decision-making styles which in turn improved corporate responsibility strength ratings in a positive link has been reported between CSRR and female directors on corporate boards [49]. It was also posited that due to their contribution to the corporate CSSR, women also improve company reputation. This means that female participation should move beyond being a token effort into an accepted corporate practice. In addition women are more environmentally conscious compared to men [52], which implies that women would be more conscientious when it comes to green/environmental issues compared to their male counterparts. In a study conducted in 2005 for 100 companies worldwide for the relationship between female directors and CSR by [53], both factors are directly related, due to the fact that female directors lean towards influencing issues that are linked to the stakeholders/CSR.

However, unlike men, women directors are not as concerned with economic performance, and instead, they are more concerned about the discretionary aspects of corporate responsibility [6]. A quantitative research on environmental reporting and board composition using the regression method in the US was conducted by [49], and the authors concluded that foreigner diversity is positively linked to gender diversity and CSRR, while the age of the directors was not significantly linked to environmental reporting.

Malay-dominated boards are positively-linked to the corporate social disclosure (CSD) [37]. Most respondents affirmed the belief that the ethnicity of the board members are determinants of corporate social disclosure (CSD) in the context of Malaysia. On top of favorable treatment towards a specific ethnicity, the board demonstrated a more feminine cultural leaning associated with Malay culture, which could be the reason behind the aforementioned positive relationship.

The relationship between CSRR and gender and foreigner diversity is mixed. Despite the positive link between CSRR and board diversity, other researchers, such as [54], who studied corporate governance characteristics and CSR reporting in Malaysian companies using the quantitative regression method, reported no significant relationship between gender diversity and CSR disclosure. This was also reported by [55], who researched the role of the board in disseminating greenhouse gas information disclosure. They posited that there is no significant relationship between board diversity and CSR disclosure. Empirical literature mostly reports a positive relationship between board diversity (foreigner and gender) and CSR reporting, such as [37,52]. This study formulated two aspects of board diversity, namely gender and foreigner with CSRR.

From the perspective of theory, this research uses the legitimacy theory to elucidate the link between corporate governance and CSR, due to its status as the most cited theories in social and Sustainability **2018**, 10, 556 6 of 20

environmental studies. The theory is based on the concept of a social contract, which limits the activities of a company within the boundaries defined by society [56]. Basically, the company will be supported by the stakeholders and continue to operate insofar as the company offers advantages, or remain benign. According to this theory, organizations are continually striving to ensure that they are perceived to operate within the boundaries and norms of their respective communities, in that they try to ensure that their activities are perceived as "legitimate" [57].

Legitimacy theory suggests that the top management of an organization is responsible for pinpointing gaps and conducting social practices and disclosure to the stakeholders to guarantee accountability. Corporate governance and CSR disclosures in Bangladeshi companies using legitimacy theoretical frameworks to cover the extent of corporate governance capabilities, such as managerial holdings, foreign ownership, board staff, CEO duality, and the presence of audit committee organizational responses to the many interest groups [58]. The authors confirmed that although CSR data is negatively associated with management ownership, it becomes positively related in the case of export-oriented industries. They also pointed out that the characteristics of corporate governance confirm organizational legitimacy via CSR disclosures.

On another perspective the institutional theory implies that corporate governance mechanisms can sometimes be used for legitimization [59]. Moreover, CSRR literature seems to suggest that getting rid of concerns pertaining to the threat to organizational legitimacy form a significant motivating factor for disclosing information. This implies a significant relationship between CSRR and corporate governance mechanisms.

3. Hypothesis Development

3.1. Integrating Board Diversity, Corporate Performance and CSRR as a Mediator

Well-designed corporate governance systems will help align the interest of the managers to that of the shareholders. The sociological approach towards institutional theory posited that individuals, groups, and businesses compete, not only for finances, but also social legitimacy [36]. Increased participation in CSR increases efficiency and improves corporate financial performance (CFP) by decreasing agency costs and information asymmetry among financial stakeholders [60].

Managers must fully comprehend corporate rationale and the organizational process involved in transactions between organizations and their stakeholders [61]. They are required, at individual level, to take responsibility for socially responsible outcomes in all areas of CSR. Due to the growing importance of institutional theory in CSR literature, this study uses the new institutional theory, which consists of legitimacy and institutional theories [36], to determine the links between CSR, CG, and corporate achievements. This theory mainly refers to accepted socioeconomic beliefs, norms, and practices that are linked to different aspects of society, such as education, law, politics, religion, and work. The list of sub Hypotheses are based on the new institutional theory:

Hypothesis 1. *CSRR mediates the relationship between gender diversity and corporate performance.*

Hypothesis 2. *CSRR mediates the relationship between foreigner diversity and corporate performance.*

3.2. Moderated Mediation Effect of Country

We generally expect the CSRR to mediate the relationship between corporate governance and CSRR via new institutional theory in the ASEAN region, namely Malaysia, Indonesia, Singapore, and the Philippines. It is also important to be aware of this effect of mediating the relationship in each of the four regions in ASEAN.

According to [28], the effect of culture in the CSR reporting model depend on institutional theory in cross-cultural settings, where the culture was one of collectivism instead of individualism. It is also stated that the CSRR in each country is unique and specific to the institutional background

Sustainability **2018**, 10, 556 7 of 20

of the countries. Therefore, it is important to be aware of the effect of different cultures on CSRR, which is the mediator of CG-corporate performance relationship. Hence, Hypothesis H3 and H4 are formulated below:

Hypothesis 3. Country moderates the mediation effect of CSRR in the relationship between gender diversity and corporate performance.

Hypothesis 4. Country moderates the mediation effect of CSRR in the relationship between foreigner diversity and corporate performance.

4. Method

Sample and Procedures

The data for the current research were collected from ASEAN countries namely Malaysia, Indonesia, Singapore, and the Philippines. Association of South East Asian Nations is an interesting area for research since it represents a region where the countries vary in terms of languages, regulatory framework, level of development, population size, standard of living religious affiliation, and legal environment, and level of trade.

This study focuses on companies reporting their CSRR activities based on GRI G3 guideline in GRI database as a sample for ASEAN countries. The latest guidelines are available for all companies' reports for these countries during the period of 2011–2013. This period is chosen because the guidelines used by companies in the particular time span was G3. Moreover, the Blueprint for the ASEAN Socio-Cultural Community adopted by the ASEAN Leaders in 2008 is to promote CSR by including it as a part of its strategic objectives. The Blueprint calls for actions to ensure that CSR corporates in the corporate agenda and contributes towards sustainable development in the ASEAN region [62].

Initially, 447 corporates from all industry sectors namely 102 corporates from Malaysia, 123 from Singapore, 150 Indonesia, and 72 from the Philippines reported their CSRR activities in GRI report list database. However some corporates which reported their CSR activities are not listed in the stock exchange and data stream, therefore the number of corporates decreased to 264 corporates in the current study. Therefore specifically the data come from 69 corporates from Malaysia, 57 Singapore, 90 Indonesia, and 48 from the Philippines.

5. Measures

5.1. Research Model

The current research examines the association between board diversity (gender and foreigner), CSRR and corporate performance in ASEAN countries. The study uses SPSS AMOS 22.0 to analyse the research model. The links between the variables of interest in the current research are illustrated in a research model which is presented in Figure 1.

5.2. Model Specification of the Link between CSRR, CG, and Corporate Performance

After the conceptual framework is constructed and the Hypotheses presented, the next step is to construct the models to test the Hypotheses. Mediation, or an indirect effect, is assumed to take place when the causal effect of an independent variable (X) on a dependent variable (Y) is transmitted by a mediator (M) [63], In other words, X directly affects Y, and indirectly affects Y via indirect regression relationship, constructed to show the mediation role in model 1. Also, model 2 examines the strength of the country as moderator to see the effect of mediation role of CSRR in the association between board diversity and corporate performance for the four sample countries. A summary of both models are tabulated in Table 1.

Sustainability **2018**, *10*, 556 8 of 20

	Research Models				
	Model 1	Model 2			
IV	Gender Diversity, Foreigner Diversity	Gender Diversity, Foreigner Diversity			
\mathbf{DV}	Corporate Performance	Corporate Performance			
Controls	Firm Risk, Firm Risk, CEO Age	Firm Risk, Firm Risk, CEO Age			
Mediator (CSRR)	yes	yes			
Moderator (Country)	no	ves			

Table 1. Summary of models.

5.2.1. Independent Variables

This study measures board diversity in the context of gender and foreigners. Diversity representation is obtained from publicly available official and GRI reports for 2011, 2012, and 2013 on the basis of the annual review of the company's financial performance and sustainability reports. Gender diversity is defined by the number of women on board, which is determined by dividing the number of women on the board with that of the total number of people on the board. Foreign diversity refers to the number of foreign board members, using the same formulae above, substituting the variable women with foreigners.

5.2.2. Dependent Variable

Organizational performance is measured using various methods. Researchers use financial data as the share price ratio to revenue and stock prices at book values [42]. Consistent with previous literature [34,64], two key financial ratios are used: firstly return on assets as short-term proxies to measure accounting performance is defined by net income divided by balance sheet or ROA, which is constantly claimed to be a traditional and real measurement of corporate performance [65]. It also enables researchers to consider possible market anomalies that may act as an obstacle to all available information being reflected in the stock price, and secondly Tobin's Q (a long-term proxy for the value of companies, which is the company's market value of the book value of assets). Information about ROA and Tobin Q is taken from publicly available financial reports for 2011 and 2013. Both measures assess the effectiveness of a company's capital invested by shareholders.

5.2.3. Mediator

CSRR is used as an intermediary in this research. There are two techniques for measuring CSRR in annual reports: The first is based on the number of pages [66], sentences [65], and words [66]. According to [67], page may contain an image that lack information on the CSR activities, while sentences and words could possibly ignore a graph or a table. The second method is the quality of reporting, which is based on assessing measurement based on disclosures via content analysis. It involves identifying the presence of CSR-related information via a dichotomy or weighted scoring method [68].

Under the dichotomous scoring method, researchers use an equal or underweight scoring method to pinpoint the presence of CSR-related information disclosed by companies. The use of the former is simpler and less controversial compared to the latter [69]. The limitation of this approach is its inability to assess the weight of a particular CSRR dimension.

Thereafter, several researchers refine the method of weight evaluation by assigning points for disclosed CSRR elements, at 0–3 [67], and 0–4 [68,70]. This method is named the weighted scoring method, and a higher score for a particular CSRR element signify the importance companies placed on the CSRR element relative to others [71]. A higher score for a particular CSRR element also shows a better quality of CSRR.

Sustainability **2018**, 10, 556 9 of 20

This study utilizes the weightage scoring method to analyze the quality of CSRR disclosed by corporate organization in ASEAN countries. The decision to use the weightage scoring method is due to its aforementioned advantages.

The guidelines of the GRI can be used voluntarily by organizations to report economic, environmental, and the social dimensions of their activities, products, and services. Although the use of GRI has been criticized [66], its comparability and conceptual approach makes it expandable when used for research. Global Responsible Initiative published its first index in 2000 at the Global Conference on Sustainability and Reporting in 2002 (G2), 2006 (G3), 2011 (G3.1), and the latest version at May 2013 (G4) at the global conference on sustainability reporting [62]. Data collected for this study is linked to companies reporting CSR registered in GRI between 2011 and 2013, during which time the guidelines used were G3. The CSR index in this study is calculated based on a weighted scoring method. This method is used due to its ability to specify the weighting level given to a particular CSRR contains G3. Depending on the structure and justification, each subject criterion is rated between 0 and 4 points, as per previous scoring systems. If a specific topic has not been mentioned in the reviewed report, no points are given; short or generic statements obtained 1 point, a more accurate coverage 2 points, comprehensive coverage 3 points, and maximum score 4 are given to a topic when the coverage is full and systematic. The value of CSRR used in this study is based on the content analysis of annual reporting standards. The study uses the GRI guideline to analyze CSRR content.

5.2.4. Moderated Mediation

Moderated mediation model helps to explain how and when a given effect takes place [72]. Formally, moderated mediation takes place when the strength of an indirect effect relies on specific variables. In this term, ASEAN countries are considered as a moderated mediation variable to see and compare differences between countries in the relationship between corporate governance mechanism and corporate performance with CSRR as a mediating variable. Country is a categorical variable, therefore the measurement of this variable is based on four ASEAN countries by giving a value of 1 for Malaysia, 2 for Singapore, 3 for Indonesia, and 4 for the Philippines.

5.2.5. Control Variables

Statistical predictions can be improved using more than one independent variable. There are other variables that can affect the relationship between corporate governance and corporate performance; thus, these variables need to be controlled in the research. Six control variables are included in the research model.

Corporate size is an important factor affecting corporate performance. The research utilizes the natural log of corporate assets to measure corporate size if there is a positive relationship between corporate size and corporate performance [35]. The risk the company used to control the relationship between social behaviors and profitability is achieved by long term debt divided by total assets. The final variable is the age of the CEO [73].

6. Analysis

6.1. Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) is a special form of factor analysis and a specific case of SEM, often times is used in social science. It is defined as an extended analysis of the Exploratory Factor Analysis (EFA), and can be used to determine whether the actions of a design agree with the understanding of a researcher regarding the nature of the construct (or factor). The aim of CFA is to determine if the data agree with the hypothetical measurement model. Model fit measures can be garnered from the analyses, which can then be used to determine the covariance between all objects or actions in the model. Any unnecessary items contained in a latent construction are either removed or restricted.

Determining whether a particular model agrees with the data is a crucial juncture in SEM, as it finalizes whether or not the model will be accepted/rejected. Model fit is defined as the extent a hypothesis model agrees with the data [74]. In contrast to many statistical procedures that have a single powerful pass index, SEM reports a large number of model fit indices. There is an opportunity for the researcher to only report measures that are within an acceptable range, such as those that agree with their proposed model. It should also be noted that the appropriate index of the model does not guarantee that it is useful. Matching indices actually provide information about models that are inadequate and not reflective of the usability of the model [74].

Model testing and pre assumption for fitness analysis of this work requires that the data meet all of the aforementioned criteria. According to [75] AMOS can be used to confirm whether or not the proposed model meets the criteria of an excellent structural equation model:

 χ^2 (Chi Square Statistic) and Probability, value of Chi Square /DF is \leq 2.0 or 3.0, p-value must be \geq 0.05, Degrees of Freedom (Degree of Freedom) must be Positive , Goodness of Fit Index (GFI) must be \geq 0.90, CFI (Comparative Fit Index) must be \geq 0.90, RMSEA (Root Mean Square Error of Approximation) must be \leq 0.08. Table 2 shows the results of the fitness of models, based on the 264 corporate-year observations gathered over three-year period from 2011 to 2013.

Goodness of Fit Index	Research Models				
Goodness of 11t maex	Cut off Value	M1	M2		
df	positive	37	64		
<i>p</i> -Value	≥0.05	0.236	0.123		
RMSEA	≤0.08	0.024	0.028		
GFI	≥0.90	0.975	0.954		
CFI	≥0.90	0.964	0.967		
RChisq/df	≤2.00	1.157	1.207		
Total Result	good	good	good		

Table 2. Summary of models fitness.

It is absolutely necessary to establish and test the validity and reliability, when doing a confirmatory factor analysis (CFA). If factors do not demonstrate adequate validity and reliability, moving on to test a casual model is useless.

6.2. Discriminant Validity

Discriminant validity is defined as the extent to which a construct is really different from others. In other words, each construct should be one of a kind. There is a discriminant validity if the Average Variance Extracted (AVE) exceeded the Maximum Shared Squared Variance (MSV) and Average Shared Squared Variance (ASV), where MSV < AVE, ASV < AVE. Discriminant validity needs to be examined for constructs. All path estimates were significant at the 1% level, while loadings between measured variables and factors generally exceed 0.5. Construct Reliability (CR) also exceeded AVE, which confirms that the indicators are significantly loaded on their hypothesized construct, and are at adequate levels of convergent validity [76].

6.3. Convergent Validity

The items that are indicators of a specific construct should cover or share a high proportion of variance. All factor loadings should be statistically significant. Average Variance Extracted (AVE) needs to exceed 0.5, while Construct Reliability (CR) should exceed Average Variance Extracted (AVE), where AVE > 0.5, CR > AVE.

6.4. Reliability

Reliability is an indicator of convergent validity, which refers to the internal consistency of the factors. We have reliability if Construct Reliability (CR) exceeds 0.7. All path estimates are significant, while CR is higher than 0.7. Table 3 depicts the results of validity and reliability.

Convergent Validity CR > 0.7		Discrimina	nt Validity	Reliability $\alpha > 0.7$ CR > 0.7	
		MSV	< AVE		
CR > A	VE	ASV < AVE			
	Cronbach's α	CR	AVE	MSV	ASV
Gender Diversity	0.876	0.798	0.663	0.547	0.187
Foreigner Diversity	0.918	0.941	0.763	0.723	0.342
ROA	0.787	0.663	0.646	0.234	0.155
Tobin's Q	0.814	0.826	0.720	0.654	0.379
CSRR	0.898	0.847	0.734	0.679	0.329

Table 3. Results of validity and reliability.

6.5. Descriptive Statistics

Table 4 shows the descriptive statistics of the variables proposed for the analysis: the dependent variables (ROA and Tobin's Q), independent variables (gender and foreigner diversity), mediator (CSRR), moderator (country), and control variables (firm size, CEO age, and firm risk). Results report that the mean gender diversity is 10% which indicates that on average 10 per cent of listed firms possess female for board of directors in ASEAN. The mean presence of foreigner diversity is also very low (20%).

	Number	Minimum	Maximum	Mean	Std. Deviation
ROA	264	-0.16	0.41	0.0973	0.08705
Tobin's Q	264	0.45	9.77	3.7061	2.04196
gender	264	0.00	0.500	0.1013	0.10983
foreigner	264	0.00	0.71	0.2179	0.18419
CEO age	264	1.58	1.68	1.7279	0.04925
SIZE	264	0.26	1.05	0.8750	0.10998
CSRR level	264	1.00	3.00	1.8631	0.71801
Country	264	1.00	4.00	2.4373	1.06419

Table 4. Descriptive statistics.

6.6. SEM Results

Hypotheses 1 and 2 predicted that CSRR mediates the relationship between board diversity and corporate performance. To do so, we performed Bootstrapping 1000 samples to compute bias-corrected confidence intervals. According to [77] a full mediation is supported if the total effect is significant (p < 0.05). In this case, the indirect effect is significant (p < 0.05), but the direct effect is not significant. There is also a partial mediation if the total effect, indirect effect, and direct effect are significant (p < 0.05).

As per Hypothesis 1, it is supported when there is a partial mediation with all the total path with mediation, the indirect path, and the direct path without mediation being significant (p < 0.05). Hypothesis 2 is supported as the mediation analysis supported that CSRR fully mediates the relationship between foreigner diversity and ROA, as the direct unmediated path and indirect path is both significant.

As predicted in Hypothesis 1 and 2, CSRR (partially) mediates the relationship between gender diversity and Tobin's Q; with significant total, indirect, and direct path coefficients of (p < 0.05, path coefficient = 0.53, p < 0.05, path coefficient = 0.48, p < 0.05, path coefficient = 0.57). Although Hypothesis 2 is not supported in the case of foreigner diversity and Tobin's Q, only the indirect relationship is significant, with path coefficient of 0.66 confirming the significant link between CSRR and organizational performance. Tables 5 and 6 tabulate details pertaining to H1 and H2.

Table 5. Mediating SEM result for ROA.

		Dourd	Diversity (X) $=$	CORRECTION /				
		Total	Effect	Indire	ct Effect	Direct	Effect	
Нуро	Description	P.Co	<i>p</i> -Value	P.Co	<i>p</i> -Value	P.Co	<i>p</i> -Value	Relationship Conclusions
H1	$Gender \rightarrow ROA$	0.531	0.041 *	0.481	0.029 *	0.572	0.042 *	Partial Supported
H2	$For eigner {\rightarrow}\ ROA$	0.872	0.013 *	0.664	0.005 *	0.915	0.068	Full Supported
	Description	P.Co	<i>p</i> -Value	P.Co	<i>p</i> -Value	P.Co	<i>p</i> -Value	Relationship Conclusions
CEO age	$CEO age \rightarrow ROA$	-0.533	0.031 *	0.442	0.864	-0.564	0.564	Direct
Firm Size	$Size \rightarrow ROA$	0.262	0.023 *	-0.453	0.264	0.336	0.336	Direct
Firm Risk	$Risk \rightarrow ROA$	-0.756	0.214	0.000	0.0	-0.821	-0.821	No

R Square (ROA) 0.245 R Square (CSRR) 0.403

Table 6. Mediating SEM Result for Tobin's.

		Total	Effect	Indire	ct Effect	Direct Effect		
Нуро	Description	P.Co	<i>p</i> -Value	P.Co	<i>p</i> -Value	P.Co	p-Value	Relationship Conclusions
H1	Gender→ Tobin's Q	0.234	0.009 *	0.451	0.005 *	0.289	0.006 *	Partial Supported
H2	$For eigner {\rightarrow} \ Tobin's \ Q$	0.312	0.410	0.516	0.005 *	0.312	0.068	Indirect Supported
	Description	P.Co	<i>p</i> -Value	P.Co	<i>p</i> -Value	P.Co	p-Value	Relationship Conclusion
CEO age	CEO age \rightarrow ROA	0.255	0.017 *	-0.151	0.231	0.274	0.019 *	Direct
Firm Size	$Size \rightarrow ROA$	0.296	0.161	-0.146	0.049 *	0.276	0.171	Indirect
Firm Risk	$Risk \rightarrow ROA$	-0.212	0.851	0.285	0.216	-0.289	0.643	No

^{*} Indicates significance at 5%.

^{*} Indicates significance at 5%.

Hypotheses 3 and 4 predicted ASEAN countries moderate the mediation effect of CSRR in the relationship between board diversity and corporate performance. Accordingly, we performed moderated path analysis [78], bootstrapping 1000 samples to compute bias-corrected confidence intervals. As shown in Table 11, in Malaysia, gender diversity and ROA have partial mediation with the direct path with mediation and the indirect path, and total unmediated being significant path coefficient = 0.41, p < 0.05, path coefficient = 0.58, p < 0.05, path coefficient = 0.48, p < 0.05). Accordingly Indonesia has partial mediation with the direct path with mediation and the indirect path, and total unmediated of (path coefficient = 0.23, p < 0.05, path coefficient = 0.52, p < 0.05, path coefficient = 0.28, p < 0.05). As it pertains to Singapore and the Philippine, there is no mediation effects of CSRR for gender diversity and ROA in these two countries.

In conclusion, based on differences in ASEAN countries, H3 is supported, there is a moderation effect of country for mediation role pf CSRR in the relationship between gender diversity and ROA. As it pertains to H4, it is also supported. ASEAN countries moderates the mediated relationship between foreigner diversity and ROA via CSRR in such a way that it shows partial mediation effect in Singapore with (path coefficient = 0.19, p < 0.05, path coefficient = 0.38, p < 0.05, path coefficient = 0.53, p < 0.05, path coefficient = 0.53, p < 0.05, path coefficient = 0.53, p < 0.05, path coefficient = 0.54, p < 0.05, path coefficient = 0.55, p < 0.05, path coefficient = 0.56, p < 0.05, path coefficient = 0.57, p < 0.05, path coefficient = 0.58, p < 0.05).

Regarding to H3 for Tobin's Q, it is supported since ASEAN countries have moderated mediation effect on the association between gender diversity and Tobin's Q. The reason is due to partial mediation effect in Indonesian companies with total path coefficient = 0.19, p < 0.05, indirect path coefficient = 0.44, p < 0.05, and direct path coefficient = 0.21, p < 0.05), although there is no mediation effect in other three countries. As we predicted for H4 with Tobin's Q, it is supported because of full mediation effect in Singaporean companies with significant direct unmediated path coefficient of 0.44 and the indirect path coefficient of 0.19. Summary of results for H3 and H4 are reported in Table 7.

Hypothesis	Malaysia	Indonesia	Singapore	Philippines	Conclusions
H3 (with ROA)	Supported (Partial Mediation)	Supported (Partial Mediation)	Rejected	Rejected	There is a difference with moderator (accepted)
H4 (with ROA)	Rejected	Supported (Partial Mediation)	Supported (Partial Mediation)	Rejected	There is a difference with moderator (accepted)
H3 (with Tobin's Q)	Rejected	Supported (Partial Mediation)	Rejected	Rejected	There is a difference with moderator (accepted)
H4 (with Tobin's Q)	Rejected	Rejected	Supported (Full Mediation)	Rejected	There is a difference with moderator (accepted)

Table 7. Summary of Hypothesis results for H3 and H4.

6.7. Additional Analysis

We conducted additional analyses to support the mediation effect of CSRR in the interaction between board diversity and corporate performance. According to [78], 3-step approach in which several regression analyses is performed to establish that zero-order relationships among the variables exist with the purpose of predicting any significant or non-significant relationships to conclude possibility of mediation existence [79,80]. The interpretation of [78] causal steps approach tests for the relative size of the indirect effect compared to the direct effect, in which full mediation results when c' is non-significant, partial mediation eventuates while c is sum of c' and indirect effect (a*b), and no mediation happens only if c and c' have zero amount.

To ascertain the results of H1 and H2, this study replicates the results in Tables 8–11 by doing 3-step regression analysis, and re-estimated interaction effect of CSRR between corporate performance and board diversity (path c) in the first step. Then in step 2 (path a) between board diversity and CSRR,

bivariate regression is applied, and later in step 3 (path b, and c') multiple regression is conducted for the prediction of corporate performance from CSRR and board diversity. These results supported the mediational Hypothesis. Percent mediation is calculated on the effective size of mediation analysis (PM) for H1 and H2 which is interpreted as the percent of the total effect (c) accounted by indirect effect (a*b) (PM = a*b/c). As an additional analysis for H1 and H2 with ROA, the results of Table 8 supported partial mediation effect of CSRR with mediation size of 20 percent (path c, p < 0.05, beta = 0.532; path a, p < 0.05, beta = 0.248; path b, p < 0.05, beta = 0.432; path c', p < 0.05, beta = 0.320) . Moreover, Table 9 confirmed full mediation effect of CSRR for H2 with mediation size of 60 percent (path c, p < 0.05, beta = 0.456; path a, p < 0.05, beta = 0.815; path b p < 0.05, beta = 0.342; path c', p > 0.05). There is partial mediation effect in H1 with Tobin's Q with mediation effect size of 26 percent shown in Table 10 (path c, p < 0.05, beta = 0.221; path a, p < 0.05, beta = 0.248; path b, p < 0.05, beta = 0.229; path c', p < 0.05, beta = 0.164), however there is no mediation effect shown in Table 11.

Table 8. Regression Coefficient for the Mediation Effect H1 with ROA.

Testing Path	S.E	β	Sig			
	Path c $DV = ROA$ $R^2 = 0.216$					
IV = gender	0.048	0.532	0.035			
	Path a DV = CSRR $R^2 = 0.135$					
IV = gender	0.0937	0.248	0.001			
	Path b and c' $DV = ROA$ $R^2 = 0.08$					
IV = gender	0.035	0.320	0.049			
IV = CSRR	0.023	0.432	0.021			
Total (a)*(b)		0.110				

Note: C = c' + a*b (partial mediation).

Table 9. Regression coefficient for the mediation effect H2 with ROA.

Testing Path	S.E	β	Sig			
	Path c $DV = ROA$ $R^2 = 0.162$					
IV = foreigner	0.048	0.465	0.035			
	Path a DV = CSRI $R^2 = 0.157$					
IV = foreigner	0.423	0.815	0.001			
	Path b and c' $DV=ROA$ $R^2 = 0.231$					
IV = foreigner	-	-	Not Sig			
IV = CSRR	0.3221	0.342	0.014			
Total (a)*(b)		0.278				
Note: $C = a^*$	b, c' = 0 (ful	l mediatio	on).			

Sustainability **2018**, 10, 556 15 of 20

Table 10. Regression coefficient for the mediation effect H1 with Tobin's Q.

Testing Path	S.E	β	Sig				
	Path c						
D	V = Tobin'	s Q					
	$R^2 = 0.252$	2					
IV = gender	1.351	0.221	0.003				
	Path a						
	DV = CSRR						
	$R^2 = 0.086$						
IV = gender	0.0937	0.248	0.001				
]	Path b and	c'					
D	V = Tobin'	s Q					
	$R^2 = 0.231$						
IV = gender	1.123	0.164	0.000				
IV = CSRR	0.093	0.229	0.043				
Total (a)*(b)		0.057					
NI : 6 /	41 /	1 11	`				

Note: C = c' + a*b (partial mediation).

Table 11. Regression coefficient for the mediation effect H2 with Tobin's Q.

Testing Path	S.E	β	Sig			
Path c						
DV = Tobin's Q						
IV = foreigner	-	-	Not Sig			
	Path a	a				
	DV = CSRR					
	$R^2 = 0.157$					
IV = foreigner	0.423	0.815	0.001			
	Path b ar	nd c'				
	DV=Tobin					
	$R^2 = 0.0$	52				
IV = foreigner	-	-	Not Sig			
IV = CSRR	0.156	0.324	0.023			
Total (a)*(b)		0.264				

Note: no mediation, indirect effect (c = c' = 0).

7. Discussion and Implication

This study examines the mediating effect of CSRR on the association between board diversity and organizational performance, and the moderation effect of ASEAN countries on this mediation affected relationship. The empirical findings support all of the hypotheses, except the mediation effect of CSRR in the case of foreigner diversity and Tobin's Q, which rejected H4, meaning that with or without the existence of CSRR, the link between foreigner diversity and Tobin's Q is not significant, whereas CSRR and Tobin's Q relationship is significant, confirming an indirect effect [81]. Therefore, CSRR can be used to legitimize CSR activities based on studies in developing countries by [82]. According to the findings in multi group analysis for explaining the moderating effect of country on the relationship between total and corporate performance with CSRR as a mediator, country is an important moderating variable for the relationship between board diversity and organizational performance. The findings supported the supposition that there is a significant difference between the presence (or lack thereof) of a country variable as a moderator in the context the mediation effects.

Significant contributions are made in this work vis-à-vis CSRR, CG, and organizational performance. We developed a measurement scale pertaining to CSR in this work, which is a complex concept to quantify, mostly due to the lack of a universally accepted definition. As per literature, we define CSRR activities via GRI being most trustworthy international framework for CSR reporting. The scale items are taken from previous research pertaining to the GRI database by relying on a generalized neo-institutional theory, emphasizing the legitimization and the efficiency effects of CSRR. This research came up with a new approach, not only to test the link between CSRR-financial performance, CG-corporate performance, CSRR-CG, but also to quantify the mediation effect of CSRR in the link between CG-corporate performances in the ASEAN region. According to [82] a simple correlation between both variables is inappropriate due to the fact that the CSR influence the bottom line via intermediary routes. This study also involves an empirical research on the moderator effect of country on mediation effect of CSRR to CG-corporate performance association in the ASEAN region. ASEAN is a region composed of multiple cultures and regulations, and we proved in this work that country is a significant moderator in the ASEAN region. Therefore our study have significant implication for future research on South East Asian countries.

This study has crucial practical implication for regulators, policy makers, practitioners, and government in other countries currently pursuing CG and CSR policy reforms. It could also result in increased membership in CG with CSR when better-governed corporations are more socially responsible. Excellent CG enhances internal control systems that assure financial transparency of an organization [38]. Moreover, multinational companies working in developing countries will benefit from these findings, as it will help them conceptualize important CSRR insights when looking into corporate governance determinants in the context of corporate performance. This will help induce positive social and financial performance. In addition, using GRI as an international framework for CSRR demonstrates a new incentive for the further development of ASEAN countries.

8. Conclusions

Despite the importance, as well as inconsistent impact of board diversity on organizational performance, there has been limited empirical evidence that investigates the mediating role of CSRR between board diversity and organizational performance. It is also important to be aware of the multicategorical differences between ASEAN countries via moderated mediation analysis. The current research examines the mediating role of CSRR in board diversity and organizational performance association, and moderation role of country for this mediation relationship. Taking into account new institutional theory, this study posited that board diversity positively influence corporate performance. In short, our results revealed that CSRR mediates gender and foreigner diversity with organizational performance interaction. Our moderated mediation model accounts for countries in ASEAN which can affect the mediated relationship in 264 from companies using GRI reporting. However, a larger sample size could help us understand the mediation and moderated mediation of this study in a wider context. This study serves as a springboard for future research towards understanding the underlying processes that engender and improve board diversity and organizational performance.

Acknowledgments: We would like to thank the three anonymous reviewers for their suggestions and comments that greatly improved the manuscript.

Author Contributions: All authors made equal contributions to the work in this editorial paper.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Marsiglia, E.; Falautano, I. Corporate social responsibility and sustainability challenges for a Bancassurance Company. Geneva Pap. Risk Insur. Issues Pract. 2005, 30, 485–497. [CrossRef]
- 2. Rao, K.; Rao, K.; Tilt, C.; Tilt, C. Board diversity and CSR reporting: An Australian study. *Meditari Account. Res.* **2016**, 24, 182–210. [CrossRef]

 Alshareef, M.N.Z.; Sandhu, K. Integrating Corporate Social Responsibility (CSR) into Corporate Governance Structure: The Effect of Board Diversity and Roles—A Case Study of Saudi Arabia. *Int. J. Bus. Manag.* 2015, 10, 1. [CrossRef]

- 4. Shleifer, A.; Vishny, R.W. A survey of corporate governance. J. Financ. 1997, 52, 737–783. [CrossRef]
- 5. Van Knippenberg, D.; De Dreu, C.K.; Homan, A.C. Work group diversity and group performance: An integrative model and research agenda. *J. Appl. Psychol.* **2004**, *89*, 1008. [CrossRef] [PubMed]
- 6. Ibrahim, N.A.; Angelidis, J.P. The corporate social responsiveness orientation of board members: Are there differences between inside and outside directors? *J. Bus. Ethics* **1995**, *14*, 405–410. [CrossRef]
- 7. Hafsi, T.; Turgut, G. Boardroom diversity and its effect on social performance: Conceptualization and empirical evidence. *J. Bus. Ethics* **2013**, *112*, 463–479. [CrossRef]
- 8. Miller, T.; del Carmen Triana, M. Demographic diversity in the boardroom: Mediators of the board diversity–firm performance relationship. *J. Manag. Stud.* **2009**, *46*, 755–786. [CrossRef]
- 9. Galia, F.; Zenou, E. Board composition and forms of innovation: Does diversity make a difference? *Eur. J. Int. Manag.* **2012**, *6*, 630–650. [CrossRef]
- 10. Grosvold, J.; Brammer, S.; Rayton, B. Board diversity in the United Kingdom and Norway: An exploratory analysis. *Bus. Ethics Eur. Rev.* **2007**, *16*, 344–357. [CrossRef]
- 11. Mahadeo, J.D.; Soobaroyen, T.; Hanuman, V.O. Board composition and financial performance: Uncovering the effects of diversity in an emerging economy. *J. Bus. Ethics* **2012**, *105*, 375–388. [CrossRef]
- 12. Carter, D.A.; Simkins, B.J.; Simpson, W.G. Corporate governance, board diversity, and firm value. *Financ. Rev.* **2003**, *38*, 33–53. [CrossRef]
- 13. Campbell, K.; Mínguez-Vera, A. Gender diversity in the boardroom and firm financial performance. *J. Bus. Ethics* **2008**, *83*, 435–451. [CrossRef]
- 14. Zelechowski, D.D.; Bilimoria, D. Characteristics of women and men corporate inside directors in the US. *Corp. Gov. Int. Rev.* **2004**, *12*, 337–342. [CrossRef]
- 15. Yukl, G.; Gordon, A.; Taber, T. A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *J. Leadersh. Organ. Stud.* **2002**, *9*, 15–32. [CrossRef]
- 16. Williams, G. Responsible Management in Asia: Perspectives on CSR; Palgrave Macmillan: Basingstoke, UK, 2010.
- 17. Tan, N. Party quotas and rising women politicians in Singapore. Politics Gend. 2015, 11, 196–207. [CrossRef]
- 18. Nielsen, S.; Huse, M. The contribution of women on boards of directors: Going beyond the surface. *Corp. Gov. Int. Rev.* **2010**, *18*, 136–148. [CrossRef]
- 19. Ahmad, Z.; Abdullah, N.M.H.; Roslan, S. Capital structure effect on firms performance: Focusing on consumers and industrials sectors on Malaysian firms. *Int. Rev. Bus. Res. Pap.* **2012**, *8*, 137–155.
- 20. Salvioni, D.M.; Gennari, F.; Bosetti, L. Sustainability and Convergence: The Future of Corporate Governance Systems? *Sustainability* **2016**, *8*, 1203. [CrossRef]
- 21. Dienes, D.; Velte, P. The impact of supervisory board composition on CSR reporting. Evidence from the German two-tier system. *Sustainability* **2016**, *8*, 63. [CrossRef]
- 22. Rossi, A.; Rossi, A.; Tarquinio, L.; Tarquinio, L. An analysis of sustainability report assurance statements: Evidence from Italian listed companies. *Manag. Audit. J.* **2017**, *32*, 578–602. [CrossRef]
- 23. Wilburn, K.; Wilburn, R. Using global reporting initiative indicators for CSR programs. *J. Glob. Responsib.* **2013**, *4*, 62–75. [CrossRef]
- 24. Dingwerth, K. *The New Transnationalism: Transnational Governance and Democratic Legitimacy;* Palgrave Macmillan: Basingstoke, UK, 2007.
- 25. Adams, C.A.; McNicholas, P. Making a difference: Sustainability reporting, accountability and organisational change. *Account. Audit. Account. J.* **2007**, 20, 382–402. [CrossRef]
- 26. Adams, A.; Muir, C.; Hoque, Z. Measurement of sustainability performance in the public sector. *Sustain. Account. Manag. Policy J.* **2014**, *5*, 46–67. [CrossRef]
- 27. KPMG. KPMG International Survey of Corporate Responsibility Reporting 2011; KPMG: New York, NY, USA, 2011.
- 28. Global Reporting Initiative. Equator Principles. Power. Available online: https://www.globalreporting.org/information/news-and-press-center/newsarchive/Pages/2016.aspx (accessed on 7 January 2016).
- 29. Corporate Social Responsibility Asia; Lloyd's Register Quality Assurance Limited. *CSR in Asia the Real Picture*; Corporate Social Responsibility Asia: Singapore; Lloyd's Register Quality Assurance Limited: London, UK, 2010. Available online: www.csr-asia.com/publication.php (accessed on 7 January 2016).

30. Waagstein, P.R. The mandatory corporate social responsibility in Indonesia: Problems and implications. *J. Bus. Ethics* **2011**, *98*, 455–466. [CrossRef]

- 31. Chapple, W.; Moon, J. Corporate social responsibility (CSR) in Asia: A seven-country study of CSR web site reporting. *Bus. Soc.* **2005**, *44*, 415–441. [CrossRef]
- 32. Jizi, M.I.; Salama, A.; Dixon, R.; Stratling, R. Corporate governance and corporate social responsibility disclosure: Evidence from the US banking sector. *J. Bus. Ethics* **2014**, *125*, 601–615. [CrossRef]
- 33. Peters, S.; Miller, M.; Kusyk, S. How relevant is corporate governance and corporate social responsibility in emerging markets? *Corp. Gov. Int. J. Bus. Soc.* **2011**, *11*, 429–445. [CrossRef]
- 34. Dzingai, I.; Fakoya, M.B. Effect of Corporate Governance Structure on the Financial Performance of Johannesburg Stock Exchange (JSE)-Listed Mining Firms. *Sustainability* **2017**, *9*, 867. [CrossRef]
- 35. Waddock, S.A.; Graves, S.B. The corporate social performance-financial performance link. *Strateg. Manag. J.* **1997**, *18*, 303–319. [CrossRef]
- 36. Ntim, C.G.; Soobaroyen, T. Corporate governance and performance in socially responsible corporations: New empirical insights from a Neo-Institutional framework. *Corp. Gov. Int. Rev.* **2013**, *21*, 468–494. [CrossRef]
- 37. Haniffa, R.; Hudaib, M. Corporate governance structure and performance of Malaysian listed companies. *J. Bus. Financ. Account.* **2006**, 33, 1034–1062. [CrossRef]
- 38. Schadewitz, H.; Niskala, M. Communication via responsibility reporting and its effect on firm value in Finland. *Corp. Soc. Responsib. Environ. Manag.* **2010**, *17*, 96–106. [CrossRef]
- 39. Jamali, D.; Safieddine, A.M.; Rabbath, M. Corporate governance and corporate social responsibility synergies and interrelationships. *Corp. Gov. Int. Rev.* **2008**, *16*, 443–459. [CrossRef]
- 40. Mahoney, L.; Roberts, R.W. Corporate social performance, financial performance and institutional ownership in Canadian firms. *Account. Forum* **2007**, *31*, 233–253. [CrossRef]
- 41. Catanzariti, J.; Lo, M. Corporate Governance Changes Focus on Diversity. Available online: https://www.claytonutz.com/knowledge/2011/may/corporate-governance-changes-focus-on-diversity (accessed on 11 May 2011).
- 42. Erhardt, N.L.; Werbel, J.D.; Shrader, C.B. Board of director diversity and firm financial performance. *Corp. Gov. Int. Rev.* **2003**, *11*, 102–111. [CrossRef]
- 43. Shrader, C.B.; Blackburn, V.B.; Iles, P. Women in management and firm financial performance: An exploratory study. *J. Manag. Issues* **1997**, *9*, 355–372.
- 44. Yoo, T.; Jung, D.K. Corporate governance change and performance: The roles of traditional mechanisms in France and South Korea. *Scand. J. Manag.* **2015**, *31*, 40–53. [CrossRef]
- 45. Protasovs, I. Board Diversity and Firm's Financial Performance: Evidence from South-East Asia, Bachelor's Thesis, University of Twente, Enschede, The Netherlands, 2015.
- 46. Chuanrommanee, W.; Swierczek, F.W. Corporate governance in ASEAN financial corporations: Reality or illusion? *Corp. Gov. Int. Rev.* **2007**, *15*, 272–283. [CrossRef]
- 47. Taghizadeh, M. Corporate Governance and Executive Remuneration in Malaysia. Life Sci. J. 2013, 10, 7.
- 48. Bear, S.; Rahman, N.; Post, C. The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *J. Bus. Ethics* **2010**, *97*, 207–221. [CrossRef]
- 49. Vinnicombe, S. Women on Corporate Boards of Directors: International Research and Practice; Edward Elgar Publishing: Cheltenham, UK, 2009.
- 50. Reddy, Y.R.K. The ethics of corporate governance: An Asian perspective. *Int. J. Law Manag.* **2009**, *51*, 17–26. [CrossRef]
- 51. Braun, P. Going green: Women entrepreneurs and the environment. *Int. J. Gender Entrep.* **2010**, *2*, 245–259. [CrossRef]
- 52. Setó-Pamies, D. The relationship between women directors and corporate social responsibility. *Corp. Soc. Responsib. Environ. Manag.* **2015**, 22, 334–345. [CrossRef]
- 53. Said, R.; Hj Zainuddin, Y.; Haron, H. The relationship between corporate social responsibility disclosure and corporate governance characteristics in Malaysian public listed companies. *Soc Responsib. J.* **2009**, *5*, 212–226. [CrossRef]
- 54. Prado-Lorenzo, J.M.; Garcia-Sanchez, I.M. The role of the board of directors in disseminating relevant information on greenhouse gases. *J. Bus. Ethics* **2010**, *97*, 391–424. [CrossRef]
- 55. Gray, R.; Owen, D.; Adams, C. Accounting & Accountability: Changes and Challenges in Corporate Social and Environmental Reporting; Prentice Hall: Upper Saddle River, NJ, USA, 1996.

- 56. Scott, W.R. The adolescence of institutional theory. Adm. Sci. Q. 1987, 32, 493–511. [CrossRef]
- 57. Khan, A.; Muttakin, M.B.; Siddiqui, J. Corporate governance and corporate social responsibility disclosures: Evidence from an emerging economy. *J. Bus. Ethics* **2013**, *114*, 207–223. [CrossRef]
- 58. Biggart, N.W. Explaining Asian economic organization. Theor. Soc. 1991, 20, 199–232. [CrossRef]
- 59. Zattoni, A.; Cuomo, F. Why adopt codes of good governance? A comparison of institutional and efficiency perspectives. *Corp. Gov. Int. Rev.* **2008**, *16*, 1–15. [CrossRef]
- 60. Wood, D.J. Corporate social performance revisited. Acad. Manag. Rev. 1991, 16, 691-718.
- 61. Adnan Khurshid, M.; Al-Aali, A.; Ali Soliman, A.; Mohamad Amin, S. Developing an Islamic corporate social responsibility model (ICSR). *Compet. Rev.* **2014**, 24, 258–274. [CrossRef]
- 62. Preacher, K.J.; Rucker, D.D.; Hayes, A.F. Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivar. Behav. Res.* **2007**, *42*, 185–227. [CrossRef] [PubMed]
- 63. Hackston, D.; Milne, M.J. Some determinants of social and environmental disclosures in New Zealand companies. *Account. Audit. Account. J.* **1996**, *9*, 77–108. [CrossRef]
- 64. Cheng, S. Board size and the variability of corporate performance. *J. Financ. Econ.* **2008**, *87*, 157–176. [CrossRef]
- 65. McGuire, J.B.; Sundgren, A.; Schneeweis, T. Corporate social responsibility and firm financial performance. *Acad. Manag. J.* **1988**, 31, 854–872. [CrossRef]
- 66. James, L.R.; Brett, J.M. Mediators, moderators, and tests for mediation. *J. Appl. Psychol.* **1984**, *69*, 307–321. [CrossRef]
- 67. Zeghal, D.; Ahmed, S.A. Comparison of social responsibility information disclosure media used by Canadian firms. *Account. Audit. Account. J.* **1990**, *3*, 38–53. [CrossRef]
- 68. Al-Tuwaijri, S.A.; Christensen, T.E.; Hughes, K.E. The relations among environmental disclosure, environmental performance, and economic performance: A simultaneous equations approach. *Account. Org. Soc.* **2004**, 29, 447–471. [CrossRef]
- 69. Hooks, J.; van Staden, C.J. Evaluating environmental disclosures: The relationship between quality and extent measures. *Br. Account. Rev.* **2011**, *43*, 200–213. [CrossRef]
- 70. Freedman, M.; Jaggi, B. Global warming, commitment to the Kyoto protocol, and accounting disclosures by the largest global public firms from polluting industries. *Int. J. Account.* **2005**, *40*, 215–232. [CrossRef]
- 71. Skouloudis, A.; Evangelinos, K.; Kourmousis, F. Development of an evaluation methodology for triple bottom line reports using international standards on reporting. *Environ. Manag.* **2009**, *44*, 298–311. [CrossRef] [PubMed]
- 72. Hambrick, D.C.; Geletkanycz, M.A.; Fredrickson, J.W. Top executive commitment to the status quo: Some tests of its determinants. *Strateg. Manag. J.* **1993**, *14*, 401–418. [CrossRef]
- 73. Diamantopoulos, A.; Siguaw, J.A.; Cadogan, J.W. Export performance: The impact of cross-country export market orientation. In Proceedings of the AMA Winter Educators' Conference, Chicago, IL, USA, 12 June 2000.
- 74. Arbuckle, J. Amos Users' Guide, version 3.6; Marketing Division, SPSS Incorporated: Chicago, IL, USA, 1997.
- 75. Barki, H.; Hartwick, J. Interpersonal conflict and its management in information system development. *Mis Q.* **2001**, 25, 195–228. [CrossRef]
- 76. Mathieu, J.E.; Deshon, R.P.; Bergh, D.D. Decision points for mediational type inferences in organizational behavior. *J. Organ. Behav.* **2006**, 27, 1031–1056. [CrossRef]
- 77. Edwards, J.R.; Lambert, L.S. Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychol. Methods* **2007**, *12*, 1. [CrossRef] [PubMed]
- 78. Baron, R.M.; Kenny, D.A. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J. Personal. Soc. Psychol.* **1986**, *51*, 1173. [CrossRef]
- 79. MacKinnon, D.P.; Fairchild, A.J.; Fritz, M.S. Mediation analysis. *Annu. Rev. Psychol.* **2007**, *58*, 593–614. [CrossRef] [PubMed]
- 80. Figueredo, A.J.; Garcia, R.A.; Cabeza De Baca, T.; Gable, J.C.; Weise, D. Revisiting mediation in the social and behavioral sciences. *J. Methods Meas. Soc. Sci.* **2013**, *4*, 1–19. [CrossRef]

Sustainability **2018**, 10, 556 20 of 20

81. Azizul Islam, M.; Deegan, C. Motivations for an organisation within a developing country to report social responsibility information: Evidence from Bangladesh. *Account. Audit. Account. J.* **2008**, 21, 850–874. [CrossRef]

82. Fombrun, C.J.; Gardberg, N.A.; Sever, J.M. The Reputation QuotientSM: A multi-stakeholder measure of corporate reputation. *J. Brand Manag.* **2000**, *7*, 241–255. [CrossRef]



© 2018 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).