The Effect of ESG on Financial Performance and Firm Value: The Moderating Role of CEO Power in the ISE

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Abstract

Purpose: The purpose of the present study is to analyze the moderating impact of CEO power on the link between environmental, social and, governance (ESG) and financial performance and firm value in the Iraq Stock Exchange (ISE).

Design/methodology/approach: With a sample of ISE covering 2013-2022, multivariate linear regression estimation was used to test the study hypotheses by panel data method. The study sample includes 440 firm-year observations (44 firms). the financial performance (FP) and firm value (FV) were used as dependent variables. ESG score and CEO power were used as independent and interaction variables, respectively.

Findings: The research results indicate that the link between ESG and FP improves under the influence of CEO power. Also, the findings show that the power of the CEO has a significant impact on association between ESG score and FV. These results remained stable by performing robustness checks. The findings of the study confirmed the stakeholder theory. Accounting standards-setting and policymakers and investors can be among the users of the results of this study. Considering the significance of the impact of ESG disclosure on FP and FV, standards-setting and policymakers need to reform the disclosure regulations. Also, considering the positive and significant impact of the interaction variable of the CEO power on the link between ESG and FP (or ESG and FV), investors are advised to pay attention to the transparency and accountability of the firm.

Originality/value: The critical contribution of this study is that it is one of the early studies that provides insight into the interaction impact of the power of the CEO on the link between ESG and FP (or ESG and FV) in Iraq' emerging economy.

Keywords: CEO power, ESG, Financial Performance, Firm Value, Stakeholders Theory.

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1.Introduction

During the last two decades, sustainable or ESG reporting has become an issue of interest for accounting and financial researchers. Capital market policymakers and global stock exchange decision-makers have approved that the disclosure of non-financial information about performance and risk is essential to investors and to the sustainability of modern capital markets (Ho, 2017). Based on the Sustainable Stock Exchange (SSE) initiative, is expected that most large companies will take practical actions about the environment and society by 2030 (SSE, 2015). Previous literature indicates that capital market participants are interested in the transparency and disclosure of information published in ESG reporting and want the growth of transparency in ESG reporting (Li et al., 2017; Velt, 2019; Eccles et al., 2011). It is because the qualitative characteristics of accounting information such as comparability, reliability and timeliness are important to capital market participants. Also, ESG reporting can be the basis of stakeholder management because stakeholders have found that non-financial information can be useful to them. In addition, the main goal of companies has changed from maximizing wealth and value for shareholders to value creation for stakeholders in modern financial and accounting literature. This issue has become more critical after the 2008 financial crisis (Al Amosh et al., 2023). Despite this notable heightened, the main question that has been less explored in previous literature is whether ESG reporting can lead to value creation and better FP. Also, what elements can affect this relationship? The results of previous studies on the first question in developed countries are contradictory. That is, the results were positive, negative, or unrelated (Al Amosh et al., 2023; Li et al., 2017; Velt, 2019; Cho et al., 2006; Madsen & Rodgers, 2015). Considering different theories in the field of sustainability (i.e., Institutional,

Legitimacy and Stakeholder theories) and in order to achieve the goal, the theory of stakeholders has been used to develop hypotheses (Rezaee, 2017; Li et al., 2017; Velt, 2019). Also, considering the critical role of the CEO in making decisions and organizing the company, this study provides empirical evidence of its interaction role.

In the literature of traditional financial management, the primary and ultimate goal of the company is to maximize the shareholders' wealth. Based on this, financial reports can determine the financial performance and firm value by disclosing timely and reliable information and decreasing information asymmetry. Thus, the purpose of the shareholder theory is to invest the company's resources in activities that are in the interests of the shareholders (Fama and Jensen, 1983) and, leave activities that are useful for society and the environment. Also, according to the shareholder theory, the activities or motivations of managers to do things are to achieve short-term profits, which are in line with the realization of their individual interests. In the modern perspective of strategic management, the stakeholder theory was presented by Friedman (1984). Stakeholder theory indicates that the interaction and communication of stakeholders with the firm can create value for the firm and increase the welfare of the stakeholders. In the stakeholder theory, the organization can be considered as a part of the social system in which different groups work together to achieve the goals of the social system. The main objevtive of the stakeholder theory is to attain maximum stable performance and wealth creation for the stakeholders in the long term. In order achieve this goal, non-financial ESG activities lead to strengthening and improving the relationship between stakeholders and reducing conflicts (Rezaee, 2017). Previous empirical studies on stakeholder theory indicate that sustainability performance and activities

can increase corporate value through corporate social responsibility (CSR), fulfilling environmental obligations, and raising their reputation (Rezaee, 2017; Campbell, 2007; Clarkson et al., 2011; Weber, 2008).

Previous literature has documented that there has been a growing demand for non-financial information disclosure and change in financial reporting over the past 20 years (Li et al., 2018). The disclosure of managers' actions in ESG reporting can lead to strengthening relationships between stakeholders (Dhaliwal et al., 2011). Also, the information disclosed in the ESG describe reduces information asymmetry between the company and other stakeholders, and in addition to strengthening relationships between stakeholders, it increases operation and financial performance through consumption, investment, reducing employee counterproductive behaviors, etc. Finally, ESG reporting can reduce agency costs by improving stakeholder engagement.Thus, we argue that by disclosing non-financial ESG information, companies can better attract limited resources and increase the company's FP by establishing better communication with stakeholders.

In the finance and accounting literature, many studies have recently focused on CEO power. Finkelstein (1992) and Adams et al. (2005) point out that the power of the CEO is measured based on the CEO's ability to solve the conflict in the company and influence the company's critical decision-makers. CEO power includes four dimensions of power structure, ownership power, expertise power and, prestige power (Finkelstein, 1992). From the point of view of corporate governance, the CEO is a person who can participate in the strategic decisions of the company and influence them (Busenbark et al., 2016). Velte (2019) points out that CEO power has significantly influences over the content of financial and non-financial disclousers. Javeed and Lefen

(2019) showed that CEO power affects the relationship between non-financial reporting and financial performance. Veprauskaite and Adams (2013) found that power of the CEO moderates the link between CSR and FP. Li et al. (2018) conducted a study in the UK and found that the relationship between ESG and FV was positively influenced by CEO power. The results of the empirical studies that conducted on the moderating role of the CEO power are in line with the stakeholder theory. In other words, based on the stakeholder theory, the CEO power has been able to have positive economic consequences for companies. Thus, we argue that the relationship between ESG score and FP and FV is influenced by CEO power. Following previous studies (Sheikh, 2019; Muttakin et al. 2018; Li et al., 2018), we use the CEO power index, which includes four dimensions of power, to measure the moderator variable of CEO power.

The Arab developing countries are facing many problems that lead to the development process being delayed due to bad economic conditions, economic sanctions and, increased corruption. Therefore, this issue has affected the financial performance of the Arab capital market (Al Amosh et al., 2023). On the other hand, the occurrence of the Arab Spring and the state formation of the Islamic State of Iraq and Syria (ISIS) have had a negative impact on economic indicators, and there are many concerns about increasing political, social and, environment risks. Chang et al. (2022) point out that terrorist activities lead to an increase in macroeconomic uncertainty and cause managers to worry about the future performance of companies. In addition, due to weak corporate governance and ISIS, the desire for transparency has decreased and corruption has increased in the period from 2012 to 2018 in Iraq (Salehi et al., 2022). These factors have caused a decrease in the attraction of investment. Also, there are no

mandatory regulations to disclose ESG information in the ISE. However, because of the crises of low economic growth, water scarcity, import of energy and human rights, ESG reporting has become an important issue for stakeholders in Arab countries including Iraq (Al Amosh et al., 2023). Miller et al. (2021) believe that based on stakeholder theory, sustainability issues become more essential for stakeholders in crises. Considering the background, we argue that the Iraq capital market can provide a suitable place to examine the influence of the CEO power on the relationship between ESG and FP (or ESG and FV) .Thus, it is crucial to investigate this question and address this research gap.

In this study, 440 firm-year observations from 2013 to 2022 were used for companies listed on the ISE. Panel multivariate linear regression was used to test the hypotheses. The results of the study showed that the ESG score has a positive and significant effect on the FP and FV. Also, the research results indicate that the relationship mentioned above is strengthened under the influence of the CEO power. Considering robustness checks, the fitting results of the GMM method are not different from those obtained from the panel method. The main contributions of the present study are described below. First, this study examines the relationship between ESG score and FV (or ESG score and FP) under the influence of CEO power in Iraq, which is a little-known capital market. Second, the results of this study enrich the literature on ESG reporting by identifying the CEO power as a new driver of disclosure polices in Iraq emerging economy. These results showed that the CEO power can strengthen the trust of stakeholders and finally lead to wealth creation. Third, The findings of the present study improved our understanding of the impact of CEO power. Finaly, from a theoretical point of view, the present study used a combination of theories, including stakeholders, economic (proprietary costs), and upper echelons theories, to investigate the effect of the CEO power.

1.1 ESG reporting and financial performance and firm value

One of the most critical and challenging issues in business is information transparency. Information transparency leads to areduction of information asymmetry and an increase in accountability through the disclosure of financial and non-financial information to stakeholders. In the past, only financial information was sufficient to meet the demands of shareholders. But, with the increase of adherents of sustainable development in the world, the demand for disclosure of non-financial information increased for stakeholders (Lipunga, 2015). Thus, non-financial information covered information in three different scopes, including environment, society and, corporate governance and create modern reporting approaches such as sustainability or ESG reporting (Al Amosh and Mansor, 2021).

Various theories (i.e., stakeholder theory, legitimacy theory, Institutional theory) can be used to explain the impact of ESG reporting on FP (ESG and FV). A review of previous studies shows that stakeholder theory has been widely used to justify the motivation of companies to disclose information (Al Amosh and Mansor, 2021; Li et al., 2018; Velt, 2019; Rezaee, 2017; Deegan and Unerman, 2011). Also, the stakeholder theory is one of the primary and significant changes in the last century and has caused many debates in the academic literature. Stakeholder theory was proposed by Freeman (1984) to meet the information needs of stakeholders. In the view of Freeman (1984), stakeholders are considered as groups or individuals who can have a two-way relationship with the company and not only have an impact on the company but also be influenced by it. According to this theory, increasing the satisfaction among the stakeholders leads to

an increase in the probability of the company's long-term success. Stakeholder theory is a theory of management, ethics, law, economics and society about the company and it deals with how the company should really act to be successful and create value for everyone (Visser et al., 2009). Considering stakeholder theory, the function of managers and principles is to perform their functions in line with the interests of all individuals and groups so that the interests of the stakeholders are on the same line, a balance is created between them and finally, the interests of all the stakeholder are managed (Wu, 2010). Thus, disclosure of financial and non-financial information can lead to the reduction of interest conflict and information asymmetry and ultimately improve FP and FV. Li et al. (2018) argue that with improved ESG reporting in the capital market, it becomes easier for investors and other key stakeholders to allocate resources. Thus, this issue leads to the strengthening of the relationship between the company and the stakeholders and increases the FV of the company in the long term.

Previous literature highlighted that ESG reporting has advantages to capital markets, company managers and financial institutions. First, price transparency can be increased by disclosing of public and diverse information in the capital market and economy (Goldstein & Yang, 2015). Second, ESG reporting allows managers to observe the feedback of information disclosure in the capital market and use this feedback to improve internal mechanisms and investment decisions (Chen et al., 2007). Third, it reduces the information asymmetry by improving the disclosure of non-financial information in the capital market and leads to the alignment of stakeholders (Banerjee et al.,2015). Fourth, As a significant financial institution in the capital market, socially responsible mutual funds consider ESG reporting in their investment decisions (Van Duren et al., 2016). Lastly, ESG reporting can reduce

agency costs caused by interest conflicts and minimize the possibility of myopic decisions-making (Li et al., 2018).

Recent empirical evidence shows that ESG reporting has a positive and significant impact on FP and FV (Al Amosh et al., 2023; Bruna et al., 2022; Li et al., 2018; Velt, 2019). These results support the stakeholder theory. Al Amosh et al. (2023) find that ESG reporting has a positive and significant effect on the financial performance (ROA and Tobin's Q) of companies in Levant countries. Based on emerging markets, Bahadori et al. (2021) observed that a higher ESG score leads to higher FP. Using the European listed companies, Bruna et al. (2022) showed that ESG reporting has a positive effect on FP. Buallay et al. (2020) indicate that CSR reporting has a positive impact on the FP of Mediterranean countries. Li et al. (2018) find that ESG disclosure has a significant impact on FV (Tobin's Q). Using Malaysian companies, Sadiq et al. (2020) found that ESG reporting has a positive impact on FV. Cormier & Magnan (2007) and Aerts et al. (2008) point out that environment reporting has a positive effect on FV. Considering stakeholder theory and previous empirical evidence, we expect ESG reporting to have a positive and significant impact on FP and FV. Thus, our hypotheses are as follows:

H1: A high ESG reporting score leads to an increase in financial performance.
H2: A high ESG reporting score leads to an increase in the firm value.

1.2 The moderator role of CEO power
Although CEO power has been considered in the corporate governance literature, its benefits for companies have not been entirely determined (Larcker and Tayan, 2012). The power of the CEO comes from their position and the CEO is always considered one of the people who have the most power in the firm. The power of the CEO has a potential influence on the

company's decisions. The CEO power is defined as the ability of managers to examine and overcome conflicting internal and external situations and to influence the critical decisions of the organization (Finkelstein, 1992; Adams et al., 2005). It can be said that the most crucial role of the CEO in companies is not only to create wealth for the stakeholders (Papadakis, 2006) but also to maximize future opportunities for them (Kanter, 1982). Finkelstein (1992) has provided the four dimensions to create CEO power that may explain how CEO power is generated. The first dimension is structural power. This power is made based on management structure and organizational position levels. The second dimension is the power of ownership. This power is made when people are the founders or shareholders of the company. The third dimension is expert power. This power is determined based on the CEO's familiarity with the company environment. Criteria for recognizing this power include having experience, having skills, having expertise, and so on. The last dimension is the power of prestige. This means is a managerial reputation and elite in the institutional environment and among stakeholders.

Previous studies indicate that the importance of individual characteristics has been neglected in the board of directors or the top management team in traditional economic theories and empirical evidence of information disclosure (Habib and Hossain, 2013; Velt, 2019). In contrast, behavioral economics emphasizes that information disclosure and performance are influenced by the individual characteristics of the top management team. In other words, the effect of CEO power on the relationship between ESG reporting and FP is explained through the upper echelons theory (Velt, 2019; Hambrick, 2007). The literature review of upper echelons theory, stakeholder theory and empirical evidence reveals that top management team (i.e., CEO) motivations and characteristics

(compensation, power, duality, tenure, gender, education, ability and, experience) have a considerable influence on the relationship between disclosure policies and FP (Busenbark et al., 2016; Berns and Klarner, 2017; Habib and Hossain, 2013; Winschel and Stawinoga, 2019; Velt, 2019). Upper echelons theory in strategic management focuses on the role of managers' characteristics on the company performance and considers the difference between the performance of companies in an industry to be the result of the difference between the performance of their managers, and this difference in the performance of managers is also the result of a set of differences, including the difference in the characteristics of managers, gender, experience and age (Hambrick, 2007). Also, based on stakeholder theory, Velt (2019) indicates that increasing the CEO power is useful when the CEO is motivated to improve the firm performance through stakeholder management. By studying Pakistani companies, Javeed and Lefen (2019) find that CEO power has a positive and significant impact on the link between information disclosure and FP. Empirical evidence of Rossi et al. (2021) showed that the characteristics of board members have a positive impact on the link between CSR and FP. Considering a sample of French companies, Kahloul et al. (2022) find that the characteristics of the board of directors have a positive and significant impact on link between information disclosure (i.e., CSR) and FP. Thus, considering the stakeholder and upper echelons theories and empirical evidence, we argue that increasing CEO power leads to an improved link between ESG reporting and FP. The third hypothesis is as follows:

H3: There is a positive moderating effect of CEO power on the the relationship between ESG reporting and FP.

Previous literature indicates that the CEO power can affect the policies of information

disclosure. Song & Thakor (2006) find that CEO are motivated to control the information provided to the board of directors. Goldman & Slezak (2006) and Axelson & Baliga (2009) point out that CEO power can affect the quality of information disclosure. Chang et al. (2010) show that the disclosure of the useful operational and strategic decisions of the CEO in the form of disclosure reports can lead to a positive reaction of investors to the CEO's ability and, thus increase the CEO pay. Hui & Matsunaga (2015) believe that the CEO can reflect signals about the power and capabilities of the CEO to the capital market by disclosing information about factors affecting the competitive environment and predicting future economic outcomes. Thus, high disclosure quality is a sign of the CEO power to increase wealth and FV. Considering ESG reporting as a proxy for disclosure quality, Li et al. (2018) suggest that the presence of a strong CEO leads to a greater impact of ESG reporting on FV. Considering upper echelons theory and the economic theories of information disclosure, García-Sánchez et al. (2020) show that CEO power has a direct and indirect effect on the company's disclosure policies. Economic theories justify disclosure of information through greater benefits than costs (i.e., proprietary costs theory) (Verrecchia, 1983). This theory leads to a competitive advantage for the company. Upper echelons theory indicates that demographic characteristics of CEO, such as age, education, and, experience affect the type and amount of information they use, and this also affects strategic decisions and FP (Hambrick, 2007). Thus, We argue that the power of the CEO can moderate the link between ESG reporting and FV by mitigating conflicts of interest. The fourth hypothesis is as follows:

H4: There is a positive moderating effect of CEO power on the the relationship between ESG reporting and firm value.

2. Research Methods
2.1 Sample and data
In the present study, the companies listed in the ISE were selected as the statistical population from 2013 to 2022. The study sample was selected based on the following criteria. The number of companies listed to the ISE on December 31, 2022 is equal to 112 companies. Companies related to banking, investment and, insurance sectors were eliminated. Also, some companies do not disclose the information required for this study, or their information was incomplete. Therefore, they were removed. Finally, the number of research sample companies was 44 companies or 440 company years.

Description	Observation
Initial sample from 2013-2022	1,120
Less: firms-year insurance sector	(40)
Less: firms-year non-disclosure or missing of data	(160)
Less: firms-year banking and investment sectors	(480)
Final sample	440

The data required to calculate the research variables were extracted from the ISE databases and financial and non-financial reports published by the ISE. Data were analyzed based on panel data method and, multivariate linear regression method was used to test study hypotheses. Also, descriptive and inferential statistics were used to analyze the research estimates. F-limer, Hausman and, multivariate linear regression tests were used to perform inferential statistics.

2.2. Research Models and Variables
In the present study, the following models were used to estimate the study hypotheses. These models have been used in previous researche, such as Li et al. (2017) and Velt (2019).

$$QT_{i,t} = \alpha_0 + \alpha_1 ESG_{i,t} + \alpha_2 CEOP_{i,t} + \alpha_3 ESG_{i,t} \times CEOP_{i,t} + \alpha_4 FA_{it} + \alpha_5 Size_{i,t} + \alpha_6 Lev_{i,t} + \alpha_7 GR_{i,t} + \alpha_8 Cash_{i,t} + \varepsilon_{i,t}$$

(Model 1)

$$ROA_{i,t} = \alpha_0 + \alpha_1 ESG_{i,t} + \alpha_2 CEOP_{i,t} + \alpha_3 ESG_{i,t} \times CEOP_{i,t} + \alpha_4 FA_{it} + \alpha_5 Size_{i,t} + \alpha_6 Lev_{i,t} + \alpha_7 GR_{i,t} + \alpha_8 Cash_{i,t} + \varepsilon_{i,t}$$

(Model 2)

In the above models, $QT_{i,t}$ indicates firm value i at time t. $ROA_{i,t}$ is the return on assets ratio i at time t. $ESG_{i,t}$ refers to environmental, social and governance i at time t. $CEOP_{i,t}$ represents the CEO power i at time t. FA_{it} is fixed assets i at time t. $Size_{i,t}$ indicates firm size i at time t. $Lev_{i,t}$ represents the firm debt leverage i at time t. $GR_{i,t}$ is the firm sales growth i at time t. $Cash_{i,t}$ refers to firm cash i at time t.

2.3 Main variables
Considering the above models, the dependent variables are Tobin's Q and ROA (Li et al., 2017; Velt, 2019; Kalia and Aggarwal, 2023). The independent variable in this study is ESG activities, which is calculated for each firm annually and based on the disclosure of ESG activities. Disclosures related to ESG are present in financial and non-financial reports. Following prior literature (Li et al., 2017; Velt, 2019; Kalia and Aggarwal, 2023; Ruan and Liu, 2022; Al Amosh et al., 2023), we obtained the total ESG score by aggregating the environmental (emission, innovation and resource use), social (community, product responsibility, workforce and human rights) and

governmental (management, shareholders and CSR strategy) items. Thus, the dummy variable is used to measure ESG disclosure indicators. If the item is disclosed by the firm, it is given a score of 1 and otherwise it is given a score of zero. Then, a simple average of ESG score is calculated for each company in each year. This proxy is based on Thomson Reuters Eikon indicators that have been generally used in previous studies (Li et al., 2017; Velt, 2019; Kalia and Aggarwal, 2023; Ruan and Liu, 2022: Al Amosh et al., 2023).

Our moderating variable in this research is CEO power. Following prior literature (Li et al., 2019; Oradi et al., 2020; Sheikh, 2019), we used the CEO Power Index. The index of CEO power is calculated by integrating CEO power dimensions. The dimensions of CEO power include structural power, ownership power, expert power and prestige power (Finkelstein,1992). Similar to the previous literature (Sheikh, 2019; Muttakin et al., 2018), and the data disclosed in the ISE, we decided to use the strategy of integrating by a combination of four elements of power, including founder CEO, CEO expert, CEO duality and CEO ownership. A dummy variable was used for each of the items, and finally, the average score was considered as the CEO power index.

Based on previous literature, we controlled for the effects of firm size, financial leverage, sales growth, fixed assets, and cash (Li et al., 2017; Velt, 2019; Javeed and Lefen, 2019; Li et al., 2018; Aggarwal et al.,2010). The method of measuring all study variables are fully explained in Table 1.

Table 1: Variables of the study

Variables	Measurement	Sign
Dependent variables		
Tobin's Q (QT)	It is measured by the market value of capital to book value of assets ratio	
ROA	Return on assets (ROA) is calculated by net income to assets ratio.	

Independent variable

| ESG | It is calculated by the average scores of environmental, social and governmental items. ESG score for each firm can be between zero and one. | + |

Moderating variable

| CEOP | It is measured based on the average score four criteria: structural power, ownership power, expert power, and prestige power. | + |

Control variables

FA	It is the fixed assets (FA) to total assets ratio	+
Size	It is calculated based on the natural logarithm of total assets.	+
Lev	It is the total debt to total assets ratio.	-
GR	GR shows the percentage changes in the firm's sales.	+
Cash	Cash calculated by dividing cash by total assets.	+

3. Results and Discussion
3.1. Descriptive Statistics
Table 2 provides a summary of descriptive statistics for study variables. Descriptive statistics provide useful information about the mean, median, and standard deviation (SD). The mean and SD of the dependent variable of the FV are equal to 1.235 and 0.498, respectively. ESG score is between zero and one. The mean and SD of ESG score are 0.394 and 0.172, respectively. These results indicate that the average disclosure score of the sample companies in the ISE is less than 0.5. In the study period, the mean and SD of the dependent variable of financial performance (ROA) are 0.072 and 0.254, respectively. The mean and SD of CEO power variable are 0.356 and 0.159, respectively.

Table 2: Descriptive Statistics

Var	Obs	Mean	Median	SD	Maximum	Minimum
QT	440	1.235	1.113	0.498	1.659	1.047
ROA	440	0.072	0.021	0.254	0.128	-0.851
ESG	440	0.394	0.258	0.172	0.468	0.214
CEOP	440	0.356	0.248	0.159	0.500	0.250
FA	440	0.251	0.179	0.548	0.310	0.153
SIZE	440	14.251	14.015	1.258	18.542	11.879
LEV	440	0.289	0.241	0.058	0.546	0.147
GR	440	0.057	0.049	0.154	0.079	0.035
Cash	440	0.002	0.002	0.124	0.034	0.016

Table 3 presents the Pearson correlation matrix. Pearson correlation results indicate that the ESG variable and CEO power variable are positively and significantly related to the dependent variables of FV and FP.

Table 3: Pearson correlation matrix

Var	QT	ROA	ESG	CEOP	FA	SIZE	LEV	GR	Cash
QT	1								
ROA	0.214**	1							
ESG	0.645**	0.547**	1						
CEOP	0.348**	0.458**	0.148**	1					
FA	0.184**	-0.254**	0.201	0.102	1				
SIZE	0.147**	0.195**	0.508*	0.0273**	0.057	1			
LEV	-0.547**	-0.283**	-0.193	-0.216	-0.214	0.106	1		
GR	0.208**	0.278**	0.024**	0.065	0.028	0.052	0.047	1	
Cash	0.302**	0.215**	0.154	0.042	0.018	0.091	0.038	0.216	1

Notes: ** $P \leq 1\%$ and * $P \leq 5\%$

3.2. Test of Hypotheses

In the current study, the type of data includes time series and cross-section, which is called panel data. In order estimate the panel data, it is necessary to use the F-limer and Hausman tests to choose pooled or panel methods. The F-limer's diagnostic test, if the probability of F test is greater than 5%, the pooled method is used for estimation. The results of the F-limer test are presented in Table 4. Considering the F tests in the first and second models (0.935 and 0.987), we use the pooled method. Thus, it is not necessary to perform Hausman's diagnostic test to select fixed effects or random effects.

Table 4: F-limer and Hausman tests

Equation	F-test	Outcome
Equation (1)	0.935	Pooled data method
Equation (2)	0.987	Pooled data method

In order test the critical assumptions of linear regression, i.e., heteroscedasticity and serial autocorrelation of residuals, we used the Likelihood ratio and Wooldridge tests, respectively. The results reveal that in Table 5. Considering the significance level of 5%, the results of the Likelihood ratio test show that there is heteroscedasticity in all study models. In econometrics, it is suggested to use the generalized least squares method (GLS) to solve this problem. Also, the results of the Wooldridge test show that there is autocorrelation in all the study models. According to econometrics, the first-order autoregressive variable (AR (1)) was added to the models when fitting the study models.

Table 5: Likelihood ratio and Wooldridge tests

Equation	Heteroscedasticity test		Autocorrelation test	
	Lr chi2	Outcome	F-test	Outcome
Equation (1)	102.310	NR	20.241	NR
Equation (2)	262.504	NR	58.359	NR

NR= Not Rejected

Table 6 provides a multivariate linear regression fit for the results of the H3 hypothesis. The H3 hypothesis of the study was proposed that by increasing the power of the CEO, the relationship between the ESG score and the FP can be increased. The coefficient and t-statistic in the interaction variable (i.e., ESG*CEOP) are 0.124 and 4.308, respectively. The H3 hypothesis is not rejected at the 99% confidence level. The results of the study indicate that the moderating variable of the power of the CEO has a considerable influence on the link between ESG and FP. The results of our study are consistent with the results of previous studies, such as Velt (2019) and Al Amosh et al. (2023). Also, the coefficients and t-statistics for the ESG score variable have a positive and significant effect on FP at the 99% confidence level. Thus, the H1 hypothesis is not rejected at the 1% significance level. In addition, the results of the study show that the CEO power variable (Coe= 0.186, t= 3.522) has a positive and significant effect on FP. Adjusted R-squared (66% and 69%) for study models is provided in Table 7. The results of the study indicate that the independent and control variables have been able to explain the dependent variable in a favorable way. Finally, checking the fit of the whole model (i.e., F-test= 4.127 and 9.050) shows that the model is

significant at the 1% confidence level.

Table 6: Results of the Hypothesis				
Var	Coe	t-teset	Coe	t-teset
C	2.225	5.108**	2.281	5.311**
ESG	0.048	3.212**	0.061	3.504**
CEOP			0.186	3.522**
ESG*CEOP			0.124	4.308**
FA	0.488	3.248**	0.645	3.502**
Size	0.519	3.946**	0.413	3.269**
Lev	-0.056	-3.012**	-0.082	-3.504**
GR	0.115	3.111**	0.147	3.614**
Cash	0.298	4.187**	0.360	4.619**
AR (1)	0.614	3.109**	0.521	3.512**
F-test	4.127		9.050	
Durbin-Watson	1.945		1.896	
Adj R-squared	0.662		0.691	
Notes: ** P<= 1% and *P<= 5%				

Table 7 describes the results of linear regression for the H4 hypothesis. According to the H4 hypothesis, it is predicted that when the power of the CEO the increases, the influence of the ESG score on the FV increases. The coefficient and t-statistics of the interaction variable (i.e., ESG*CEOP) are 0.053 and 4.128, respectively. Hence, the H4 hypothesis is not rejected at the 1% significance level. This result indicates that the moderating variable of the power of the CEO has a considerable influence on the link between ESG and FV. The results of our study are consistent with the results of previous studies, such as Li et al., (2017), Nekhili et al., (2017) and, Husser and Evraert-Bardinet, (2014). Also, the study results indicate that the ESG score has a positive and significant effect on the FV. Thus, the H2 hypothesis is not rejected at the 1% significance level. In addition, the coefficient of the CEO power (0.041, t= 3.057) has a positive and significant effect on the FV at the confidence level of 1%. Adjusted R-squared for fitted models is 62% and 68% respectively. This indicates that the combination of independent and control variables has been able to explain the changes in the dependent variable. The significance of the F-statistic (6.031 and 7.201) is indicated at the 1% confidence level that the whole fitted model is significant.

Table 7: Results of the Hypothesis				
Var	Coe	t-teset	Coe	t-teset
C	2.057	4.028**	2.214	4.028**
ESG	0.051	3.108**	0.078	3.108**
CEOP			0.041	3.057**
ESG*CEOP			0.053	4.128**
FA	0.512	3.118**	0.568	3.295**
Size	0.628	3.102**	0.520	3.175**
Lev	-0.042	-3.471**	-0.064	-3.329**
GR	0.124	3.248**	0.201	3.705**
Cash	0.381	4.204**	0.307	4.011**
AR (1)	0.370	3.512**	0.428	3.005**
F-test	6.031		7.201	
Durbin-Watson	1.952		1.869	
Adj R-squared	0.621		0.684	
Notes: ** P<= 1% and *P<= 5%				

3.2. Additional analysis for CEO power

To increase the robustness of the models and control any endogeneity bias, it is necessary to fit the research models using the generalized method of moments (GMM). One of the important features of the GMM method is that it solves the problem of heteroscedasticity and autocorrelation in the residuals of the fitted model by adding first differences and instrumental variables (i.e., lagged independent variables). Arellano – Bond test (AR(1) and AR(2)) used for autocorrelation of model residuals, the Sargan test was applied to over-identifying restrictions, and the Wald test was applied to the significance of the fitted model. The results of the study revealed that the power of the CEO has considerable influence on the link between ESG score and FP. Also, with increasing CEO power, we can expect to improve the association between ESG score and FV.

Table 8: Additional Regression Analyses				
	Equation 1: Tobin's Q		Equation 2: RoA	
Variable	Coef	t-test	Coef	t-test
C	2.817	3.350**	2.958	3.301**
ESG	0.066	3.905**	0.083	3.527**
CEOP	0.039	3.167**	0.095	3.506**
ESG*CEOP	0.154	3.603**	0.134	3.865**
FA	0.621	3.581**	0.542	3.205**
Size	0.104	3.019**	0.185	3.620**
Lev	-0.165	-3.890**	-0.138	-3.522**
GR	0.354	3.508**	0.402	3.627**
Cash	0.504	3.821**	0.642	3.541**
Wald Test	38.040**		68.512**	
Sargan Test	21.351		22.201	
AR (1)	4.441**		4.635**	
AR (2)	2.314		2.287	
Notes: ** P<= 1% and *P<= 5%				

4. Conclusion

One of the challenging issues about companies' voluntary disclosure that has been developed in the sustainability reporting literature is ESG. In the last two decades, the goals of companies have changed from creating profits for shareholders to creating benefits for stakeholders. Thus, to increase revenue, and improve the quality of financial reporting, companies must disclose information related to the environment, society and governance (ESG). Rezaee (2017) believes sustainability reporting focuses on FP and ESG non-financial sustainability performance. According to his opinion, ESG performance can be created by maximizing the effectiveness of corporate governance and minimizing social and environmental harms that finally create value for stakeholders. Therefore, this study investigates the effect of ESG score on FP and FV through the moderating role of CEO power in Iraq companies.

In this study, the authors provided empirical evidence regarding the effect of CEO power on the relationship between ESG disclosure score and FP (or ESG disclosure score and FV) on the ISE from 2013 to 2022. To achieve this goal, we used the linear regression method with panel data. The results showed that the ESG disclosure score has a positive and significant effect on the FP (or FV). These results indicate that by improving the ESG score, transparency, accountability and information symmetry can be increased in the Iraq capital market. Hence, the necessary financial resources are allocated to these companies. Finally, firm value and financial performance increases by enhanced stakeholder trust. Also, the results indicate that the relationship stated above is influenced by the power of the CEO as an interaction variable. In other words, when the power of the CEO increases, the impact of the ESG score on FP (the ESG score on FV) increases. Thus, the results of the study suggest that the concentration of the CEO power can lead to the creation of value for the stakeholders. Also, results of the study indicate that the CEO power can affect the voluntary disclosure policies of companies. Furthermore, our results are align recent studies (Li et al., 2017; Velt, 2019; Al Amosh et al., 2023).

This study can have implications for a wide range of groups, including accounting standards setting and policymakers, board of directors, stakeholders, investors, and so on. Accounting standards-setting and policymakers can use the results of this study to improve non-financial information disclosure regulations in the Iraq capital market. Since the CEO power has a positive and significant effect on the FP (FV), it is suggested to the board of directors the companies listed in ISE to pay attention to the power indicators when hiring the CEO. Considering the positive impact of the SEG score on FP (the SEG score on and FV), investors are suggested to invest in companies that have a higher ESG rating.

Although the authors performed robustness tests, some limitations should be considered when interpreting the results. First, this study has only examined the moderating role of the CEO power, and other moderating variables such as ownership structure, managers' compensation, and competition in the product market may affect this relationship, which have not been investigated. They can be investigated in future studies. Second, ESG measurement is based on Thomson Reuters Eikon indicators, and there may be another method for ESG measurement. However, when using different indicators to measure ESG, it is necessary to pay attention to the issue of information overload. This issue can be investigated in future studies. Finally, The CEO power index was measured based on the information available in the Iraq capital market and may differ in other countries. We encourage researchers to add further individual characteristics (e.g., compensation, tenure) to the CEO strength index in future studies.

5. References

Adams, R. B., Almeida, H., & Ferreira, D. (2005). Powerful CEOs and their impact on corporate performance. *The Review of Financial Studies*, *18*(4), 1403-1432.

Al Amosh, H., Khatib, S. F., & Ananzeh, H. (2023). Environmental, social and governance impact on financial performance: evidence from the Levant countries. *Corporate Governance: The International Journal of Business in Society*, *23*(3), 493-513.

Al Amosh, H., & Mansor, N. (2021). Disclosure of integrated reporting elements by industrial companies: evidence from Jordan. *Journal of Management and Governance*, *25*, 121-145.

Axelson, U., & Baliga, S. (2008). Liquidity and manipulation of executive compensation schemes. *The Review of Financial Studies*, *22*(10), 3907-3939.

Aerts, W., Cormier, D., & Magnan, M. (2008). Corporate environmental disclosure, financial markets and the media: An international perspective. *Ecological economics*, *64*(3), 643-659.

Aggarwal, R., Erel, I., Stulz, R., & Williamson, R. (2009). Differences in governance practices between US and foreign firms: Measurement, causes, and consequences. *The Review of financial studies*, *22*(8), 3131-3169.

Banerjee, S., Chang, X., Fu, K., Li, T., & Wong, G. (2015). Corporate environmental risk and the customer-supplier relationship. *Available at SSRN 2533471*.

Bahadori, N., Kaymak, T., & Seraj, M. (2021). Environmental, social, and governance factors in emerging markets: The impact on firm performance. *Business Strategy & Development*, *4*(4), 411-422.

Berns, K. V., & Klarner, P. (2017). A review of the CEO succession literature and a future research program. *Academy of Management Perspectives*, *31*(2), 83-108..

Busenbark, J.R., Krause, R., Boivie, S. and Graffin, S.D. (2016), "Toward a configurational perspective on the CEO", *Journal of Management*,42(1), 234-268.

Buallay, A., Kukreja, G., Aldhaen, E., Al Mubarak, M., & Hamdan, A. M. (2020). Corporate social responsibility disclosure and firms' performance in Mediterranean countries: a stakeholders' perspective. *EuroMed Journal of Business*, *15*(3), 361-375.

Bruna, M. G., Loprevite, S., Raucci, D., Ricca, B., & Rupo, D. (2022). Investigating the marginal impact of ESG results on corporate financial performance. *Finance Research Letters*, *47*, 102828.

Cho, C. H., Patten, D. M., & Roberts, R. W. (2006). Corporate political strategy: An examination of the relation between political expenditures, environmental performance, and environmental disclosure. *Journal of Business Ethics*, *67*(2), 139–154.

Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2011). Does it really pay to be green? Determinants and consequences of proactive environmental strategies. *Journal of accounting and public policy*, *30*(2), 122-144.

Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of management Review*, *32*(3), 946-967.

Chang, Y. Y., Dasgupta, S., & Hilary, G. (2010). CEO ability, pay, and firm performance. *Management Science*, *56*(10), 1633-1652.

Chang, Y., Duru, A., Fan, Y., Pirinsky, C., & Pevzner, M. (2022). Terrorism activities and long-term annual management forecasts. *Journal of Accounting and Public Policy*, *41*(3), 106943.

Chen, Q., Goldstein, I., & Jiang, W. (2007). Price informativeness and investment sensitivity to stock price. *The Review of Financial Studies*, *20*(3), 619-650.

Cormier, D., & Magnan, M. (2007). The revisited contribution of environmental reporting to investors' valuation of a firm's earnings: An international perspective. *Ecological economics*, *62*(3-4), 613-626.

Deegan, C., & Unerman, J. (2011). *Financial Accounting Theory*. McGraw-Hill Higher Education: Second European Edition

Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The accounting review*, *86*(1), 59-100.

Finkelstein, S. (1992). Power in top management teams: Dimensions, measurement, and validation. *Academy of Management journal*, *35*(3), 505-538.

Eccles, R. G., Serafeim, G., & Krzus, M. P. (2011). Market interest in nonfinancial information. *Journal of Applied Corporate Finance*, *23*(4), 113–127.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics*, *26*(2), 301-325.

Freeman, R. Edward. (1984). *Strategic Management: A Stakeholder Perspective*. Boston: Pitman Publishing.

García-Sánchez, I. M., Aibar-Guzmán, B., Aibar-Guzmán, C., & Azevedo, T. C. (2020). CEO ability and sustainability disclosures: The mediating effect of corporate social responsibility performance. *Corporate Social Responsibility and Environmental Management*, 27(4), 1565-1577.

Goldstein, I., & Yang, L. (2015). Information diversity and complementarities in trading and information acquisition. *The Journal of Finance*, 70(4), 1723-1765.

Goldman, E., & Slezak, S. L. (2006). An equilibrium model of incentive contracts in the presence of information manipulation. *Journal of Financial Economics*, 80(3), 603-626.

Habib, A., & Hossain, M. (2013). CEO/CFO characteristics and financial reporting quality: A review. *Research in Accounting Regulation*, 25(1), 88-100.

Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of management review*, 32(2), 334-343.

Hui, K. W., & Matsunaga, S. R. (2015). Are CEOs and CFOs rewarded for disclosure quality?. *The Accounting Review*, 90(3), 1013-1047.

Ho, V. H. (2017). Comply or explain and the future of nonfinancial reporting. *Lewis & Clark L. Rev.*, 21, 317.

Husser, J., & Evraert-Bardinet, F. (2014). The effect of social and environmental disclosure on companies' market value. *Management international*, 19(1), 61-84.

Kalia, D., & Aggarwal, D. (2023). Examining impact of ESG score on financial performance of healthcare companies. *Journal of Global Responsibility*, 14(1), 155-176.

Kahloul, I., Sbai, H., & Grira, J. (2022). Does Corporate Social Responsibility reporting improve financial performance? The moderating role of board diversity and gender composition. *The Quarterly Review of Economics and Finance*, 84, 305-314.

Javeed, S. A., & Lefen, L. (2019). An analysis of corporate social responsibility and firm performance with moderating effects of CEO power and ownership structure: A case study of the manufacturing sector of Pakistan. *Sustainability*, 11(1), 248.

Kanter, R. M. (1982). The middle manager as innovator. *Harvard Business Review*, 60(4), 95–105.

Larcker, D.F. and Tayan, B. (2012), "Is a powerful CEO good or bad for shareholders?", Stanford Closer Look Series, pp. 1-5.

Li, M., Lu, Y., & Phillips, G. M. (2019). CEOs and the product market: when are powerful CEOs beneficial?. *Journal of Financial and Quantitative Analysis*, 54(6), 2295-2326.

Li, Y., Gong, M., Zhang, X. Y., & Koh, L. (2018). The impact of environmental, social, and governance disclosure on firm value: The role of CEO power. *The British Accounting Review*, 50(1), 60-75.

Lipunga, A. M. (2015). Integrated reporting in developing countries: Evidence from Malawi. *Journal of Management Research*, 7(3), 130–156.

Muttakin, M. B., Khan, A., & Mihret, D. G. (2018). The effect of board capital and CEO power on corporate social responsibility disclosures. *Journal of Business Ethics*, 150, 41-56.

Madsen, P. M., & Rodgers, Z. J. (2015). Looking good by doing good: The antecedents and consequences of stakeholder attention to corporate disaster relief. *Strategic Management Journal*, 36(5), 776–794.

Nekhili, M., Nagati, H., Chtioui, T., & Rebolledo, C. (2017). Corporate social responsibility disclosure and market value: Family versus nonfamily firms. *Journal of Business Research*, 77, 41-52.

Miller, D., Tang, Z., Xu, X., & Le Breton-Miller, I. (2022). Are socially responsible firms associated with socially responsible citizens? A study of social distancing during the Covid-19 pandemic. *Journal of Business Ethics*, 179(2), 387-410.

Oradi, J., Asiaei, K., & Rezaee, Z. (2020). CEO financial background and internal control weaknesses. *Corporate Governance: An International Review*, 28(2), 119-140.

Papadakis, V. M. (2006). Do CEOs shape the process of making strategic decisions? Evidence from Greece. *Management Decision*, 44(3), 367-394.

Rezaee, Z. (2017). Corporate Sustainability: Theoretical and Integrated Strategic Imperative and Pragmatic Approach. *The Journal of Business Inquiry*, *16*(1 Spec), 60-87.

Rossi, M., Chouaibi, J., Chouaibi, S., Jilani, W., & Chouaibi, Y. (2021). Does a board characteristic moderate the relationship between CSR practices and financial performance? Evidence from European ESG firms. *Journal of Risk and Financial Management*, *14*(8), 354.

Ruan, L., & Liu, H. (2021). Environmental, social, governance activities and firm performance: Evidence from China. *Sustainability*, *13*(2), 767.

Sadiq, M., Singh, J., Raza, M., & Mohamad, S. (2020). The impact of environmental, social and governance index on firm value: evidence from Malaysia. *International Journal of Energy Economics and Policy*, *10*(5), 555-562.

Salehi, M., Ajel, R. A., & Zimon, G. (2022). The relationship between corporate governance and financial reporting transparency. *Journal of Financial Reporting and Accounting*. Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JFRA-04-2021-0102

Sheikh, S. (2019). An examination of the dimensions of CEO power and corporate social responsibility. *Review of Accounting and Finance*, *18*(2), 221-244.

Song, F., & Thakor, A. V. (2006). Information control, career concerns, and corporate governance. *The Journal of Finance*, *61*(4), 1845-1896.

Sustainable Stock Exchanges (SSE) (2015). Sustainable Stock Exchanges Initiative: Model Guidance on Reporting ESG Information to Investors. www.sseinitiative.org/wpcontent/ uploads/2015/09/SSE-Model-Guidance-on-Reporting-ESG.pdf.

Van Duuren, E., Plantinga, A., & Scholtens, B. (2016). ESG integration and the investment management process: Fundamental investing reinvented. *Journal of Business Ethics*, *138*, 525-533.

Verrecchia, R. E. (1983). Discretionary disclosure. *Journal of accounting and economics*, *5*, 179-194.

Veprauskaite, E. and Adams, M. (2013), "Do powerful chief executives influence the financial performance of UK firms?", *The British Accounting Review,45*, 229-241.

Velte, P. (2020). Does CEO power moderate the link between ESG performance and financial performance? A focus on the German two-tier system. *Management Research Review*, *43*(5), 497-520.

Visser, W., Matten, D., Pohl, M., & Tolhurst, N. (2009). *The A to Z of corporate social responsibility: A complete reference guide to concepts, codes and organisations*. John Wiley & Sons.

Weber, M. (2008). The business case for corporate social responsibility: A company-level measurement approach for CSR. *European Management Journal*, *26*(4), 247-261.

Wu, M. (2010). *The search for sustainable competitive advantage: a stakeholder management perspective: a thesis presented in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Management at Massey University, Albany, New Zealand* (Doctoral dissertation, Massey University).

Winschel, J., & Stawinoga, M. (2019). Determinants and effects of sustainable CEO compensation: a structured literature review of empirical evidence. Management Review Quarterly, 69, 265-328.