International Journal of Accounting and Economics Studies, 12 (7) (2025) 404-414

International Journal of Accounting and Economics Studies

Website: www.sciencepubco.com/index.php/IJAES
https://doi.org/10.14419/z4xz1540
Research paper

The Corporate Governance–Disclosure Nexus and Integrated Reporting among Jordanian SMEs

Marwan Altarawneh [1] *, Heba Hikal [2], Alaa Zuhair Mansour [3]

[1] *Department of Financial & Administrative Science, Aqaba University College, Al-Balqa Applied University, Jordan*
[2] *Department of Accounting, Arab Open University, Riyadh, Saudi Arabia*
[3] *Accounting Department, Faculty of Business Studies, Arab Open University – Jordan, Amman*
**Corresponding author E-mail: marwan.tarawneh@bau.edu.jo*

Received: September 2, 2025, Accepted: November 3, 2025, Published: November 12, 2025

Abstract

This study examines the quality of Integrated Reporting (IR) of governance systems. IR is rapidly becoming a tool for businesses to comprehend better the process of creating value and interacting with outside parties. Initially, a questionnaire was created for this study to evaluate integrated report quality. Following that, the data was collected from 384 Jordanian SMEs. SEM-Smart PLS was used to assess the agency theory-based hypotheses on the association between SMEs and the caliber of IR. The results demonstrate that the corporate governance system offers significant support for giving stakeholders high-quality information on the value creation process through investor relations. The reason for this is that, in contrast to a voluntary reporting model like IR, Jordanian SMEs place a great deal of importance on corporate governance requirements and the processes that follow mandated corporate reporting obligations. The results suggest that, despite using resources to prepare integrated reports, considering that many aspects of corporate governance are meant to satisfy reporting requirements, directors have not placed much emphasis on the provision of superior information via voluntary disclosure procedures like integrated reporting (IR).

Keywords: *Corporate Governance; Integrated Reporting; Performance; Small and Medium Enterprises.*

1. Introduction

Integrated reporting (IR) has rapidly developed as a novel accounting approach. It helps businesses figure out how they produce value and how effectively communicating this to external stakeholders is one of the many required and optional forms of corporate reporting. In IR, information on government, the environment, social issues, and finances is all reported in one document (Rossi & Luque-Vílchez, 2021; Hichri, 2022). IR, which encompasses a broad definition of integration, catches the relationships among the non-financial and financial aspects that influence a firm's performance (Abdulsamad, Yusoff, & Lasyoud, 2018), surpassing the simple combination of financial reporting and sustainability (Gerwanski, 2020). As a result, by encouraging integrated thinking and strong function-to-function collaboration in organizations (Aktan et al., 2018; Vitolla et al., 2020). Despite IR's growing popularity, there are still concerns regarding it. Although IR has been defined in much research, a generally agreed-upon definition has not yet been established (Villiers & Sharma, 2020). To assess the quality of organizations' thinking, operations, monitoring, and performance reporting in an interconnected manner, a more comprehensive perspective is required, as Integrated Reporting (IR) often relates to its ability to communicate the strategic components that clarify a firm's performance and value creation (Chouaibi, Belhouchet, Chouaibi, & Chouaibi, 2022). As a result, corporate governance frameworks and the practices that signify how corporate entities are managed and directed are essential to creating the connections between various elements that, as anticipated in IR, contribute to value creation (Gerwanski, 2020; Raimo, 2021).

A corporate governance framework makes it easier to apply a comprehensive approach to strategy formulation, which integrates various aspects of value creation inside a firm. (Christensen, Kent, Routledge, & Stewart, 2015). In a similar vein, it discharges the responsibility of a firm by showing the interconnectedness of its value drivers and offers the supervision necessary for the value creation process. (Doan & Nguyen, 2018). As a result, companies that include investor relations in their annual reports are more open about both financial and non-financial information about the company. (Vitolla, Raimo, Rubino, & Garzoni, 2020). Consequently, more value would be created in firms by an efficient corporate governance system, which would also give IR a foundation from which to produce high-quality information. (Villiers & Sharma, 2020). Mandatory and voluntary reporting mechanisms can affect how corporate governance affects investor relations (Bhasin & Shaikh, 2013). Many studies have looked into how different parts of corporate governance affect the quality of different types of financial and non-financial reporting (Dimes & Molinari, 2024). These include reporting on corporate social responsibility (CSR), financial reporting, environmental reporting, sustainability reporting, and intellectual capital disclosure. (Okpamen & Ogbeide, 2020; Van der Zahn, 2023). All these forms of reporting are still to be investigated (Soriya & Rastogi, 2022). One can look at corporate governance's effect on the calibre of information offered by IR from several angles (Landau, Rochell, Klein, & Zwergel, 2020).

On the one hand, corporate governance principles help to enhance the transparency of firms and decision-making with high-quality information by guiding the corporate reporting process in this direction (Alghizzawi et al., 2024). This holds particular significance for investor relations, as its implementation is guided by principles and left to the discretion of corporate management (Fernández-Temprano & Tejerina-Gaite, 2020). In contrast, financial reporting is subject to regulations, and sustainability reporting closely adheres to guidelines that have become standards, such as the Global Reporting Initiative, that determine its structure and contents (Hindley, 2012). Consequently, the lack of a defined framework and disclosures in independent reporting, in contrast to financial and sustainability reporting, has made it difficult to provide stakeholders with high-quality information (Christensen, Kent, Routledge, & Stewart, 2015). As a result, the relationship between corporate governance and IR has gained significant attention. IR is not concentrated on certain firm practices like climate change, CSR, or management intellectual capital, in contrast to other voluntary disclosure formats (Wang, Zhou, & Wang, 2020). Instead, it impacts the organization, its approach, performance, and related stakeholders through a variety of capital sources in the long run to create value (Rossi, Festa, Chouaibi, Fait & Papa, 2021). Since they are anticipated to be essential in fostering integration among various elements that contribute to value creation, it is crucial to comprehend how an organization's governance practices support the reporting firms' capacity to create value (Endrikat, Villiers, & Guenther, 2020). Therefore, for Integrated Reporting (IR) to offer a comprehensive view of an organization's performance, it must be supported by effective corporate governance practices.

Conversely, the emergence of investor relations can be linked to corporate governance, since there has been a growing importance on sustainability, strategy, performance, and risks for corporate leadership due to a rise in natural disasters, financial crises, and corporate scandals (Zavertiaeva et al., 2024). This forces businesses to concentrate on how the governance structure of the firm enhances its capacity to generate value over the short, medium, and long terms (Alazzani, Wan-Hussin, Jones, & Al-hadi, 2021). Consequently, to enhance an organization's capacity to generate value and deliver superior information regarding value generation via integrated reporting (Soriya & Rastogi, 2022; Marçal, Neumann & Sanches, 2022). The directors and senior management in charge of the organization's governance must acknowledge that they are accountable for developing a suitable oversight structure under the International Integrated Reporting Framework of the International Integrated Reporting Council. Despite the evident significance of corporate governance procedures on performance as well as integrated reporting, previous research has not empirically examined the mediating role of integrated reporting between governance and performance, especially in the context of Jordanian SMEs. As a result, this study looks at how corporate governance affects investor relations in Jordan, a rising market. Jordan was chosen for several reasons. First off, Jordan is regarded as a haven for SMEs and has lately shown a quick acceptance of IR in the SMEs (Damer et al., 2021). Its strong systems of values and beliefs, along with the accounting profession, have fostered welcoming surroundings for holistic thinking, resulting in a high degree of IR. Second, in addition to these advancements, the nation has prioritized corporate governance recently and launched numerous programs in this area (Qadorah & Fadzil, 2018; Mansour et al., 2023). The corporate governance systems of the nation have undergone constant enhancements in accordance with global advancements since the introduction of the first Code of Best Practice in 1997, which was in accordance with the UK Cadbury Code of 1992 (Cadbury, 1992).

This research makes multiple theoretical advances (Agarwal & Chadha, 2005; Tuấn, 2021). In the first place, it helps close the current definitional gap about what is intended by IR. There is still disagreement over how to define IR despite the abundance of research that investigates it (Saidat, Silva, & Seaman, 2018). This paper offers an extensive examination of IR based on the various interpretations of quality found in IR as well as additional financial and non-financial writings. Second, after defining IR, this paper creates a thorough framework for evaluating IR. This is crucial as numerous academics have identified numerous problems with IR assessment (Anas et al., 2023). Third, by including IR, this study broadens the conversation on how corporate governance practices affect voluntary corporate reporting. This offers new insights because, unlike other Corporate social responsibility (CR) reporting and sustainability reporting are voluntary reporting formats that focus more on a specific dimension, such as sustainability, which have already been given due importance in the developed countries (Kyere & Ausloos, 2021). As an emerging reporting framework, Integrated Reporting (IR) captures the interconnections among an organization's strategy, governance, performance, and prospects, providing a comprehensive perspective on the value creation processes of SMEs (Nguyen, Ntim, & Malagila, 2020).

Therefore, the rest of this paper is organized as follows: In Section 2, the literature review and hypotheses are presented. The study method is presented in Section 3. Section 4 presents the analysis of the study. Finally, the discussions, limitations, recommendations, and conclusions are offered in Section 5.

2. Review of Literature

2.1. Corporate governance and financial reporting

According to a conventional viewpoint, a corporate governance system addresses how a firm's investors ensure they will get their money back (Alabdullah et al., 2018). The main goal of its development was to safeguard the interests of shareholders, as modern companies have separated ownership and control (Alazzani, Wan-Hussin, Jones, & Al-hadi, 2021). The board of directors plays a vital and comprehensive role in the implementation of corporate governance within a firm, particularly in monitoring and guiding the actions of top management.

A more modern interpretation of corporate governance considers the other stakeholders of firms, whereas the conventional definitions concentrated mostly on shareholders (Aljifri & Moustafa, 2007). The concept of corporate governance has meaningfully expanded in light of recent advancements in corporate accountability, which begins to cover some aspects traditionally seen as being part of CSR (Carroll, 2015; Di Vito & Trottier, 2022). Di Vito and Trottier (2022) assert in their study "A Literature Review on Corporate Governance Mechanisms: Past, Present, and Future" that the comprehension and implementation of corporate governance mechanisms have undergone substantial evolution over time. The Cadbury Report (1992) was a very important step in this evolution because it showed how the outside world can affect how companies run their businesses. This report was the first step toward later governance codes and frameworks that stress the importance of transparency, accountability, and outside oversight in making sure that businesses are run well. Therefore, the definition of corporate governance in Islamic countries as "the system by which companies are directed and controlled" is now generally acknowledged (Al-Azizah, 2017). It can be thought of as the internal system used by organizations to run and make decisions. Broadly speaking, corporate governance maintains equilibrium between the objectives of the individual and the group, as well as between the economic and social spheres (Truong & Nguyen, 2024). The Organization for Economic Co-operation and Development highlighted the significance of corporate governance in corporate accountability, suggesting that "the board is chiefly responsible for monitoring managerial performance and achieving an adequate return for shareholders while preventing conflicts of interest and balancing competing demands on the corporation, along with guiding corporate strategy" (Balsmeier, Buchwald, & Stiebale, 2014; Badu & Appiah, 2017; Sierra-Morán et al., 2024). Accordingly, some corporate governance practices that were primarily designed to safeguard the interests of shareholders may also be successful in expanding managerial accountability to include other stakeholders (Agyei-Mensah, 2021).

Numerous empirical studies have observed that the connection between various aspects of corporate governance and the calibre of financial, environmental, social responsibility, and sustainability reporting, as well as disclosures about intellectual capital (Al-Sartawi, 2018). Based on qualitative traits, norms, and standards like the Global Reporting Initiative, an index has often been utilized in the majority of this research to evaluate the reporting quality (Hamad, Draz, & Lai, 2020). Regarding the SMEs variables and different types of reporting quality, the aforementioned research has shown varying outcomes (Augusto, Pascoal, & Reis, 2020). Furthermore, whereas some researchers have exposed a negligible link between board size and sustainability reporting, others have found a strong correlation between board size and environmental reporting (Cooray, Gunarathne, & Senaratne, 2020). Some researchers have discovered a positive correlation between a larger board and performance, but that connection ends there and call to add other variables of corporate governance (Amedi & Mustafa, 2020). Nonetheless, the bulk of this research's conclusions highlight the function of corporate governance in helping firms fulfill their obligations by giving stakeholders of all stripes access to high-quality information (Vafeas & Vlittis, 2018; Tran, 2019). The different behaviours and traits, including board size, board independence, and chief executive officer (CEO) duality, that are outlined in the corporate governance laws and regulations, as well as the developed codes of best practices along with cash flows, have been used in these studies to illustrate the broad concept of SMEs (Alkhuzaie & Asad, 2018). However, depending on variables unique to each nation, variations can be seen in various aspects of corporate governance. Consequently, the correlations found in these studies also vary according to the social, legal, and economic situations, which calls for research in the Jordanian context, which is considered a hub of SMEs and is certainly different in culture compared to other countries (Alshaboul & Zraiq, 2020). In a similar vein, corporate governance is anticipated to be crucial to IR and its calibre. Nevertheless, there is no actual research to support the notion that corporate governance influences IR, especially in the contextual settings of Jordan.

2.2. Corporate governance and performance of SMEs

The ability of an organization to modify its strategy in response to shifting and developing external conditions, as well as internal capabilities, is a significant outcome variable of governance studies. (Tulung & Ramdani, 2018). Corporate governance can bring enhanced management practices, stronger internal auditing, greater growth options, and a new strategic viewpoint to SMEs, all of which can be highly advantageous. (Khushi, din, & Sulaiman, 2020). Contrary to popular assumption, larger publicly traded organizations, whose ownership structures are focused in the hands of one or a small number of families, have mostly neglected family enterprises and closely held SMEs (Edeti & Garg, 2020). Prior studies have mostly concentrated on these companies' performance-related features (Yousaf et al., 2024). Recent governance literature has challenged this conventional wisdom by highlighting the significance of board control functions in family firms where competing interest groups coexist (Ferli, Fauzia, & Christiani, 2020). A successful business leader knows how to use the company's strengths and weaknesses, stay flexible in the face of changes in the market, and make quick decisions when things change outside the company (Bertschi-Michel et al., 2019). In this context, corporate entrepreneurship functions as a strategic method for attaining a competitive edge, enhancing efficiency, and cultivating the adaptability that propels enduring organizational success (Omenihu & Nwafor, 2025). Corporate governance, on the other hand, often involves risk and uncertainty because it requires the use of new and sometimes untested ideas and methods (Gafoor, Mariappan, & Thiyagarajan, 2018).

To improve SMEs' performance, they need to be committed to good governance practices for a long time. This means making sure that boards are balanced and independent, that the roles of the CEO and chairperson are clearly defined, that independent non-executive directors are hired, and that risk management is overseen by special committees. These steps work together to make people more responsible, which helps them to make good decisions and promotes sustainable growth for SMEs. Together, these governance mechanisms strengthen accountability, enhance strategic decision-making, and contribute to the long-term sustainability of the organization.

2.3. Integrated reporting (IR)

Information about the environment, society, non-financial sector, financial sector, and governance has become increasingly important to stakeholders over the past few decades. (Cooray, Gunarathne, & Senaratne, 2020; Hamad, Draz, & Lai, 2020). Both the financial information and this information have been quite helpful (Chouaibi et al., 2022). Nonetheless, the need for improved corporate reporting has been fuelled by flaws in sustainability reporting systems and financial reporting (Landau, Rochell, Klein, & Zwergel, 2020). The main result of this has been the introduction of IR as a new facet of corporate reporting. (Villiers & Sharma, 2020). However, integrated reporting is more than just merging reporting, sustainability, and financial reporting. (Velte, 2021). An integrated report can be used to gauge the effectiveness of integrated reporting inside an organization since it illustrates how successfully the latter uses this new reporting method. (Hichri, 2022). Therefore, IR has appeared as a significant advancement in corporate reporting in recent times and should be studied in various cultural contexts.

2.4. Theoretical underpinning and framework development

According to agency theory, a principal-agent relationship ought to represent the effective arrangement of knowledge and the costs associated with taking on risk (Hidayat & Utama, 2017). There are two categories in the literature on agency theory (Hoang, Przychodzen, Przychodzen, & Segbotangni, 2021). The first one is called "positivist agency theory," and it discusses governance systems that restrain agents' self-serving behaviour after identifying circumstances whereby principals and agents are likely to have conflicting aims (Hossain, Prevost, & Rao, 2001). Agency theory primarily investigates the principal–agent relationship between the proprietors and management of public enterprises (Jenter, Schmid, & Urban, 2019; Qalati, Ostic, Sulaiman, Gopang, & Khan, 2022). A related field, commonly known as principal-agent research, broadens this framework to encompass a wider array of relationships, including those between buyers and suppliers, employers and employees, and lawyers and clients (Kafidipe et al., 2021). Agency theory is often used to explain how different governance factors, like board size, board independence, CEO duality, audit committee independence, the presence of a separate risk management committee, and the quality of financial reporting, are related to each other in the context of corporate governance (Kyere & Ausloos, 2021). The fundamental idea of SMEs is accountability, which establishes the link between corporate reporting and corporate governance by guaranteeing the disclosure of information about stakeholders and so lowering the information asymmetry brought on by a firm's agency problem (Kalsie & Shrivastav, 2016; Bilal & Sulaiman, 2021). As a result, it can be said that voluntary disclosures and corporate governance are the primary factors in lowering the expenses associated with concealing and falsifying information resulting from the agency problem (Mansulu, 2021; Sulaiman & Asad, 2023). Therefore, to reduce agency conflicts, a firm with strong SME practices is expected to improve the calibre of voluntary disclosure (Merendino & Melville, 2019). Lastly, the democratic viewpoint highlights the board's duty to protect democracy and promote tolerance for different points of view within the same organization as well as the ability to compromise (Hammami et al., 2021; Asad et al., 2024). However, the Resource-Based View (RBV) places a strong emphasis on internal organizational resources (Asad et al., 2023; Khan et al., 2021). RBV is a good fit for the internal resources that SMEs and family-owned businesses use to implement governance principles because, despite adhering to board procedures, SMEs do not welcome outside involvement (Majali et al., 2022).

Moreover, integrating stakeholder theory with agency theory provides a robust conceptual foundation for understanding the mediating role of Integrated Reporting (IR) between the selected components of corporate governance and the performance of SMEs. Stakeholder theory emphasizes the importance of addressing the interests of all stakeholders, not just shareholders, like agency theory (Aljifri & Moustafa, 2007), thus highlighting transparency and accountability as key drivers of sustainable performance (Appiagyei & Donkor, 2024). In contrast, agency theory focuses on aligning the interests of owners and managers, often through monitoring mechanisms inherent in corporate governance (Mansulu, 2021). By combining these perspectives, integrated reporting emerges as a strategic tool that enhances transparency, reduces information asymmetry, and fosters trust among stakeholders, thereby aligning managerial actions with broader stakeholder expectations (Kafidipe et al., 2021; Minh et al., 2025). This integration not only supports stronger governance practices but also improves decision-making and long-term performance of SMEs, which often lack the formal structures of larger corporations.

2.5. Board size (BS)

Endrikat, Villiers, and Guenther (2020) suggest that organizations with larger boards of directors tend to be more transparent in their disclosures, as broader board composition enhances oversight and strengthens governance practices (Ahrens et al., 2025). A greater number of board members can also help reduce information asymmetry between management and stakeholders, reflecting a higher level of managerial capability and accountability (Ali & Ayoko, 2020). Moreover, the collective expertise and diverse perspectives of a larger board often lead to richer and more comprehensive reporting (Bansal & Singh, 2021). Overall, prior studies have consistently demonstrated a positive relationship between board size and the quality of corporate transparency (Bashir & Asad, 2018).

2.6. Board independence (BI)

Board independence is widely recognized as a fundamental element of effective corporate governance, particularly in shaping a firm's relationship with its investors (Almansour, Asad, & Shahzad, 2016; Meng, Clements, & Padgett, 2018). From the perspective of agency theory, independent directors play a crucial role in mitigating the dominance of executive management when making decisions and ensuring that shareholder interests are given appropriate priority (Miyajima, Ogawa, & Saito, 2018; Masulis, 2019). When boards maintain a higher level of independence, stakeholders tend to benefit from more reliable and transparent information (Qadorah & Fadzil, 2018). Companies with a greater proportion of independent directors are also more inclined to disclose comprehensive, forward-looking, and strategically relevant information (Rashid, 2018). A substantial body of research supports this association, showing that the quality of corporate disclosures improves significantly with greater board independence (Tulung & Ramdani, 2018).

2.7. CEO duality

CEO duality, in which one individual holds both the position of chairman of the board and CEO of the firm, is a bad corporate governance scenario that makes it more difficult to give stakeholders high-quality information (Garcia-Sanchez & Nicola Raimo, 2021). A CEO who also serves as chairman has a significant effect on the firm's decision-making process (Hichri, 2022). He might not take stakeholders' interests into account, which could lower the standard of corporate transparency. (Velte, 2021). Therefore, this demands that the chairman's and CEO's roles be kept distinct. There are mixed results concerning the role of CEO duality in providing high-quality voluntary disclosures, and numerous studies indicate a strong negative correlation between IR and CEO duality.. (Dragomir & Dumitru, 2023).

2.8. Independent non-executive directors (NED)

Enhancing corporate disclosures is a proactive responsibility of the audit committee. (deAndrés, Arranz-Aperte, & Rodriguez-Sanz, 2017; Shin, Hyun, Oh, & Yang, 2017). Its job is to assess the internal controls and organizational procedures for generating financial data that result in high-calibre financial reporting (Cavaco et al., 2017). Members of the independent audit committee may request additional testing and a higher level of assurance (Alqahtani, Duong, Taylor, & Eulaiwi, 2021). Having an independent director with a higher proportion on the audit committee reduces agency costs and fortifies internal controls, both of which pave the way for high-calibre disclosures. (Scholtz & Kieviet, 2018).

2.9. Separate risk management committee (SRMC)

An audit committee may lack the necessary experience to handle the additional risks brought on by a turbulent business climate. (Cooray, Gunarathne, & Senaratne, 2020; Nwachukwu, 2022). As a result, it is crucial to create a distinct risk management committee for disclosing both financial and non-financial information. (Raimo, NIcolò, Polcini, & Vitolla, 2022). Similarly, one way to raise the standard of risk-related information disclosure would be to create a distinct risk management committee. (Soriya & Rastogi, 2022; Salem, Alanadoly, & Sulaiman, 2023). Furthermore, (Bertinetti & Gardenal, 2016) Found a favourable correlation between the integrated reporting and a standalone risk management committee in most of the studies they reviewed.

3. Methodology

The hardest barrier to overcome in disclosure research, like IR, is figuring out how much corporate disclosure there is and how accurate, which is the major issue associated with SMEs. Since there isn't a complete framework for measuring IR, a questionnaire was created in this study by considering several IR-relevant models comprising 10 items. The questionnaire was sent to the subject specialists before distributing the questionnaires for the collection of the data. On the other hand, the items for measuring the five variables of corporate governance were measured using the questionnaires used in the prior studies (Baydoun et al., 2013; Kalsie & Shrivastav, 2016; Badu &

Appiah, 2017; Cavaco et al., 2017; Kafidipe et al., 2021; Mansour et al., 2025). Financial performance of SMEs was measured using the instrument used by the prior researchers, containing eight items (Bigliardi, 2013; Asad et al., 2023). Every item in the index has been rated using a five-point rating scale ("ranging from 1 to 5, where 1 represents strongly disagree and 5 represents strongly agree"). Five-point Likert scale is considered very successful in obtaining accurate results and is used by several studies that have been conducted over SMEs (Ismail, 2009; Asad et al., 2023).

Jordan was selected as the focus of this study primarily because it is regarded as a hub for SMEs, with more than 90% of its companies falling within this category. Furthermore, Jordan is among the few countries where corporate governance practices are mandated even for SMEs. However, despite this regulatory advancement, integrated reporting has not yet been adopted, although it is essential for the effective implementation of corporate governance principles in their true spirit.

A probability sampling technique was employed to select respondent firms from the list provided by the Amman Chamber of Commerce and Industry. A total of 1,000 SMEs were chosen, and questionnaires were distributed in person by the researchers. Responses were collected from managers and owners, as they were deemed the most knowledgeable and appropriate participants for the study. Follow-up phone calls and multiple reminders were conducted, resulting in 384 valid and genuine responses, yielding an effective response rate of 38.4%. For a model comprising five independent variables, one moderating variable, and one dependent variable, this sample size satisfied the minimum requirement of 384 responses, thereby enabling further statistical analysis using the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique (Hair et al., 2022).

4. Analysis

In the analysis, outer loadings have been analyzed initially in order to confirm the factor loadings of the items. All the item loadings values as referred by Quinlan, Zikmund, Babin, Carr, and Griffin (2018) must be greater than 0.7. The item loading indications of all variables have a specific value range between 0.716 and 0.971, according to the threshold level of 0.7, are mentioned in Table 1.

Table 1: Factor Loadings

	Board Independence	Board Size	CEO Duality	Integrated Reporting	Non-Executive Directors	Performance of SMEs	Separate Risk Management Committee
BI1	0.941						
BI2	0.910						
BI3	0.966						
BS1		0.939					
BS2		0.733					
BS3		0.909					
BS4		0.871					
BS5		0.917					
BS6		0.944					
BS7		0.894					
BS8		0.923					
CEOD1			0.940				
CEOD2			0.851				
CEOD4			0.917				
CEOD5			0.971				
FPSME1						0.808	
FPSME2						0.899	
FPSME3						0.866	
FPSME4						0.940	
FPSME5						0.829	
FPSME6						0.890	
FPSME7						0.745	
FPSME8						0.716	
IR1				0.848			
IR10				0.732			
IR2				0.808			
IR3				0.779			
IR4				0.811			
IR5				0.749			
IR6				0.729			
IR7				0.768			
IR8				0.738			
IR9				0.728			
NED1					0.914		
NED2					0.951		
NED4					0.883		
NED5					0.965		
NED6					0.912		
NED7					0.896		
NED8					0.900		
SRMC1							0.882
SRMC2							0.864
SRMC3							0.904

As shown in Table 1, all items involved in the model for the variables, including Board Independence, Board Size, CEO Duality, Separate Risk Management Committee, Non-Executive Directors, Integrated Reporting, and Performance of SMEs, values found to be greater than the level of 0.7.

4.1. Construct reliability and validity

The reliability and validity of the constructs were evaluated using Cronbach's Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE) for all study variables. According to Hair et al. (2022), acceptable values for Cronbach's Alpha should exceed the threshold of 0.7, representing satisfactory internal consistency. Also, prior studies have suggested that Composite Reliability values should generally be above 0.60, with scores of 0.70 or higher reflecting stronger reliability (Hair et al., 2022). In terms of convergent validity, the AVE values for each construct should meet or exceed the benchmark of 0.50, signifying that the indicators explain at least half of the variance of the underlying latent variable (Hair et al., 2022). The results presented in Table 2 confirm that all constructs in the current study meet the recommended thresholds for reliability and validity.

Table 2: Construct Reliability and Validity

	CA	CR	AVE
Board Independence	0.933	0.957	0.882
Board Size	0.963	0.969	0.798
CEO Duality	0.939	0.957	0.847
Integrated Reporting	0.923	0.936	0.593
Non-Executive Directors	0.969	0.974	0.842
Performance of SMEs	0.939	0.950	0.705
Separate Risk Management Committee	0.859	0.914	0.78

4.2. Discriminant by Fornell

The study evaluated discriminant validity for all variables using the Fornell-Larcker Criterion. Discriminate validity confirmed that each latent variable is empirically distinct from other constructs in the research model. As noted by Hair et al. (2022), the Fornell-Larcker Criterion is the most widely adopted method for evaluating discriminant validity. The results of this analysis for all variables are presented in Table 3.

Table 3: Discriminant Validity by Fornell-Larcker Criterion

	1	2	3	4	5	6	7
1 Board Independence	0.939						
2 Board Size	0.603	0.893					
3 CEO Duality	0.464	0.700	0.921				
4 Integrated Reporting	0.746	0.689	0.612	0.77			
5 Non-Executive Directors	0.428	0.576	0.496	0.641	0.917		
6 Performance of SMEs	0.642	0.633	0.490	0.669	0.599	0.840	
7 Separate Risk Management Committee	0.562	0.591	0.563	0.632	0.705	0.677	0.883

As stated in Table 3 demonstrates the results of the Fornell-Larcker Criterion for discriminant validity. This means that all of the variables in the structural model are both valid and reliable.

4.3. Direct effects

The study examined the structural model to provide an overview of the direct effect results. The calculated direct effect between the IVs – BI, BS, CEO Duality, NED, and the presence of an SRMC, and the DV, SMEs Performance, as well as the mediating variable, IR, are presented in Table 4.

Table 4: Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Board Independence->Integrated Reporting	0.245	0.249	0.116	2.109	0.035
Board Independence->Performance of SMEs	0.213	0.229	0.088	2.404	0.017
Board Size->Integrated Reporting	0.565	0.561	0.105	5.384	0.000
Board Size->Performance of SMEs	0.634	0.631	0.084	7.571	0.000
CEO Duality->Integrating Reporting	0.237	0.238	0.091	2.603	0.010
CEO Duality->Performance of SMEs	0.236	0.247	0.069	3.444	0.001
Integrated Reporting-> Performance of SMEs	0.403	0.394	0.124	3.244	0.001
Non-Executive Directors-> Integrating Reporting	0.403	0.418	0.117	3.439	0.001
Non-Executive Directors-> Performance of SMEs	0.587	0.595	0.075	7.805	0.000
Separate Risk Management Committee-> Integrating Reporting	0.496	0.484	0.156	3.186	0.001
Separate Risk Management Committee-> Performance of SMEs	0.315	0.316	0.142	2.212	0.014

Table 4 presents the findings of the path coefficient for direct effects, confirming that all variable values meet the threshold levels.

4.4. Mediating effects

The study has examined the mediating effects in which the mediating variable, Integrating Reporting, has been introduced. The calculated values of the mediating effects are shown in Table 5.

Table 5: Specific Indirect Effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Separate Risk Management Committee-> Integrating Reporting-> Performance of SMEs	0.211	0.201	0.097	2.187	0.029
Non-Executive Directors-> Integrating Reporting-> Performance of SMEs	0.588	0.588	0.115	5.110	0.000
Board Size->Integrated Reporting-> Performance of SMEs	0.240	0.228	0.104	2.307	0.011
Board Independence->Integrated Reporting-> Performance of SMEs	0.236	0.247	0.069	3.444	0.001
CEO Duality->Integrating Reporting-> Performance of SMEs	0.237	0.238	0.091	2.603	0.010

Table 6 shows the findings of mediating effects, which suggest that integrated reporting has a significant relationship between SRMC, NED, BS, BI, CEO Duality, and Performance of SMEs.

5. Discussions, Limitations, Recommendations, and Conclusions

Even though there has been a lot of interest in the governance structure to keep up with new accounting innovations, this has resulted in suggestions that IR has improved gradually. Additionally, the findings reveal a strong positive association among all corporate governance variables, IR, and SMEs' financial performance. This is consistent with other research that indicates enterprises with larger boards are more likely to have the expertise and diversity needed to improve financial performance. Additionally, research has demonstrated that following the turning point that integrated reporting significantly mediates the association between selected corporate governance practices and SMEs' financial performance. Furthermore, agency theory's assertions are strengthened by these findings. The findings further strengthen the proposition of RBV as well as agency theory and show that a combination of the two creates a synergetic effect. The effect of corporate governance traits on IR has been examined in this study. According to the findings, Jordan's overall IR is mild and has gradually improved. The structure of SMEs also makes it difficult to provide stakeholders with high-quality information about the value creation process (Riphah et al., 2022). This is so because corporate governance primarily concentrates on financial reporting, which is mandated and supplements financial performance. This suggests that Jordanian SMEs' corporate governance structures are at a developing point where they can concentrate on the demands of a wider range of stakeholders as well as the connectedness and interrelationships between capitals, which stand for the many types of value that organizations generate.

Additionally, the confirmation of IR's mediating role further underscores the integration of RBV, contingency theory, and stakeholder theory, providing a robust conceptual framework for understanding SME performance. Integrating stakeholder theory with agency theory highlights the importance of considering the interests of all stakeholders, as reflected in IR, emphasizing transparency and accountability as drivers of long-term financial performance. This theoretical integration not only strengthens governance practices but also enhances decision-making and sustainable performance outcomes in SMEs.

The findings suggest that Jordanian SMEs' corporate governance structures are crucial, thus, need directors to devote enough time to supplying high-quality information through voluntary disclosure procedures like integrated reporting. This leads to an intriguing discovery about IR in Jordan: the boards have committed corporate resources to create an integrated report, but they haven't focused enough on the calibre of the data they have provided. One explanation could be the impact of actively promoting IR in Jordan, which has made it popular and appealing for businesses to jump on the bandwagon, but hasn't resulted in integrated practices and thinking.

5.1. Limitations and recommendations

This study produces some significant findings; given some of its shortcomings, they should be interpreted cautiously. First off, only five corporate governance factors that were related to the study's setting were chosen for inclusion in the analysis. To completely understand their influence on integrated reporting, future research can take into account additional corporate governance factors. Second, the research sample included both sectors, both financial and non-financial, which differ structurally in several ways when it comes to reporting and corporate governance. Thus, this study can be repeated by academics in the future in greater sectors that are compatible with the structure, including both financial and non-financial sectors. Thirdly, this study utilised a cross-sectional design. To strengthen the validity of the results, future research can increase the sample size and examine a longitudinal period. Fourth, Jordan was taken into consideration in this analysis, since it has demonstrated distinct features in its voluntary reporting policies. To validate the results, future research can examine a similar association in other jurisdictions where IR is required or optional. Consequently, self-reported goods (i.e., integrated reports) form the basis of our reporting quality analysis, where potential greenwashing risks are present. This also emphasizes, though it similarly calls for more research, the importance of reforming corporate governance practices to emphasize broader reporting that includes information beyond financial statements, while ensuring the reliability and quality of these non-financial disclosures.

5.2. Policy recommendations

The results of this study hold substantial implications for policymakers, regulatory bodies, and SME support institutions seeking to enhance the performance of SMEs. The study establishes that integrated reporting serves as an effective mediating mechanism through which important components of corporate governance for SMEs positively influence the performance of SMEs.

Policymakers should consider adapting and promoting simplified integrated reporting frameworks tailored specifically for SMEs. While current integrated reporting standards are often designed for large corporations, creating SME-friendly guidelines can improve transparency, long-term planning, and stakeholder engagement in the SME sector. Likewise, the research highlights that strong corporate governance positively impacts SME performance when mediated by integrated reporting. Therefore, governments and financial institutions can introduce incentives (e.g., tax benefits, easier credit access, or grants) for SMEs that adopt and report on governance structures.

Additionally, implementation of integrated reporting requires adequate knowledge and skills. Public agencies, SME development centers, and industry associations should initiate training programs to raise awareness and build the capacity of SME owners and managers on both corporate governance and integrated reporting practices. Moreover, national and regional SME policies should embed corporate governance and integrated reporting as strategic pillars for SME growth and sustainability. Encouraging structured reporting will not only foster accountability but also enhance SMEs' access to finance and partnerships by improving their credibility among investors and stakeholders. Finally, integrated reporting, by design, incorporates sustainability considerations. Policymakers can leverage integrated reporting adoption among SMEs to align them with national sustainability goals and international standards (e.g., SDGs), enabling SMEs to contribute more meaningfully to inclusive and sustainable economic development.

5.3. Conclusions

Despite the abovementioned shortcomings, the work has several implications, theoretical and practical. This study provides supporting evidence for the agency theory perspective; therefore, careful consideration of these corporate governance qualities is necessary to strike a balance between principal-agent interactions and avert future agency costs. This research highlights the need for legislators and regulators to develop appropriate regulatory measures, including laws, stock market guidelines, and industry-specific listing requirements (such as those found in the banking sector). These measures would shift the burden of information sharing among board members to a larger group of stakeholders.

Authors' Contributions

Marwan Altarawneh: project administration, conceptualization, data curation, formal analysis, investigation, methodology, resources, validation, visualization, writing – original draft, writing – review & editing; Heba Hikal: conceptualization, data curation, formal analysis, software, Investigation, methodology, resources, validation, visualization, writing – original draft, writing – review & editing. Alaa Zuhair Mansour: Investigation, validation, visualization, writing – review & editing.

Disclosure Statement

The authors declare that they have no conflicts of interest.

Acknowledgements

The Authors sincerely thank Al-Balqa Applied University, Arab Open University, and everyone who helped this research project be completed successfully. The Authors sincerely thank everyone for the assistance and participation, which helped shape their endeavor's results.

Research Funding

The authors thank the Arab Open University for funding this research through the AOU research fund No. (AOURG-2023-037).

Data Availability Statement

The dataset generated and analyzed during the current study is available from the corresponding author upon reasonable request.

References

[1] Abdulsamad, A. O., Yusoff, W. F., & Lasyoud, A. A. (2018). The influence of the board of directors' characteristics on firm performance: Evidence from Malaysian public listed companies. Corporate Governance and Sustainability Review, 2(1), 6-13. https://doi.org/10.22495/cgsrv2i1p1.

[2] Agarwal, A., & Chadha, S. (2005). Corporate governance and accounting scandals. Journal of Law and Economics, 48(2), 371-406. https://doi.org/10.1086/430808.

[3] Agyei-Mensah, B. K. (2021). The impact of board characteristics on corporate investment decisions: An empirical study. Corporate Governance. Retrieved from https://doi.org/10.1108/CG-04-2020-0125.

[4] Ahrens, F. K., Veltrop, D. B., Mulder, L. B., & Rink, F. (2025). Board size in context: A meta-analysis on the relationship between board size and firm performance. *Corporate Governance An International Review*, *corg 12664*. https://doi.org/10.1111/corg.12664.

[5] Aktan, B., Turen, S., Tvaronavičienė, M., Celik, S., & Alsadeh, H. A. (2018). Corporate governance and performance of the financial firms in Bahrain. Polish Journal of Management Studies, 17(1), 39-58. https://doi.org/10.17512/pjms.2018.17.1.04.

[6] Alabdullah, T. T., Nor, M. I., Ahmed, E. R., & Yahya, S. (2018). The determination of firm performance in emerging nations: Do board size and firm size matter? International Academic Journal of Accounting and Financial Management, 5(2), 57-66. https://doi.org/10.9756/IAJAFM/V5I2/1810017.

[7] Al-Azizah, U. S. (2017). Islamic corporate governance (case study in Asia and GCC countries). Agregat Jurnal Ekonomi & Bisnin, 1(1), 114-132. https://doi.org/10.22236/agregat_vol1/is1pp114-132.

[8] Alazzani, A., Wan-Hussin, W. N., Jones, M., & Al-hadi, A. (2021). ESG reporting and analysts' recommendations in GCC: The moderation role of royal family directors. Journal of Risk and Financial Management, 14(2), 72. https://doi.org/10.3390/jrfm14020072.

[9] Ali, M., & Ayoko, O. B. (2020). The impact of board size on board demographic faultlines. Corporate Governance, 20(7), 1205-1222. https://doi.org/10.1108/CG-03-2020-0100.

[10] Alghizzawi, M., Ahmed, E., Al-Gasawneh, J. A., & Alhawamdeh, Z. M. (2024). Corporate governance paradigm in a developing country. Theoretical overview. In *The AI Revolution: Driving Business Innovation and Research* (pp. 897–907). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-54383-8_68.

[11] Aljifri, K., & Moustafa, M. (2007). The impact of corporate governance mechanisms on the performance of UAE firms: An empirical analysis. Journal of Economic and Administrative Sciences, 23(2), 71 - 93. https://doi.org/10.1108/01409171111116295.

[12] Alkhuzaie, A. S., & Asad, M. (2018). Operating cash flow, corporate governance, and sustainable dividend payout. International Journal of Entrepreneurship, 22(4), 1-9.

[13] Alkhuzaie, A. S., Asad, M., Mansour, A. Z., Sulaiman, M. A., Kayani, U. N., & Asif, M. U. (2024). Compliance with accounting standards by Jordanian SMEs. Ikonomicheski Izsledvania, 33(1), 89-107.
[14] Almansour, A. Z., Asad, M., & Shahzad, I. (2016). Analysis of corporate governance compliance and its impact over return on assets of listed companies in Malaysia. Science International, 28(3), 2935-2938.
[15] Anas, M., Gulzar, I., Tabash, M. I., Ahmad, G., Yazdani, W., & Alam, M. F. (2023). Investigating the nexus between corporate governance and firm performance in India: Evidence from COVID-19. *Journal of Risk and Financial Management*, *16*(7), 307. https://doi.org/10.3390/jrfm16070307.
[16] Alqahtani, J., Duong, L., Taylor, G., & Eulaiwi, B. (2021). Outside directors, firm life cycle, corporate financial decisions and firm performance. Emerging Markets Review, 1-20. https://doi.org/10.1016/j.ememar.2021.100820.
[17] Al-Sartawi, A. M. (2018). Ownership structure and intellectual capital: Evidence from the GCC countries. International Journal of Learning and Intellectual Capital, 15(3), 277-291. https://doi.org/10.1504/IJLIC.2018.094716.
[18] Alshaboul, M. T., & Zraiq, M. A. (2020). Investigating the relationship between board of directors and corporate financial performance in Jordan. Journal of Finance and Accounting, 8(2), 59-63. https://doi.org/10.11648/j.jfa.20200802.11.
[19] Amedi, A. M., & Mustafa, A. S. (2020). Board characteristics and firm performance: Evidence from manufacture sector of Jordan. Accounting Analysis Journal, 9(3), 146-151.
[20] Appiagyei, K., & Donkor, A. (2024). Integrated reporting quality and sustainability performance: does firms' environmental sensitivity matter? *Journal of Accounting in Emerging Economies*, *14*(1), 25–47. https://doi.org/10.1108/JAEE-02-2022-0058.
[21] Asad, M., Aledeinat, M., Majali, T., Almajali, D. A., & Shrafat, F. D. (2024). Mediating role of green innovation and moderating role of resource acquisition with firm age between green entrepreneurial orientation and performance of entrepreneurial firms. Cogent Business & Management, 11(1), 2291850. https://doi.org/10.1080/23311975.2023.2291850.
[22] Asad, M., Asif, M. U., Sulaiman, M. A., Satar, M. S., & Alarifi, G. (2023). Open innovation: The missing nexus between entrepreneurial orientation, total quality management, and performance of SMEs. Journal of Innovation and Entrepreneurship, 12(79), 1-13. https://doi.org/10.1186/s13731-023-00335-7
[23] Asad, M., Majali, T., Aledeinat, M., & Almajali, D. A. (2023). Green entrepreneurial orientation for enhancing SMEs financial and environmental performance: Synergetic moderation of green technology dynamism and knowledge transfer and integration. Cogent Business & Management, 10(3), 1-20. https://doi.org/10.1080/23311975.2023.2278842.
[24] Asif, M. U., Asad, M., Bhutta, N. A., & Khan, S. N. (2021). Leadership behavior and sustainable leadership among higher education institutions of Pakistan. Sustainable Leadership and Academic Excellence International Conference (SLAE) (pp. 1-6). Manama, Bahrain: IEEE Xplore. https://doi.org/10.1109/SLAE54202.2021.9788081.
[25] Augusto, M., Pascoal, R., & Reis, P. (2020). Firms' performance and board size: A simultaneous approach in the European and American contexts. Applied Economics Letters, 27(13), 1039-1043. https://doi.org/10.1080/13504851.2019.1659487.
[26] Badu, E. A., & Appiah, D. K. (2017). The impact of corporate board size on firm performance: Evidence from Ghana and Nigeria. Research in Business and Management, 4(2), 1-12. https://doi.org/10.5296/rbm.v4i2.11721.
[27] Balsmeier, B., Buchwald, A., & Stiebale, J. (2014). Outside directors on the board and innovative firm performance. Research Policy, 43(10), 1800-1815. https://doi.org/10.1016/j.respol.2014.06.003.
[28] Bansal, D., & Singh, S. (2021). Does board structure impact a firm's financial performance? Evidence from the Indian software sector. American Journal of Business, 37(1), 34-49. https://doi.org/10.1108/AJB-08-2020-0125.
[29] Bashir, A., & Asad, M. (2018). Moderating effect of leverage on the relationship between board size, board meetings and performance: A study on textile sector of Pakistan. American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS), 39(1), 19-29.
[30] Baydoun, N., Maguire, W., Ryan, N., & Willett, R. (2013). Corporate governance in five Arabian Gulf countries. Managerial Auditing Journal, 28(1), 7 - 22. https://doi.org/10.1108/02686901311282470.
[31] Bertinetti, G., & Gardenal, G. (2016). Enterprise risk management and integrated reporting: Is there a synergism? Integrated Reporting, 205–230. https://doi.org/10.1057/978-1-137-55149-8_11.
[32] Bertschi-Michel, A., Sieger, P., & Kammerlander, N. (2019). Succession in family-owned SMEs: the impact of advisors. *Small Business Economics*. https://doi.org/10.1007/s11187-019-00266-2.
[33] Bhasin, M. L., & Shaikh, J. M. (2013). Voluntary corporate governance disclosures in the annual reports: an empirical study. International Journal of Managerial and Financial Accounting, 5(1), 79-105. https://doi.org/10.1504/IJMFA.2013.052432.
[34] Bigliardi, B. (2013). The effect of innovation on financial performance: A research study involving SMEs. Innovation, 15(2), 245-255. https://doi.org/10.5172/impp.2013.15.2.245.
[35] Bilal, Z. O., & Sulaiman, M. A. (2021). Factors persuading customers to adopt islamic banks and windows of commercial banks services in Sultanate of Oman. Review of International Geographical Education (RIGEO), 11(4), 651-660.
[36] Cadbury, A. (1992). The Financial Aspects of Corporate Governance. London: Burgess Science Press.
[37] Carroll, A. B. (2015). Corporate social responsibility. Organizational dynamics, 44(2), 87-96. https://doi.org/10.1016/j.orgdyn.2015.02.002.
[38] Cavaco, S., Crifo, P., Rebérioux, A., & Roudaut, G. (2017). Independent directors: Less informed but better selected than affiliated board members? Journal of Corporate Finance, 43, 106-121. https://doi.org/10.1016/j.jcorpfin.2017.01.004.
[39] Chouaibi, Y., Belhouchet, S., Chouaibi, S., & Chouaibi, J. (2022). The integrated reporting quality, cost of equity and financial performance in Islamic banks. Journal of Global Responsibility. https://doi.org/10.1108/JGR-11-2021-0099.
[40] Christensen, J., Kent, P., Routledge, J., & Stewart, J. (2015). Do corporate governance recommendations improve the performance and accountability of small listed companies? Accounting & Finance, 55(1), 133-164. https://doi.org/10.1111/acfi.12055.
[41] Cooray, T., Gunarathne, A. D., & Senaratne, S. (2020). Does corporate governance affect the quality of integrated reporting? Sustainability, 12(10), 1030. https://doi.org/10.3390/su12104262.
[42] Damer, N., Al-Znaimat, A. H., Asad, M., & Almansour, A. Z. (2021). Analysis of motivational factors that influence usage of Computer Assisted Audit Techniques (CAATs) auditors in Jordan. Academy of Strategic Management Journal, 20(Special Issue 2), 1-13. https://doi.org/10.5296/ijafr.v10i2.16692.
[43] deAndrés, P., Arranz-Aperte, L., & Rodriguez-Sanz, J. A. (2017). Independent versus non-independent outside directors in European companies: Who has a say on CEO compensation? BRQ Business Research Quarterly, 20(2), 79-95. https://doi.org/10.1016/j.brq.2017.02.001.
[44] DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*(2), 147. https://doi.org/10.2307/2095101.
[45] Di Vito, J., & Trottier, K. (2022). A literature review on corporate governance mechanisms: past, present, and future. Accounting Perspectives, 21(2), 207-235. https://doi.org/10.1111/1911-3838.12279.
[46] Dimes, R., & Molinari, M. (2024). Non-financial reporting and corporate governance: a conceptual framework. Sustainability Accounting, Management and Policy Journal, 15(5), 1067-1093. https://doi.org/10.1108/SAMPJ-04-2022-0212.
[47] Doan, T., & Nguyen, N. Q. (2018). Boards of directors and firm leverage: Evidence from real estate investment trusts. Journal of Corporate Finance, 51, 109-124. https://doi.org/10.1016/j.jcorpfin.2018.05.007.
[48] Dragomir, V. D., & Dumitru, M. (2023). Does corporate governance improve integrated reporting quality? A meta-analytical investigation. Meditari Accountancy Research, 31(6), 1846-1885. https://doi.org/10.1108/MEDAR-03-2022-1618.
[49] Edeti, A. G., & Garg, M. C. (2020). Impact of board size on financial performance of commercial banks in Ethiopia. American Journal of Humanities and Social Sciences Research (AJHSSR), 4(5), 140-145.
[50] Endrikat, J., Villiers, C. d., & Guenther, E. M. (2020). Board characteristics and corporate social responsibility: A meta-analytic investigation. Business & Society, 60(8), 2099-2135. https://doi.org/10.1177/0007650320930638.

[51] Fadhel, H. A., Aljalahma, A., Almuhanadi, M., Asad, M., & Sheikh, U. (2022). Management of higher education institutions in the GCC countries during the emergence of COVID-19: A review of opportunities, challenges, and a way forward. The International Journal of Learning in Higher Education, 29(1), 83-97. https://doi.org/10.18848/2327-7955/CGP/v29i01/83-97.
[52] Ferli, O., Fauzia, S. N., & Christiani, A. E. (2020). Size of board effect return on asset and return on equaity of banking sector in INDONESIA. 2nd International Seminar on Accounting Society.
[53] Fernández-Temprano, M. A., & Tejerina-Gaite, F. (2020). Types of director, board diversity and firm performance. Corporate Governance, 20(2), 324-342. https://doi.org/10.1108/CG-03-2019-0096.
[54] Gafoor, C. A., Mariappan, V., & Thiyagarajan, S. (2018). Board characteristics and bank performance in India. IIMB Management Review, 30(2), 160-167. Retrieved from https://doi.org/10.1016/j.iimb.2018.01.007.
[55] Garcia-Sanchez, I.-M., & Nicola Raimo, F. V. (2021). CEO power and integrated reporting. Meditari Accountancy Research, 29(4), 908-942. https://doi.org/10.1108/MEDAR-11-2019-0604.
[56] Gerwanski, J. (2020). Managers' incentives and disincentives to engage with integrated reporting or why managers might not adopt integrated reporting: an exploratory study in a nascent setting. Qualitative Research in Accounting & Management, 17(4), 553-587. https://doi.org/10.1108/QRAM-01-2019-0025.
[57] Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (3e)*. Sage. https://doi.org/10.1007/978-3-030-80519-7.
[58] Hamad, S., Draz, M. U., & Lai, F.-W. (2020). The impact of corporate governance and sustainability reporting on integrated reporting: A conceptual framework. SAGE Open, 1-15. https://doi.org/10.1177/2158244020927431.
[59] Hammami , S. M., Ahmed , F., Johny, J., & Sulaiman, M. A. (2021). Impact of knowledge capabilities on organisational performance in the private sector in Oman: An SEM approach using path analysis. International Journal of Knowledge Management, 17(1), 15-18. https://doi.org/10.4018/IJKM.2021010102.
[60] Hichri, A. (2022). Corporate governance and integrated reporting: evidence of French companies. Journal of Financial Reporting and Accounting, 20(3/4), 472-492. https://doi.org/10.1108/JFRA-09-2020-0261.
[61] Hichri, A. (2022). Corporate governance and integrated reporting: evidence of French companies. Journal of Financial Reporting and Accounting, 20(3/4), 472-492. https://doi.org/10.1108/JFRA-09-2020-0261.
[62] Hidayat, A. A., & Utama, S. (2017). Board characteristics and firm performance: Evidence from Indonesia. International Research Journal of Business Studies, 8(3), 137-154. https://doi.org/10.21632/irjbs.8.3.137-154.
[63] Higgins, C., Stubbs, W., & Love, T. (2014). Walking the talk (s): Organisational narratives of integrated reporting. *Accounting, Auditing & Accountability Journal*, *27*(7), 1090–1119. https://doi.org/10.1108/AAAJ-04-2013-1303.
[64] Hindley, A. T. (2012). Integrated reporting compliance with the Global Reporting Initiative framework: An analysis of the South African mining industry (Doctoral dissertation, North-West University). https://doi.org/10.19030/iber.v11i11.7372.
[65] Hoang, T. H., Przychodzen, W., Przychodzen, J., & Segbotangni, E. A. (2021). Environmental transparency and performance: Does the corporate governance matter? Environmental and Sustainability Indicators, 10, 1-11. https://doi.org/10.1016/j.indic.2021.100123.
[66] Hossain, M., Prevost, A. K., & Rao, R. P. (2001). Corporate governance in New Zealand: The effect of the 1993 Companies Act on the relation between board composition and firm performance. Pacific-Basin Finance Journal, 9(2), 119-145. https://doi.org/10.1016/S0927-538X(01)00003-8.
[67] Ismail Salaheldin, S. (2009). Critical success factors for TQM implementation and their impact on performance of SMEs. International journal of productivity and performance management, 58(3), 215-237. https://doi.org/10.1108/17410400910938832.
[68] Jenter, D., Schmid, T., & Urban, D. (2019). Does board size matter? London, United Kingdom: London School of Economics & Political Science.
[69] Kafidipe, A., Uwalomwa, U., Dahunsi, O., Okeme, F. O., & Ntim, C. G. (2021). Corporate governance, risk management and financial performance of listed deposit money bank in Nigeria. Cogent Business & Management, 8(1). https://doi.org/10.1080/23311975.2021.1888679.
[70] Kalsie, A., & Shrivastav, S. M. (2016). Analysis of board size and firm performance: Evidence from NSE companies using panel data approach. Indian Journal of Corporate Governance, 9(2), 148-172. https://doi.org/10.1177/0974686216666456.
[71] Khan, A. A., Asad, M., Khan, G. u., Asif, M. U., & Aftab, U. (2021). Sequential mediation of innovativeness and competitive advantage between resources for business model innovation and SMEs performance. 2021 International Conference on Decision Aid Sciences and Application (DASA) (pp. 724-728). Sakheer: IEEE. https://doi.org/10.1109/DASA53625.2021.9682269.
[72] Khushi, M., din, S. M., & Sulaiman, M. A. (2020). Effects of profitability measures on free cash flow; evidence from pakistan stock exchange . International Journal of Scientific & Technology Research, 9(2), 3882-3889.
[73] Kyere, M., & Ausloos, M. (2021). Corporate governance and firms financial performance in the United Kingdom. International Journal of Finance & Economics, 26(2), 1871-1885. https://doi.org/10.1002/ijfe.1883.
[74] Landau, A., Rochell, J., Klein, C., & Zwergel, B. (2020). Integrated reporting of environmental, social, and governance and financial data: Does the market value integrated reports? Business Strategy and the Environment, 29(4), 1750-1763. https://doi.org/10.1002/bse.2467.
[75] Majali, T., Alkaraki, M., Asad, M., Aladwan, N., & Aledeinat, M. (2022). Green transformational leadership, green entrepreneurial orientation and performance of SMEs: The mediating role of green product innovation. Journal of Open Innovation: Technology, Market, and Complexity, 8(4). https://doi.org/10.3390/joitmc8040191.
[76] Mansour, A. Z., Alkhuzaie, A. S., Asad, M., Campbell, A. C., Asif, M. U., & Sulaiman, M. A. (2025). Is corporate governance important for financial performance? Evidence from Jordanian small and medium enterprises. *International Journal of Economics and Management, 19*(2), 231-248. https://doi.org/10.47836/ijeam.19.2.06.
[77] Mansour, M., Hashim, H. A., Almaqtari, F. A., & Ahdal, W. M. A. (2023). A review of the influence of capital structure on the relationship between corporate governance and firm performance. *International Journal of Procurement Management*, *17*(1), 79. https://doi.org/10.1504/IJPM.2023.130269.
[78] Mansulu, A. (2021). Corporate Governance and Voluntary Disclosure Practices in Czech Republic. Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis. https://doi.org/10.11118/actaun.2021.012.
[79] Marçal, A. D. S. V., Neumann, M., & Sanches, S. L. R. (2022). Integrated Reporting and Value Creation: the Semantics of the Fundamental Concept of Integrated Reporting. Organizações & Sociedade, 29, 449-480. https://doi.org/10.1590/1984-92302022v29n0021en.
[80] Masulis, R. W. (2019). How valuable are independent directors? Evidence from external distractions. Journal of Financial Economics, 132(3), 226-256. https://doi.org/10.1016/j.jfineco.2018.02.014.
[81] Meng, Y., Clements, M. P., & Padgett, C. (2018). Independent directors, information costs and foreign ownership in Chinese companies. Journal of International Financial Markets, Institutions and Money, 53, 139-157. https://doi.org/10.1016/j.intfin.2017.09.016.
[82] Merendino, A., & Melville, R. (2019). The board of directors and firm performance: Empirical evidence from listed companies. Corporate Governance, 19(3), 508-551. https://doi.org/10.1108/CG-06-2018-0211.
[83] Minh, N. P., Anh, T. L., Thanh, H. P., & Van, N. V. (2025). Overview of integrated reporting: biliometric analysis. *Cogent Business & Management*, *12*(1). https://doi.org/10.1080/23311975.2025.2458166.
[84] Miyajima, H., Ogawa, R., & Saito, T. (2018). Changes in corporate governance and top executive turnover: The evidence from Japan. Journal of the Japanese and International Economies, 47, 17-31. https://doi.org/10.1016/j.jjie.2017.12.006.
[85] Nguyen, T. H., Ntim, C. G., & Malagila, J. K. (2020). Women on corporate boards and corporate financial and non-financial performance: A systematic literature review and future research agenda. International Review of Financial Analysis, 71, 101554. https://doi.org/10.1016/j.irfa.2020.101554.
[86] Nwachukwu, C. (2022). Systematic review of integrated reporting: recent trend and future research agenda. Journal of Financial Reporting and Accounting, 20(3/4), 580-598. https://doi.org/10.1108/JFRA-10-2020-0308.

[87] Omenihu, C. M., & Nwafor, C. (2025). Board structure and firm performance: The moderating role of national governance quality. *Administrative Sciences*, *15*(8), 314. https://doi.org/10.3390/admsci15080314.
[88] Okpamen, P. E., & Ogbeide, S. O. (2020). Board director reputation capital and financial performance of listed firms in Nigeria. Insights into Regional Development, 2(4), 750-758. https://doi.org/10.9770/IRD.2020.2.4(3).
[89] Qadorah, A. A., & Fadzil, F. H. (2018). The effect of board independence and board meeting on firm performance: evidence from Jordan. Journal of Finance and Accounting, 6(5). https://doi.org/10.11648/j.jfa.20180605.11.
[90] Qalati, S. A., Ostic, D., Sulaiman, M. A., Gopang, A. A., & Khan, A. (2022). Social media and SMEs' performance in developing countries: Effects of technological-organizational-environmental factors on the adoption of social media. SAGE Open, 12(2), 1-13. https://doi.org/10.1177/21582440221094594.
[91] Quinlan, C., Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2018). Business Research Methods (2 ed.). London: Cengage Learning.
[92] Raimo, N. (2021). Integrated reporting: State of play, theoretical underpinnings and empirical insights: The role of corporate governance mechanisms.
[93] Raimo, N., NIcolò, G., Polcini, P. T., & Vitolla, F. (2022). Corporate governance and risk disclosure: evidence from integrated reporting adopters. Corporate Governance, 22(7), 1462-1490. https://doi.org/10.1108/CG-07-2021-0260.
[94] Rashid, A. (2018). Board independence and firm performance: Evidence from Bangladesh. Future Business Journal, 4(1), 34-49. https://doi.org/10.1016/j.fbj.2017.11.003.
[95] Riphah, H. Z., Ali, S., Danish, M., & Sulaiman, M. A. (2022). Factors affecting consumers intentions to purchase dairy products in Pakistan: a cognitive affective-attitude approach. Journal of International Food & Agribusiness Marketing. https://doi.org/10.1080/08974438.2022.2125919.
[96] Rossi, A., & Luque-Vílchez, M. (2021). The implementation of sustainability reporting in a small and medium enterprise and the emergence of integrated thinking. Meditari Accountancy Research, 29(4), 966-984. https://doi.org/10.1108/MEDAR-02-2020-0706
[97] Rossi, M., Festa, G., Chouaibi, S., Fait, M., & Papa, A. (2021). The effects of business ethics and corporate social responsibility on intellectual capital voluntary disclosure. Journal of Intellectual Capital, 22(7), 1-23. https://doi.org/10.1108/JIC-08-2020-0287.
[98] Saidat, Z., Silva, M., & Seaman, C. (2018). The relationship between corporate governance and financial performance: Evidence from Jordanian family and nonfamily firms. Journal of Family Business Management, 9(1), 54-78. https://doi.org/10.1108/JFBM-11-2017-0036.
[99] Salem, S. F., Alanadoly, A. B., & Sulaiman, M. A. (2023). Immersive gaming in the fashion arena: an investigation of brand coolness and its mediating role on brand equity. Journal of Research in Interactive Marketing. https://doi.org/10.1108/JRIM-02-2023-0053.
[100] Sarstedt, M., M.Ringle, C., Smith, D., Reams, R., & F.HairJr, J. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. Journal of Family Business Strategy, 5(1), 105-115. https://doi.org/10.1016/j.jfbs.2014.01.002.
[101] Scholtz, H., & Kieviet, S. (2018). Board size and board composition : Does it really matter? Southern African Journal of Accountability and Auditing Research, 20(1), 29-42.
[102] Shin, J. Y., Hyun, J.-H., Oh, S., & Yang, H. (2017). The effects of politically connected outside directors on firm performance: Evidence from Korean chaebol firms. Corporate Governance an International Review, 26(1), 23-44. https://doi.org/10.1111/corg.12203.
[103] Sierra-Morán, J., Cabeza-García, L., González-Álvarez, N., & Botella, J. (2024). The board of directors and firm innovation: A meta-analytical review. *BRQ Business Research Quarterly*, *27*(2), 182–207. https://doi.org/10.1177/23409444211039856.
[104] Soriya, S., & Rastogi, P. (2022). A systematic literature review on integrated reporting from 2011 to 2020. Journal of Financial Reporting and Accounting, 20(3/4), 558-579. https://doi.org/10.1108/JFRA-09-2020-0266.
[105] Sulaiman, M. A., & Asad, M. (2023). Organizational learning, innovation, organizational structure and performance evidence from Oman. Organizational Learning, Innovation, Organizational Structure and Performance Evidence from Oman (pp. 1-17). Ljubljana: The International Society for Professional Innovation Management (ISPIM).
[106] Tran, Q. T. (2019). Independent directors and corporate investment: Evidence from an emerging market. Journal of Economics and Development, 21(1), 30-41. https://doi.org/10.1108/JED-06-2019-0008.
[107] Truong, T. N., & Nguyen, V. C. (2024). The impact of the board of directors and the audit committee on the transparency of financial information of companies listed in a frontier market. *Heliyon*, *10*(22), e40188. https://doi.org/10.1016/j.heliyon.2024.e40188.
[108] Tuấn, N. V. (2021). Mainstream theories of corporate governance and the corporate governance–firm performance relationship. Science & Technology Development Journal-Economics-Law and Management, 5(3), 1638-1647. https://doi.org/10.32508/stdjelm.v5i3.781.
[109] Tulung, J. E., & Ramdani, D. (2018). Independence, size and performance of the board: An emerging market research. Corporate Ownership & Control, 15(2), 8. https://doi.org/10.22495/cocv15i2c1p6.
[110] Vafeas, N., & Vlittis, A. (2018). Independent directors and defined benefit pension plan freezes. Journal of Corporate Finance, 50, 505-518. https://doi.org/10.1016/j.jcorpfin.2017.10.003.
[111] Van der Zahn, J. L. M. (2023). Sustainability reporting regime transition and the impact on intellectual capital reporting. Journal of Applied Accounting Research, 24(3), 544-582. https://doi.org/10.1108/JAAR-06-2021-0143.
[112] Velte, P. (2021). Archival research on integrated reporting: a systematic review of main drivers and the impact of integrated reporting on firm value. Journal of Management and Governance, 26, 997–1061. https://doi.org/10.1007/s10997-021-09582-w.
[113] Villiers, C. d., & Sharma, U. (2020). A critical reflection on the future of financial, intellectual capital, sustainability and integrated reporting. Critical Perspectives on Accounting, 70, 101999. https://doi.org/10.1016/j.cpa.2017.05.003.
[114] Vitolla, F., Raimo, N., Rubino, M., & Garzoni, A. (2020). The determinants of integrated reporting quality in financial institutions. Corporate Governance, 20(3), 429-444. https://doi.org/10.1108/CG-07-2019-0202.
[115] Wang, R., Zhou, S., & Wang, T. (2020). Corporate governance, integrated reporting and the use of credibility-enhancing mechanisms on integrated reports. European Accounting Review, 29(4), 631-663. https://doi.org/10.1080/09638180.2019.1668281.
[116] Yousaf, U. B., Tauni, M. Z., Yousaf, I., & Su, N. L. (2024). Board competence and green innovation—Does external governance matter? Business Strategy and the Environment, 33(4), 3078–3102. https://doi.org/10.1002/bse.3641.
[117] Zavertiaeva, M., Shenkman, E., & Kazarina, E. (2024). Does independence of board committees enhance corporate performance? The case of Russia. *Emerging Markets Finance and Trade*, *60*(6), 1316–1332. https://doi.org/10.1080/1540496X.2023.2278649.