



Article

The Effect of Environmental, Social and Governance (ESG) Performance on Financial Disclosure Quality with Regard to the Role of Managerial Ability and Corporate Culture

Assist. Prof. Dr. Sakar Dhahir Omar Amen

1. Kirkuk Polytechnic College, Northern Technical University

* Correspondence: sakardaher@ntu.edu.iq

Abstract: Environmental, social, and governance issues have gained significant attention from investors, regulators, and society; however, their influence on financial disclosure quality is comparatively underexplored. This study investigates the effect of environmental, social and governance (ESG) Performance on financial disclosure quality with regard to the role of managerial ability and corporate culture. It seeks to shed light on whether a firm's emphasis on ESG initiatives leads to enhanced financial disclosures. The panel data method is used considering the data type and the available analysis methods. The required data is collected through document analysis and referring to databases, and inferential statistics are used to conclude. The statistical population of this study includes 105 companies listed on the Tehran Stock Exchange during the period 2018-2023. The panel data regression model tests the research hypotheses, and the Eviews software (Version 10) is employed to analyze the data. The results showed that environmental, social and governance (ESG) performance has a positive impact on the financial disclosure quality, and managerial ability and corporate culture lead to strengthening this impact.

Keywords: Environmental, Social and Governance (ESG), Financial Disclosure Quality, Managerial Ability, Corporate Culture

Citation: Amen, S. D. O. The Effect of Environmental, Social and Governance (ESG) Performance on Financial Disclosure Quality with Regard to the Role of Managerial Ability and Corporate Culture. American Journal of Economics and Business Management 2026, 9(3), 202-216

Received: 10th Dec 2025

Revised: 21th Jan 2026

Accepted: 04th Feb 2026

Published: 12th Mar 2026



Copyright: © 2026 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license

(<https://creativecommons.org/licenses/by/4.0/>)

1. Introduction

Investors, regulators, and society are now paying more attention to environmental, social, and governance (ESG) aspects. As ESG factors become more important in investing decisions [1], it is critical to understand their impact on financial accuracy and transparency, and research shows that investors increasingly prefer disaggregated, transparent data [2]. The growing prominence of ESG variables generates significant research questions. Financial statement disaggregation disclosure quality (FSDQ) is the practice of giving specific breakdowns within financial statements, such as individual line items or company divisions, to increase transparency and minimize information asymmetry.[3].

Disaggregated financial statements have various advantages. According to [4], FSDQ differs from other measures of disclosure quality, such as voluntary disclosures (e.g., management forecasts or conference calls), researcher-constructed indices [5], analyst ratings (e.g., AIMR scores), and the narrative quality of management discussion and analysis in annual reports (e.g., the Fog index). FSDQ emphasizes the 'fineness' of data, as demonstrated by the amount of disaggregation in financial statements. More comprehensive disaggregation improves the credibility of financial reporting by

restricting managers' capacity to alter statistics [6], increasing the use of accounting information in evaluating responsibility. This granularity facilitates resource allocation and performance evaluation, resulting in better informed investment decisions. Furthermore, disaggregation is consistent with accountability and voluntary disclosure theory by expressing a firm's commitment to responsibility, thereby attracting ESG-conscious investors [7].

There is an argument that firms strongly committed to ESG performance are more inclined to provide enriched financial disclosures, including detailed financial statement disaggregation. This proposed link between ESG adherence and enhanced disclosure quality might be attributed to a variety of variables, including the firm's responsibility mindset and internal ESG reporting processes [8]. Implementing such procedures not only satisfies the accountability standards mentioned by [9] but also serves as a strategic tool, generating a competitive advantage by distinguishing enterprises in the marketplace and attracting ESG-conscious investors [10].

While numerous studies have explored the impact of ESG factors on corporate financial performance [11],[12], The specific impact of ESG performance on financial reporting transparency remains unexplored. This study addresses this research vacuum by looking at whether firms with high ESG goals are more likely to give richer financial disclosures in Iran. This connection is investigated within the context of accountability and voluntary disclosure theory, with an emphasis on how ESG practices might influence financial information reporting by reducing information asymmetry and increasing accountability to stakeholders. Also, in this study, the moderating role of managerial ability and corporate culture on this relationship is also examined. Therefore, the present study seeks to answer the question of whether environmental, social, and governance (ESG) performance affects the financial disclosure quality the moderating role of a managerial ability and c corporate culture?

Theoretical underpinnings and hypotheses development

ESG performance and financial disclosure quality

Using accountability theory, this study proposes that organizations with superior ESG performance exhibit higher levels of disclosure quality through increased FSDQ. According to accountability theory, corporations are encouraged to improve accountability by disclosing extensive and detailed information. ESG has arisen as a major issue among stakeholders, including investors [13]. As a result, organizations fulfill the information needs of investors and other stakeholders in order to maintain their credibility and faith in their company [14]. Firms make strategic decisions about which information to voluntarily publish depending on the social expectations in their operational environment. To promote responsibility to stakeholders, companies with better ESG performance give more thorough financial disclosures [3].

Companies are encouraged to provide information on business sustainability in order to maximize advantages within their own contextual setting [15]. As a result, corporations prefer to give more detailed disclosures, increasing their accountability [16]. Where such disclosures demonstrate ESG commitment, organizations can differentiate themselves in the market and attract ESG-conscious investors [7]. From this perspective, ESG-performance disclosure is crucial because it conveys strategic asset information, enables informed decisions of stakeholders and market players [10], and acts as market reputation insurance [17].

Companies that prioritize ESG issues may earn a competitive advantage as well as long-term advantages [10]. This encourages businesses to include full disclosures in their financial statements about ESG-related aspects, which are increasingly regarded as important to investors and stakeholders [18]. [8] show that firms that prioritize ESG commitments have effective internal ESG reporting systems that help in monitoring ESG performance and add to the ability to provide extensive financial statement disaggregation. Similarly, [19] discovers a link between the quality of a company's profitability and its ESG-disclosure performance, citing the relevance of both factors to investors and their contribution to improving the company's reporting credibility.

As a result, organizations with a strong ESG emphasis will make more detailed financial disclosures to fulfill stakeholder accountability requirements. This proposition is grounded in accountability theory, which posits that firms that view ESG as important will see detailed disclosure of accounting information as a means to ensure accountability to stakeholders and bolster credibility, creating a favorable environment for increased ESG accountability, effectively addressing stakeholders' information needs, and helping to mitigate the adverse effects of negative news [20]. Hence, environmental, social, and corporate governance (ESG) performance is expected to have a positive impact on the financial disclosure quality [3]. Therefore, the first hypothesis of the research:

H1: Environmental, social and governance (ESG) performance has a positive impact on the financial disclosure quality.

ESG performance, managerial ability and financial disclosure quality

Managerial competency influences the amount and quality of information supplied. Previous research has highlighted the importance of strong management in establishing transparent and reliable financial reporting processes [21],[22],[23], which in turn strengthen investor trust and contribute to the overall efficiency of capital markets [24]. Companies led by superior management are more likely to provide informative information. Skilled managers understand the need of transparent and dependable reporting processes, which facilitates better decision-making by stakeholders [3]. Similarly, [23] discovered that better managers tend to provide higher-quality financial reports. Capable managers are also less likely to be involved in earnings manipulation [25] and are aware of the negative consequences of earnings manipulation, preferring to prioritize ethical reporting procedures for long-term firm viability. This conclusion is corroborated by [26], which shows that skilled management is more likely to provide disaggregated accounting information. Comprehensive disclosure of relevant and trustworthy information is thus required for investors and other stakeholders to evaluate a company's financial performance and make educated decisions [27], [28].

Other recent research have found a substantial link between management skill, business sustainability performance, and climate change disclosure. For example, [29] shows that effective managers strategically devote resources to ESG activities, hence increasing shareholder value. Similarly, capably managed corporations tend to publish more information about climate change [30] and make greater corporate environmental disclosures [21].

Using accountability theory, can examine how managerial ability affects the relationship between ESG performance and financial disclosure quality. In this regard, it can be stated that capable managers who are aware of their accountability to stakeholders are most likely to improve financial transparency by presenting disaggregated financial statements. Additionally, the favorable reputation of skilled managers increases stakeholders' trust in them, which determines the amount of responsibility these managers maintain as part of their reputational management plan [31]. This is congruent with business entrepreneur Warren Buffet's well-known quote, "It takes twenty years to build a reputation and five minutes to ruin it." If you think about it, you'll behave differently." Buffett's comment suggests that managers' conduct, including the motivation to offer extensive and quality disclosures, is impacted by the fear of losing a good reputation, resulting in more accountability to stakeholders. Hence, managerial ability can be expected to enhance the positive impact of environmental, social, and governance (ESG) performance on the financial disclosure quality [3]. Therefore, the Second hypothesis of the research:

H2: Management ability enhances the positive impact of environmental, social and governance (ESG) performance on financial disclosure quality.

ESG performance, corporate culture and financial disclosure quality

Recent research have looked into the relationship between business culture and managers' financial reporting decisions. Corporate culture or cultural innovation has an impact on the quality of financial reporting [32, 33]. [34] discovers that companies with a strong corporate culture exhibit greater comparability in their financial statements, while [35] argue that fostering cooperation among employees and encouraging them to report

errors and issues can lead to a collaborative culture that reduces auditor risk premiums and litigation risk. A strong business culture can impact managers' actions and decision-making processes [36], [37]. For example, [38] suggests that organizations with a strong corporate culture are less likely to use accrual-based earnings management methods, but [39] indicates that managers in high-power distance cultures use both accrual-based and real earnings management. [40] discovered that, despite incentives to get private information, management choices affected by cultural dispositions toward secrecy result in decreased disclosures in both number and quality. Similarly, [41] discovered that 53% of executives thought a good business culture minimized knowledge asymmetry among managers. This is consistent with results that show that a strong corporate culture helps reduce agency conflicts caused by divergent goals between firm executives and employees. In firms without conflicts of interest, CEOs usually make consistent and uniform judgments on financial reporting.

Drawing on accountability on accountability theory, it is hypothesized that companies with a strong organizational culture are more likely to provide disaggregated financial disclosure. This is confirmed by [42], which demonstrates that responsibility through information sharing is directly related to particular cultures. Providing more disaggregated information improves a company's responsibility, strengthens its environmental reputation [43], and lowers transaction risks associated by knowledge asymmetry. According to [44], excellent ESG performance improves responsibility between enterprises and external stakeholders, reduces information asymmetry, and fosters stakeholder confidence. Extending the previous claim about the impact of ESG performance on financial disclosure, it can be argued that companies with a strong organizational culture are more likely to provide disaggregated financial disclosure. This is supported by prior studies indicating that certain cultural factors are significantly associated with voluntary disclosures [45], [46]. For example, [46] illustrate how corporate culture impacts the quality of disclosed information, leading to improved implementation of accountability procedures. Hence, corporate culture can be expected to enhance the positive impact of environmental, social, and governance (ESG) performance on the financial disclosure quality [3]. Therefore, the Second hypothesis of the research:

H3: corporate culture enhances the positive impact of environmental, social and governance (ESG) performance on financial disclosure quality.

Research background

[3] They conducted a research titled "Decoding the Impact of Firm-Level ESG Performance on Financial Disclosure Quality." This study uses data from US-listed firms from 2002 to 2021 to look at the influence of environmental, social, and governance (ESG) performance on financial disclosure quality as evaluated by disaggregated financial statements (FSDQ). The findings revealed a positive relationship between ESG performance and FSDQ quality, implying that stronger ESG performance is associated with higher disclosure quality and accountability, and that management competence and a strong corporate culture amplify this relationship. Further investigation reveals a greater association between organizations with high-quality accounting standards and good financial reporting readability, whereas complicated financial reporting undermines this relationship.

[47] They conducted a study titled EESG performance and disclosure quality: does a well-balanced board of directors matter when impression management occurs? This work uses a sample of 616 firm-year observations using a sample of French firms indexed on SBF120 index from 2010 to 2017. To test the developed hypotheses, the GLS regression is applied and to control for endogeneity issue and sample selection bias, the authors used, respectively, the two stage least square (2SLS) procedure and the Heckman model. Findings suggest that a well-balanced board of directors moderates the relationship between the ESG performance and the disclosure quality. The positive effect of abnormal tone management on ESG is weakened by the presence of a good structure of the board, attenuating impression management initiatives.

[48] A study entitled investigate the effects of environmental, social and governance (ESG) performance on financial risk disclosure of European companies have done. It

analyzed the relationships between ESG factors and financial risk disclosure between 2010 and 2020. To test their hypotheses in this study, the authors used the multivariate regression analysis on panel data using the Thomson Reuters ASSET4 database and the annual reports of 154 European companies listed in the ESG index between 2010 and 2020. Empirical evidence shows a positive association between European companies' environmental and governance performance with financial risk disclosure, whereas social performance does not influence financial risk disclosure. Concerning the control variables, the findings demonstrate that firm size and profitability are significant factors in changing the financial risk disclosure. Nevertheless, firms' leverage is insignificantly correlated with financial risk disclosure.

[49] A study entitled investigate the effect of the ability characteristics of managers of companies admitted to the stock exchange on the voluntary disclosure of information have done. For this purpose, the data of 125 companies admitted to Tehran Stock Exchange during the period of 2012 to 2023 (1500 company-years) were selected as a sample and tested using multiple regression equations based on Panel data method. After the statistical analysis, the results of the research hypothesis test showed that the characteristics of managers' ability had a positive and significant effect on the voluntary disclosure of companies' information. Based on the obtained results, it is expected that managers with more ability and skill can play an important and practical role in improving the quality of financial reporting and improving the performance of the company and finally the quality of voluntary disclosure to attract investors and increase the value of the company, that is, the ability of managers can Improve the level of voluntary information disclosure.

A study entitled The impact of environmental disclosure and the quality of financial disclosure and IT adoption on firm performance: Does corporate governance ensure sustainability? have done. The study's motivation is to investigate the role of environmental and financial disclosure, IT adoption, and good governance on firms' sustainability from 1990–2019. A sample of 75 financial institutions enlisted in Bangladesh's capital market was considered for relevant data collection. In terms of baseline assessment, the study revealed a positive and statistically significant association between a firm's sustainability and target explanatory variables. Furthermore, the study extended the empirical valuation by implementing a system-GMM and documented a positive linkage between financial and environmental disclosure, IT adaptation, good governance, and the firm's performance sustainability.

[50] A study entitled examines the relationship between corporate social responsibility (CSR) orientation and textual attributes of financial disclosures. Using a large U.S. sample from 1999 to 2017, we find that firms with high CSR orientation provide more readable disclosures and use a less ambiguous tone in their annual reports. These findings are consistent with the notion that managers in CSR-conscious firms adhere to high ethical standards and commit to improving the transparency of their firms' financial disclosures. Our results are robust to alternative measures of readability and CSR performance, potential indigeneity, and sampling methods. Moreover, in a cross-sectional analysis, we show that the impact of CSR on corporate readability/tone ambiguity is more pronounced for firms with weak corporate governance. Overall, the results suggest that CSR serves as a substitute for traditional corporate governance mechanisms to ensure transparent disclosure.

2. Materials and Methods

Research type

This research is considered a part of applied research regarding its purpose and a part of descriptive-correlational research regarding its method. This paper constitutes a primary research study that utilizes data from multiple channels, including Rahavard-e-Novin software, companies' financial statements, and the CODAL.1 Website. This study employs panel data and multivariable regression models to examine the research hypotheses. The Eviews software (version 10) is utilized to estimate the model. Data was analyzed using the multivariable regression model.

Data collection method and statistical population

The statistical population of the research includes all the companies listed on the Tehran Stock Exchange. The data were collected for Six years, from 2018 to 2023. To make the information comparable, March is considered the end of the financial year. Furthermore, the data related to the variables should be available; banks and financial institutions are excluded from the study. Ultimately, 105 companies were selected as the final sample of the research.

Research models

The research models are presented as follows:

Model 1 is used to test H1:

$$FDQ_{it} = \beta_0 + \beta_1 ESG_{it} + \sum \beta_k Control Variable_{it} + \varepsilon_t$$

Model 2 is used to test H2:

$$FDQ_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 MA_SCORE_{it} + \beta_3 ESG_{it} * MA_SCORE_{it} + \sum \beta_k Control Variable_{it} + \varepsilon_t$$

Model 3 is used to test H3:

$$FDQ_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 CULTURE_{it} + \beta_3 ESG_{it} * CULTURE_{it} + \sum \beta_k Control Variable_{it} + \varepsilon_t$$

Where:

FDQ: financial disclosure quality.

ESG: ESG is an overall assessment of a company based on self-reported information in three key areas: environmental (ENV), social (SOC), and corporate governance (GOV).

MA_SCORE: Managerial ability.

CULTURE: Corporate culture.

Control Variable: Control variables.

Variables measurement

The variables used in this study consist of dependent, independent, Modifier, and control variables, which are measured as follows:

Financial disclosure quality (FDQ)

In this study, the company's financial disclosure quality is measured using a manual content analysis technique based on a predetermined disclosure index. According to [51], the disclosure index includes eight main dimensions and components related to each dimension: 1- General information about the company; 2- Corporate governance information; 3- Social and environmental information; 4- Risk information; 5- Sector information; 6- Financial ratio information; 7- Information about stocks and 8- Forward-looking information. Finally, the financial disclosure quality is calculated from Relationship [1]:

$$\text{Relationship 1: } FDQ_{it} = \frac{TDC_{it}}{TD_{it}}$$

Where:

FDQ: Financial disclosure quality

TDC: Number of cases disclosed

TD: Total disclosures

Environmental, social and governance (ESG)

In this study, 26 items and 6 subgroups are used to calculate environmental, social and governance performance according to [52] research, which indicate the environmental, social and governance performance of companies. These six groups include: environmental strategic statement (2 items), environmental information disclosure vehicle (3 items), environmental governance structure and management system (4 items), voluntary environmental protection activities and rewards (5 items), environmental commitment disclosure (6 items), and environmental performance disclosure (6 items). Finally, to measure environmental, social and governance performance, relationship [2] is used as follows:

$$\text{Relationship 2: } \text{ESG}_j = \sum_{i=1}^{n_j} \frac{X_{ij}}{n_j}$$

Where:

n_j : The expected score for each company j in year t , which for the 26 items above is equal to 26

X_{ij} : The total points earned for each company j in year t . For each item that the company has disclosed, the code one is assigned to the relevant item, otherwise it is assigned a code zero.

4.4.3. Managerial ability (MA_SCORE)

In this study, the model of [53] is used to evaluate managers. Management in this study involves a two-step process that begins with the use of data envelopment analysis. According to the research of [53], data envelopment analysis is a statistical method that is used to evaluate the efficiency of economic units that can be separated. Each economic unit can be separated and represents a decision maker. In this model, the company acts as a decision maker. First, based on this research, the basic CCR model is used. Then, equation [3] is used to calculate efficiency.

$$\text{Relationship 3: } \text{MAX}_{V1U\theta} = \frac{\text{Sales}}{V1\text{COGS} + V2\text{SG\&a} + V3\text{PPE} + V4\text{Other assets}}$$

Where:

Sales: Total revenue from the company's sales as output

COGS: The company's cost of goods sold (representing the factors used in production)

SG&a: General administrative expenses of the company's sales

PPE: Tangible fixed assets

Other assets: Other assets are

After measuring the company's efficiency, the regression equation [4] is used to calculate managerial ability to adjust the company's efficiency and neutralize other factors that affect the manager's effort:

$$\text{Relationship 4: } \text{DEA-Eff}_{it} = \alpha_0 + \alpha_1 \text{FirmSize}_{it} + \alpha_2 \text{MarketShare}_{it} + \alpha_3 \text{FreeCashFlow}_{it} + \alpha_4 \text{FirmAge}_{it} + \alpha_5 \text{ForeignCurrencyIndicator}_{it} + \alpha_6 \text{YearFixedEffects}_{it} + \text{RESEFF}_{it}$$

Where:

DEA-Eff_{it}: Company efficiency

Firm Size_{it}: Firm size (natural log of total assets)

Market Share_{it}: Market share (the company's share of sales revenue in the industry, which is equal to the ratio of company sales revenue to industry sales revenue)

Free Cash Flow_{it}: The variable that indicates the company's free cash flow takes the code 1 if the company's free cash flow is positive, and takes the code 0 otherwise.

Firm Age_{it}: Natural log of the company's age

Foreign Currency Indicator_{it}: The company's export sales index variable takes the number 1 if the company's foreign currency (export sales revenue) is positive after adjustments, and takes the number 0 otherwise.

Year Fixed Effects_{it}: Fiscal year fixed effects dummy variable

Reseff_{it}: Model waste

The company's free cash flow will be calculated from equation [5]:

Relationship 5:

$$\text{Free Cash Flow} = \text{OIBDP} - \Delta \text{working capital} - \text{CAPX}$$

Where:

Free Cash Flow: Free cash flow

OIBDP: Profit before depreciation expense

Working capital: Changes in working capital (current assets minus current liabilities)

CAPX: Capital expenditures

After estimating the above regression model, the remaining component of the model (management skills) is transferred to the Excel environment and then, for comparability over time and industry, as well as to reduce the impact of outlier observations, it is decimated and ranked based on the decile to which it belongs. To decimate the management ability criterion, first the distance between the highest and lowest

management ability criteria is calculated and then this distance is divided by 10 to obtain equal decimal intervals. Then, the management ability values that are in decimal intervals are assigned a rank from 1 to 10 to each company. The ranking of companies is from the highest level of management ability (tenth decile) to the lowest level of ability (first decile). During the above steps, the variables required to estimate the main research models are prepared. These composite variables are entered into the Eviews environment and the model is estimated.

Corporate culture (CULTURE)

In this study, following [34], the natural logarithm of the set of words related to culture is used to calculate corporate culture. This measure consists of five cultural criteria: 1-Innovation, 2-Integrity, 3-Quality, 4-Respect, and 5-Teamwork. Finally, the number of times each word appears in the executive reports and the board of directors' report to the general meeting of shareholders of a company is counted. The greater the frequency of words related to each type of culture, the greater the emphasis of that culture in that company, and the greater the number of related words, the stronger the corporate culture.

Control variables

After reviewing studies on the role of different factors in financial disclosure quality, a comprehensive set of control variables is identified. These factors include the following.. It should be noted that only the variables previously used in domestic studies (in the context of Iran) are presented in this study.

Q: Q-tobin ratio

ROA: It is equal to the ratio of net profit to total assets.

CASHL: It is equal to the standard deviation of the ratio of operating cash flow to total assets over the past three years.

LEV: It is equal to the ratio of total liabilities to total assets.

MTB: It is equal to the ratio of the market value of equity to the book value of equity.

GROWTH: It is equal to the total sales of the current year minus the total sales of the previous year divided by the total sales of the previous year.

LNAT: It is equal to the natural logarithm of total assets.

BIG4: It is a dummy variable, it takes the number one if the company's auditor is an auditing organization, and zero otherwise.

LOSS: It is a dummy variable, it takes the number one if the company has a loss and zero otherwise.

INST: It is a dummy variable, it takes the number one if the company has a loss and zero otherwise.

FOREIGN: It is equal to the ratio of export sales to the company's total sales.

FAGE: It is equal to the natural logarithm of the number of years the company has been in operation since its establishment until the research period.

CAPINT: It is equal to the ratio of capital expenditures to total assets.

TAN: It is equal to the ratio of tangible fixed assets to total assets.

CASH: It is equal to the ratio of cash to total assets.

3. Results and Discussion

Inferential statistics

Before testing the research hypotheses, the F-Limer and the Hausman tests are employed to determine the panel data model (fixed effects vs. random effects). Table 1 presents the results of these tests.

As presented in Table 1, the significance level of the Hausman test for both models is less than 0.05; thus, the fixed-effects model should be used to estimate the coefficients. The Wald and Wooldridge tests are used to assess the presence of autocorrelation and the heterogeneity of variance. The results of these two tests are presented in Tables 2 and 3.

Table 1. The results of the F-Limer and the Hausman tests

The Chow test			The Hausman test			
Research hypotheses	Test statistic	Statistic probability	Test result	Test statistic	Significance level	Test result
The first hypothesis	11.899	0.000	panel	160.042	0.000	Fixed effects
The second hypothesis	11.446	0.000	panel	160.579	0.000	Fixed effects
The third hypothesis	12.145	0.000	panel	149.765	0.000	Fixed effects

Table 2. The results of the Wald test

Dependent variable	Null hypothesis	Test statistic	Statistic probability	Result
The first hypothesis	There is no heterogeneity	2034.41	0.000	The null hypothesis is
The second hypothesis	There is no heterogeneity	1693.30	0.000	The null hypothesis is
The third hypothesis	There is no heterogeneity	1984.50	0.000	The null hypothesis is

Table 3. The results of the Waldridge test

variable	Null hypothesis	Test statistic	Statistic probability	Result
The first hypothesis	There is no auto correlatio	15.116	0.0002	The null hypothesis is
The second hypothesis	There is no auto correlatio	15.680	0.0001	The null hypothesis is
The third hypothesis	There is no auto correlatio	15.970	0.0001	The null hypothesis is

Analysis of the results

The first hypothesis: Environmental, social and governance (ESG) performance has a positive impact on the financial disclosure quality.

Table 4. The results of the effect of ESG on FDQ

$FDQ_{it} = \beta_0 + \beta_1 ESG_{it} + \sum \beta_k Control Variable_{it} + \varepsilon_t$					
Variable	Coefficient	Std. Error	t-Statistic	Prob	VIF
ESG	0.0053	0.0024	2.167502	0.0306	1.02
Q	0.0021	0.0008	2.463046	0.0570	1.66
ROA	0.0341	0.0208	1.636546	0.1627	2.49
CASHL	-0.0319	0.0920	-0.347374	0.7425	1.13
LEV	-0.0083	0.0113	-0.733848	0.4960	1.56
MTB	-0.0004	0.0001	-3.229748	0.0232	1.50
GROWTH	-0.0020	0.0003	-5.116238	0.0037	1.01

$$FDQ_{it} = \beta_0 + \beta_1 ESG_{it} + \sum \beta_k Control Variable_{it} + \varepsilon_t$$

Variable	Coefficient	Std. Error	t-Statistic	Prob	VIF
LNAT	-0.0151	0.0064	-2.361226	0.0647	1.34
BIG4	-0.0405	0.0314	-1.288859	0.2539	1.25
LOSS	0.0177	0.0078	2.270869	0.0724	1.83
INST	-0.0077	0.0397	-0.193765	0.8540	1.05
FOREIGN	0.0011	0.0150	0.074556	0.9435	1.12
FAGE	-0.6594	0.1606	-4.106032	0.0093	1.12
CAPINT	-0.0972	0.0409	-2.372720	0.0637	1.26
TAN	0.0025	0.0237	0.107549	0.9185	1.23
CASH	0.0091	0.0721	0.126268	0.9044	1.14
C	3.5291	0.5408	6.525806	0.0013	-
R-squared	Adjusted R-squared	F-statistic	Prob(F-statistic)		
0.8005	0.7534	12.0210	0.0000		

Since the tolerance level of the variance inflation factor in this model was less than 5; therefore, there is no collinearity problem in this model. As can be seen, the value of the F statistic is 12.0210, and the probability of the F statistic is 0.000. This value is less than 0.05, so the null hypothesis is rejected at 95% confidence, meaning the model is generally significant. This result shows that at least one of the coefficients of the explanatory variables is non-zero and the regression model is significant at the 95% confidence level. Also, the adjusted coefficient of determination equals 0.7534; independent and control variables can explain 75.34% of dependent variable changes. According to the results in the above table, the estimated coefficient for ESG is equal to 0.0053, which shows that ESG positively affect the financial disclosure quality. Since the corresponding significance level (0.0306) is less than 0.05, it can be said that the impact of ESG on financial disclosure quality is statistically significant, so the first hypothesis of the research is confirmed.

The second hypothesis: Managerial ability Strengthens the positive impact of environmental, social and governance (ESG) performance on financial disclosure quality.

Table 5. The results of the effect of ESG*MA_SCORE on FDQ

$$FDQ_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 MA_SCORE_{it} + \beta_3 ESG_{it} * MA_SCORE_{it} + \sum \beta_k Control Variable_{it} + \varepsilon_t$$

Variable	Coefficient	Std. Error	t-Statistic	Prob	VIF
ESG	0.1845	0.0112	16.4074	0.0000	1/02
MA_SCORE	-0.0028	0.0056	-0.5035	0.6360	1/03
ESG*MA_SCORE	0.2062	0.0152	13.5200	0.0000	1/11
Q	0.0021	0.0008	2.4752	0.0562	1.67
ROA	0.0320	0.0211	1.5125	0.1908	2.52
CASHL	-0.0294	0.0914	-0.3216	0.7607	1/13
LEV	-0.0083	0.0110	-0.7525	0.4856	1.57
MTB	-0.0005	0.0001	-3.1616	0.0250	1.51
GROWTH	-0.0019	0.0003	-5.0543	0.0039	1/01
LNAT	-0.0148	0.0067	-2.1939	0.0797	1.43
BIG4	-0.0400	0.0315	-1.2700	0.2600	1.25
LOSS	0.0175	0.0079	2.2036	0.0787	1.84
INST	-0.0078	0.0404	-0.1946	0.8533	1/06
FOREIGN	-0.0010	0.0137	-0.0793	0.9399	1.12
FAGE	-0.6561	0.1591	-4.1227	0.0091	1.13
CAPINT	-0.0989	0.0412	-2.3967	0.0619	1.27
TAN	0.0038	0.0240	0.1618	0.8778	1.24
CASH	0.0133	0.0682	0.1961	0.8522	1.15

$$FDQ_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 MA_SCORE_{it} + \beta_3 ESG_{it} * MA_SCORE_{it} + \sum \beta_k Control Variable_{it} + \varepsilon_t$$

Variable	Coefficient	Std. Error	t-Statistic	Prob	VIF
C	3.5262	0.5379	6.5554	0.0012	-
R-squared	Adjusted R-squared		F-statistic	Prob(F-statistic)	
0.7994	0.7511		0.0000	16.5660	

Since the tolerance level of the variance inflation factor in this model was less than 5; therefore, there is no collinearity problem in this model. As can be seen, the value of the F statistic is 16.5660, and the probability of the F statistic is 0.000. This value is less than 0.05, so the null hypothesis is rejected at 95% confidence, meaning the model is generally significant. This result shows that at least one of the coefficients of the explanatory variables is non-zero and the regression model is significant at the 95% confidence level. Also, the adjusted coefficient of determination equals 0.7511; independent and control variables can explain 75.11% of dependent variable changes. The results of the second hypothesis indicate that the correlation coefficients between the explanatory variable multiplied by managerial ability in environmental, social and governance (ESG) performance and financial disclosure quality are positive ($\beta_3 = 0.2062$). The t-statistics for the statistical testing hypothesis is equal to 13.5200, with a significance level of 0.0000. Therefore, the second hypothesis is accepted; Managerial ability Strengthens the positive impact of environmental, social and governance (ESG) performance on financial disclosure quality.

The third hypothesis: Corporate cultures Strengthens the positive impact of environmental, social and governance (ESG) performance on financial disclosure quality.

Table 6. The results of the effect of ESG*CULTURE on FDQ

$$FDQ_{it} = \beta_0 + \beta_1 ESG_{it} + \beta_2 CULTURE_{it} + \beta_3 ESG_{it} * CULTURE_{it} + \sum \beta_k Control Variable_{it} + \varepsilon_t$$

Variable	Coefficient	Std. Error	t-Statistic	Prob	VIF
ESG	0.0075	0.0019	3.9399	0.0110	1.02
CULTURE	-0.0734	0.0334	-2.1986	0.0792	1.22
ESG*CULTURE	0.0113	0.0026	4.2773	0.0079	1.14
Q	0.0022	0.0009	2.4859	0.0554	1.68
ROA	0.0328	0.0219	1.4947	0.1952	2.51
CASHL	-0.0286	0.0869	-0.3296	0.7550	1.14
LEV	-0.0085	0.0113	-0.7520	0.4859	1.75
MTB	-0.0005	0.0001	-3.1736	0.0247	1.50
GROWTH	-0.0019	0.0003	-4.9835	0.0042	1.01
LNAT	-0.0136	0.0067	-2.0368	0.0973	1.55
BIG4	-0.0412	0.0258	-1.5927	0.1721	1.28
LOSS	0.0176	0.0079	2.2232	0.0768	1.85
INST	-0.0109	0.0348	-0.3125	0.7672	1.06
FOREIGN	0.0048	0.0141	0.3398	0.7478	1.12
FAGE	-0.7001	0.1531	-4.5704	0.0060	1.13
CAPINT	-0.1030	0.0412	-2.4959	0.0548	1.26
TAN	0.0050	0.0212	0.2396	0.8201	1.24
CASH	0.0097	0.0679	0.1435	0.8914	1.14
C	4.1343	0.4898	8.4399	0.0004	-
R-squared	Adjusted R-squared		F-statistic	Prob(F-statistic)	
0.8063	0.7597		17.3004	0.0000	

Since the tolerance level of the variance inflation factor in this model was less than 5; therefore, there is no collinearity problem in this model. As can be seen, the value of the F statistic is 17.3004, and the probability of the F statistic is 0.000. This value is less than 0.05, so the null hypothesis is rejected at 95% confidence, meaning the model is generally significant. This result shows that at least one of the coefficients of the explanatory variables is non-zero and the regression model is significant at the 95% confidence level. Also, the adjusted coefficient of determination equals 0.7597; independent and control variables can explain 75.97% of dependent variable changes. The results of the third hypothesis indicate that the correlation coefficients between the explanatory variable multiplied by corporate cultures in environmental, social and governance (ESG) performance and financial disclosure quality are positive ($\beta_3 = 0.0113$). The t-statistics for the statistical testing hypothesis is equal to 4.2773, with a significance level of 0.0079. Therefore, the second hypothesis is accepted; corporate cultures Strengthens the positive impact of environmental, social and governance (ESG) performance on financial disclosure quality.

4. Conclusion

Corporate history contains several examples of financially healthy companies that handled their social and environmental operations by being less attentive to stakeholders, resulting in social, political, and socioeconomic consequences to them and society. Such occurrences also undermine the confidence between firms and stakeholders. A country's political, social, and economic climate can all have an impact on the nature of these interactions. Environmental, social, and governance problems have received increasing attention from investors, regulators, and society; yet, their impact on financial disclosure quality is still unknown. This study looks at the impact of environmental, social, and governance (ESG) performance on financial disclosure quality, including the function of management skill and company culture. It tries to provide light on whether a company's focus on ESG activities results in improved financial reporting. As a result, the goal of this study is to look at the impact of environmental, social, and governance (ESG) performance on financial disclosure quality, particularly in terms of management skill and company culture. This study yielded three key findings. First, our examination of data from Tehran Stock Exchange businesses supports the premise that firms with superior ESG performance are more likely to give full financial disclosures, increasing openness and accountability. This is consistent with voluntary disclosure theory, which holds that firms with great sustainability performance should reveal more information to increase investor trust and eliminate information asymmetry. Second, we discover that managerial skill improves the link between ESG performance and financial disclosure quality. Capable managers understand the benefit of voluntary disclosures in increasing financial openness, emphasizing the necessity of talented management in corporate reporting processes. Finally, our findings show that having a strong business culture improves the association between ESG performance and financial disclosure quality. Firms with strong corporate cultures are devoted to openness and responsibility, which results in more extensive disclosures.

Theoretical implications

This paper makes substantial theoretical advances. Integrating accountability theory with voluntary disclosure theory creates a complete framework for analyzing the incentives for precise financial disclosures. This study builds on these beliefs by demonstrating how ESG performance, management skill, and organizational culture affect financial reporting procedures. This study also adds to the literature on voluntary disclosures by emphasizing the importance of disaggregated financial statements in improving openness and minimizing information asymmetry. These theoretical findings contribute to our understanding of the strategic value of openness in corporate reporting. Furthermore, this study contributes considerably to the current literature on ESG performance and financial reporting by experimentally investigating the link between ESG performance and financial statement disaggregation. It covers a hitherto unexplored

topic, offering a better knowledge of how ESG issues affect the granularity and transparency of financial disclosures. It bridges the gap between voluntary disclosure theory and the actual application of ESG principles to financial reporting, with a focus on financial transparency and information asymmetry reduction. It makes a novel theoretical contribution by combining voluntary disclosure theory and ESG performance, as well as expanding the use of information asymmetry concepts in the context of ESG reporting, highlighting how firms use disaggregated financial statements to demonstrate their accountability to ESG principles. Finally, it shows how the regulatory environment influences business disclosure policies, particularly those including ESG.

Practical implications

This study has major policy implications, particularly for the creation of ESG reporting standards and laws. It presents empirical evidence that excellent ESG performance is associated with improved financial statement disaggregation. Such disaggregation is likely to be of interest to regulatory authorities. Indeed, regulations promoting or enforcing full ESG disclosures may contribute to increased openness in financial reporting, allowing stakeholders to make more informed decisions. For company managers and practitioners, the study provides significant insights into the benefits of incorporating ESG concepts into reporting procedures. It emphasizes the competitive advantage that firms can gain by increasing transparency and providing detailed financial disclosures, both of which can be influenced by strong ESG performance. Furthermore, the data can assist investors and analysts in assessing a company's adherence to ESG standards using financial reporting information and transparency. As a result, this study may be used to improve financial market decision-making processes as well as company ESG and financial reporting strategies.

REFERENCES

- [1] A. Young-Ferris and J. Roberts, "Looking for something that isn't there: A case study of an early attempt at ESG integration in investment decision making," *European Accounting Review*, vol. 32, no. 3, pp. 717–744, 2023.
- [2] P. Matos, *ESG and Responsible Institutional Investing Around the World: A Critical Review*. Charlottesville, VA, USA: CFA Institute Research Foundation, 2020, pp. 1–72.
- [3] L. T. Ferdous, T. Rana, and R. Yeboah, "Decoding the impact of firm-level ESG performance on financial disclosure quality," *Business Strategy and the Environment*, vol. 34, pp. 162–186, 2025.
- [4] S. Chen, B. Miao, and T. Shevlin, "A new measure of disclosure quality: The level of disaggregation of accounting data in annual reports," *Journal of Accounting Research*, vol. 53, no. 5, pp. 1017–1054, 2015.
- [5] J. Francis, D. Nanda, and P. Olsson, "Voluntary disclosure, earnings quality, and cost of capital," *Journal of Accounting Research*, vol. 46, no. 1, pp. 53–99, 2008.
- [6] D. E. Hirst, L. Koonce, and S. Venkataraman, "How disaggregation enhances the credibility of management earnings forecasts," *Journal of Accounting Research*, vol. 45, no. 4, pp. 811–837, 2007.
- [7] I. Ioannou and G. Serafeim, "The impact of corporate social responsibility on investment recommendations: Analysts' perceptions and shifting institutional logics," *Strategic Management Journal*, vol. 36, no. 7, pp. 1053–1081, 2015.
- [8] T. Busch, R. Bauer, and M. Orlitzky, "Sustainable development and financial markets: Old paths and new avenues," *Business & Society*, vol. 55, no. 3, pp. 303–329, 2016.
- [9] F. Gjesdal, "Accounting for stewardship," *Journal of Accounting Research*, vol. 19, no. 1, pp. 208–231, 1981.
- [10] J. W. Ryou, A. Tsang, and K. T. Wang, "Product market competition and voluntary corporate social responsibility disclosures," *Contemporary Accounting Research*, vol. 39, no. 2, pp. 1215–1259, 2022.
- [11] Z. Zoalfaghari, N. Izadinia, and S. Aliahmadi, "The moderating role of product market non-financial performance in the relationship between ESG activities and financial performance in listed companies in the Tehran Stock Exchange," *Journal of Empirical Research in Accounting*, vol. 14, no. 2, pp. 241–272, 2024. (In Persian)
- [12] C. Flammer, "Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach," *Management Science*, vol. 61, no. 11, pp. 2549–2568, 2015.
- [13] M. Alda, "Corporate sustainability and institutional shareholders: The pressure of socially responsible pension funds on environmental firm practices," *Business Strategy and the Environment*, vol. 28, no. 6, pp. 1060–1071, 2019.

- [14] G. Michelon, M. Rodrigue, and E. Trevisan, "The marketization of a social movement: Activists, shareholders and CSR disclosure," *Accounting, Organizations and Society*, vol. 80, p. 101074, 2020.
- [15] C. de Villiers and D. Alexander, "The institutionalisation of corporate social responsibility reporting," *The British Accounting Review*, vol. 46, no. 2, pp. 198–212, 2014.
- [16] R. V. Aguilera, D. E. Rupp, C. A. Williams, and J. Ganapathi, "Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations," *Academy of Management Review*, vol. 32, no. 3, pp. 836–863, 2007.
- [17] H. B. Christensen, L. Hail, and C. Leuz, "Mandatory CSR and sustainability reporting: Economic analysis and literature review," *Review of Accounting Studies*, vol. 26, no. 3, pp. 1176–1248, 2021.
- [18] Z. Chen and G. Xie, "ESG disclosure and financial performance: Moderating role of ESG investors," *International Review of Financial Analysis*, vol. 83, p. 102291, 2022.
- [19] Z. Rezaee and L. Tuo, "Are the quantity and quality of sustainability disclosures associated with the innate and discretionary earnings quality?" *Journal of Business Ethics*, vol. 155, no. 3, pp. 763–786, 2019.
- [20] Z. Rezaee, "Business sustainability research: A theoretical and integrated perspective," *Journal of Accounting Literature*, vol. 36, pp. 48–64, 2016.
- [21] J. Chen and J. Chen, "Does managerial ability affect the quality of environmental financial disclosure?" *Sustainability Accounting, Management and Policy Journal*, vol. 11, no. 6, pp. 1055–1073, 2020.
- [22] P. R. Demerjian, B. Lev, M. F. Lewis, and S. E. McVay, "Managerial ability and earnings quality," *The Accounting Review*, vol. 88, no. 2, pp. 463–498, 2013.
- [23] E. García-Meca and I.-M. García-Sánchez, "Does managerial ability influence the quality of financial reporting?" *European Management Journal*, vol. 36, no. 4, pp. 544–557, 2018.
- [24] J. A. Doukas and R. Zhang, "Corporate managerial ability, earnings smoothing, and acquisitions," *Journal of Corporate Finance*, vol. 65, p. 101756, 2020.
- [25] P. M. Healy and J. M. Wahlen, "A review of the earnings management literature and its implications for standard setting," *Accounting Horizons*, vol. 13, no. 4, pp. 365–383, 1999.
- [26] D. G. Bui, Y. Chen, Y.-S. Chen, and C.-Y. Lin, "Managerial ability and financial statement disaggregation decisions," *Journal of Empirical Finance*, p. 101427, 2023.
- [27] N. K. Bergman and S. Roychowdhury, "Investor sentiment and corporate disclosure," *Journal of Accounting Research*, vol. 46, no. 5, pp. 1057–1083, 2008.
- [28] K. Gödker and L. Mertins, "CSR disclosure and investor behavior: A proposed framework and research agenda," *Behavioral Research in Accounting*, vol. 30, no. 2, pp. 37–53, 2018.
- [29] K. Welch and A. Yoon, "Do high-ability managers choose ESG projects that create shareholder value? Evidence from employee opinions," *Review of Accounting Studies*, vol. 28, no. 4, pp. 1–28, 2022.
- [30] H. Daradkeh, S. Shams, S. Bose, and A. Gunasekarage, "Does managerial ability matter for corporate climate change disclosures?" *Corporate Governance: An International Review*, vol. 31, no. 1, pp. 83–104, 2023.
- [31] A. T. Hall, F. R. Blass, G. R. Ferris, and R. Massengale, "Leader reputation and accountability in organizations: Implications for dysfunctional leader behavior," *The Leadership Quarterly*, vol. 15, no. 4, pp. 515–536, 2004.
- [32] A. Bhandari, B. Mammadov, M. Thevenot, and H. Vakilzadeh, "Corporate culture and financial reporting quality," *Accounting Horizons*, vol. 36, no. 1, pp. 1–24, 2022.
- [33] R. D. Guggenmos and W. A. Van der Stede, "The effects of creative culture on real earnings management," *Contemporary Accounting Research*, vol. 37, no. 4, pp. 2319–2356, 2020.
- [34] M. Afzali, "Corporate culture and financial statement comparability," *Advances in Accounting*, vol. 60, p. 100640, 2023.
- [35] H. Chen, B. B. Francis, T. Hasan, and Q. Wu, "Does corporate culture impact audit pricing? Evidence from textual analysis," *Journal of Business Finance & Accounting*, vol. 49, no. 5–6, pp. 778–806, 2022.
- [36] J. Garrett, R. Hoitash, and D. F. Prawitt, "Trust and financial reporting quality," *Journal of Accounting Research*, vol. 52, no. 5, pp. 1087–1125, 2014.
- [37] Z. Liao, "Corporate culture, environmental innovation and financial performance," *Business Strategy and the Environment*, vol. 27, no. 8, pp. 1368–1375, 2018.
- [38] K. Li, F. Mai, R. Shen, and X. Yan, "Measuring corporate culture using machine learning," *The Review of Financial Studies*, vol. 34, no. 7, pp. 3265–3315, 2021.

- [39] P. K. Chaney, S. Lodh, and M. Nandy, "How does culture impinge upon managers' demeanor of earnings management? Evidence from cross-country analysis," *The International Journal of Accounting*, vol. 56, no. 2, p. 2150009, 2021.
- [40] M. Götttsche, S. Küster, and T. Steindl, "To reveal or not to reveal? The influence of cultural secrecy on discretionary disclosure decisions," *The International Journal of Accounting*, vol. 55, no. 3, p. 2050012, 2020.
- [41] J. R. Graham, J. Grennan, C. R. Harvey, and S. Rajgopal, "Corporate culture: Evidence from the field," *Journal of Financial Economics*, vol. 146, no. 2, pp. 552–593, 2022.
- [42] S. Velayutham and M. H. B. Perera, "The influence of emotions and culture on accountability and governance," *Corporate Governance: The International Journal of Business in Society*, vol. 4, no. 1, pp. 52–64, 2004.
- [43] N. Tamimi and R. Sebastianelli, "Transparency among S&P 500 companies: An analysis of ESG disclosure scores," *Management Decision*, vol. 55, no. 8, pp. 1660–1680, 2017.
- [44] C. Li, M. Wu, X. Chen, and W. Huang, "Environmental, social and governance performance, corporate transparency, and credit rating: Evidence from Chinese A-share listed companies," *Pacific-Basin Finance Journal*, vol. 74, p. 101806, 2022.
- [45] R. M. Haniffa and T. E. Cooke, "Culture, corporate governance and disclosure in Malaysian corporations," *Abacus*, vol. 38, pp. 317–349, 2002.
- [46] H. Akhari and J. Mohammadi, "The impact of organizational culture on voluntary disclosure quality (timeliness and reliability)," *Accounting and Auditing*, vol. 23, no. 3, pp. 394–414, 2016.
- [47] S. Hamza and A. Jarboui, "ESG performance and disclosure quality: Does a well-balanced board of directors matter when impression management occurs?" *EuroMed Journal of Business*, 2024, ahead-of-print.
- [48] J. Chouaibi, H. Benmansour, H. Ben Fatma, and R. Zouari-Hadiji, "Does environmental, social, and governance performance affect financial risk disclosure? Evidence from European ESG companies," *Competitiveness Review*, vol. 34, no. 6, pp. 1057–1076, 2024.
- [49] E. Ahmadi, S. H. Sajadi, and M.-H. Safarzade Bandari, "The effect of managers' ability characteristics on voluntary information disclosure," *Journal of Accounting Advances*, vol. 16, no. 1, pp. 1–20, 2024. (In Persian)
- [50] M. Soliman and W. Ben-Amar, "Corporate social responsibility orientation and textual features of financial disclosures," *International Review of Financial Analysis*, vol. 84, p. 102400, 2023.
- [51] L. T. Ferdous, K. Ahmed, and D. Henry, "An empirical investigation of the effect of CFO power on disclosure quality," *Abacus*, vol. 59, no. 2, pp. 606–649, 2023.
- [52] H. Dong, "The influence of environmental information disclosure on stock liquidity," 2024, doi:10.4108/eai.23-2-2024.2345888.
- [53] P. Demerjian, B. Lev, and S. McVay, "Quantifying managerial ability: A new measure and validity tests," *Management Science*, vol. 58, no. 7, pp. 1229–1248, 2012.