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Values of Directors, Gender Diversity and Corporate Social Responsibility in the Industrial Region of Ghana

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Abstract

In recent years, gender diversity has gained considerable attention at both the global and national levels and is aimed at multiple perspectives including governance and operations. However, the available evidence on the outcomes of gender diversity have been largely demonstrated for the developed world. The evidence for developing countries is rare to find or at best nascent. This calls for concern as the evidence from the global north may be at variance with the case of the global south due to differences in cultures, demographics, institutional quality, regulation and economic development. This study focuses on a developing country context to achieve the following two sequential objectives: examination of the gender gaps in values of female and male directors, and an investigation of the effect of gender diversity on corporate social responsibility. Using data collected on 312 medium and large firms in the Greater Accra Region of Ghana and, values data on 792 respective directors of the firms comprising 292 female and 500 male directors, the Ordinary Least Square and Propensity Score Matching techniques are employed. Gender gaps in values were largely observed across male and female directors, with female directors ranking lower in power, but high in hedonism compared to the male directors. Gender diversity was observed to have corporate social responsibility increasing effects at the firm level. Relatively, gender diverse firms have the biggest effect in increasing ethical responsibility, followed by discretionary, economic and legal responsibilities respectively. Finally, we find a positive nonlinear relationship between gender diversity and corporate social responsibility akin to the critical mass theory. Overall, the findings on director values and gender diversity-corporate social responsibility linkage converge with that of the developed countries. Hence, we recommend intensifying gender quota and affirmation actions among corporate bodies in developing countries to promote socially responsible outcomes.

Keywords: gender diversity, corporate social responsibility, values, Greater Accra Region, Ghana.

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1. Introduction

Over the past decades, gender diversity has gained considerable attention among international organizations, policymakers, governments and academics (Marinova et al., 2016; Nadeem et al., 2017; Yang et al., 2022). This is reflected in the increased global interest in the representation of women in corporate governance, particularly with regard to gender quota advocacy and affirmative action (World Economic Forum, 2021). The increased attention is heightened by the assumption that the integration of females in managerial positions improves corporate structure as they bring in different experiences, knowledge, beliefs, values, creativity and innovation, broadening information base as well as different intuitive and moral qualities which contribute to improvement in the performance and health of corporate organizations (Barsh & Lavoie, 2014; Bear et al., 2010; Ferrary & Déo, 2022; Galbreath, 2018). The foregoing has spurred a burgeoning literature that seeks to understand the role of corporate gender diversity on various firm outcomes. Among others, the literature has examined the role of gender diversity on renewable energy consumption (Atif et al., 2021), risks preferences (Adams & Funk, 2012a), corporate social responsibility (CSR) (Shaukat et al., 2016), illicit business activities (Boulouta, 2013; Cumming et al., 2015), environmental protection support (Kennedy & Dzialo, 2015; McCright & Xiao, 2014), environmental CSR (Boulouta, 2013; Jia & Zhang, 2013; Liu, 2018; McGuinness et al., 2017). However, the growing body of literature on gender diversity is based on studies from global south.

This paper makes a contribution to the gender diversity-CSR outcome nexus from a developing country perspective by examining the effect of gender diversity on CSR outcomes of medium and large firms in the Greater Accra Region, the industrial hub, of Ghana, and interrogates whether gender gaps exist in directors' values in corporate leadership. Thus, the study presents evidence on four main hypotheses. Firstly, it tests whether gender gaps persist in values at the level of directors. This hypothesis will put in context the differences in core values that exist between male and female directors and provide a background information for the discussion on gender diversity-CSR linkage. The remaining three hypotheses are from the perspectives of CSR outcome increasing impact of gender diversity: (2) gender diverse firms have CSR outcome increasing effect; (3) firms with at least one-third female directors have CSR outcome increasing effect; and (4) there is a non-linear relationship between gender diversity and CSR outcome. The mentioned hypotheses will fill an important gap given that empirical evidence on gender differences at corporate leadership levels for developing countries is almost non-existent partly because fewer women belong to corporate leadership positions. Additionally, the difficulty of collecting firm data in developing countries persists due to the vast informal nature of such economies coupled with low investment in research and development. It is therefore not clear whether we should continue to nurture the expectation that women at the leadership level in corporate organizations are different from men in the context of a developing country. Indeed, many reasons could allude to the erosion of gender differences. First, gender barriers are more prevalent in developing countries compared to the developed world. Second, responsibilities based on gender are more pronounced in developing countries than in developed economies. Third, "male heroism" is core to the African culture. Therefore, women in developing countries require much more drastic transformation than their developed counterparts to compete with their male colleagues for leadership roles. In the process, gender differences may be eroded at an increasing pace than in developed countries. Consequently, studies based on firms in developing countries could help inform more effective policies and provide more practical guidance than references based on foreign experiences.

While the foregoing suggests a knowledge gap in the empirical assessment of the role of gender diversity and evidence biased towards developed countries coupled with limited firm data in developing countries, Ghana lends itself particularly well to firm data analyses due to availability of data. Specifically, the 2015 Integrated Business Enterprise Survey (IBES) collected data on 600,000 firms in the country. The survey collected information on several indicators such as the sex of firm ownership, the form of organization and the sector of operation. Leveraging the sampling frame of the IBES will anchor new surveys to address empirical studies on gender diversity within the context of a developing country. Besides firm data leverage, the case for Ghana is very compelling given that the country over the years has signed and adopted several international gender conventions. However, this momentum has been skewed towards women's participation in administrative and political leadership positions (Government of Ghana, NDPC, 2017), to the neglect of corporate leadership. The country's policy is to have 35% of women in administration and political leadership by 2025 (Government of Ghana, NDPC, 2021). Ghana, therefore, has no clearly defined legislation nor quota for women's participation in leadership and decision-making in neither state nor privately owned enterprises. Moreover, the Ghana Business Code which emphasizes standards, practices and ethics including gender diversity in line with global practices is yet to receive the much needed empirical interrogation and evaluation vis-à-vis various firm outcomes.

The paper makes key contributions to the literature. First, it contributes to the gender diversity-ESG ecosystem nexus within a developing country setting by focusing on CSR. This is pertinent given that the recent turbulence at the global corporate level has thrown the academic and policy searchlight on gender diversity and corporate social responsibility. Regarding the second contribution, the study enriches the debate on gender diversity and corporate performance. Thus, we used corporate social responsibility as a proxy for corporate performance. That is, we examine whether gender diversity impacts the commitment of corporate organizations in establishing and valuing a strong responsibility towards society from economic, legal, discretionary and ethical perspectives. This paradigm shift is arguably the case because most of the studies on gender diversity and corporate performance are skewed towards financial performance outcomes as returns on assets and returns on equity (Gruszczyński, 2020). In terms of the third contribution, most empirical studies used data on firms from the global south (Amorelli & García-Sánchez, 2020). Thus we contribute to the very limited studies on gender diversity on corporate performance in Africa and Ghana where there is scanty or non-availability of data. The fourth contribution is methodology-wise: we employed a quasi-experimental approach in Propensity Score Matching (PSM) in our analysis. This we consider very significant in making attribution towards CSR increasing effects of gender diversity.

The final major contribution of the study can be viewed from a macro perspective. The World Economic Forum (2014) posited that gender diversity is positively correlated with gross domestic product (GDP) per capita, the level of competitiveness and human development. Also, Desvaux et. al. (2017) assert that gender diversity could add value to the global GDP by 11% or by an extra $12 trillion by 2025. A plethora of studies at the firm level have also shown strong evidence of gains in terms of the positive effects of gender diversity on firm performance, a few of these studies also found a negative relationship between gender diversity on firm performance while some are non-significant (Amorelli & García-Sánchez, 2020). Amid the evidence available, women

continue to be underrepresented in senior and middle management positions as well as in top management. This has profound implications for economic growth and corporate performance but more so for Sub-Saharan Africa (SSA) where growth and firm performance are low as compared to the rest of the world. Implications from this study will propel benefits associated with gender diversity and economic growth as well as corporate performance.

The rest of the paper is structured as follows. Section 2 reviews the link between gender diversity and CSR. Section 3 discusses the empirical strategy, data used and measurement of variables. The results are presented in Section 4, and discussions and implications of the main findings ensued in Section 5. Section 6 concludes.

2. How gender diversity influences firms' CSR outcomes

Theoretically, gender diversity could be either positively or negatively related to CSR outcome. However, in this section, we briefly advance arguments on why gender diversity can translate into positive outcome such as firm's CSR.

The arguments in favour of gender diversity are far reaching. Carter et al. (2003a) outlined three benefits of management diversity from a business perspective. First, a more diversified board of directors engenders broader based decision making from alternative evaluation considerations compared to boards that are not diverse. A heterogeneous board tends to consider wider perspectives and engender the quality of decision making (Burgess & Tharenou, 2002; Forbes & Milliken, 1999; Kang et al., 2007; Singh & Vinnicombe, 2004). Croson and Gneezy (2009) and Adams (2009a) emphasised that director gender differences could translate into better board dynamics and decision making which is supported by burgeoning literature (Adams & Funk, 2012a; Chen et al., 2019; Gul et al., 2011; Heugens et al., 2004; Hill & Jones, 1992; Levi et al., 2014).

Second, a diverse board has an accentuated information and understanding of the market place of the firm which will translate into relevant innovation. Third, heterogeneous board has the potential of illuminating the image and goodwill of the firm to attract investments and shareholders. Extant literature asserts female directors have a positive influence on a firm's reputation (Heugens et al., 2004; Hill & Jones, 1992) via a broader stakeholder orientation (Adams et al., 2011; Adams & Funk, 2012b; Carter et al., 2003b; Rindova, 1999). Gender-diversified boards are less likely to lay-off their workforce in the bid to downsize. They are resolute in their environmental CSR orientation (Al-Shaer & Zaman, 2016; Hafsi & Turgut, 2013) and more responsive in providing aid to victims of natural disasters (Jia & Zhang, 2013). Along the same line, Cumming et al. (2015) found a low propensity of female directors towards corporate fraud, and their high proclivity toward the quality of appointments carried out by directors compared to male dominated firms.

Moreover, a growing body of literature provided channels through which gender diversity improves firm performance. Two channels are compelling. First, female directors improve corporate practices through regular board meetings and improved board meeting attendance records for both males and females (Adams & Ferreira, 2009b; Goergen & Renneboog, 2014). Secondly, existing literature further points to fundamental differences between men and women in values and attitudes. Schwartz (1994) defined ten overarching ideals that are thought to be universal yet have various motivations which propel people to either or not engage in an activity. These values were then grouped into four primary categories. Self-transcendence against self-

enhancement dimensions, which has to do with universalism and benevolence, which highlights care for the wellbeing of others, as opposed to power and achievement values, which emphasize the pursuit of one's own interests. Openness to change as against conservation dimensions which represent self-direction, hedonism, and stimulation values oppose security, conformity, and traditional values, which emphasize self-restriction, order, and resistance to change. These values emphasize independent action, thought, and feeling as well as readiness for new experiences. Promoting female representation is said to improve organization's cooperative social responsibility as women are more open to change and are self-transcendent (Beramendi & Zubieta, 2017; Schwartz, 2012; Schwartz & Rubel, 2005). Gender gaps have been identified in risk attitudes (Eckel & Grossman, 2008; Sapienza et al., 2009), competitive drive (Niederle & Vesterlund, 2007) and altruistic behavior (Andreoni & Vesterlund, 2001).

Gender socialization and ethical theories point to women being concerned about wider societal issues than their male counterparts (Atif et al., 2021). For instance, women value morality in the context of responsibility compared to men. According to Gilligan (1977) such responsibilities include caring for others unlike their male counterparts. Also, men are often concerned about heroic and short-lived accomplishment, while the nurturing and caring behaviour of women has long term consequences. In addition, women were found to be more honest than men when it even involves monetary payoffs in experiments (Dreber & Johannesson, 2008). As such, more women on the board may promote more honest communication among board members since women are more communitarian, democratic, and participatory than men. It has been demonstrated that the presence of female directors lowers instances of corporate malfeasance and other wrongdoing that could harm the company's reputation (Amorelli & García-Sánchez, 2020; Atena & Tiron-Tudor, 2019; Atif et al., 2019; Dawar & Singh, 2016).Women managers bring unique qualities to top management than males because of their unique leadership philosophies. They frequently employ a more collaborative management style and are more focused on control when it comes to the individuals they are supervising, are known to be more compassionate, and derive much pleasure due to the impact they have on others (Ferrary & Déo, 2022); as such they are more likely to uphold societal good values.

It is worth adding that potential investors may use the gender diversity of a company as a core feature. Investor awareness of hiring practices has increased because of the emergence of shareholder engagement, and many more companies are now disclosing diversity data in their annual report and accounts as a result. According to the resource-based perspective, diversity is an important human factor that can boost a company's productivity, inventiveness, and strategic decision-making by broadening the pool of accessible abilities, viewpoints, information, and social networks (DiTomaso et al., 2007; Zhang, 2020). Diversity in gender is viewed as vital for the long-term success of the firm, and it symbolises the commitment of the firm to advancing gender principles and devotion to regulatory risks. As a result, it can attract investors and increase a firm's market worth (Roberson & Park, 2007; Zhang, 2020).

3. Data and Methods

3.1 Data and variable description

Two main surveys were administered by the Ghana Statistical Service focusing on firm-level characteristics and Individual-level director background characteristics including their values. The firm-level instrument focuses on four main thematic areas covering firm characteristics, corporate social responsibility outcomes, corporate governance outcomes, and environmental management practices. The firms were randomly selected as medium and large firms using the World Bank (2009) approach to sampling from the Greater Accra Region based on the sampling frame from the Integrated Business Establishment Survey (IBES) (Ghana Statistical Service, 2017). The IBES provides detailed and complete data for all non-household businesses in Ghana. It provides the framework for firm surveys for the country and is used to develop Ghana's Business Register, managed by the Ghana Statistical Service (GSS). In terms of firm level data, 360 medium and large firms were sampled by the Ghana Statistical Service from the IBES in the Greater Accra Region. Out of this expected sample, data was successfully collected on 312 firms, registering a response rate of 86.67%. The 312 firms comprised 100 large firms (with more than 100 employees) and 212 medium firms (between 31 to 100 employees). In terms of the directors, three directors were expected to be selected from each of the 360 firms, making a total of 1,080 directors. However, background information and data on values were successfully collected on 792 directors recording a response rate of 73.33%. Of the 792 directors, 292 and 500 are females and males respectively. The individual director instrument focuses on the values of directors measured by the Schwartz's 40 question Portrait Value Questionnaire (PVQ). The measurement of key variables, namely director's values, dependent variable (CSR outcome), and the leading independent variable (gender diversity) including the control variables are defined in the succeeding sections.

3.1.1 Directors values

We used the Schwartz's 40 PVQ to measure the values of the directors. The 40 questions PVQ are categorized into ten main value priorities in life as depicted in Table 1. Generally, for each value dimension the PVQ poses between three to six questions, for instance, to measure conformity, one question is: "S/he believes that people should do what they are told. S/he thinks people should follow rules at all times, even when no one is watching", for which the respondent has to indicate the extent to which he/she is like this person with answers ranging from 6, very much like me, to 1, not like me at all. Each of the ten value dimensions is therefore generated by the average score of the set questions that represent a given value and subtracting the average individual score over all the 40 questions. This is premised on the need to correct for differences in the response scale of the individual directors. This allows us to correct for individual differences in "answering priorities", thereby clearly identifying an individual's relative value priorities as evident in existing studies (Adams & Funk, 2012b; Schwartz, 2011).

Table 1: Values measurements

Sno	Values	Measure/definition
1	Self-Direction	Independent thought and action; choosing, creating, exploring.
2	Stimulation	Excitement, novelty, and challenge in life.
3	Hedonism:	Pleasure and sensuous gratification for oneself.
4	Achievement	Personal success through demonstrating competence according to social standards.
5	Power:	Social status and prestige, control or dominance over people and resources.
6	Security	Safety, harmony, and stability of society, or relationships, and of self.
7	Conformity	Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms.
8	Tradition	Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide the self.
9	Benevolence	Preserving and enhancing the welfare of those with whom one is in frequent personal contact (the "in-group").
10	Universalism	Understanding, appreciation, tolerance, and protection for the welfare of all people and for nature.

3.1.2 Corporate Social Responsibility

We use two measures of CSR obtained through the application of different methods consistent with the extant literature. Our first and key measure is obtained by applying the Principal Component Analyses to each of the 18 Corporate Social Responsibility questions covering economic, legal, ethical and discretionary responsibilities. The 18 questions are presented in Appendix C based on the work of Maignan and Ferrell (2000). The response to the questions ranges from 1 (strongly disagree) to 5 (strongly agree). Using the PCA, we retain only factors with eigenvalues greater than or equal to one and we prioritise Kaiser-Meyer-Olkin (KMO) score greater than 0.8 required for sampling adequacy. The PCA measure is also applied to each of the four dimensions of CSR to produce economic, legal, ethical and discretionary responsibilities outcomes as displayed in Panel A of Table 2. The second measure of CSR is an additive index of the 18 questions. Given that each of the questions ranges from 1 (strongly disagree) to 5 (strongly agree), the additive index is expected to range from 18 to 90. Also, the additive index approach was also carried across each of the dimensions of the CSR as shown in Panel A of Table 2. Both approaches produce ten continuous measures of the CSR (*see* Table 2 Panel A) and the higher the CSR score the more a firm is socially responsible.

3.1.3 Gender Diversity

Our main independent variable is gender diversity. This variable shows the representation of female directors among the firms. The main gender diversity variables emanate from the management perspective. These variables are (1) the proportion of female directors in the firm; (2) a dummy variable equaling one if more than one-third of the directorsare females (women) and zero otherwise and; (3) the number of female directors. These variables are presented in Panel B of Table 2 including top management gender diversity. Overall, the four variants of gender diversity variable are measured from the perspectives of management and leadership based on existing literature (*see* Atif et al. 2021; Adams & Funk, 2012).

The measurements of the control variables are shown in Panel D of Table 2. Their choices were determined by their identification as control variables of firm performance in existing studies (Adams & Funk, 2012b; Alam et al., 2019; Atif et al., 2021; Nyeadi et al., 2021; Qian, 2016; Smith et al., 2006).

Table 2: Definition of Variables

Notation	Variable name	Measure
Panel A: Corporate Social Responsibility		
CSR Score	CSR outcome	Principal Component Analyses estimates of all the CSR indicators
ER Score	Economic Responsibility outcome	PCA estimates of all the economic responsibility indicators of the CSR outcome
LR Score	Legal Responsibility Outcome	PCA estimates of all the legal responsibility indicators of the CSR outcome
ETR Score	Ethical Responsibility Outcome	PCA estimates of all the ethical responsibility indicators of the CSR outcome
DR Score	Discretionary Responsibility Outcome	PCA estimates of all the discretionary responsibility
CSR Index	CSR Index	Additive Index of all the CSR indicators
ER Index	Economic Responsibility Index	Additive Index of all the economic responsibility indicators of the CSR index
LR Index	Legal Responsibility Index	Additive Index of all the legal responsibility indicators of the CSR index
ETR Index	Ethical Responsibility Index	Additive Index of all the ethical responsibility indicators of the CSR index
DR Index	Discretionary Responsibility Index	Additive Index of all the discretionary responsibility indicators of the CSR index
Panel B: Gender Diversity		
MGD	Average Percentage of Management Gender Diversity	Proportion of female directors in the firm
MGDD	Management Gender Diversity Dummy	A dummy variable equal to one if more than one-third of the directors are females and zero otherwise
NMGDD	Number of Managers who are females	Continuous variables indicating the number of female directors

CGD	CEO /Top Management Gender Diversity	A dummy variable equal to one if the top manager (CEO) of the firm is female, and zero otherwise
Panel C: Firm Characteristics		
Manufacturing	Manufacturing firms	A dummy variable equal to one if firm is operating in a Manufacturing sector
Services	Services firms	A dummy variable equal to one if firm is operating in a sector
Agriculture and other industry	Agriculture and other industry firms	A dummy variable equal to one if firm is operating in Agriculture and other industry firms
Large	Large firms	A dummy variable equal to one if firm has more than 100 employees
Established	Established firms	A dummy variable equal to one if firm is existence for more than 15 years
Limited liability	Limited liability firms	A dummy variable equal to one if firm is a limited Liability firm
Local firms	Ghanaian firms	A dummy variable equal to one if firm is a Ghanaian firm
Female employees	Female employees	Continuous variable for the number of female employees
District dummies	Districts of firm location	District fixed effects represent 27 districts in Greater Accra Region.

3.2 Empirical strategy

Two variants of econometric analyses are used for this study. The first is a baseline model focusing on the Ordinary Least Square (OLS), and the main model using the propensity score matching technique. The choice of these econometrics approaches is underscored by the objectives of the study and the need to establish an association and causality between gender diversity and firm CSR outcomes. In the subsequent sections, a brief description of the two econometric approaches are provided.

3.2.1 Ordinary Least Square

The OLS is used foremost to established gender gaps between male and female directors after controlling for individual director's background characteristics, namely level of education, marital status, number of household members, social group membership status and ethnic(cultural) affiliation of directors.

Additionally, the OLS provides the baseline model for the PSM in establishing the link between gender diversity and CSR. Given the hypothesis that gender diverse business enterprises have a positive effect on their CSR outcomes, we specify the OLS model as follows:

$$CSROutcomes_i = \alpha + \beta_1(gender\ diversity)_i + \beta_2(firm\ characteristics)_i + \varepsilon_i \quad (1)$$

The dependent variable, $CSROutcomes_i$, is the CSR outcome as indicated in Panel A of Table 2. The gender diversity indicators and firm characteristics including locational factors are captured in Panels B and C of Table 2.

3.2.2 Propensity Score Matching

We use PSM to address the endogeneity concerns from perspective of sample selection bias. The treatment variable in this study is a gender diversity dummy measured as one (1) if more than one-third of the managers/directors are females (women) and zero otherwise. The gender diversity dummy is used to estimate the average treatment effect on CSR outcomes. The technique produces an estimate to obtain the counterfactual effect of gender diversity on firms' CSR outcomes. To subject our findings to sensitivity tests, we use five matching techniques, namely, nearest neighbour (1), nearest neighbour (5), radius, kernel and local linear regression matching methods. The average treatment is estimated as in equations (3), (4) and (5):

The average treatment is estimated as in equations (2), (3) and (4):

$$\Psi = \mathrm{E}\{\theta_1 - \theta_0 | \mathrm{H} = 1\} \quad (2)$$

$$= \mathrm{E}\{\mathrm{E}\{\theta_1 - \theta_0 | \mathrm{H} = 1, p(W)\}\} \quad (3)$$

$$= E\{E\{\theta_1 | \mathrm{H} = 1, p(W) - E\{\theta_0 | \mathrm{H} = 0, p(W)\} | \mathrm{H} = 1\} \quad (4)$$

where Ψ is the average treatment effect, H is a binary variable equal to one if more than one-third of the directors are females (women) and zero otherwise. θ is CSR outcome, and W is a vector of firm characteristics signifying relevant covariates. The propensity score, p(W), captures the probability of firms' CSR outcome given firm characteristics (W).

3.3 Descriptive statistics

Table 3 presents summary statistics for the reported ten values for all directors. It is worth stating that higher value scores signal higher value priorities. It can be seen from the table that directors generally rank high on security, traditional and conformity values, and low on power, achievement and stimulation values. Comparing the values scores across male-female directors, Table 3 depicts that female directors rank higher than male directors in benevolence, universalism, self-direction, hedonism, achievement and security. On the other hand, male directors rank higher than female directors in stimulation, power, conformity and traditional values. In terms of statistical significance, only two values (hedonism and power) are different across male and female directors. The both indicate that whereas female directors have more hedonism value compared to their male counterparts, they recorded less power values than male directors.

Table 3: Descriptive Statistics on Values

	All Sample		Male	Female	
Values	Mean	SD	Mean	Mean	P-Value
Benevolence	0.315	0.66	0.308	0.327	0.692
Universalism	0.131	0.672	0.111	0.166	0.262
Self-direction	0.071	0.596	0.06	0.091	0.47
Stimulation	-0.14	0.753	-0.16	-0.105	0.322
Hedonism	-0.433	0.951	-0.513	-0.297	0.002
Achievement	-0.315	0.797	-0.326	-0.298	0.632
Power	-0.987	1.099	-0.862	-1.201	0.00
Security	0.542	0.519	0.533	0.558	0.512
Conformity	0.359	0.594	0.359	0.358	0.996
Traditional	0.359	0.594	0.359	0.358	0.996
N	792	792	500	292	

SD: Standard deviation. Relative values are centered around the individual's mean response and reflect a director's relative value priorities in life.

Table 4 shows descriptive statistics on CSR outcome, gender diversity, and firm characteristics using Panels A, B and C respectively. Using Panel, A, the CSR score from the PCA registered a mean of 2.528 and ranges between -14.81 to 3.85. The mean score is lower and the range is wider than the four sub-categories of CSR outcomes, namely economic, legal, ethical and discretional scores. Panel A further shows CSR Index based on additive summation, and it recorded a mean of 75.23 and ranges between 27 to 90. Comparing the sub-categories of the additive index to the CSR index, the mean is higher and the range is wider for the latter. In terms of the gender diversity variables, Panel B of Table 3 shows that the proportion of female directors in the firm is 30.32 percent, 47.4 percent of firms have more than one-third of the directors being females, the average number of female directors in the firm is 2.4 and 25 percent of firms have their top director being female. Finally, Panel C of Table 3 focuses on firm characteristics that are covariates of the firm's CSR outcome. Manufacturing firms on average are 17.6 percent, whereas firms in the services, agricultural and other industry sectors constitute 49.7 and 25 percent respectively. Large, established, limited liability and local firms constitute 32.1, 71.8, 76.0 and 65.4 percent respectively. The average number of female employees in the firm is 39.80.

Table 4: Descriptive statistics on Gender Diversity, CSR and firm characteristics.

Variable	Mean	Std. Dev	Min	Max
Panel A: Corporate Social Responsibility				
CSR Score	-0.00350	2.528	-14.81	3.851
ER Score	0.00418	1.441	-7.272	1.778
LR Score	0.0099	1.469	-6.847	1.654
ER Score	0.0073	1.696	-9.796	1.901
DR Score	0.00646	1.626	-6.306	2.468
CSR Index	75.23	8.943	27	90
ER Index	16.94	2.341	6	20
LR Index	17.29	2.212	9	20
ETR Index	21.69	2.935	5	25
DR Index	19.32	3.759	5	25
Panel B: Gender Diversity				
MGD	30.32	21.93	0	100
MGDD	0.474	0.500	0	1
NMGDD	2.394	3.791	0	49
CGD	0.250	0.434	0	1
Panel C: Firm Characteristics & Location dummies				
Manufacturing firms	0.176	0.382	0	1
Services firms	0.497	0.501	0	1
Agriculture and other industry firms	0.250	0.434	0	1
Large firms	0.321	0.467	0	1
Established firms	0.718	0.451	0	1
Limited liability firms	0.760	0.428	0	1
Local firms	0.654	0.477	0	1
Female employees	39.80	114.4	0	1562
District dummies	Yes	Yes	Yes	Yes

4. Results

4.1 Gender gaps in values

The analyses in this section address the first objective of the study which seeks to examine whether female directors are different from their male counterparts or not. To provide an appropriate response, we compare male and female directors in their ten value priorities using Table 5. The table presents the results from an OLS estimation of the gender value gap of directors after controlling for background information on directors such as educational level, ethnicity and membership in social groups. This was estimated for each of the ten (10) values. (*See* Appendix

A4 for the full model having all the control variables). This enables us to determine values with significant gender gap and the magnitude of that gap. Results show that out of the 10 values, two had a significant gender value gap. These are hedonism and power with differing direction of effect. While hedonism showed a positive gender value gap, the gender power gap indicated a negative gap. This implies that female directors were more prone to hedonism as a value and less disposed to power. This finding is corroborated by Adams and Funk (2012). This evidence suggests that gender differences persist even at the corporate leadership level.

Table 5: Gender Gap in Values of Directors (OLS)

	(1) BV	(2) UV	(3) SD	(4) ST	(5) HD	(6) AC	(7) PW	(8) SC	(9) CF	(10) TD
Female Director	0.044	0.067	0.010	0.014	0.186***	0.034	-0.328***	0.033	0.003	0.003
	(0.049)	(0.048)	(0.044)	(0.055)	(0.071)	(0.060)	(0.082)	(0.039)	(0.046)	(0.046)
Director's Background Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	792	792	792	792	792.000	792	792	792	792	792
R-squared	0.000	0.002	0.001	0.001	0.012	0.000	0.022	0.001	0.000	0.000

Standard errors in parentheses* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Robust standard errors in bracket. BV(Benevolent); UV(Universalism); SD(Self-Direction); ST(Stimulation); HD(Hedonism); AC(Achievement); PW(Power); SC(Security); CF(Conformity); and TD(Traditional). Director's background characteristics include level of education, marital status, number of household members, social group memberships of directors. See Table A4 in the Appendices for full results.

4.2 Gender Diversity and CSR

4.2.1 Effect of Gender Diversity and CSR-OLS

This section examines the effect of gender diversity on CSR score as the second objective of the study. Simple regressions (bivariate analyses) of gender diversity on CSR score and index were first estimated and are displayed in Table 6. The results show that management gender diversity (MGD), management gender diversity dummy (MGDD) and the number of female directors (NMGD) have a positive significant effect on CSR score. Hence, an increase in female directors increase the CSR score. The additive index of CSR also reveals a similar effect. A disaggregation of the CSR score to its four components (economic, legal, ethical and discretionary) however show various positive effects across all disaggregated components, albeit differential coefficients. The results in Table 6, however, do not contain important covariates, hence the results do not lend itself to generalizability.

Table 6: Effect of Gender Diversity on CSR (OLS-Bivariate Analyses)

Variable	(1) CSR Score	(2) ER Score	(3) LR Score	(4) ETR Score	(5) DR Score	(6) CSR Index	(7) ER Index	(8) LR Index	(9) ETR Index	(10) DR Index
MGD	0.020***	0.011***	0.008**	0.012***	0.010**	0.073***	0.017***	0.012**	0.020***	0.023**
	(0.006)	(0.004)	(0.004)	(0.004)	(0.004)	(0.023)	(0.006)	(0.006)	(0.007)	(0.010)
MGDD	0.858***	0.468***	0.322*	0.494***	0.450**	3.154***	0.784***	0.499**	0.830**	1.042**
	(0.280)	(0.160)	(0.165)	(0.189)	(0.181)	(0.988)	(0.259)	(0.248)	(0.327)	(0.419)
NMGD	0.067**	0.027**	0.031*	0.032	0.043	0.231**	0.030	0.048*	0.053	0.100
	(0.031)	(0.013)	(0.018)	(0.021)	(0.027)	(0.115)	(0.023)	(0.028)	(0.035)	(0.062)
CGD	0.136	-0.186	0.125	-0.039	0.365**	0.611	-0.329	0.201	-0.103	0.842**
	(0.334)	(0.192)	(0.200)	(0.230)	(0.185)	(1.159)	(0.310)	(0.293)	(0.400)	(0.427)
Observations	312	312	312	312	312	312	312	312	312	312

Robust standard errors in parentheses * p < 0.1, ** p < 0.05, *** p < 0.01; Robust Standard Errors in bracket.
Refer to **Table 2** for the variant definitions of Gender Diversity (Independent Variable) and Corporate Social Responsibility (Outcome variable)

The multivariate analyses which include controlling for important covariates focused on the effect of MGD on CSR in Table 7 (*See* Appendix A5 for the full model bearing all the control variables). Panel A shows the results for CSR scores, whereas Panel B shows the estimates for CSR Index. To further understand the level of MGD that is right for maximum CSR the quadratic form (squared) of MGD was also included as an explanatory variable in both panels. In terms of the CSR score in Panel A, there is a significant positive effect of MGD across the CSR score and their disaggregated components. However, the relationship between MGD and the CSR score is not linear for the overall CSR score. This implied a level for MGD for which management gender diversity could be increased to obtain a maximum level of CSR. This was approximately 69 percent of MGD, thus firms could increase their management gender diversity by as much as 69 percent to obtain the full benefit of CSR. For Panel B, there is a significant positive effect of MGD across the CSR index and their disaggregated components. Results from the CSR index in Panel B are also consistent with those of the CSR score in Panel A. To obtain the highest CSR index, MGD needs to be increased by approximately 67 percent.

Table 7: Gender Diversity and CSR (OLS-Multivariate Analyses)

	(1)	(2)	(3)	(4)	(5)
Panel A: CSR score	CSR Score	ER Score	LR Score	ETR Score	DR Score
MGD	0.051***	0.024**	0.020*	0.031***	0.027**
	(0.018)	(0.010)	(0.011)	(0.011)	(0.012)
MGD Square	-0.00037*	-0.00016	-0.00013	-0.00020	-0.00024*
	(0.00020)	(0.00012)	(0.00014)	(0.00013)	(0.00013)
Firm Characteristics	Yes	Yes	Yes	Yes	Yes
District fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	312	312	312	312	312
R-Squared	312	312	312	312	312
	0.156	0.117	0.092	0.193	0.148
Panel B: CSR Index	CSR Index	ER Index	LR Index	ETR Index	DR Index
MGD	0.182***	0.036**	0.030*	0.052***	0.063**
	(0.064)	(0.017)	(0.017)	(0.020)	(0.028)
MGD Square	-0.00135*	-0.00024	-0.00021	-0.00034	-0.00057*
	(0.00072)	(0.00019)	(0.00021)	(0.00022)	(0.00031)
Firm Characteristics	Yes	Yes	Yes	Yes	Yes
District fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	312	312	312	312	312
R-Squared	0.158	0.115	0.101	0.196	0.150

Robust standard errors in parentheses * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; MGD is the proportion of female directors in the firm. Firm Characteristics include sector of operation, nationality status of firm owner, size of firm, age of firm, legal organization status and number of female employees. District fixed effects represent 27 districts in the Greater Accra Region. See Table A5 in the Appendices for full results.

4.2.2 Effect of Gender Diversity on CSR- PSM

Further analysis was done to ascertain the veracity of the OLS results using different matching techniques of the PSM and results are presented in Table 8. The impact of MGDD on CSR score and index was analyzed. The results are consistent with the earlier results presented in Table 6. Generally, MGDD increases CSR score and index. For CSR score, the impact of having at least one third of the directors being female ranges approximately between 0.8 and 1.4 while that of the index ranges approximately between 3.1 and 5.0. The results of the PSM is consistent with that of the multivariate analyses and therefore confirms that gender diversity has CSR increasing effect.

Table 8: Propensity Score matching using different matching methods

Matching Techniques	Nearest Neighbour (1)	Nearest Neighbour (5)	Radius	Kernel	Local linear regression
Panel A: CSR Score					
MGDD	1.397***	1.067***	0.858***	0.869***	0.838**
	(0.492)	(0.345)	(0.212)	(0.312)	(0.492)
Firm Characteristics	Yes	Yes	Yes	Yes	Yes
District fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	312	312	313	313	313
Panel B: CSR Index					
MGDD	4.986***	3.955***	3.154***	3.175***	3.062
	(1.726)	(1.224)	(0.747)	(1.102)	(1.726)
Firm Characteristics	Yes	Yes	Yes	Yes	Yes
District fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	312	312	312	312	312

Bootstrap standard errors in parentheses * p < 0.1, ** p < 0.05, *** p < 0.01. MGDD is a dummy variable equal to one if more than one-third of the directors within are females and zero otherwise.

Parameter Stability and robustness to omitted variable bias

The study leveraged the Oster's (2019) selection test to ascertain the stability of the regression coefficients. The test hinges on the coefficient and R-square movements to gauge the extent of bias as a result of omitted variables. The observed variations in the main coefficient of interest, gender diversity, as result of inclusion of control variables, are used to compute the identified set comprising the lower bound $(\tilde{\beta})$ and the upper bound (β^*) of the effect of gender diversity on CSR. It is worth stating that β* is the bias-adjusted coefficient, whereas $\tilde{\beta}$ is the coefficient of the full model. Also, we use R-square from the full model to set our R_{max} equivalent to min $(1.3\tilde{R};1)$ by choosing degree of proportionality (δ)= 1 [*see* Oster (2019) for detailed description of this procedure].

The δ can be interpreted as the extent of selection of unobservable variables relative to the observables that would be necessary to obviate the effect of gender diversity on CSR .Table 8 shows that each identified set of the lower bound and upper bound excludes zero. However, we observe that the bias-adjusted coefficient (β^*) is higher than our main variable (gender diversity)

in Table 7, albeit marginally. Moreover, the values of δ require that the omitted variables (unobservable variables) should be substantial for us to observe a zero-effect of gender diversity. From the Table 8, the unobservable variables should be about 2.3 and 2.4 times the observables in the respective models before the treatment effect of gender diversity will have zero impact on CSR.

Table 9: Parameter stability and robustness to omitted variable bias

	(1) CSR outcome	(2) CSR Index
Identified set$[\tilde{\beta}, \beta^*]$	[0.05,0.06]	[0.18,0.19]
Coefficient of proportionality (δ)	2.3	2.4

5. Discussion of main findings

The analyses of the study yielded three main findings; (1) gender gaps in the values of female and male directors' values; (2) a statistically significant positive relationship between gender diversity and CSR outcomes; and (3) a nonlinear relationship between gender diversity and CSR outcome.

The first finding on gender gaps brings to the fore gender differences that persist at the level of directors. The gender gaps in values reveal statistically significant differences across power and hedonism values, where female directors rank lower in power value compared to their male counterparts, but high in hedonism value compared to the male directors. Though gender gaps in universalism and benevolence (caring) values are not statistically significant, the averages suggest that female directors are more caring than male directors. Values that indicate conservatism (security, conformity and traditional) reveal mixed results across male and female directors. On the whole, the findings suggest that female directors are different from male directors: they are less ambitious (low power and achievement values) than male directors. However, female directors are more stimulated and change-oriented than male directors (high self-direction, stimulation and hedonism values). The finding on gender gaps support a growing body of research that suggest core differences between men and women related to exposure to competition, risk attitudes and altruistic behaviours (Adams & Funk, 2012a; Amorelli & García-Sánchez, 2020; Atif et al., 2021). Moreover, the findings are in consonance with much of the research in the field of psychology and the developed world premised on survey evidence that documents gender differences in core values across cultures (Schwartz, 1994, 2011, 2012). The implication of this finding is that varying gender diversity can have causal effects on corporate outcomes. For instance, firms with more representation of female directors are more likely to make decisions that are corporate socially responsible, because female directors emphasize self-transcendence values compared to their male counterparts.

Considering the second finding, the bivariate analyses of the effect of gender diversity on CSR outcomes motivated early evidence that firms with gender diversified directors are more socially responsible. This is mainly corroborated by the theoretical model of relations among the ten motivational types of values proposed by Schwartz ((2012). It postulates that the values of female directors predispose them to self-transcendence motivations and tendencies which is underscored

by concern for the welfare of others and the environment. Hence, female directors in a firm will uphold and foster the implementation of socially responsible decisions. In the same vein, promoting female representation is said to improve decision-making by ensuring that a wide range of topics and viewpoints are considered, and the outcome is evaluated (Amorelli & García-Sánchez, 2020; Atena & Tiron-Tudor, 2019; Atif et al., 2019; Dawar & Singh, 2016). As a result, improved decision making will translate into socially responsible outcomes. A host of other theories such as stakeholder, the agency, resource dependency and the upper echelon also lend credence to the benefits of diversity in the composition of firm directors (Boyd, 1990; Gaio & Gonçalves, 2022; Hillman & Dalziel, 2003; Wu et al., 2022). The evidence was further supported by both the multivariate OLS and PSM estimations which revealed even larger positive effects of gender diversity on CSR.

A number of studies attest to our finding. Johnson and Greening (1999) employed the Kinder, Lydenberg, Domini, and Company corporate social performance database which contains information on large firms, including many Fortune 1000 members to examine the relation between gender diversity and ethical practices and socially responsible behavior of the firms. They found a positive relationship mainly from the perspective of the product quality dimension compared to people dimension of corporate social responsibility. Bear et al. (2010) examined the link between the number of women on boards and firms' CSR ratings. The results indicate a positive relationship between gender diversity and CSR ratings, with a further demonstration that CSR ratings had a positive impact on corporate reputation. Boulouta (2013) carried out an empirical analysis from a sample of S&P500 group of companies over a 5-year period to examine the relationship between female board directors and corporate social performance. Their findings suggest a positive relationship between the two with the caveat of the impact dependent on the social performance metric under consideration. Hafsi and Turgut (2013) used a sample of S&P500 firms to investigate the linkage between diversity of boards and social performance. They found a significant relationship between diversity in boards and social performance. McGuinness et al. (2017) focused on the Chinese listed firms to examine the gender diversity-CSR nexus. Their findings reveal that gender balance in top-management predicts stronger CSR performance. Additional findings have shown that gender mixed is just as important as female leadership in fostering CSR change. Other studies in the same domain include (Adams & Ferreira, 2008; Carter et al., 2003b; Schubert et al., 1999).

Comparing the OLS estimates for the four components of the CSR outcome (economic, legal, ethical and discretionary responsibilities) from the perspectives of PCA and additive index, all of them indicate a significant and positive increasing effect of gender diversity. However, ethical responsibility and discretionary responsibility demonstrated larger effects in terms of magnitude. This finding is not far-fetched given that Nekhili et al., (2017) found that firms with female directors tend to make voluntary disclosures about CSR than firms without female directors. This finding further corroborates a growing body of literature that suggests that more women on the board may engender more honest communication among board members given that women are more communitarian, democratic, and participatory than men (Atena & Tiron-Tudor, 2019; Dawar & Singh, 2016; Dreber & Johannesson, 2008). Moreover, existing literature revealed that the

presence of female directors' lowers cases of corporate malfeasance and other wrongdoing that could damage the company's reputation (Amorelli & García-Sánchez, 2020; Atif et al., 2019).

The third main finding of the study reveals the positive relationship between gender diversity and CSR as nonlinear. We found a positive but nonlinear relationship between gender diversity and CSR. This positive finding implies that gender diverse are more socially responsible. However, the nonlinear relationship shows a cap for the positive relationship, which we found to range between 67-69 percent based on the two measures of the CSR outcome we used. These findings demonstrate that gender-diverse directors increase corporate social responsibility. However, appointing more than six (6) women as directors out of ten directors within a firm could adversely affect corporate social responsibility gains. This finding aligns with the critical mass theory, which suggests that firms with gender-diverse directors will advocate corporate social responsibility in the decision-making body of firms; however, it cautions against female dominance in the upper echelons of companies. With the current rate of gender diversity being 30.5 percent, it means there is more than a doubling of gains before the cap of 69 percent. It is worth mentioning that almost all the covariates included in the models to ensure 'internal' consistency of our policy variable (gender diversity) were observed to have statistically significant and intuitive results. In the same vein, the Oster's (2019) selection test has shown that the regression coefficients of the CSR models are stable and robust to omitted variable bias.

6. Conclusion

The growing literature on women in corporate gender positions, affirmative actions and gender quotas across many countries in the past few decades have drawn attention from policymakers, researchers and academics to understand its link with various firm outcomes. We contribute to the literature from developing country context by examining the gender gaps in values of female and male directors, and investigating the effect of gender diversity on CSR. In doing this, we used data on 312 medium and large firms in the Greater Accra Region of Ghana, an industrial hub of the country, and values data on 792 respective directors of the firms comprising 292 female and 500 male directors. Data was collected by the Ghana Statistical Services using the Integrated Business Enterprise Survey (IBES) as the sampling frame. Concerning the first objective of evaluating gender gaps in values, we used test of means and OLS to test gender gaps using Schwartz's 40 Portrait Value Questionnaire. In terms of the second objective, we employ two variant microeconometric estimation techniques (OLS and PSM) to assess the link between gender diversity and CSR.

The results show that female and male directors differ significantly in their core values. Thus we found that significant differences are observable across power and hedonistic values. Thus, male directors rank higher in power value compared to female directors. In contrast, female directors rank higher in hedonism compared to male directors. These differences in values have implications on the various motives that underpin corporate decision making and implementation by corporate directors which could dictate CSR friendliness.

Overall, gender diversity has been observed to be positively correlated with CSR outcomes among firms in the Greater Accra Region of Ghana. However, the positive relationship was found to be nonlinear which we found to range between 67-69 percent based on the two measures of the CSR outcome employed. The use of PSM provides a basis to allude to CSR outcome increasing effect. Further interrogation reveals larger effects across ethical and discretionary responsibilities domains of CSR compared to that of the economic and legal. Barring the differences in effects across domains and the nonlinear relationship, promising evidence for gender diversity for the corporate body has been established within the context of a developing country.

The findings and conclusion from this study complement the overwhelming majority of literature on female corporate leadership premised on data from developed countries. Though the context in developing countries including Africa differs due to differences in cultures, demographics, institutional quality, regulation and economic development, the promising evidence converge with that from the developed country.

Given the evolution in corporate bodies and the clamor for sustainable firm outcomes, different compositions of leadership are imminent to garner different viewpoints in decision making and motivations. Associations and institutions such as Ghana National Chamber of Commerce and Industry and Association of Ghana Industry should intensify efforts to advance and calibrate gender quota advocacy and affirmative actions within the caveats we have established to engender socially responsible outcomes at the firm level.

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APPENDIX

Table A1: Distribution of Female Directors by Industry

Industries	Number of females directors
Agriculture, forestry, and fishing	60
Mining and quarrying	52
Manufacturing	348
Electricity, gas, steam, and air conditioning supply	35
Water supply; sewerage, waste management, and remediation activities	40
Construction	152
Wholesale and retail trade; repair of motor vehicles and motorcycles	78
Transportation and storage	61
Accommodation and food service activities	108
Information and communication	47
Financial and insurance activities	96
Real estate activities	40
Professional, scientific and technical activities	16
Administrative and support service activities	12
Public administration and defense; compulsory social security	5
Education	155
Human health and social work activities	60
Arts, entertainment, and recreation	51
Other service activities	47
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	7

Table A2: Extent of matching bias across observable firm characteristics

Observable characteristics	Mean			t-statistics
	Not Gender Diversified	Gender Diversified	% Bias	
Manufacturing	0.022	0.022	0.000	0.00
Services	0.652	0.652	0.0	0.00
Agriculture and other industry	0.130	0.109	0.109	0.32
Large	1.261	1.196	14.2	0.74
Established	0.739	0.717	4.8	0.23
Limited liability	0.761	0.870	-25.3	-1.34
Local firms	0.804	0.783	4.9	0.25

Figure A1: Evaluating the Propensities

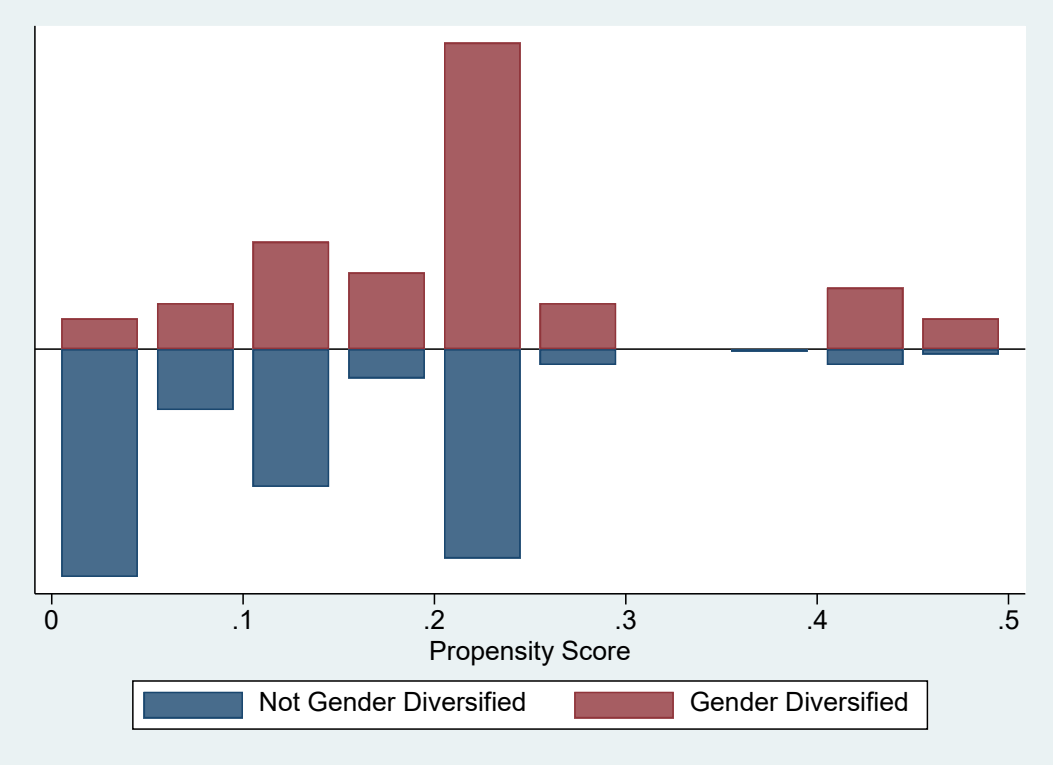

Table A3: Corporate Social Responsibility Indicators

The following statements describe the Corporate Social Responsibilities of businesses. Please indicate the extent to which you agree or disagree with each statement. Tick the appropriate option. Strongly disagree=1, disagree =2, Neither Agree nor Disagree =3, Agree =4, Strongly Agree =5.

	1	2	3	4	5
Category: Economic Responsibility					
We maintain lower operating costs.					
We closely monitor employees' productivity.					
Top management establishes long-term strategies.					
Our customers are grateful that our products are different.					
Category: Legal Responsibility					
The managers of this organization try to comply with the law.					
Our company seeks to comply with all laws regulating hiring and employee benefits.					
We have programs that encourage the diversity of our workforce (e.g., based on gender, age, career stage, etc.).					
Internal policies prevent discrimination in employees' compensation and promotion.					
Category: Ethical Responsibility					
Our business has a comprehensive code of conduct.					
We are recognized as a trustworthy company.					
Fairness towards co-workers and business partners is an integral part of the employee evaluation process.					
A confidential procedure is in place for employees to report any misconduct at work.					
Our salespersons and employees are required to provide full and accurate information to all customers.					
Category: Discretionary Responsibility					
Our business supports employees who wish to acquire additional education.					
Flexible company policies enable employees to better coordinate work and personal life.					
Our business gives adequate contributions to charities.					
A program is in place to reduce the amount of energy and materials wasted in our business.					
We encourage partnerships with local businesses and schools.					

Table A4: Gender Gap in Values of Directors (OLS) full model

	BV	UV	SD	ST	HD	AC	PW	SC	CF	TD
female director	0.044	0.067	0.010	0.014	0.186***	0.034	-0.328***	0.033	0.003	0.003
	(0.049)	(0.048)	(0.044)	(0.055)	(0.071)	(0.060)	(0.082)	(0.039)	(0.046)	(0.046)
Education(base: Basic)										
Secondary	-0.165	0.036	-0.173	0.823**	-0.047	-0.167	-0.183	0.055	-0.195	-0.195
	(0.177)	(0.143)	(0.196)	(0.386)	(0.352)	(0.221)	(0.312)	(0.127)	(0.152)	(0.152)
Professional	0.153	0.073	0.140	0.615*	-0.089	-0.395*	-0.670**	0.072	0.026	0.026
	(0.144)	(0.119)	(0.153)	(0.358)	(0.337)	(0.223)	(0.285)	(0.111)	(0.136)	(0.136)
Tertiary	0.094	-0.069	0.206	0.860**	-0.038	-0.379**	-0.470*	0.074	-0.200*	-0.200*
	(0.134)	(0.101)	(0.129)	(0.343)	(0.310)	(0.183)	(0.243)	(0.093)	(0.115)	(0.115)
Marital status (base: Married)										
Separated	0.104	0.131	-0.134	0.053	-0.198	-0.241	-0.489	0.075	0.278**	0.278**
	(0.143)	(0.120)	(0.165)	(0.149)	(0.256)	(0.217)	(0.310)	(0.104)	(0.119)	(0.119)
Never married	-0.186***	-0.223***	0.057	0.078	0.158*	0.115	0.175*	-0.008	0.004	0.004
	(0.060)	(0.060)	(0.055)	(0.067)	(0.086)	(0.070)	(0.101)	(0.044)	(0.051)	(0.051)
Number of household members	0.026**	-0.027**	-0.000	-0.005	-0.032*	-0.003	-0.002	0.012	0.004	0.004
	(0.012)	(0.012)	(0.012)	(0.015)	(0.018)	(0.016)	(0.020)	(0.009)	(0.011)	(0.011)
Number of social groups	0.028	0.113***	-0.015	0.008	0.014	-0.084***	-0.129***	-0.012	0.029	0.029
	(0.019)	(0.019)	(0.018)	(0.023)	(0.028)	(0.024)	(0.032)	(0.017)	(0.019)	(0.019)
Constant	0.112	0.244**	-0.112	-0.978***	-0.355	0.094	-0.321	0.416***	0.489***	0.489***
	(0.151)	(0.120)	(0.145)	(0.355)	(0.328)	(0.207)	(0.268)	(0.104)	(0.131)	(0.131)
N	792	792	792	792	792	792	792	792	792	792
r2	0.035	0.061	0.021	0.033	0.025	0.029	0.060	0.004	0.020	0.020

Standard errors in parentheses* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Robust standard errors in bracket. BV(Benevolent); UV(Universalism); SD(Self-Direction); ST(Stimulation); HD(Hedonism); AC(Achievement); PW(Power); SC(Security); CF(Conformity); and TD(Traditional). Director's background characteristics include level of education, marital status, number of household members, social group memberships of directors.

Table A5: Gender Diversity and CSR (OLS-Multivariate Analyses) full model

	(1) CSR Score	(2) CSR Index
Proportion of female directors (MGD)	0.051***	0.182***
	(0.018)	(0.064)
Proportion female directors square (MGD Square)	-0.00037*	-0.00135*
	(0.00020)	(0.00072)
Manufacturing firms	0.719	2.404
	(0.752)	(2.543)
Services firms	0.485	1.482
	(0.664)	(2.209)
Agriculture and other industry firms	0.475	1.229
	(0.742)	(2.470)
Large firms	0.183	0.772
	(0.295)	(1.039)
Established firms	-0.144	-0.393
	(0.312)	(1.110)
Limited liability firms	0.600*	2.219*
	(0.331)	(1.203)
Ghanaian firms	-0.130	0.001
	(0.328)	(1.167)
Female workers	-0.002***	-0.009***
	(0.001)	(0.002)
District Dummies	Yes	Yes
N	312	312
R-Squared	0.156	0.158