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Ownership structure and environmental, social and governance performance disclosure: the moderating role of the board independence

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Abstract

Purpose – The current study dealt with the ownership structure effect as a potential determinant of the environmental, social and governance (ESG) performance disclosure in the Jordanian context.

Design/methodology/approach – Using the content analysis technique, data were collected and analyzed from a final sample of 51 annual reports of Jordanian industrial companies listed for 2012–2019.

Findings – The results show that foreign ownership and state ownership play a critical role in disclosing the ESG performance. Also, the board's independence plays an influential role in improving disclosure quality, enhancing family ownership in disclosure. It also limits the negative role of block holder ownership and managerial ownership on the ESG disclosure.

Originality/value – To the best of the authors' knowledge, this is the first study that deals with the role of ownership structure on the ESG disclosure level separately and collectively through the moderating role of board independence.

Keywords Ownership structure, Board independence, ESG disclosure, Stakeholders, Legitimacy

Paper type Research paper

1. Introduction

In recent decades, the disclosure landscape evolution in a context of well-established interest toward non-financial information at a global level gave rise to many concepts related to social, economic, and environmental issues that have surfaced as a reaction to corporate practices and their effect on the environment in which they operate. Therefore, many stakeholders took the initiative to take an approach to corporate accountability for their role and the extent of their contribution to meeting their aspirations (Manes-Rossi *et al.*, 2018). At the same time, companies realized the potential consequences of this. They began to think about the most appropriate means to meet various stakeholders' aspirations. Thus, the companies' activities and practices became subject to continuous monitoring by the stakeholders, prompting companies to contribute to activities that stakeholders favor.

According to stakeholder theory, companies must consider all stakeholder demands to legalize their activities (Al Amosh and Mansor, 2018; Deegan, 2002). Disclosure of information

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related to companies' activities is one of the stakeholders' demands, and it is also a means of communication with various stakeholders. Besides, satisfying stakeholders' desires also spares companies from further pressures that they may face, in addition to working to narrow the legitimacy gap between stakeholders and companies (Al Amosh and Mansor, 2020). So, the issues related to sustainability fall within stakeholders' interests (Khatib *et al.*, 2021; Hörisch *et al.*, 2020), and this gives companies an excellent opportunity to gain trust and enhance legitimacy.

In Jordan, the government started to motivate companies to engage in sustainability disclosure activities, as the Amman Stock Exchange joined the United Nations Sustainable Stock Exchanges initiative as part of a comprehensive strategy to improve the performance of the financial market (Amman stock exchange, 2016), this follows the launch of a government plan to promote sustainable development in the country, the plan includes social, economic and environmental goals called "Jordan 2025" (Al Amosh, 2021), To face the recent crises that Jordan is going through, such as the humanitarian displacement due to the political conditions in neighboring countries and the challenging social, environmental and economic situations that need radical solutions.

Corporate ownership structures are one of the indicators that describe a company's identity. Also, the corporate ownership structure contributes to institutional oversight and affects companies' motives in disclosing information (Eng and Mak, 2003). Legal regulations require all listed Jordanian companies to disclose ownership structure details in their annual reports. According to Alzoubi (2016), Jordan has a high concentration of ownership. It is a factor influencing corporate decisions; it is also considered one of the tools of governance parallel to legal regulations. Thus, this is the leading research catalyst for the current study.

The study examines the impact of the ownership structure, including foreign ownership, state ownership, managerial ownership, block-holder ownership, and family ownership, on the level of sustainability performance disclosure (including environmental, social, and governance), using a sample of listed Jordanian industrial companies. The current paper carries many contributions. In theory, this study expands the theoretical framework of stakeholder theory and legitimacy theory by providing insights on the interaction of independent boards with the demands of legitimacy and stakeholders despite the possibility of a conflict of interest with the owners and their role in the ESG practices (Zamil *et al.*, 2021). In practice, the study provides an in-depth look at the reality of the ownership structure within Jordanian companies and the extent of their influence on ESG disclosure. Moreover, the current study provides insight about independent boards and how they manage relationships with stakeholders and the legitimacy agenda with a diversity of owners. Hence, the study adds to the existing literature new evidence about the relationship between companies' ownership structures and the boards' independence and practices of disclosing ESG performance.

The rest of the paper is structured as follows: Section 2 sheds light on the theoretical framework. Section 3 reviews the literature and the hypotheses development. Section 4 includes the methodology. Section 5 reflects the results and discussion—finally, the conclusions.

2. Theoretical framework

The disclosure phenomenon has been discussed in several related theories, such as stakeholder theory and legitimacy theory (Zamil *et al.*, 2021). The stakeholder theory argues that companies practice disclosing information to meet their stakeholders' expectations (Al Amosh and Mansor, 2021). According to Pajuelo Moreno and Duarte-Atoche (2019), companies are beginning to realize the importance of disclosing sustainability issues to stakeholders. Also, non-financial issues receive significant attention from various stakeholders (Schaltegger *et al.*, 2006), which led to increased companies' awareness of the importance of disclosing sustainability issues to stakeholders (Pajuelo Moreno and Duarte-Atoche, 2019).

Stakeholders' interest in sustainability and related social and environmental issues is considered ethical issues (Eugénio *et al.*, 2013). This is consistent with Deegan and Unerman's (2006) suggestions that companies should take an ethical approach to deal with stakeholders by promoting transparency and disclosure. Therefore, firms began adopting serious disclosure strategies that took into account stakeholder pressure and legitimacy concerns (Negre *et al.*, 2017), including disclosure of its performance in the field of sustainability.

Disclosure of sustainability performance is an effective way to communicate with various stakeholders (Bae *et al.*, 2018); It influences stakeholder attitudes toward corporate practices and maximizes the value of various stakeholders (Hörisch *et al.*, 2020). Therefore, companies should improve their disclosure practices to meet stakeholders' information needs (Al Amosh and Mansor, 2020). Avoid any possible confrontation with stakeholders, and address current stakeholders' demands and legitimation by strengthening disclosure strategy (Patten, 2019).

On the other hand, the legitimacy theory is considered one of the most common theories in the disclosure literature (Campbell *et al.*, 2003; Deegan, 2002; Zamil *et al.*, 2021). Where the legitimacy theory states that "organizations continually seek to ensure that they are perceived as operating within the bounds and norms of their respective societies—that is, they attempt to ensure that outside parties perceive their activities as being "legitimate" (Deegan, 2013, p. 343).

According to Suchman (1995), the entities should act according to prevailing social order, values, and norms. Accordingly, the actual disparity between the entity's behavior and the overall value system threatens its legitimacy (Lindblom, 1994). There was a significant focus on the concept of the "legitimacy gap," which occurs when companies violate the prevailing value system in communities, as the widening legitimacy gap is a real threat to the company's existence (Moloi and Marwala, 2020). Therefore, companies are taking proactive initiatives to legitimize their existence and avoid a legitimacy gap. Among the most important of these initiatives is engaging in sustainability-related activities and disclosing them to the stakeholders and public (Ching and Gerab, 2017).

3. Literature review and hypotheses development

According to Iannotta *et al.* (2007), the ownership concept structure falls within two main concepts: the degree of ownership concentration and the nature of the owners. In this regard, the literature dealt with the relationship between ownership structure and disclosure. Consequently, the current study will examine a set of suggested factors and their impact on ESG disclosure.

3.1 Foreign ownership

Foreign shareholders are essential pillars of achieving transparency and trust between companies and stakeholders (Al Amosh and Mansor, 2021). The presence of foreign ownership also enhances stakeholders' aspirations (Suchman, 1995; Arouri *et al.*, 2014); this gives legitimacy to the company's activities (Alkhawaldeh, 2012). Moreover, foreign expertise may direct the company's policies towards a specific agenda, such as sustainability.

The literature presented mixed evidence regarding the relationship between foreign ownership and information disclosure. In Jordan, Alhazaimeh *et al.* (2014) argued that foreign ownership positively affected voluntary disclosure practices for companies, while Abu Qa'dan and Suwaidan (2019) claimed a negative relationship between foreign ownership and disclosure of corporate social responsibility in Jordan. In another context, Guo and Zheng (2021) investigated a set of proposed variables as determinants of corporate social responsibility in China. The results yielded that foreign ownership has a positive impact on the disclosure level. These results were supported by Barako *et al.* (2006) and Grassa *et al.* (2020).

In contrast, Saini and Singhania (2019) reported a negative relationship between foreign ownership and information disclosure. Likewise, Sharma *et al.* (2020) suggested an adverse effect of foreign owners in companies on disclosure. On the other hand, these allegations have been refuted before Adeniyi and Adebayo (2018), Mahmood *et al.* (2017), and Rustam *et al.* (2019), where they indicated that the foreign ownership factor plays a critical role in motivating companies to engage in and report on sustainability activities.

Consequently, foreign ownership can enhance corporate governance and maximize stakeholders' value by pushing corporate administrations to respond to their demands and aspirations, including companies' performance disclosure in the field of sustainability. Therefore, the following hypothesis was developed:

H1. There is a positive effect of foreign ownership on the level of ESG disclosures.

3.2 State ownership

State ownership refers to the number of state-owned shares in a company, as governments invest in companies to achieve their goals and promote development. According to Monk (2009), state ownership improves legitimacy by enhancing corporate transparency and accountability. Likewise, the diversity of ownership parties is in the interest of stakeholders (Hazaea *et al.*, 2021). This reinforces the stakeholders' demands to disclose information and concern to them, such as sustainability. Also, the government considers disclosure a priority for stakeholders (Eng and Mak, 2003). This supports the ethical system of companies that contribute owned by the government.

Previous literature discussed the relationship between the state ownership factor and the information disclosure level. However, is still a lack of evidence presented (Lagasio and Cucari, 2019). Rudyanto (2017) suggests that state ownership plays a critical role in improving sustainability disclosure quality. Khan *et al.* (2013) also trusted that companies that include public ownership aspire more to achieve the aspirations of society and achieve legitimacy, which enhances social responsibility and its disclosure, where the government put pressure on the corporate boards to strengthen social and environmental responsibility for companies (Khlif *et al.*, 2017). Moreover, a set of researchers also supported the positive effect of state ownership on disclosure practices (e.g. Albawwat and Basah, 2015; Alhazaimeh *et al.*, 2014). While Al-Janadi *et al.* (2016) suggested a negative effect of state ownership on the disclosure level. In line with the literature, the study proposes the following hypothesis:

H2. There is a positive effect of state ownership on the level of ESG disclosures.

3.3 Managerial ownership

According to stakeholder theory, management practices influence stakeholder attitudes, where the public of stakeholders demands corporate departments to constantly meet their aspirations for information. On the other hand, managerial ownership represents the share of executives owning the company's shares (Samaha and Dahawy, 2011). In this regard, this results in management interests that may or may not coincide with the aspirations of the rest of the stakeholders. It has been suggested that managerial ownership is likely to play an influential role in bringing the convergence views between corporate management and other stakeholders which affects the company's performance (Oanh *et al.*, 2021).

In the context of literature, Juhmani (2013) mentioned that managerial ownership has no impact on the Bahraini companies' practices in the voluntary disclosure. Lagasio and Cucari (2019) also argued that managerial ownership does not improve ESG's disclosure quality.

Khan *et al.* (2013) also found that managerial ownership enables the management to dominate the company's decisions and push towards limiting participation in social activities to reduce costs, which will negatively affect social responsibility disclosure. In contrast, Li *et al.* (2018) claimed a linear relationship between managerial ownership and disclosure. As a result, it is possible that the interests of management do not coincide with the interests of stakeholders and that the hegemony of management may limit investment in issues related to sustainability, so the following hypothesis was suggested:

H3. There is no effect of managerial ownership on the level of ESG disclosures.

3.4 Block-holder ownership

The block-holder ownership expresses the owners typically own to 5% or more of the company's number of issued shares (Al Amosh and Mansor, 2020; Juhmani, 2013). Block holders constantly try to influence the company's decisions by directing it to engage in a specific agenda (Al-Janadi *et al.*, 2016). This agenda can be consistent with the stakeholders' aspirations, and the stakeholder perspective argues that management is subject to the demands of stakeholders who have a larger share in the company (Juhmani, 2013). On the other hand, the block holders may restrict the disclosure of information (Raimo *et al.*, 2020), which leads to the emergence of information inconsistency. On the other hand, Samaha *et al.* (2012) believe that the block holder ownership presence contributes to strengthening corporate governance.

Most of the literature suggested the absence of a relationship or negative relationship between the block holder's ownership and the disclosure level, as in a study conducted by Eng and Mak (2003) in Singapore, it was found that there is no link between the ownership of the block holder and the disclosure. In contrast, Juhmani (2013) indicated the block holder's ownership plays a negative role in voluntary disclosure practice. The owners of the blocks try to monopolize the information to maintain their information excellence (Sengupta, 2004). Elfeky (2017) also documented the negative impact of the block holder's ownership on the disclosure, and this evidence was supported by Kolsi (2017). Yu *et al.* (2020) took an opposing stance, claiming a positive correlation to the block holder's ownership on disclosure. From the preceding, the block holder may carry a particular agenda that may conflict with the interests of the public of stakeholders (Younas *et al.*, 2021). The block holder may monopolize the information to distinguish it from the rest of the stakeholders. Also, the block holder ownership dispersion positively affects the information asymmetry (Shin *et al.*, 2020). Hence, the study hypothesized that:

H4. There is no effect of block-holder ownership on the level of ESG disclosures.

3.5 Family ownership

Family ownership is defined as the percentage of ownership by a family or family members of shares in a company. The presence of shares owned by the family contributes to controlling the management's behavior and decreases its discretion (Bansal *et al.*, 2018). According to Ilhan-Nas *et al.* (2018), family ownership owners seek to achieve their demands through internal corporate governance and informal relationships. If family ownership is high, pressure will increase to enforce their rights, and this will subject the management to the demands of family ownership to maintain their positions. This dominance will direct corporate strategies towards bias toward family owners and no other shareholders and stakeholders (Khan *et al.*, 2013). This will neglect many of the issues that various stakeholders are looking forward to.

There is a scarceness of literature that has examined the relationship between family ownership and the ESG disclosure, as Lagasio and Cucari (2019) argue that there are still hesitations regarding the impact of family ownership on disclosing ESG. Generally, Chau and Gray (2010) report that family ownership has a significant effect on voluntary disclosure practices in Hong Kong, and it also contributes to enhancing transparency and reducing information asymmetries. Jalila and Devi (2012) believe that companies with more family ownership have no strong incentive to disclose information. In contrast, Rees and Rodionova (2015) claimed that family ownership negatively impacts the company's ESG performance. Furthermore, Rudyanto (2017) documented that family ownership does not influence the quality of sustainability disclosure. The literature produced inconsistent evidence regarding the effect of family ownership on disclosure, providing an incentive for further research.

On the one hand, family ownership may have an active role in establishing common interests with other stakeholders and meeting many common goals. On the contrary, family ownership may be opportunistic. Therefore, the following hypothesis has been formulated:

H5. There is no effect of family ownership on the level of ESG disclosures.

3.6 The moderating role of board independence

It is typical for the board's independence to enhance good governance in companies, where decisions are taken without bias or personal interests (Romano *et al.*, 2020; Jizi, 2017). Independent boards also contribute to a more significant oversight role on corporate performance (Fuzi *et al.*, 2016). Moreover, Independent boards also limit the negative impact of ownership, such as family ownership, on disclosure practices (Chau and Gray, 2010). This enhances transparency and trust and ensures that stakeholders' demands are taken into consideration. According to the legitimacy perspective, the board of directors' independence stimulates social responsibility disclosure, enhancing the sustainability of the company's activities (Fernández-Gago *et al.*, 2018). Accordingly, it is expected that more independent boards of directors will tend to meet the aspirations of various stakeholders and consider the means that guarantee the company's legitimacy in the environment in which it operates.

In the relevant literature, Zaid *et al.* (2020) argued that board independence plays a crucial mediating role in promoting corporate social responsibility, as its positive impact on foreign ownership and government ownership is reflected in Palestinian companies' disclosure practices. Cucari *et al.* (2018) added that boards of more independent directors are likely to be more invested in sustainability activities in a study they conducted in Italy. Also, Husted and de Sousa-Filho (2019) state that companies with high independence boards are more likely to be involved in ESG activities. While Pucheta-Martínez and Gallego-Álvarez (2019) presented a different point of view, as they argued that the board of directors' independence does not motivate companies to disclose, and this prediction was supported by Khan *et al.* (2021). On the contrary, Ortas *et al.* (2017) indicated through an analysis of 87 published research papers that the high percentage of independent directors in companies encourages them to adhere to stakeholders' demands and ESG criteria. As a result, the study suggested the following hypotheses:

H6a. The effect of foreign ownership on the level of ESG disclosures is moderated by board independence.

H6b. The effect of state ownership on the level of ESG disclosures is moderated by board independence.

H6c. The effect of managerial ownership on the level of ESG disclosures is moderated by board independence.

H6d. The effect of block-holder ownership on the level of ESG disclosures is moderated by board independence.

H6e. The effect of family ownership on the level of ESG disclosures is moderated by board independence.

4. Methodology

4.1 Sampling and data collection

The current study's statistical population included all Jordanian industrial listed companies on the Amman Stock Exchange (ASE) between 2012 and 2019, a total of 62 companies. Eleven companies were excluded due to the unavailability of their data over the study period. Thus, the final sample became 51 companies, and it constitutes approximately 82% of the total population of the study. In addition, 408 observations were collected for statistical analysis.

4.2 Data analysis

The current study relied on the content analysis technique to explore the ownership structure impact on the ESG disclosure, where the published annual reports of the listed Jordanian industrial companies published were examined and relevant data extracted through the panel data approach, which is the most appropriate method for the current study (Krippendorff, 2018; Lu *et al.*, 2017). Moreover, several disclosure literatures relied on this method (e.g. Romano *et al.*, 2020; Saini and Singhania, 2019).

4.3 Research model

The following regression equations by two models were developed to investigate the effect of the ownership structure variables on the level of total ESG disclosure, and their environmental, social and governance dimensions:

Model 1

$$\text{Disclosure} = \alpha + \beta_0 + \beta_1\,\text{FOROWN} + \beta_2\,\text{STAOWN} + \beta_3\,\text{MANOWN}_{it} + \beta_4\,\text{BLKOWN} + \beta_5\,\text{FAMOWN} + \beta_6\,\text{COSIZ} + \beta_7\,\text{COAGE} + \beta_8\,\text{COTYP}_{it} + \varepsilon$$

The moderating role of board independence with the ownership structure effect on ESG disclosure is examined by the following regression model:

Model 2

$$\text{Disclosure} = \alpha + \beta_0 + \beta_1\,\text{FOROWN} + \beta_2\,\text{STAOWN} + \beta_3\,\text{MANOWN}_{it} + \beta_4\,\text{BLKOWN} + \beta_5\,\text{FAMOWN} + \beta_6\,\text{BOIND} + \beta_7\,\text{COSIZ} + \beta_8\,\text{COAGE} + \beta_9\,\text{COTYP}_{it} + \varepsilon$$

where disclosure refers to three environmental (ENVD), social (SOCD), governance (GOVD), and total sustainability performance disclosure (ESGD). The current study is based on the checklist of recommended sustainability metrics by the Amman Stock Exchange as a proxy for the dependent variable (disclosure), and it is derived from the guidelines issued by Global Reporting Initiative (GRI). The checklist consists of 28 indicators, 7 environmental, 13 social and 8 governance indicators, as provided in Table 1. Table 2 provides a summary of the research variables.

Table 1.
ESG disclosure elements

Variable	Code	Data coverage	Operationalization
Environmental performance disclosure	ENVD	Direct and indirect energy consumption, energy intensity, primary energy source, water management, waste management, environmental policy, environmental impacts	Dummy 1 for disclosing the item and 0 otherwise
Social performance disclosure	SOCD	CEO pay ratio, gender pay ratio, employee turnover rate, gender diversity, non-discrimination, injury rate, child labor, human rights policy, board- diversity, donations, employee qualification, community work, health	Dummy 1 for disclosing the item and 0 otherwise
Governance performance disclosure	GOVD	Board- separation of powers, confidential voting, incentivized pay, fair labor practice, supplier code (SC) of conduct, ethics code (EC) of conduct, bribery/anti-corruption code (BAC), tax transparency	Dummy 1 for disclosing the item and 0 otherwise
Total sustainability performance disclosure	ESGD	Environmental, social, and governance performance disclosure	Dummy 1 for disclosing the item and 0 otherwise

Table 2.
The study variables description

	Independent and control variables	
Variable	*Code*	*Operationalization*
Foreign ownership	FOROWN	The percentage of the shares owned by foreigners to the total number of issued shares
State ownership	STAOWN	The percentage of state-owned shares to the total number of issued shares
Managerial ownership	MANOWN	The percentage of shares owned by CEO and executive directors to the total number of shares
Block-holder ownership	BLKOWN	Owners 5% or more of a total shares
Family ownership	FAMOWN	Percentage of family-owned shares to total issued shares
Board independence	BOIND	Percentage of independence directors on the board
		Control variables
Company size	COSZE	The natural logarithm of total assets
Company age	COAGE	Number of years since foundation
Company type of industry	COTYP	The type of sub-sectors

5. Results and discussion

5.1 Descriptive results

Table 3 shows a summary of the variable's descriptive statistics. The analysis indicates that foreign investment is still in its infancy in Jordan, where the average foreign ownership amounted to (mean = 28.54%), while the minimum of state ownership is 0.00. The maximum was 96.9 with a (mean = 11.73%), it was that there seem to be companies that the government owns most of its shares, while the average of managerial ownership is (mean = 10.21%). In comparison, the average of block holder ownership has reached (mean = 58.33%), which indicates significant concentration ownership in many companies. Also, family ownership appears at a relatively small average of (mean = 19.61%), as it does not seem that the public shareholding industrial companies' sector is witnessing family domination.

Variables	Obs.	Minimum	Maximum	Mean %	SD %
FOROWN	408	0.00	37.8	28.54	6.47
STAOWN	408	0.00	96.9	11.73	16.32
MANOWN	408	0.00	25.61	10.21	21.14
BLKOWN	408	5.00	100.00	58.33	18.9
FAOWN	408	0.00	89.24	19.61	16.92
BOIND	408	44.00	100	74.68	16.64
COSZE	408	4.27	9.86	7.15	9.58
COAGE	408	10	64	30.19	14.88
ENVD	408	6	62	36.72	12.56
SOCD	408	19	77	41.68	14.21
GOVD	408	22	72	37.24	11.86
ESGD	408	16	69	38.37	11.09

Table 3.
Descriptive statistics

Moreover, the board independence appears on average (mean = 74.68%). That is, most companies have independent boards. On the other hand, the environmental disclosure shows an average (mean = 36.72%), the social is (mean = 41.68%). The governance is (mean = 37.24%), while the average of the sustainability disclosure as a whole is (mean = 38.37%). This indicates that industrial companies comply with disclosing their sustainability performance and dimensions close to the average, but there could be room for improvement in the future.

5.2 Regression analysis results

As shown in Table 4, VIF values ranged between 1.09 and 1.52. Thus, the results point out that there is no multicollinearity between the variables, as all values are less than 10 (Akinwande *et al.*, 2015; Myers, 1990). Therefore, those results are considered positive for the current study data. Using a pair-wise correlation, multicollinearity was tested. According to Gujarati *et al.* (2012), a multicollinearity problem may exist if a coefficient correlation is higher than 0.8. Looking at the Table 4 results, all the independent variables are less than 0.8, which indicates that all the variables are not correlated and that there is no multicollinearity issue in the current study.

It seems that foreign ownership and state ownership enhance the disclosure of the performance of companies in the field of sustainability in all its environmental, social, and governance dimensions, as it seems that foreign expertise is an essential factor in promoting sustainability disclosure practices in emerging economies, this result is the line with the evidence provided by several researchers (e.g. Alhazaimeh *et al.*, 2014; Adeniyi and Adebayo, 2018; Mahmood *et al.*, 2017; Rustam *et al.*, 2019). On the other hand, the results were not agreed with (Abu Qa'dan and Suwaidan, 2019; Saini and Singhania, 2019; Sharma *et al.*, 2020). According to Table 5, state ownership plays a decisive role for companies in the disclosure of sustainability due to the fact that the companies in which the state contributes respond to government strategies aimed at promoting sustainable development, as government pressures seem to be in line with the interests of stakeholders, and this is what was indicated in previous literature (e.g. Rudyanto, 2017; Khan *et al.*, 2013).

On the other hand, the findings show no impact of managerial ownership on the total ESG disclosure. This may be due to a conflict of interest that negatively affects good governance, the owner-managers may decide based on Its interests, managers who own stakes in the company may not pay any attention to the sustainability agenda and related issues. These findings are consistent with Lagasio and Cucari (2019) regarding the ESG disclosure and with Juhmani (2013) concerning its general disclosure practices. As expected, block holder ownership negatively affects the sustainability disclosure with its all dimensions, and it

Table 4.
Correlation and multicollinearity analysis results for independent variables

No.	Variables	FOROWN	STAOWN	MANOWN	BLKOWN	FAOWN	BOIND	CSIZ	CAGE
1	FOROWN	1							
2	STAOWN	–0.098	1						
3	MANOWN	–0.733**	–0.054	1					
4	BLKOWN	0.225**	–0.198*	0.441**	1				
5	FAOWN	0.132*	–0.242**	–0.039	–0.268**	1			
6	BOIND	–0.127*	–0.133*	0.278**	0.436**	–0.139*	1		
7	CSIZ	–0.019	0.512**	–0.062	0.121*	–0.009	0.296**	1	
8	CAGE	0.192**	–0.086	0.007	0.313**	0.078	0.347**	–0.237**	1
9	*Tolerance*	0.746	0.922	0.681	0.593	0.814	0.427	0.621	0.527
10	*VIF*	1.09	1.51	1.16	1.43	1.48	1.32	1.52	1.39

Note(s): **Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed)

Independent variables	ENVD Coef.	ENVD Sig.	SOCD Coef.	SOCD Sig.	GOVD Coef.	GOVD Sig.	ESGD Coef.	ESGD Sig.
FOROWN	2.622	0.047*	1.661	0.026*	1.583	0.041*	1.797	0.012*
STAOWN	1.949	0.018*	1.466	0.039*	1.329	0.007*	1.793	0.042*
MANOWN	−2.506	0.509	−1.791	0.731	−2.391	0.722	−2.289	0.594
BLKOWN	−2.163	0.019*	−2.155	0.045*	−1.863	0.021*	−2.943	0.034*
FAOWN	−1.637	0.364	1.447	0.758	2.171	0.629	1.828	0.565
COSZE	4.277	0.011*	3.912	0.037*	3.193	0.003**	3.274	0.013*
COAGE	0.985	0.174	0.792	0.326	0.843	0.656	0.738	0.498
Year dummies	Include		Include		Include		Include	
Industry dummies	Include		Include		Include		Include	
Constant	0.273	0.000**	0.259	0.000**	0.266	0.000**	0.245	0.29
Adj. R square (R^2)	0.387**		0.319**		0.342**		0.401**	
F-statistics	16.76		6.87		5.83		9.146	
Sig. (F-statistics)	0.000		0.000		0.000		0.000	
No. of observations	408		408		408		408	

Note(s): **Significant at the 1% level; *Significant at the 5% level

Table 5.
Regression results

withholds information from stakeholders. This can be attributed to the fact that the companies' motives for disclosure are reduced because the block holder ownership can access information from the company's internal sources (Elfeky, 2017; Kolsi, 2017). This result is consistent with the notion that dispersion of ownership enhances disclosure and governance. These results the researchers agreed upon previously (e.g. Shin *et al.*, 202; Yu *et al.*, 2020; Juhmani, 2013).

The results showed that family ownership does not significantly push companies towards sustainability disclosures and the associated environmental, social, and governance performance. It seems that attention is focused away from the aspirations of stakeholders. This result contradicts Chau and Gray's (2010) arguments that family ownership in companies reduces information asymmetry problems. In contrast, this result agrees with Rudyanto (2017), who denied any active role of family ownership. Regarding the control variables, the results indicate that the larger companies fulfill their responsibilities towards stakeholders, engage in issues of concern, and maintain the relationship with stakeholders through sustainability disclosure, which gives legitimacy to its existence. While the company's age is not considered one of the sustainability disclosure determinants, older companies may be regarded as having strong legitimacy and are no longer willing to provide more to modernize their legitimacy.

Considering the influential role of the board's independence, the results indicate that through Table 6, the positive impact of foreign ownership on the ESG disclosure quality. Still, the level of confidence has increased regarding the governance dimension at (0.001) and sustainability ESG as a whole at the level (0.000), and this can be explained that foreign owners cooperate extensively with independent boards to strengthen governance in the companies they manage, which is reflected in improving disclosure levels, which meets the aspirations of various stakeholders, where companies that include foreign investors are more vulnerable to pressure from stakeholders. This result supports the stakeholder theory that foreign owners contribute to improving corporate behavior in disclosure. Moreover, the results confirm the positive role of government ownership in promoting sustainability disclosure practices and their dimensions under high independence level for boards of directors (Zaid *et al.*, 2020).

Governments, in general, seek to promote community development, and the Jordanian government is trying to implement parts of its sustainable development plan through its

Independent variables	ENVD Coef.	ENVD Sig.	SOCD Coef.	SOCD Sig.	GOVD Coef.	GOVD Sig.	ESGD Coef.	ESGD Sig.
FOROWN	1.449	0.016*	1.527	0.014*	1.269	0.001**	1.459	0.000**
STAOWN	1.514	0.002*	1.618	0.015*	1.874	0.010*	1.692	0.003*
MANOWN	−1.506	0.413	−3.615	0.157	−2.407	0.686	−4.147	0.446
BLKOWN	−1.218	0.259	−1.369	0.945	−1.327	0.468	−1.459	0.479
FAOWN	−0.338	0.231	2.177	0.027*	1.925	0.033*	0.394	0.025*
BOIND	1.096	0.028*	1.772	0.001**	1.309	0.004**	1.595	0.006**
COSZE	2.964	0.031*	3.248	0.008**	2.871	0.022*	2.388	0.024*
COAGE	0.864	0.492	0.525	0.485	0.239	0.451	0.926	0.516
Year dummies	Include		Include		Include		Include	
Industry dummies	Include		Include		Include		Include	
Constant	0.296	0.000**	0.228	0.000**	0.314	0.000**	0.198	0.23
Adj. R square (R^2)	0.417**		0.328**		0.282**		0.237**	
F-statistics	20.127		7.415		6.129		8.191	
Sig. (F-statistics)	0.000		0.000		0.000		0.000	
No. of observations	408		408		408		408	

Note(s): **Significant at the 1% level; *significant at the 5% level

Table 6.
The moderating effect of board independence

ownership of shares in public joint-stock companies; this motivates companies to report as much information on their ESG performance to various parties. This finding is consistent with the legitimacy perspective in that state ownership enhances the accountability and transparency system in companies, thus enhancing their legitimacy. On the other hand, the board independence role appears neutral in dealing with the factor of managerial ownership, as the findings did not result in any explanation towards the disclosure of sustainability and its three dimensions. Besides, the interaction of the board's independence contributed to limiting the negative impact of the block holder's ownership, especially concerning their attitudes towards social, environmental, and sustainability issues as a whole.

Additionally, the interaction between independent boards and family owners has contributed to improving their attitudes towards disclosing information related to corporate social performance, governance, and sustainability because independent boards realize the importance of disclosing information to preserve legitimacy and satisfy various stakeholders. It appears that the family owners interact positively with those propositions and the importance of better managing relationships with stakeholders to avoid more pressure in the future. The results show that independent directors hold favorable views of their stakeholders' expectations, and they are also highly qualified to manage relationships with stakeholders (Romano *et al.*, 2020). Thus, independent directors support disclosure on sustainability, environmental and social performance, and corporate governance. Also, companies that guarantee greater independence for the board of directors are more transparent about disclosure. In general, it can say that board independence is an essential tool to enhance transparency and governance, reduce information asymmetry, and encourage sustainability-related initiatives and reporting on them to various stakeholders. Besides, independents directors are fully aware of legitimacy requirements and act following the applicable social contract to avoid any legitimacy gap that may affect the company's activities. This is consistent with the legitimacy theory, which suggests that the more independent the board of directors, the more the company maintains its legitimacy.

6. Conclusions

The current study investigated the impact of the ownership structure, including foreign ownership, state ownership, managerial ownership, block holder ownership, and family ownership on ESG disclosure practices in Jordan. Also, this study took board independence as a moderator factor to influence the ownership structure. Moreover, two regression models were relied on to illustrate ownership structure variables' effect in light of the boards with a high level of independence.

The findings revealed that independent boards stand by stakeholders' demands through their full awareness of the significance of communicating information regarding companies' environmental, social, and governance performance to avoid any tensions with stakeholders. Also, the independent boards seek to enhance their reputation through sustainability activities. The independent boards are fully aware of the importance of strengthening legitimacy, and they contribute to educating owners about ESG disclosure importance in gaining trust with stakeholders and enhancing legitimacy. On the other hand, it appears that foreign owners give outstanding support to the disclosure practices in the presence of independent boards. Additionally, the board's independence affects the family ownership attitudes by directing them by the necessity that their interests coincide with the interests of the rest of the stakeholders to be more positive. Furthermore, independent boards limit the negative impact and opportunism of the block holders. At the same time, it does not affect the managers' attitudes who own shares in the companies they manage.

The findings have produced important implications for many parties, such as regulators, policymakers, shareholders, investors, and stakeholders. These implications provide insights to regulators on the role of the current ownership structures of the industrial sector on disclosure practices of environmental, social, and governance performance, as regulators, in cooperation with policymakers, can develop a mechanism to promote foreign investment in Jordan by developing new legislation to facilitate the entry of foreign capital into in the country, which will contribute to economic development. Besides, legislators should also put in place more legislation that guarantees the boards' independence, which will contribute to developing disclosure and transparency practices and enhancing the performance of companies. Also, attention must be paid to the importance of ownership dispersal, as ownership concentration will often divert attention from the sustainability agenda and issues related to it. On the other hand, the stakeholders and shareholders should provide adequate support for the boards of directors' independence and pressure in this direction, as the independent boards work according to various stakeholders' aspirations.

As with most experimental studies, the current study has several limitations. Firstly, this study was limited to the industrial companies' sector. Therefore, future studies can deal with other sectors such as banks or non-financial companies. Also, the comparative studies for different sectors will be interesting. Secondly, the current study examined the ownership structure and its effect on ESG disclosure. Future researchers can investigate the impact of other dimensions such as governance or financial performance. The role of ownership structure can be investigated at the level of disclosure for other reporting methods, such as integrated reporting. Moreover, other theories such as Institutional theory and agency theory can be tested and linked to ESG disclosure practices through different dimensions.

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