### The Effect of Corporate Governance **Characteristics and Gender Diversity on Dividends Decision: Does ESG Matter?**

أثر خصائص حوكمة الشركات والتنوع بين الجنسين على قرار توزيع الأرياح: هل لمعايير الاستدامة تأثير؟

#### Prepared By

Neveen Hossam Noureldin \*, \*\*

\*Faculty of Business - Ain Shams University \*\* Faculty of Business and Entrepreneurship- University of Prince Edward Island, Cairo Campus

> Neveen.hossam@bus.asu.edu.eg Neveen.noureldin@uofcanada.edu.eg

تعد الحوكمة وخصائصها من الركائز الهامة التي يمكن من خلالها التأثير على توزيع الأرباح، ومن ثم تستهدف الدراسة الى الوصول الى دليل تطبيقي من خلال الدراسة المقدمة لقياس تأثير حجم واستقلالية مجلس الإدارة على قرار توزيعات الأرباح، بالإضافة الى قياس دور تنوع الجنسين في مجالس الإدارة على توزيعات الأرباح، بالإضافة الى ذلك تهدف الدراسة لمعرفة هل معايير الاستدامة لها تأثير معنوى على العلاقة بين خصائص مجلس الإدارة والتنوع بين الجنسين وتوزيعات الأرباح في الشركات المصرية.

ولتحقيق اهداف الدراسة، فقد تم بناء نماذج الدراسة باستخدام ثلاث متغيرات مستقلة يتمثلوا في حجم مجلس الإدارة، واستقلالية مجلس الإدارة والتنوع بين الجنسين في مجلس إدارة الشركة، بينما المتغير التابع يتمثل في توزيعات الأرباح، وقد تم قياس التنوع بين الجنسين عن طريق متغيرات معدلة، الي جانب بعض المتغيرات الرقابية، بالإضافة الي الأخذ في الأعتبار تأثير معايير الاستدامة والتي تم قياسها عن طريق مؤشر الاستدامة المصري، وقد تكونت عينة الدراسة من ١٢٠ شركة من الشركات المُقيدة بالبورصة المصرية خلال الفترة من عام ٢٠١٦ وحتى عام ٢٠١٩.

وقد توصلت نتائج البحث إي وجود تأثير إيجابي معنوي على التنوع بين الجنسين وتوزيعات الأرباح، كما وجدت علاقة إيجابية معنوية بين حجم مجلس الإدارة وتوزيعات الأرباح، بينما وجدت علاقة عكسية معنوية بين استقلالية مجلس الإدارة وتوزيعات الأرباح، كما يوجد تأثير ذو دلالة إحصائية لتصنيف الاستدامة ESG على العلاقة بين التنوع بين الجنسين وتوزيعات الأرباح، بينما لا يوجد تأثير ذو دلالة احصائية لتصنيف الاستدامة ESG على العلاقة بين حجم مجلس الإدارة وتوزيعات الأرباح، ولا يوجد تأثير ذو دلالة احصائية لتصنيف العلاقة بين استقلالية الأرباح، ولا يوجد تأثير ذو دلالة احصائية لتصنيف ESG على العلاقة بين استقلالية مجلس الإدارة وتوزيعات الأرباح.

المصطلحات الأساسية: خصائص حوكمة الشركات، والتنوع بين الجنسين، وتوزيع الأرباح، لمعايير الاستدامة، نظرية اعتمادية الموارد، حجم مجلس الإدارة، استقلالية مجلس الإدارة.

#### The Effect of Corporate Governance **Characteristics and Gender Diversity on Dividends Decision: Does ESG Matter?**

#### **Abstract:**

**Purpose** – The current study investigates the effects of several corporate governance characteristics and gender diversity facets on the dividends decision. Moreover, the moderating effect of ESG has been scrutinized on the relationship between board characteristics and gender diversity with dividends decision.

**Design/methodology/approach** –Logistic regression model has been utilized on a sample of 120 EGX listed companies between 2012 and 2019. The non-board data that has been collected from DataStream, the board information has been gathered based on the financial statements and websites of the companies.

**Findings** – The results of the study demonstrated a substantial positive relationship between gender diversity and dividends decision. Additionally, the association between gender diversity and dividend decision is moderated by ESG. Furthermore, the decision to declare a dividend is significantly positively correlated with the board's size, but negatively correlated with the board's independence. Moreover, neither the relationship between board size nor board independence on dividends decision is significantly moderated by ESG.

Originality/value – Results hold up well to determine the imperative role of board characteristics and more specifically the gender diversity in dividend decision-making and on ESG. They thus offer compelling evidence in favor of the significance of sustainability in dividends decision.

**Keywords** -Corporate Governance, Gender Diversity, ESG, Sustainability, Dividends Decision and Resource Dependence Theory. Board Size, Board Independence, Logistic Regression.

#### 1- Introduction:

Board of directors has an imperative role in mitigating agency problems because the board segregates both the management and control tools for the decision-making process, thus reducing the agency conflicts. The board of directors is mostly involved in decision-making; hence its attributes are quite significant. Therefore, a well-organized board could result in lower agency expenses(Bathala & Rao, 1995) as the board supervises and administers the organizational management behavior to affirm that managers are achieving the best interests for shareholders, where dividend policy is a tool for corporate governance. (Jensen, 1986). Furthermore, corporate governance is considered a control tool that consists of a group of procedures, guides and policies to improve performance of organization and to lessen the agency cost(Afzal & Sehrish, 2011).

Dividends act as alleviating device for agency problems because the dividends payout decreases the free cash flow amount that management spends on investments for their own interests than the interests of the shareholders, as capital markets examine dividends more frequently, the likelihood of issuing common shares rises (Easterbrook, 1984). However, managers usually choose a dividend policy for their best interests rather than for the interests of the shareholders (Jiraporn et al., 2011). Furthermore, it has been claimed that as dividends lessen the firm's free cash flow, this decreases the agency costs, but they increase the transaction costs when the company is depending more on expensive and external financing. Moreover, it has been argued that the agency cost is decreased by dividends payout as cash flow availability is reduced and due to companies issuing new common stock while also declaring dividends, it can raise questions in the securities market(Al-Najjar & Hussainey, 2009). Thus, dividends act as legal and internal instruments for the purpose of preserving the shareholders' interests (Jiraporn & Chintrakarn, 2009).

Dividends decision has been an arguable topic recently in the literature of financial management. Several studies have been conducted to comprehend the reasons why companies should pay dividends to their shareholders as well as understanding the association between the shareholders' investment decisions and the dividends payments to determine the best dividends payout ratio to protect its investors and amplify the shareholders' wealth. Despite these different studies that examined the relationship between the board characteristics and dividends decision, however, there is still no agreement on the findings of the variables influencing businesses' dividends decisions. Some studies have showed a positive relationship between board composition and dividends payout ratio(Abor & Fiador, 2013; Adjaoud & Ben-Amar, 2010; Afzal & Sehrish, 2011). On the other hand, other studies have revealed insignificant relationship(Abdelsalam et al., 2008; Subramaniam & Devi, study has 2011). Whereas, this showed a negative association(Ghabayen, 2012). Similarly, another study has conveyed an adverse association between the board size, board composition and the dividends payout ratio(Bolbol, 2012).

Thus, the main objective of this paper is to scrutinize the association between the board characteristics as represented by the board size, board independence, and gender diversity on the companies' dividends decision. These companies include 120 Egyptian companies that are listed in the Egyptian Stock Exchange during the period from 2012 to 2019. Methodologically, the logistic regression has been utilized to test the relationship between the independent and dependent variables, where E-Views 12 has been employed for statistical analysis.

As research evidence testing the association between board characteristics and dividends decision is still scant and inconsistent, focusing more on developed countries than developing ones. This study contributes to literature in the context of Egypt in several ways. First, it expands the existing literature in one of the most imperative and growing markets within the emerging markets, where Egypt is an appealing case study. Moreover, this study examines the impact of not only board size, independence on dividend decision, but also the effect of gender diversity as expressed by three proxies: female presence, female number on board and female percentage on the board. Furthermore, in testing the association between board characteristics and dividends decision, the interaction relationship is tested by including the ESG as a mediator. Therefore, this study contributes to the comprehension of whether such relationship is affected by the ESG ranking or not. Moreover, most of studies employed the agency theory, whereas this study has incorporated the resource dependency theory to best test the research hypotheses. The findings provide strong support for a novel position on dividends decision and corporate governance that evaluates each factor to determine its specific association with dividends.

#### 2. Literature Review and Hypotheses Development:

#### 2.1 Historical Background:

The outcome and the substitute models have been discussed, where according to the outcome model, well-governed enterprises that pay dividends are those that have effective governance because doing so lessens the possibility of shareholder expropriation, in which successful shareholders' pressure results in managers turning over extra cash or free cash flow. On the other hand, the alternative model argues that dividend payments can take the place of existing governance methods in cases when poorly governed companies require a different way to build a reputation for working in their shareholders' best interests if they want to attract capital from public sources in the future(La Porta et al., 2000). In previous studies, the results of the prior research are conflicting. A study conducted in USA supported the outcome model, where companies with better corporate governance pay higher dividends(Brown & Caylor, 2004). However, another study that was conducted in UK claimed that a common law country supported the substitute model(Al-Najjar & Hussainey, 2009). Despite the results of La Porta et al., 2000, which predicted that Malaysia supported the outcome model although it is deemed a country with poor legal protection, other studies in Malaysia showed that they support the substitute model, that is thought to be more representative of the circumstances in Malaysia (Ming & Gee, 2008; Mitton, 2002; Reed, 2002; Satkunasingam & Shanmugam, 2006; Sulong & Nor, 2008).

The agency theory serves as the framework for the corporate governance mechanisms. The key question in any corporate governance research is how effectively each governance model addresses principle and agent issues that develop in the organization(Sulong & Nor, 2008), whereas

managers or controlling shareholders cannot seize the shares of the minority shareholders (Gompers et al., 2003). Similarly, it has been claimed that corporate governance is a control tool that consists of a group of procedures, guides and principles to improve the performance of organizations and lessen the agency cost(Afzal & Sehrish, 2011). In addition to the agency theory, this study considered the resource independence theory, which demonstrates the role the board plays in controlling uncertainty in the external environment and gaining access to essential resource(Pfeffer & Salancik, 2003). Resource dependence theory studies how board capital, or the experience, knowledge, reputation, and networks of the board members, results in the provision of resources to the business(Nadeem et al., 2017). Consequently, the resource dependence theory has been employed in this study as the gender diversity has been considered as one of the antecedents of corporate governance as well as one of the critical resources that is added to the organization.

Although several studies have examined the relationship between corporate governance characteristics and dividend decision, but still there is scarcity in research in developing countries. Moreover, significant differences in dividend policies between various nations have also been identified (Coates et al., 1998), where there are significant discrepancies between companies' dividend practices in developed and emerging markets(Glen et al., 1995). Furthermore, the legal protection, financial, and economic development of a nation impact the procedures. Therefore, corporate governance governance research needs to be done from the perspective of each country, rather than generalizing across markets or nations(Doidge et al., 2007).

Prior research yielded conflicting findings, as some studies claimed that companies that have strong corporate governance practices are related with larger dividends payouts(Sawicki, 2009). Similarly, companies will pay more dividends whenever they have strong corporate governance practices and coherent shareholders' rights (Jiraporn & Ning, 2006; La Porta et al., 2000). while others revealed the contradicting results(Jo & Pan, 2009). According to another study, in weak corporate governance countries pay higher dividends(John & Knyazeva, 2006). In this study, several governance determinants proxied corporate characteristics as board size, board independence in addition to gender diversity have been considered. Moreover, the interaction impact of ESG has been employed as a mediator to determine its impact on the relationship between board characteristics and gender diversity on dividends decision.

Recent research has questioned how the business orientation toward ESG goals affects corporate dividends distributions, with conflicting findings: a positive relationship between ESG scores and a firm's capacity to pay dividends (Benlemlih, 2019; Verga Matos et al., 2020; Ould Daoud Ellili, 2022; Salah & Amar, 2022). However, other studies revealed a negative association (Cheung et al., 2018; Ni & Zhang, 2019; Niccolo et al., 2020)

#### 2.2 Hypotheses Development:

#### 2.2.1 Board Size and Dividends Decision:

There are conflicting results as per the relationship between the board size and the dividends decision and payout. A study has been conducted on a sample of 164 Malaysian companies for the year 2013, has claimed a positive relationship between board size and dividends payout ratio(Shehu, 2015). Similarly, other studies have shown positive association(Afzal & Sehrish, 2011; Bokpin, 2011; Gill & Obradovich, 2012). Furthermore, another study that has been conducted on Chinese listed firms from 2001-2007 showed a significant positive association between board size and cash dividend payments(Litai et al., 2011). On the contrary, other study have shown insignificant association between board size and dividends that was held on a sample of 17 companies listed on Colombo Stock Exchange during the period from 2008-2012(Ajanthan, 2013). However, another study that has been done on Malaysian firms has divulged an insignificant and negative impact of board size and dividends(Bolbol, 2012). Another study that was conducted on Egyptian listed firms has reported no impact of board size on dividends payout(Abdelsalam et al., 2008). This could be verified by another study that has proved that larger board size has weaker dividends policy(Subramaniam & Devi, 2011). Moreover, specialization is better allowed by larger boards, which leads to a better monitoring and thus less dividends (Klein, 2002). Whereas, on the other hand it is argued that smaller boards are more effective than larger ones as it is more difficult to coordinate larger groups(Jensen, 1993). Another recent study undertaken in the listed Turkish firms between 2013 and 2019 revealed a positive association between board size and dividends distribution (Khan, A., 2021).

## Ho<sub>1</sub>: ESG has no effect on the relationship between board size and dividends decision.

## 2.2.2 Board Independence and Dividends Decision:

The results of the studies concerning the association between board independence and dividends payout are mixed. Sone studies have shown a significant positive relationship between board independence and dividends payout (Abor & Fiador, 2013; Afzal & Sehrish, 2011). Another study done on 714 Canadian firms have shown a positive association between corporate governance mechanisms and payout(Adjaoud & Ben-Amar, 2010). Likewise, another study claimed that the board's success as a whole depends by all means on the board independence(Anderson & Reeb, 2004). Moreover, another study that has been conducted on 237 companies from four Gulf Cooperation Council(GCC) countries: Bahrain, Oman, Saudi Arabia and the United Arab Emirates, which covered a period of 13 years from 3003-3015, showed that board independence has a moderating role on the association between dividends policy and agency costs(Hamdan, 2018). On the contrary, in a study among hotels and restaurant firms in Siri Lanka revealed insignificant relationship between board independence and dividends payout(Ajanthan, 2013). This result has been confirmed by another study, which showed as well insignificant effect of board independence on firm dividends ratio (Mansourinia et al., 2013). Correspondingly, these studies showed insignificant relationship between board composition and dividends payout(Abdelsalam et al., 2008). On the other hand, negative association has been revealed between board composition and dividends payout ratio(Ghabayen, 2012). Another recent study conducted in India showed that board independence negatively related to the level of dividend pay-out (Goyala, R., & Karb, S. 2022

# Ho<sub>2</sub>: ESG has no effect on the relationship between board independence and dividends decision.

#### 2.2.3 Gender Diversity and Dividends Decision:

Previous research had conflicting findings explaining the association between gender diversity and dividends. One study has shown a positive impact of female on board and the yield of dividends depending on the amount of free cash flows generated by the company (Al-dhamari et al., 2016). Another finding claimed that boards that are more diverse in terms of gender and race pay higher dividends (Byoun et al., 2016). However, other study examined Spanish listed companies claimed that female directors has no effect on dividends policy(Pucheta-Martínez & Bel-Oms, 2016). Furthermore, a negative association between board gender diversity and dividends payout has been asserted by another study(Sanan, 2019). Another study showed a significant positive relationship between gender diversity and dividends decision in the food and beverage sector (Dissanayake, K. T., & Dissabandara, P. H. ,2021). The dividend policy of Brazilian corporations is only slightly impacted by the percentage of women in executive and deliberative bodies. The presence of women in management bodies increases the likelihood that earnings will be distributed fairly and raises payout levels; this tendency is moderated when women sit on the board of directors (Almeida, T. A., Morais, C. R. F. D., & Coelho, A. C., 2020). Another Australian study showed that when there are three or more women on the board, their influence on dividends payouts is strongest (Gyapong, E., Ahmed, A., Ntim, C. G., & Nadeem, M., 2021). Another study on 90 UK-listed companies between 2006 and 2016 indicated that companies are more likely to pay bigger dividends when there are more female members on the board (Trinh, V. Q., Cao, N. D., Dinh, L. H., & Nguyen, H. N., 2021). A recent study conducted in Egypt showed a significant positive impact of females on board with dividends distribution and sustainability performance (Ahmed Selim, 2020).

Ho3: ESG has no effect on the relationship between female number on board and the dividends decision.

Ho<sub>4</sub>: ESG has no effect on the relationship between female percentage on board and the dividends decision.

Ho<sub>5</sub>: ESG has no effect on the relationship between female presence on board and the dividends decision.

#### 2- Research Methodology:

#### 3.1 Sample and Data Collection:

The Egyptian Stock Exchange's annual reports of non-financial listed companies served as the source of the data for this empirical study (EGX). The study's sample spans an eight-year period from 2012 to 2019. The financial institutions were not included in the sample development because they have a distinct accounting system (Reverte, 2009). In addition to all other non-board data that has been collected from Data Stream, the board information has been gathered based on the financial statements and websites of the companies.

The study's sample is made up of 120 EGX listed companies between 2012 and 2019. The initial sample consists of 124 enterprises after 4 financial institutions are eliminated, in which 1000 observations in all have been gathered over the course of eight years from annual reports and company websites. Companies without yearly reports were excluded from the random sample over the study period, bringing the total number of observations down to 904 observations.

#### 3.2 Conceptual Framework:

The purpose of the study is to determine how board qualities affect dividends decision. The dependent variable is dividend decision that was employed in this study to gauge the dividend policy. The independent variables are identified as follows: Board Size, Board Independence, and Board Gender Diversity. The Gender diversity is proxied by three indicators: FN, which denotes the females' number in the board of directors; FP that represents the female number in the board of directors to the total number of directors on board and FE that illustrated the existence of female on board, which is a dummy variable that takes 0 if there are no females on board, but takes 1 in case there are females on board. The ESG acts as a moderator for this relationship. While the control variables in this study are Firm Size, Firm Leverage, and Return on Assets as a proxy for profitability. All Variables of the study are demonstrated in Table (1).

Table 1: Variables of the Study

Variable	Abbreviation	Nature		
Board Size	BZ	Independent		
Board independence	IDP	Independent		
Gender Diversity	FN, FP, FE	Independent		
ESG	ESGR	Moderator		
Firm Size	SIZE	Control		
Firm Leverage	LEV	Control		
Firm Profitability	ROA	Control		
Dividends Decision	DIVD	Dependent		

#### 3.3 Research Model:

With panel data from 120 Egyptian firms listed on the EGX between 2012 and 2019, the study's quantitative analysis was conducted utilizing cross-sectional and time-series data from these companies. The creation of hypotheses section includes a description of Logistic Regression Model along with control variables that is used to examine the effect of board characteristics on dividends decision of Egyptian enterprises. The following are the estimated models:

$$\begin{aligned} \text{DIV}_{it} &= \beta_0 + \beta_1 \text{ BZ}_{it} + \beta_2 \text{ ESGR}_{it} + \beta_3 \text{ BZ} * \text{ESGR}_{it} + \beta_4 \text{ SIZE}_{it} \\ &+ \beta_5 \text{ LEV}_{it} + \beta_6 \text{ ROA}_{it} + e_{it} \end{aligned}$$

$$\begin{aligned} \text{DIV}_{it} &= \beta_0 + \beta_1 \text{ IDB}_{it} + \beta_2 \text{ ESGR}_{it} + \beta_3 \text{ IDB} * \text{ESGR}_{it} + \beta_4 \text{ SIZE}_{it} \\ &+ \beta_5 \text{ LEV}_{it} + \beta_6 \text{ ROA}_{it} + e_{it} \end{aligned}$$

$$\begin{aligned} \text{DIV}_{it} &= \boldsymbol{\beta}_0 + \boldsymbol{\beta}_1 \text{ FN}_{it} + \boldsymbol{\beta}_2 \text{ ESGR}_{it} + \boldsymbol{\beta}_3 \text{ FN} * \text{ESGR}_{it} + \boldsymbol{\beta}_4 \text{ SIZE}_{it} \\ &+ \boldsymbol{\beta}_5 \text{ LEV}_{it} + \boldsymbol{\beta}_6 \text{ ROA}_{it} + \boldsymbol{e}_{it} \end{aligned}$$

$$DIV_{it} = \beta_0 + \beta_1 FP_{it} + \beta_2 ESGR_{it} + \beta_3 FP * ESGR_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 ROA_{it} + e_{it}$$

$$\begin{aligned} \text{DIV}_{it} &= \boldsymbol{\beta}_0 + \boldsymbol{\beta}_1 \text{ FE}_{it} + \boldsymbol{\beta}_2 \text{ ESGR}_{it} + \boldsymbol{\beta}_3 \text{ FE} * \text{ESGR}_{it} + \boldsymbol{\beta}_4 \text{ SIZE}_{it} \\ &+ \boldsymbol{\beta}_5 \text{ LEV}_{it} + \boldsymbol{\beta}_6 \text{ ROA}_{it} + \boldsymbol{e}_{it} \end{aligned}$$

#### **3-Data Analysis:**

#### 4.1 Descriptive Statistics:

All variables' descriptive statistics are shown in Table 2. The descriptive analysis includes the minimum, maximum, mean as a measure of central tendency, and finally the standard deviation. This table shows that the mean percentage of females is 0.096 while the mean number of females is 0.0884. The board size mean, and standard deviation are 8.7 and 3.2 respectively. While, for the board independence mean is 0.15 and the standard deviation is 0.15. Moreover, the coefficient of variation is a relative measure of variability, which demonstrates the size of the standard deviation in relation to its mean. Higher values indicate that the standard is relatively large compared to the mean, which indicates a higher level of dispersion around the mean.

Table 2: Descriptive Statistics of the Variables of the Study

Variables	Observations	Min.	Max.	Mean	Std. Dev.	C.V
FN	904	0.000	8.000	0.884	1.187	1.34
FP	904	0.000	0.625	0.096	0.122	1.27
BZ	904	3.000	23.000	8.702	3.168	0.364
IDP	904	0.000	0.778	0.151	0.147	0.974
ESG	904	1.077	5.587	3.026	0.903	0.298
SIZE	904	-0.943	0.439	0.040	0.098	2.45
LEV	904	0.000	30.000	3.353	7.570	2.26
ROA	904	-0.214	17.875	1.116	0.876	0.78

#### **4.2 Correlation Analysis:**

Correlation coefficients were calculated to determine the level of correlation between the study's numerous variables. The correlation coefficient is denoted by the letter (r), and its value ranges from -1 to +1. The closer the coefficient of correlation value is to one (regardless of the sign of the number), the more closely the variables are related. The association between the variables is weaker the farther away the coefficient of correlation is from one (independent of the number sign).

The direction of the coefficient of variation, on the other hand, indicates whether there is a direct or inverse link between the variables. If the symbol is negative (-), it denotes an inverse relationship between the variables, which means that when one variable rises, the other one falls. If the sign is positive (+), it means that the variables are directly related, with an increase in one variable causing an increase in the other (both variables move in the same direction).

The coefficient of correlation matrix between the study's variables, as calculated using Pearson correlation, is shown in Table 3.

Table 3: Correlation Matrix of the Key Variables of the Study

Var.	Corr.	FN	FP	FE	BZ	IDP	ESGR	SIZE	LEV	ROA	DIV
	r	1									
FN	<i>p</i> -value	1									
	r	0.0911	1								
FP	<i>p</i> -value	0.000									
	r	0.751	0.793	1							
FE	<i>p</i> -value	0.000	0.000	1							
	r	0.368	0.123	0.345	1						
BZ	<i>p</i> -value	0.000	0.000	0.000	1						
	r	-0.063	-0.054	-0.063	-0.099	1					
IDP	<i>p</i> -value	0.057	0.104	0.055	0.003	1					
	r	0.039	-0.075	0.047	0.352	0.209	1				
ESGR	<i>p</i> -value	0.238	0.025	0.156	0.000	0.000	1				
	r	0.057	-0.006	0.034	0.158	-0.067	0.040	1			
SIZE	<i>p</i> -value	0.087	0.869	0.302	0.000	0.043	0.226	1			
	r	0.004	-0.034	0.019	0.126	0.336	0.380	0.010	1		
LEV	<i>p</i> -value	0.897	0.310	0.567	0.000	0.000	0.000	0.769	1		
	r	-0.018	-0.020	0.029	0.011	0.035	0.036	0.060	0.051	1	
ROA	<i>p</i> -value	0.598	0.556	0.389	0.751	0.296	0.277	0.070	0.126	1	
	r	0.179	0.121	0.196	0.302	-0.040	0.292	0.336	0.084	0.019	1
DIV	<i>p</i> -value	0.000	0.000	0.000	0.000	0.225	0.000	0.000	0.012	0.564	1

As shown in table (3), there is a significant positive relationship between female on board number, percentage, and existence as well as board size with dividends decision at 1 % significance level. However, there is a significant negative association between board independence and dividends decision at 5 % significance level. Furthermore, there is a significant positive relationship between ESG and dividends decision at 1 % significance level.

#### **4.3 Testing of Hypotheses:**

Both tables (4) and (5) present the results of the Z-test and its associated p-value to assert the significance of the entire model, the regression model coefficient values, and its standard error. They also present the results of the coefficient of correlation (r), coefficient of determination ( $r^2$ ), adjusted coefficient of determination (Adjusted  $r^2$ ), and standard error of the estimate.

Table 4: Regression Results of Board Size and Independence on Dividend Decision

on Divident Decision													
		BZ Model		IDB Model									
Variables			z-test		X7 ' 11			z-test					
	Coeff.	Stan. Error	Z Value	<i>p</i> -value	Variables	Coeff.	Stan. Error	Z Value	<i>p</i> -value				
Constant	-3.063	0.350	-8.744	0.000	Constant	-2.337	0.310	-7.546	0.000				
BZ	0.155	0.034	4.570	0.000	IDB	-1.136	0.622	-1.825	0.068				
ESGR	-0.001	0.037	-0.027	0.979	ESGR	0.016	0.020	0.782	0.434				
BZ*ESGR	-0.001	0.004	-0.189	0.850	IDB*ESGR	-0.101	0.072	-1.394	0.163				
SIZE	0.662	0.129	5.117	0.000	SIZE	0.960	0.124	7.750	0.000				
LEV	-0.199	0.376	-0.531	0.596	LEV	-0.525	0.366	-1.436	0.151				
ROA	11.06	1.301	8.499	0.000	ROA	11.62	1.311	8.860	0.000				
R2		0.20	0		$\mathbb{R}^2$	0.186							
Test χ <sup>2</sup>		240.7	80		χ²Test	224.210							
(p-value)		(0.00)	0)		(p-value)	(0.000)							

As illustrated in Table (4), the models' validity has been tested using the  $\chi^2$  test, which was significant at 1% significance level. There is a significant positive relationship between the board size and dividends decision at 1 % significance level. However, there is significant negative impact of board independence on dividends decision at 10% significance level. Furthermore, there is insignificant moderating effect of ESG on either the board size or the board independence on dividends decision. Moreover, it has been established that the interaction between the board size and ESG (BZ\*ESGR) has an insignificant effect on the dividends decision. Furthermore, the interaction between the board independence and ESG (IDB\*ESGR) has an insignificant impact on the dividends decision. Therefore, Ho<sub>1</sub> and Ho<sub>2</sub> were accepted. Around 20% of the changes in the dividends distribution may be explained by board size, but the remaining amount (80%) can be explained by random error or other variables that could affect the dividends distribution decision. Moreover, 18.6 % of the changes in the dividends decision might be explained by the board independence, while the remaining amount (81.4%) could be explained by random error or other variables that could affect the dividends distribution decision.

```
These relationships are shown in the following equations:  \begin{aligned} \text{DIV}_{it} &= -3.063 + 0.155 \text{ BZ}_{it} - 0.001 \text{ ESGR}_{it} - 0.001 \text{ BZ} * \text{ESGR}_{it} \\ &+ 0.662 \text{ SIZE}_{it} - 0.199 \text{ LEV}_{it} + 11.06 \text{ ROA}_{it} \end{aligned} \\ \text{DIV}_{it} &= -2.337 - 1.136 \text{ IDB}_{it} + 0.016 \text{ ESGR}_{it} \\ &- 0.101 \text{ IDB} * \text{ESGR}_{it} + 0.960 \text{ SIZE}_{it} - 0.525 \text{ LEV}_{it} \\ &+ 11.62 \text{ ROA}_{it} \end{aligned}
```

Table 5: Logistic Regression Results of Gender Diversity and Dividend Decision

	F	N Model				F	P Model			FE Model				
			z-test					z-test					z-test	
Variables	Coeff.	Stan. Error	Z Value	<i>p</i> -value	Variables	Coeff.	Stan. Error	Z Value	<i>p</i> -value	Variables	Coeff.	Stan. Error	Z Value	<i>p</i> -value
Constant	-2.717	0.322	-8.435	0.000	Constant	-2.847	0.331	-8.605	0.000	Constant	-2.846	0.328	-8.681	0.000
FN	0.261	0.080	3.278	0.001	FP	2.316	0.706	3.281	0.001	FE	0.772	0.174	4.433	0.000
ESGR	-0.048	0.015	-3.236	0.001	ESGR	-0.047	0.015	-3.208	0.001	ESGR	-0.039	0.015	-2.566	0.010
FN*ESG R	0.076	0.022	3.530	0.000	FP*ESG R	0.571	0.169	3.376	0.001	FE*ESGR	0.067	0.025	2.737	0.006
SIZE	0.954	0.127	7.509	0.000	SIZE	1.002	0.127	7.862	0.000	SIZE	0.950	0.127	7.502	0.000
LEV	-0.466	0.372	-1.252	0.210	LEV	-0.489	0.370	-1.321	0.187	LEV	-0.468	0.371	-1.262	0.207
ROA	11.43	1.305	8.762	0.000	ROA	11.62	1.308	8.886	0.000	ROA	11.94	1.327	9.000	0.000
$\mathbb{R}^2$		$0.216$ $R^2$					0.212			$\mathbb{R}^2$	0.216			
χ² Test	260.437			χ² Test	255.677			χ² Test	260.217					
(p-value)	(0.000)			(p-value)	(0.000)				(p-value)	(0.000)				

As demonstrated in Table (5),  $\chi^2$  test has been done to test the validity of the models, which have been significant at 1 % significance level. Moreover, there is a significant positive association between gender diversity number on the dividend decision at 1 % significance level; a significant positive relationship between gender diversity percentage as well as their existence on the dividend decision 1 % significance level. Moreover, ESG has a significant positive moderating role on the relationship of gender diversity as proxied by: females' on-board number, females' on-board percentage and females' on-board existence, and the dividends decision at 1 % significance level. Therefore, Ho<sub>3</sub>, Ho<sub>4</sub> and Ho<sub>5</sub> were rejected. Also, 21.6% of the variations in the dividend decision may be explained by the board's female number on board, with the remaining 81.4% perhaps explained by random error or other factors that may have an impact on the dividend distribution decision that were not currently investigated in this study. Furthermore, 21.2 % change

in the dividends decision could be explained by the change in the percentage of females on board, while 21.6 % change in the dividends decision may be explained by the change of the female existence on board.

These relationships are shown in the following equations:

$$\begin{split} \text{DIV}_{it} &= -2.717 + 0.261 \ \text{FN}_{it} - 0.048 \ \text{ESGR}_{it} + 0.076 \ \text{FN} * \text{ESGR}_{it} \\ &+ 0.954 \ \text{SIZE}_{it} - 0.466 \ \text{LEV}_{it} + 11.43 \ \text{ROA}_{it} \end{split}$$
 
$$\begin{aligned} \text{DIV}_{it} &= -2.847 + 2.316 \ \text{FP}_{it} - 0.047 \ \text{ESGR}_{it} + 0.571 \ \text{FP} * \text{ESGR}_{it} \\ &+ 1.002 \ \text{SIZE}_{it} - 0.489 \ \text{LEV}_{it} + 11.62 \ \text{ROA}_{it} \end{aligned}$$
 
$$\begin{aligned} \text{DIV}_{it} &= -2.846 + 0.772 \ \text{FE}_{it} - 0.039 \ \text{ESGR}_{it} + 0.067 \ \text{FE} * \text{ESGR}_{it} \\ &+ 0.950 \ \text{SIZE}_{it} - 0.468 \ \text{LEV}_{it} + 11.94 \ \text{ROA}_{it} \end{aligned}$$

#### 5. Conclusion:

The association between board qualities and dividends choice has been the subject of an ample body of study; yet, empirical investigations have produced inconsistent results due to complex interaction between corporate characteristics, more specifically gender diversity and dividends decision. The precise processes and bundles via which ESG actions influence the association between the board characteristics and dividends decision must be identified and explained. In this sense, the current study contributes to the body of literature by presenting the phenomenon of sustainability as a new contingency to explain the relationship between the board characteristics and gender diversity with dividends decision.

The purpose of this study was to determine how corporate governance characteristics and gender diversity affected the dividends decision and whether the board characteristics and gender diversity dividend decision relationship was moderated by ESG score. By employing the logistic regression analysis, the study's findings showed a significant positive association

between gender diversity and dividends decision. Moreover, ESG has a moderating effect on the relationship between gender diversity and dividends decision. Furthermore, the board size has a significant positive association with dividends decision; however, the board independence has a significant negative relationship with dividend decision. Additionally, there is insignificant moderating effect of ESG on the relationship between either the board size nor the board independence on dividends decision.

The findings of this study have important practical applications and important ramifications for policy makers, practitioners, and scholars alike. In terms of the relationship between board size and board independence and dividends decision. Markets respond more to negative firm initiatives than to positive ones. Thus, the results of the study on the moderating impact of ESG on the relationship between gender diversity and dividends choice indicate the significance of sustainability, which necessitates a more positive attitude toward the successful ESG initiatives of businesses.

#### References

- Abdelsalam, O., El-Masry, A., & Elsegini, S. (2008). Board composition, ownership structure and dividend policies in an emerging market: Further evidence from CASE 50. *Managerial Finance*, Vol. 34, No. (12), pp. 953-964.
- Abor, J., & Fiador, V. (2013). Does corporate governance explain dividend policy in Sub-Saharan Africa? *International Journal of Law and Management*, Vol. 55, No. (3), pp.201-225.
- Adjaoud, F., & Ben-Amar, W. (2010). Corporate governance and dividend policy: shareholders' protection or expropriation? *Journal of Business Finance & accounting*, Vol. 37, No. (6), pp. 648-667.
- Afzal, M., & Sehrish, S. (2011). Ownership structure, board composition and dividend policy in Pakistan. *African Journal of Business Management*, Vol. 7, No. (11), pp. 811-817.
- Ahmed, Selim (2020). The impact of women's presence on boards on the relationship between audit quality, policies of dividend and sociasl responsibility and market performance of Egyptian listed companies. *Accounting Thought Journal*, Vol. 24, No. (2), pp. 26-89.
- Ajanthan, A. (2013). Corporate governance and dividend policy: a study of listed hotels and restaurant companies in Sri Lanka. *International Journal of Management, IT and Engineering*, Vol. 3, No. (12), pp. 98-114.
- Al-dhamari, R., Ku Ismail, K. N. I., & Al-Gamrh, B. (2016). Board diversity and corporate payout policy: Do free cash flow and ownership concentration matter? *Corporate Ownership and Control*, Vol. 14, No. (1), pp.1-14.
- Almeida, T. A., Morais, C. R. F. D., & Coelho, A. C. (2020). Gender diversity, governance and dividend policy in Brazil. *Revista de Gestão*, Vol. 27, No. (2), pp. 189-205.
- Al-Najjar, B., & Hussainey, K. (2009). The association between dividend payout and outside directorships. *Journal of Applied Accounting Research*, Vol. 10, No. (1), pp. 4-19.

- Anderson, R. C., & Reeb, D. M. (2004). Board composition: Balancing family influence in S&P 500 firms. *Administrative Science Quarterly*, Vol. 49, No. (2), pp. 209-237.
- Bathala, C. T., & Rao, R. P. (1995). The determinants of board composition: An agency theory perspective. *Managerial and Decision Economics*, Vol. 16, No. (1), pp. 59-69.
- Benlemlih, M. (2019). Corporate social responsibility and dividend policy. *Research in International Business and Finance*, Vol. 47, pp. 114-138.
- Bokpin, G. A. (2011). Ownership structure, corporate governance and dividend performance on the Ghana Stock Exchange. *Journal of Applied Accounting Research*, Vol. 12, No. (1), pp. 61-73.
- Bolbol, I. (2012). Board characteristics and dividend payout of Malaysian companies. *Unpublished Master Dissertation*, *Universiti Utara Malaysia*.
- Brown, L. D., & Caylor, M. L. (2004). The correlation between corporate governance and company performance. *Institutional Shareholder Services White Paper*.
- Byoun, S., Chang, K., & Kim, Y. S. (2016). Does corporate board diversity affect corporate payout policy? *Asia-Pacific Journal of Financial Studies*, Vol. 45, No. (1), pp. 48-101.
- Cheung, A., Hu, M., & Schwiebert, J. (2018). Corporate social responsibility and dividend policy. *Accounting & Finance*, Vol. 58, No. (3), pp. 787-816.
- Coates, J., Davis, E., & Golder, P. (1998). Comparisons of dividend per share behaviour of large UK and German companies over the period 1980-1995: preliminary findings. *The European Journal of Finance*, Vol. 4, No. (3), pp. 279-290.
- Dissanayake, D. M. K. T., & Dissabandara, D. B. P. H. (2021). The impact of board of directors' characteristics on dividend policy: Evidence from a developing country. *Corporate Governance and Sustainability Review*, Vol. 5, No. (2), pp. 44-56.
- Doidge, C., Karolyi, G. A., & Stulz, R. M. (2007). Why do countries matter so much for corporate governance? *Journal of Financial Economics*, Vol. 86, No. (1), pp. 1-39.

- Easterbrook, F. H. (1984). Two agency-cost explanations of dividends. *The American Economic Review*, Vol. 74, No.(4), pp. 650-659.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, Vol. 26, No. (2), pp. 301-325.
- Ghabayen, M. A. M. (2012). *Board characteristics and firm performance: Case of Saudi Arabia* Universiti Utara Malaysia].
- Gill, A., & Obradovich, J. (2012). Corporate governance, institutional ownership, and the decision to pay the amount of dividends: Evidence from USA. *International Research Journal of Finance and Economics*, Vol. 97, pp. 60-71.
- Glen, J. D., Karmokolias, Y., Miller, R. R., & Shah, S. (1995). *Dividend policy and behavior in emerging markets: To pay or not to pay.*The World Bank.
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, Vol. 118, No. (1), pp. 107-156.
- Goyala, R., & Karb, S. (2022). Board characteristics and dividend payout policy: Evidence from India. International Conference on Economics, Finance & Business.
- Gyapong, E., Ahmed, A., Ntim, C. G., & Nadeem, M. (2021). Board gender diversity and dividend policy in Australian listed firms: the effect of ownership concentration. *Asia Pacific Journal of Management*, Vol. 38, pp. 603-643.
- Hamdan, A. M. (2018). Dividend policy, agency costs and board independence. *International Journal of Critical Accounting*, Vol. 10, No. (1), pp. 42-58.
- Jiraporn, P., & Chintrakarn, P. (2009). Staggered boards, managerial entrenchment, and dividend policy. *Journal of Financial Services Research*, Vol. 36, No. (1), pp. 1-19.
- Jiraporn, P., Kim, J. C., & Kim, Y. S. (2011). Dividend payouts and corporate governance quality: An empirical investigation. *Financial Review*, Vol. 46, No.(2), pp. 251-279.
- Jiraporn, P., & Ning, Y. (2006). Dividend policy, shareholder rights, and corporate governance. *Shareholder Rights, and Corporate Governance (September 18, 2006)*.

- Jo, H., & Pan, C. (2009). Why are firms with entrenched managers more likely to pay dividends? *Review of Accounting and Finance*, Vol. 8, No.(1), pp. 87-116.
- John, K., & Knyazeva, A. (2006). Payout policy, agency conflicts, and corporate governance. *Agency Conflicts, and Corporate Governance (May 2006)*.
- Khan, A. (2021). Ownership structure, board characteristics and dividend policy: evidence from Turkey. *Corporate Governance: The International Journal of Business in Society*, Vol. 22, No.(2), pp.340-363.
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, Vol. 33, No. (3), pp. 375-400.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency problems and dividend policies around the world. *the Journal of Finance*, Vol. 55, No.(1), pp. 1-33.
- Litai, C., Chuan, L., & Kim, Y.-c. (2011). Financial characteristics, corporate governance and the propensity to pay cash dividends of Chinese listed companies. *International Business and Management*, Vol. 3, No.(1), pp. 176-188.
- Mansourinia, E., Emamgholipour, M., Rekabdarkolaei, E. A., & Hozoori, M. (2013). The effect of board size, board independence and CEO duality on dividend policy of companies: Evidence from Tehran stock exchange. *International Journal of Economy, Management and Social Sciences*, Vol. 2, No. (6), pp. 237-241.
- Ming, T. C., & Gee, C. S. (2008). The influence of ownership structure on the corporate performance of Malaysian public listed companies. *ASEAN Economic Bulletin*, pp. 195-208.
- Mitton, T. (2002). A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis. *Journal of Financial Economics*, Vol. 64, No.(2), pp. 215-241.
- Nadeem, M., Zaman, R., & Saleem, I.(2017). Boardroom gender diversity and corporate sustainability practices: Evidence from Australian Securities Exchange listed firms. Journal of Cleaner Production, Vol. 149, pp. 874-885.

- Niccolò, N., Battisti, E., Papa, A., & Miglietta, N. (2020, November). Shareholder value and dividend policy: The role of ESG strategies. In 2020 IEEE International Conference on Technology Management, Operations and Decisions (ICTMOD), pp. 1-5.
- Ni, X., & Zhang, H. (2019). Mandatory corporate social responsibility disclosure and dividend payouts: evidence from a quasi-natural experiment. *Accounting & Finance*, Vol. 58, No. (5), pp. 1581-1612.
- Ould Daoud Ellili, N. (2020). Environmental, social, and governance disclosure, ownership structure and cost of capital: Evidence from the UAE. *Sustainability*, Vol. 12, No. (18), pp. 1-23.
- Pfeffer, J., & Salancik, G. R. (2003). The external control of organizations: A resource dependence perspective. Stanford University Press.
- Pucheta-Martínez, M. C., & Bel-Oms, I. (2016). The board of directors and dividend policy: The effect of gender diversity. *Industrial and Corporate Change*, Vol. 25, No.(3), pp. 523-547.
- Reed, D. (2002). Corporate governance reforms in developing countries. *Journal of Business Ethics*, Vol. 37, No.(3), pp. 223-247.
- Salah, O. B., & Amar, A. B. (2022). Does corporate social responsibility affect dividend policy? Empirical evidence in the French context. *Journal of Global Responsibility*, Vol. 13, No. (3), pp. 268-289.
- Sanan, N. K. (2019). Impact of board characteristics on firm dividends: evidence from India. *Corporate Governance: The International Journal of Business in Society*, Vol. 19, No. (6), pp. 1204-1215.
- Satkunasingam, E., & Shanmugam, B. (2006). The consequences of culture on shareholder activism in Malaysia. *Journal of Applied Management Accounting Research*, Vol. 4, No. (1), pp. 45-56.
- Sawicki, J. (2009). Corporate governance and dividend policy in Southeast Asia pre-and post-crisis. *The European Journal of Finance*, Vol. 15, No. (2), pp. 211-230.

- Shehu, M. (2015). Board characteristics and dividend payout: Evidence from Malaysian public listed companies. *Research Journal of Finance and Accounting*, Vol. 6, No. (16), pp. 35-40.
- Subramaniam, R., & Devi, S. (2011). Corporate governance and dividend policy in Malaysia. International Conference on Business and Economics Research.
- Sulong, Z., & Nor, F. M. (2008). Dividends, ownership structure and board governance on firm value: Empirical evidences from malaysian listed firm. *Management & Accounting Review*, Vol. 7, No. (2), pp. 55-94.
- Trinh, V. Q., Cao, N. D., Dinh, L. H., & Nguyen, H. N. (2021). Boardroom gender diversity and dividend payout strategies: Effects of mergers deals. *International Journal of Finance & Economics*, Vol. 26, No. (4), pp. 6014-6035.
- Verga Matos, P., Barros, V., & Miranda Sarmento, J. (2020). Does ESG affect the stability of dividend policies in Europe? *Sustainability*, Vol. 12, No. (8804), pp. 1-15.