



Analysing the Effectiveness of Board Governance in Mitigating Agency Costs: Lessons from Industrial Firms in Emerging Markets

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Abstract

Objectives: This research examines the influence of board governance, specifically board size, independence, gender diversity, financial expertise, CEO's duality, and managerial ownership, on agency costs within industrial firms in Palestine and Jordan.

Methodology: The research adopts a quantitative approach to investigate the impact of board governance on mitigating agency costs in listed industrial firms in the two countries for the period 2011–2020. The sample consists of 42 industrial firms, with secondary data primarily collected from annual reports. To analyse the dataset, the panel regression methods has been applied.

Findings: The findings indicate that board governance, characterized by appropriate size, independence, diversity, and financial expertise, play a significant role in alleviating inefficiencies related to agency conflict. The research highlights the importance of tailoring corporate governance to the specific economic and cultural contexts of countries in emerging markets.

Implications: The results contribute to the existing literature by offering empirical evidence of the effect of board dynamics on agency costs. In practice, the strategic leveraging of the unique attributes of the board of directors provide firms with a competitive advantage.

Conclusions: Board governance effectiveness plays a pivotal role in mitigating agency costs in Palestinian and Jordanian industrial firms. The most influential characteristics that make a positive impact on organizational performance are independence, appropriate size, and financial literacy. The findings highlight that governance practices should be adapted to the regional contexts, accordingly the implications for improving governance within emerging markets are recommended.

Key words

Board Governance, Agency Cost, PEX, ASE, Emerging Markets.

1. Introduction

Corporate governance is a cornerstone of modern business practices, in particular as business organizations face an increasing complexity in both ownership structures and operations. Indeed, the Board of Directors (BD) plays a central role in bridging the gap between business shareholders and management interest by stimulating accountability, transparency, and adherence to the best practices (Damayanti & Utami, 2024). Nevertheless, business organizations often give rise to agency conflicts, a fundamental issue in corporate governance where the interests of managers (agents) may diverge from those of shareholders (principals) (Jalal et al., 2023). These conflicts, originating from the divergent priorities/perspectives of different stakeholders (Mitchell et al., 1997; Davis, 2017; El-Qanni et al., 2022) such as profit maximization for shareholders vs. managers' personal benefit, can result in inefficiencies which is known as agency costs (Jensen & Meckling, 2019). Effective governance through integrating multiple board attributes are essential to mitigate agency costs and enhance firm performance (Nikolić et al., 2022).

Agency theory remains a dominant theoretical framework in corporate governance literature (Saleh et al., 2020), highlighting how the adoption of different governance mechanisms impact agency costs. The BD governance, including its size, independence, diversity, financial expertise, managerial ownership, gender diversity, and the CEO duality, significantly influence its ability to safeguard shareholder interests and reduce agency cost (Kilic, 2015). Understanding the dynamics of BD is particularly important in emerging economies, where weak regulatory frameworks and socio-cultural challenges often exacerbate agency problems (Rashid Khan et al., 2020).

Despite the extensive literature on corporate governance, the specific Palestinian and Jordanian contexts

necessitate more studies. The economies of Palestine and Jordan experience common challenges, including business organizations dominated by family ownership, instable institutional environments, overdependence on conventional models of governance, and non-enforcement of corporate law (Rashid Khan et al., 2020). While international research has informed about the impact of board composition on organizational performance, the specific socio-economic and regulatory environments of these two countries leave a knowledge gap regarding how governance mechanisms function at the local level. Moreover, most of the literature concentrates on developed economies, whereas there is significant lack of interest regarding the implication of business development structure in mitigating agency costs in resource-scarce economies like Palestine and Jordan.

Therefore, the above-mentioned gaps can be filled by this research. In fact, the research examines agency cost minimization through conducting a comprehensive study of board composition employing a wide range of attributes to capture the complex nature of industrial company governance listed on the Palestine Stock Exchange (PEX) and the Amman Stock Exchange (ASE) between 2011 and 2020. For instance, size and financial acumen of the BD are predicted to lead to better-informed decision-making as well as more intense management monitoring. Moreover, gender diversity as well as board independence is anticipated to improve accountability as well as avoid any conflict of interest (Muhammad et al., 2025; Radhouani & Ajina, 2025; Sulieman et al., 2024; Agyemang Badu & Appiah, 2017; Kilic, 2015). In addition, this research examines the impact of CEO's duality and managerial ownership in aligning managerial incentives with shareholder goals while confronting the challenges resulting from concentrated ownership in family-controlled boards—a typical trend existing in Palestine as well as Jordan.

This research develops fundamental questions that seek to answer the current gap in literature on corporate governance within the Palestinian and Jordanian industrial sector. The main research question is:

- What role does Board Governance play in reducing agency costs in industrial firms listed on the PEX and ASE?

The central aim of this research question is to provide a critical evaluation of the BD governance and its impact in reducing inefficiencies due to agency problems.

The significance of this study is three-fold as it contributes to filling academic, practical, and policy gaps in corporate governance in emerging economies. First academically, the research findings contribute to the literature by examining corporate governance in two comparatively under-researched settings, namely Palestine and Jordan. Second it also offers empirical evidence of the effect of board dynamics on agency costs, which is of strategic importance in both economies. Lastly, by focusing on industrial companies, the research assigns importance to insights that often are marginalized in wider studies (Alves, 2023). The findings also enable theoretical models to be linked to practical applications in a manner uniquely tailored to the specific context and economic conditions of emerging countries (Rashid, 2016).

At the operational/practical level, this research provides valuable recommendations to managers in Jordan and Palestine intended to enhance the effectiveness of boards. Boards with effective governance are better positioned to alleviate inefficiencies related to agency costs. Understanding the unique attributes of the BD provides firms with a competitive advantage and strengthens shareholder confidence (Salehi et al., 2021; Gomes et al., 2018). By unveiling significant

attributes that play a fundamental role in mitigating agency costs, the present research provides pragmatic insights to business organizations that keen to operate efficiently and openly in competitive markets.

Policy-wise, the study provides Palestinian and Jordanian regulatory institutions with suggestions for enhancing governance practices. Across both economies, there is an urgent need to increase regulatory compliance, enhance transparency, and create more diverse board characteristics in accordance with global governance standards (Talalwa et al., 2024; Tarda et al., 2024). The findings of this research can guide policymakers in formulating policies that will enhance board effectiveness, and consequently leading to financial stability and investor confidence. Additionally, by identifying gaps in the existing governance frameworks, this study guides subsequent reforms ensuring equitable treatment of shareholders and protect broader economic interests in these countries.

The broader purpose of this study is to respond to a key question of how Palestinian and Jordanian business organizations, although working in challenging economic environments, can improve their governance processes to serve their diverse stakeholder groups better. By identifying the board attributes that most significantly influence agency cost reduction, the research aims to advance a practical and theoretical understanding of governance in emerging markets, while laying the groundwork for further studies on corporate governance in similar contexts globally. The structure of the paper is based on the following organization. Section 2 will review the current literature on corporate governance and agency theory. Section 3 will present the methods adopted to conduct the research, while section 4 will introduce the main results of the study. Section 5 will then discuss the main findings, which will be discussed in relation to the existing literature. Finally, Section 6 concludes

this paper.

2. Literature Review

Until recent years, corporate governance has been an essential area of research due to its significant role in mitigating agency costs, improving firm performance, while aligning the interests of managers and shareholders. The attributes of the BD have been explored by researchers (Mohammad et al., 2024). This section reviews the current body of literature on corporate governance and board attributes, connecting different insights to create hypotheses that guide this research. The section also discusses the agency theory as the foundational tool for understanding the dynamics between board attributes, management, and agency costs.

2.1 Agency Theory

Agency theory (Jensen & Meckling, 1976) is one of the most used frameworks in corporate governance research. This view emphasizes the contractual relationship between principals, represented by shareholders, and agents, represented by managers. In this context, the shareholders delegate the powers of decision-making to managers in order to run the firm on their behalf. However, the separation of ownership and control implies that managers might act in their self-interest rather than in the interest of the firm, thus creating agency problems (Khandelwal et al., 2023).

Agency theory posits that the emergence of the principal-agent problem occurs for two fundamental reasons: 1) a conflict of interest, and 2) information asymmetry. For the most part, agents or managers, in general, have more information about firm operations than shareholders do, which positions them to pursue goals such as empire-building or excessive risk-taking. These activities increase agency costs, which are the costs incurred to monitor managers, align their decisions with shareholder interests, and prevent op-

portunistic behaviour (Jalal et al., 2023; Khandelwal et al., 2023).

One of the primary mechanisms of reducing these costs is an effective BD. The board is a governance body which oversees, advises, and controls managerial actions. Drawing on agency theory, specific board governance such as independence, expertise, diversity and size are perceived to enhance the capability of the board to reduce agency problems. In fact, firms that can successfully integrate non-executive directors and ensure more frequent meetings can potentially reduce such costs, given that non-executive directors are more effective in their monitoring while the frequency of the meeting strengthens the accountability of the board (Aldaoud, 2024; Jalal et al., 2023).

Agency theory applied to the specific context of Palestine and Jordan indicates particular challenges related to corporate governance. Most boards in both countries are family-dominated and face regulatory limitations in terms of enforcing governance reforms (Basalat et al., 2023). The lack of independent boards, a lack of financial expertise, and a lack of gender diversity would lead agency theory to suggest increased inefficiencies and vulnerability within the principal-agent relationship. Conversely, any sound practices in these areas could help alleviate agency conflicts and, therefore, align managerial objectives with those of the shareholder with greater efficacy (Nour et al., 2023).

Agency Theory forms the foundation for the identification and justification of the measurement indicators used in this research. The independent variable, BD governance, is captured through key attributes such as board independence, size, gender diversity, financial expertise, and CEO duality. For example, having independent directors helps to reduce agency costs through their unbiased monitoring and enhancement

of accountability, while an optimally sized board balances between a variety of views and decision-making efficiency. Gender diversity improves monitoring through the inclusion of different perspectives, while financial expertise complements board oversight of resource and financial decisions. On the other hand, CEO duality is commonly linked with increased agency costs as a result of concentrated power. The dependent variable (agency costs) is captured using proxies such as asset utilization, operating cost-to-sales ratio, and free cash flow, which all indicate managerial efficiency and alignment with shareholders' interests. Reduced asset utilization, along with increased operating expenses, are indicative of inefficiencies in agency costs, whereas free cash flows depict discretionary funds that can be diverted in the lack of governance oversight. These metrics are firmly grounded in Agency Theory, providing strong theoretical justification for their selection and supporting the study's hypotheses. The following sub-sections discuss the hypotheses of the study in further details.

2.2 Board Financial Expertise

The financial literacy of the board members plays a significant role in strengthening the ability of the board to effectively monitor managerial decision-making processes (Talalweh & Obaid, 2024; Beji et al., 2021). Financially literate directors have a niche orientation, especially in risk management, financial reporting, and interpreting complicated financial transactions. Salehi et al. (2021) state that financially literate directors significantly enhance the performance of internal control systems, thus reducing agency costs. Also, Ali et al. (2022) argue that the financial knowledge and capabilities of directors will avert governance failure, especially during times of economic crisis. In this study we argue that the financial acumen of board directors can be a major factor in avoiding agency costs.

H1: The financial expertise of board members has a significant negative impact on agency costs.

2.3 Managerial Ownership

Managerial ownership refers to the proportion of shares held by members of a management group of an organization. With greater ownership stakes, managers will be inclined to establish goals that are consistent with shareholders because their own success is directly related to the success of the firm. Empirical evidence, e.g. (Gulzar et al., 2019) and (Ujunwa, 2012), shows that a negative relationship exists between managerial ownership and agency cost. Therefore, it is assumed that higher managerial ownership reduces the divergence of interest between management and the shareholders. Thus, we argue that:

H2: Managerial ownership has a significant negative impact on agency costs.

2.4 Gender Diversity

Female directors have attracted significant attention in the corporate governance literature because of the possibility of alternative views and insights that female directors can contribute. Gender diversity, it is argued, improves the effectiveness of board functioning, decision-making, and monitoring activities. Merendino and Melville (2019) research shows that boards with diversity are more alert in monitoring managerial behaviour and mitigating agency costs. Gender diversity also correlates with heightened stakeholder engagement and greater transparency in companies (Muhammad et al., 2025; Radhouani & Ajina, 2025). Base on this, we argue that:

H3: Gender diversity in board composition has a significant negative impact on agency costs.

2.5 CEO Duality

CEO duality occurs when a business organization's

CEO is also serving as Chairperson of the Board of Directors simultaneously. It is a dual role that can cause power to be concentrated in one person, which may undermine the board's capacity to oversee management actions effectively (Basalat et al., 2023). CEO duality supporters believes that it can enhance decision-making effectiveness and reduce information asymmetry (Nguyen et al., 2020). In addition, the existing literature (Canarella & Miller, 2022; Nour et al., 2023) indicates that CEO duality has the effect of suppressing openness and enhancing conflict of interest at the agency. In this research therefore, we argue that:

H4: CEO duality has a significant positive impact on agency costs.

2.6 Board Independence

Independence of the board means that there is a non-executive or independent board of directors with no affiliation to the internal management of the business organization. The independent directors are more likely to represent the interest of the shareholders through independent judgment and establishing accountability. Empirical evidence by Agyemang Badu and Appiah (2017) provides a strong evidence of a negative association between agency costs and board independence. Independent directors have a stronger capacity to question management decisions that are not in the interest of the shareholders (Sulie-man et al., 2024). Therefore, we argue that:

H5: Board independence has a significant negative impact on agency costs.

2.7 Board Size

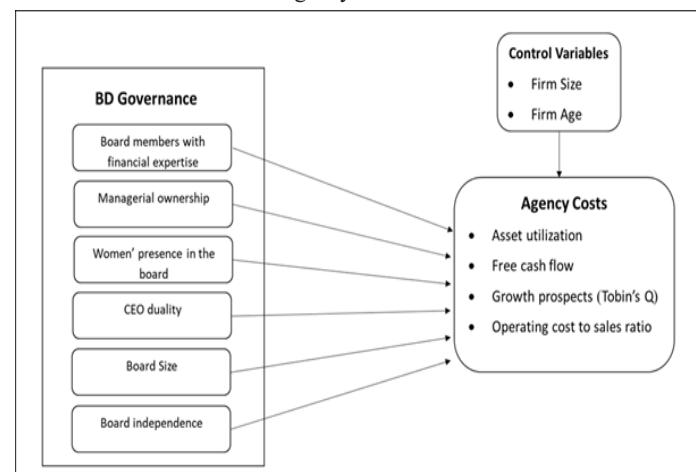
The board size plays a crucial role in the capacity of the board to oversee managerial action (Adem & Dsouza, 2024). Although having a large board size can generate various views and experience, at the same time, it may create coordination and inefficien-

cy issues (Al Farooque et al., 2020). Yusoff and Alhaji (2012) establish that medium boards are likely to find a compromise between diversity and effectiveness. A bigger board is expected to be useful to firms, as it can help management in minimizing agency costs due to management misbehaviour, thereby improving the company's financial performance (Khudhair et al., 2019). Then, we can say that:

H6: Board size has a significant negative impact on agency costs.

This study accumulates on agency theory by exploring how effective board governance mitigate agency costs in listed industrial firms in Palestine and Jordan. The framework, as depicted in Figure 1, aids in understanding the relational dynamics between board composition and firm-level outcomes, offering empirical support for governance reforms in emerging economies. This literature review establishes the foundation for the key variables studied, presents guided hypotheses grounded in empirical research, and discusses the theoretical underpinnings derived from agency theory. In conjunction, these elements create a context for evaluating the role of BD governance in mitigating agency costs in industrial firms within the unique governance contexts of the Palestinian and Jordanian economies.

Figure (1): The Study Framework Representing the Relationship between BD Governance and Agency Costs



3. Method

This study adopts a quantitative approach to investigate the impact of BD governance on mitigating agency costs in industrial firms listed on the Palestine Exchange (PEX) and Amman Stock Exchange (ASE) for the period 2011–2020. The study employs secondary data extracted from firm-specific financial statements and corporate governance reports supplemented by publicly available disclosures. A panel dataset approach has been used, considering firms' cross-sectional and longitudinal variations to ensure robust results and to capture changes over time.

3.1 Sample Selection

The sample consists of 42 industrial firms drawn from both the PEX and ASE, with 15 firms selected from the PEX and 27 firms from the ASE. The sample had been completed after deciding on a number of selection criteria. The study first excluded non-industrial companies, i.e., service or financial companies, since they possess unique governance and needs. Second, companies with incomplete disclosures, e.g., missing governance or financial information during the study period to maintain data consistency and reliability, were excluded next. Thirdly, the research covered only firms that were listed on the stock market for the study period as these firms are subject to disclosure requirements that facilitate ease of availability of information on attributes of the board and financial performance. This generated an unbalanced sample, while some firms did not offer consistent data over the entire period, this strategy ensured that the largest possible number of observations were available for analysis and therefore improved statistical solidity.

3.2 Identifying Variables

Agency cost is the dependent variable in this research, which was examined via four valid proxies: asset utilization, free cash flow, Tobin's Q, and operating cost-to-sales ratio. Asset utilization examines

the asset usage efficiency where lower values indicate higher agency costs due to inefficient management. Free cash flow represents discretionary cash, which may be vulnerable to be diverted by managers, thus the potential reason for higher agency costs. Tobin's Q is the relationship between a business organization's market value and the cost of replacing its assets, with greater numbers revealing a likelihood of managerial entrenchment influencing investment. Operating cost-to-sales ratio is used to evaluate operational inefficiency, with higher values indicating greater managerial inefficiencies and hence higher agency costs.

The independent variables in the study include key board governance that have been identified in prior research as relevant to corporate governance effectiveness. Firstly, the board size, which measures the number of directors serving on the board. Secondly, board independence, calculated as the proportion of independent directors on the board. Thirdly, gender diversity of the board, measured as the percentage of female board members. Fourthly, financial expertise of board members, operationalized as a binary variable (1 if at least one member on the board has financial expertise, and 0 otherwise). Fifthly, CEO duality, a binary variable coded as 1 if the same individual serves as both CEO and Chairperson of the Board, otherwise coded as 0. And lastly, managerial ownership, measured as the percentage of shares held by board members.

To control for firm-specific factors that could influence agency costs, the study incorporates three control variables: firm size and firm age (calculated as the number of years since the firm's incorporation). These control variables were included to account for their moderating effects on the relationships between board governance and agency costs, as larger and older firms tend to have more established governance frameworks.

3.3 Data Collection and Analysis Techniques

Secondary data for this study have been primarily collected from the annual reports and corporate governance disclosures of the selected firms, which are publicly available through stock exchange platforms, company websites, and databases such as those maintained by the PEX and ASE. Corporate governance reports provided information on board composition, and managerial ownership, whereas financial statements have been used to gather data on the dependent and control variables. Attention is taken to validate the accuracy and completeness of data collected.

Panel data regression methods have been used to examine the dataset, considering that these models consider both cross-sectional and time-series components, hence ensuring control for unobserved heterogeneity and greater accuracy in the estimates. Specifically, the study uses both Fixed Effects Models and Random Effects Models to examine the relationships between board attributes and agency costs. The choice between these models is determined by the Hausman test, which estimates the relationship between firm-specific effects and the explanatory variables. The fixed effect model has been selected when such relationships are identified because it controls for unobservable, time-invariant firm-specific heterogeneity. The random effect model has been applied when no such relationship was found because it yields the more efficient estimation of the coefficients under that scenario. Diagnostic tests for multicollinearity, heteroscedasticity, and autocorrelation have been conducted to ensure the validity of the regression equations. Wherever appropriate, heteroscedasticity-consistent standard errors have been used to enhance robustness.

Descriptive statistics were conducted to provide the summary of the distribution of the variables and establish early trends (Qubbaj et al., 2023). Correlational

analysis has been conducted for the purpose of identifying possible multicollinearity issues among independent variables. Statistical tests were conducted using Stata statistical software in all cases, considering its high appropriateness in handling panel data as well as diagnostics.

The research approach employed in this study ensures rigor and reliability in exploring the association between agency costs and board attributes. By using a large dataset and new panel data techniques, the current study provides useful information regarding corporate governance and its impact on reducing inefficiencies in Palestine's and Jordan's industrial sector.

4. Results

4.1 Descriptive Analysis

The descriptive statistics describe the sample nature and provide an initial overview of the data. The mean of the board size (BS) of the firms in the sample is approximately 7 directors, suggesting comparatively smaller boards compared to the world average. This finding is consistent with corporate governance practice in emerging economies and is consistent with regional practice of having a leaner board governance due to the lower firm complexities. However, these small boards can have issues of a lack of diversity in skills and decreased monitoring capability, issues delved into in further analysis.

Board independence as defined by the percentage of independent directors, is on average 39% with wide variation between firms. Although the percentage indicates moderate reliance on independence, it is a deficit relative to governance norms in developed markets, where board independence is frequently above 50%. The reliance on affiliated board members in Palestine and Jordan is primarily due to the prevalence of family-controlled firms, which can undermine the objectivity of governance institutions. Similarly, the

17% average managerial ownership reflects the prevalence of insider and family ownership structures. While high managerial ownership can be effective in aligning interests, it also involves entrenchment risks, particularly when minority shareholders' concerns are neglected.

The representation of gender diversity remains very low, with women occupying, on average, less than 10% of corporate board seats. The above observation is a long-standing structural hindrance in regional governance, wherein cultural values and societal norms have restricted women's involvement in leadership in the corporate sector. Financial expertise is present in about 60% of firms in the sample, which reflects increased awareness of the importance of financial knowledge for board effectiveness. CEO duality is observed in 25% of the firms, indicating a relatively high concentration of power in comparison to global norms, where separation of CEO and chairperson roles is widely recommended to maintain checks and balances.

In order to verify the validity of the model and ensure the robustness of the data and the model assumptions, diagnostic tests for Normality Distribution and Collinearity were performed. The Normality Distribution Test results show that the data achieve acceptable normality and the Collinearity Test results verify that there is no multicollinearity between the independent variables. Complete results of these tests are included in Appendix A.

4.2 Regression Analysis

The regression analysis provides valuable insights into the relationships between board characteristics and agency costs. Panel data models, including fixed effects and random effects, have been used to capture the cross-sectional and longitudinal patterns in the data. The Hausman test results supported the use of

fixed effects models for most of the variables, suggesting the presence of firm-specific factors that influence the results. The findings indicate statistically significant relationships between board governance and various proxies of agency costs as summarized below in Table (1) and Table (2).

Table (1): Regression outcomes to examine the impact of board governance on agency cost for the industrial firms listed on the PEX

	Variable	Random Effect				Fixed Effect				Housman
		Beta	SD	P	R2/AR2	Beta	SD	P	R2/AR2	
Asset utilization	BMFE	-0.124	0.052	0.098	0.469/0.376	-0.124	0.048	0.073	0.469/0.376	1
	MON	0.327	0.097	0.009	0.469/0.376	0.339	0.097	0.004	0.469/0.376	
	BWOM	0.11	0.044	0.102	0.469/0.376	0.105	0.038	0.087	0.469/0.376	
	DUAL	0.123	0.039	0.044	0.469/0.376	0.117	0.036	0.038	0.469/0.376	
	BS	-0.025	0.014	0.219	0.469/0.376	-0.023	0.013	0.216	0.469/0.376	
	INBM	0.519	0.106	0	0.469/0.376	0.513	0.104	<0.001	0.469/0.376	
Free cash flow	BMFE	-0.019	0.011	0.237	0.423/0.322	-0.02	0.01	0.201	0.423/0.322	0.991
	MON	0.006	0.017	0.819	0.423/0.322	-0.002	0.017	0.93	0.423/0.322	
	BWOM	0.034	0.011	0.021	0.423/0.322	0.037	0.011	0.007	0.423/0.322	
	DUAL	-0.025	0.005	0.06	0.423/0.322	-0.022	0.005	0.076	0.423/0.322	
	BS	-0.008	0.004	0.062	0.423/0.322	-0.009	0.004	0.036	0.423/0.322	
	INBM	-0.026	0.024	0.343	0.423/0.322	-0.025	0.022	0.331	0.423/0.322	
Growth prospects Tobin's Q	BMFE	-0.323	0.054	0.001	0.521/0.437	-0.324	0.047	<0.001	0.521/0.437	0.999
	MON	0.656	0.095	<0.001	0.521/0.437	0.622	0.094	<0.001	0.521/0.437	
	BWOM	0.049	0.079	0.549	0.521/0.437	0.06	0.071	0.425	0.521/0.437	
	DUAL	-0.112	0.073	0.13	0.521/0.437	-0.101	0.077	0.146	0.521/0.437	
	BS	-0.038	0.019	0.12	0.521/0.437	-0.04	0.017	0.085	0.521/0.437	
	INBM	-0.349	0.098	0.025	0.521/0.437	-0.352	0.096	0.015	0.521/0.437	
The operating cost to sales ratio	BMFE	-0.069	0.013	0.035	0.428/0.328	-0.082	0.014	0.007	0.428/0.328	0.995
	MON	0.138	0.044	0.011	0.428/0.328	0.127	0.041	0.013	0.428/0.328	
	BWOM	-0.05	0.017	0.086	0.428/0.328	-0.037	0.017	0.168	0.428/0.328	
	DUAL	0.003	0.015	0.916	0.428/0.328	0.011	0.016	0.662	0.428/0.328	
	BS	0.015	0.004	0.09	0.428/0.328	0.018	0.004	0.03	0.428/0.328	
	INBM	-0.116	0.049	0.037	0.428/0.328	-0.137	0.052	0.008	0.428/0.328	

* Source: Prepared by the researchers

Table (2): Regression outcomes to examine the impact of board governance on agency cost for the industrial firms listed on the ASE

	Variable	Random Effect				Fixed Effect				Housman
		Beta	SD	P	R2/AR2	Beta	SD	P	R2/AR2	
Asset utilization	BMFE	0.032	0.025	0.401	0.184/0.142	0.038	0.024	0.315	0.184/0.142	0.444
	MON	0.015	0.062	0.852	0.184/0.142	0.006	0.066	0.939	0.184/0.142	
	BWOM	-0.06	0.021	0.253	0.184/0.142	-0.07	0.019	0.18	0.184/0.142	
	DUAL	-0.046	0.043	0.211	0.184/0.142	-0.043	0.044	0.24	0.184/0.142	
	BS	-0.038	0.006	<0.001	0.184/0.142	-0.037	0.006	<0.001	0.184/0.142	
	INBM	-0.406	0.042	<0.001	0.184/0.142	-0.476	0.047	<0.001	0.184/0.142	
Free cash flow	BMFE	0.03	0.006	0.001	0.145/0.1	0.03	0.006	0.001	0.145/0.1	0.011
	MON	0.011	0.019	0.584	0.145/0.1	0.01	0.019	0.622	0.145/0.1	
	BWOM	0.026	0.008	0.039	0.145/0.1	0.023	0.008	0.061	0.145/0.1	
	DUAL	-0.007	0.007	0.451	0.145/0.1	-0.006	0.007	0.476	0.145/0.1	
	BS	-0.006	0.002	0.004	0.145/0.1	-0.006	0.002	0.004	0.145/0.1	
	INBM	-0.026	0.021	0.196	0.145/0.1	-0.037	0.021	0.064	0.145/0.1	
Growth prospects Tobin's Q	BMFE	0.063	0.036	0.201	0.161/0.117	0.074	0.037	0.135	0.161/0.117	0.763
	MON	0.514	0.071	<0.001	0.161/0.117	0.5	0.073	<0.001	0.161/0.117	
	BWOM	0.011	0.047	0.877	0.161/0.117	0.005	0.046	0.937	0.161/0.117	
	DUAL	-0.04	0.043	0.404	0.161/0.117	-0.041	0.045	0.39	0.161/0.117	
	BS	-0.022	0.008	0.049	0.161/0.117	-0.022	0.008	0.05	0.161/0.117	
	INBM	-0.092	0.083	0.406	0.161/0.117	-0.151	0.072	0.146	0.161/0.117	
The operating cost to sales ratio	BMFE	-0.127	0.037	0.006	0.132/0.087	-0.128	0.036	0.005	0.132/0.087	0.852
	MON	-0.118	0.056	0.231	0.132/0.087	-0.112	0.054	0.258	0.132/0.087	
	BWOM	-0.073	0.027	0.247	0.132/0.087	-0.057	0.03	0.36	0.132/0.087	
	DUAL	0.035	0.02	0.431	0.132/0.087	0.03	0.02	0.496	0.132/0.087	
	BS	-0.016	0.007	0.118	0.132/0.087	-0.016	0.007	0.108	0.132/0.087	
	INBM	0.042	0.074	0.682	0.132/0.087	0.107	0.083	0.275	0.132/0.087	

* Source: Prepared by the researchers

Firstly, boards with financially literate members consistently display lower agency costs, as evidenced by negative significant relationships with free cash flow and asset utilization ($p < 0.01$). In PEX, we found a negative and significant impact with operating cost to sales ratio ($\beta = -0.082, p=0.007$) and growth prospect Tobin's Q ($\beta = -0.324, p<0.001$). Also, regardless of significance, boards with financially literate members have also a negative impact with asset utilization ($\beta = -0.124, p = 0.073$) and free cash flow ($\beta = -0.02, p = 0.201$). In ASE, a negative and significant impact with operating cost to sales ratio ($\beta = -0.128, p=0.005$), and a positive significant impact free cash flow ($\beta = 0.03, p = 0.001$). Also, boards with financially literate members have also a positive impact with asset utilization ($\beta = 0.038, p = 0.315$) and growth prospect Tobin's Q ($\beta = 0.074, p = 0.135$). Financially knowledgeable directors are better equipped to understand financial disclosures, evaluate management performance, and scrutinize major investment or financing decisions. These findings are consistent with the literature, such as (Rashid, 2016), which emphasizes the pivotal role of financial expertise in enhancing governance effectiveness.

Managerial ownership exhibits mixed results. In PEX, it shows a positive and significant impact with asset utilization ($\beta = 0.339, p = 0.004$). Also, managerial ownership has also a negative impact with free cash flow ($\beta = -0.002, p = 0.93$), operating cost to sales ratio ($\beta = -0.037, p=0.168$), and a positive impact with growth prospect Tobin's Q ($\beta = 0.06, p=0.425$). In ASE, showed a positive and significant impact with growth prospect Tobin's Q ($\beta = 0.5, p<0.001$). Also, regardless of significance a positive impact with asset utilization ($\beta = 0.006, p = 0.939$), free cash flow (FCF: $\beta = 0.01, p = 0.622$) and a negative impact with operating cost to sales ratio ($\beta = -0.112, p = 0.258$). This insignificance of managerial ownership in mitigating agency costs is attributable to the high ownership concentration that is

observed in Palestinian and Jordanian family firms. In such circumstances, managerial ownership tends to entrench insider control, thereby working to entrench their interests instead of reducing agency costs. The absence of strong external governance mechanisms, including activist institutional investors or stringent regulations, also diminishes its usefulness as a governance mechanism.

Moreover, a significant association is observed between gender diversity and several measures of agency costs. PEX showed that women representation in BD had a positive and significant impact with free cash flow ($\beta = 0.037, p = 0.007$) and insignificant relationship with the rest of the three factors of asset utilization ($\beta = 0.105, p = 0.087$), Tobin's Q ($\beta = 0.06, p=0.425$), and a negative impact with operating cost to sales ratio ($\beta = -0.037, p=0.168$). The insignificant relationship. This lack of significance likely echoes the low representation of women on the boards of companies in Palestine and Jordan. As emphasized in the descriptive statistics, such limited representation can constrain the potential of gender diversity to exert a significant influence on governance outcomes. ASE showed that women representation in BD had a positive and significant impact with Tobin's Q ($\beta = 0.5, p < 0.001$). Also regardless of the significance, a negative impact with asset utilization ($\beta = -0.07, p = 0.18$), a positive impact with free cash flow ($\beta = 0.023, p = 0.061$), and a negative impact with operating cost to sales ratio ($\beta = -0.057, p=0.36$). Gender-diverse boards are known to enhance governance by bringing diverse viewpoints, fostering accountability, and ensuring greater scrutiny of management decisions. This observation aligns with findings in (Kilic, 2015), which demonstrated that female board members contribute to stronger governance practices through improved ethical judgment and stakeholder considerations. However, the lack of significance between gender diversity and asset utilization indicates that gender di-

versity's benefits may be more strategic, improving long-term firm valuation without necessarily directly influencing operational efficiencies in the short term.

CEO duality in PEX showed a positive significant impact on asset utilization ($\beta = 0.117$, $p = 0.038$), a positive impact with operating cost to sales ratio ($\beta = 0.011$, $p=0.662$), a negative impact with free cash flow ($\beta = -0.022$, $p = 0.076$), and growth prospect Tobin's Q ($\beta = -0.101$, $p=.146$). In ASX, showed a negative insignificant impact on asset utilization ($\beta = -0.043$, $p = 0.24$), insignificant positive impact with operating cost to sales ratio ($\beta = 0.03$, $p=0.496$), a negative insignificant impact with free cash flow ($\beta = -0.006$, $p = 0.476$), and growth prospect Tobin's Q ($\beta = -0.041$, $p=.39$). Though conceptually linked to greater agency costs by way of centralized control and reduced board autonomy (Jensen, 1993), this finding may demonstrate normalization of duality for family-controlled companies, which prevail in Palestine and Jordan. In such contexts, the coincidence of ownership and management tends to result in trust-based decision-making that can neutralize the visible impact of duality on agency costs. These findings are consistent with Nour et al. (2023), who hold the opinion that emerging markets' cultural norms influence agency problems and board composition dynamics differently than those of developed economies.

In addition, the presence of independent directors significantly and negatively correlates with all measures of agency costs. In PEX, showed a negative and significant impact with Tobin's Q ($\beta = -0.352$, $p=0.015$) and operating cost to sales ratio ($\beta = -0.137$, $p=0.008$). Also, a negative impact with free cash flow ($\beta = -0.025$, $p = 0.331$), while a positive significant impact with asset utilization ($\beta = 0.513$, $p < 0.001$). In ASE, showed a negative and significant impact with asset utilization ($\beta = -0.476$, $p = < 0.001$). Also, regardless of the significance, a negative impact with free cash flow ($\beta = -0.037$, $p = 0.064$), Tobin's Q ($\beta = -0.151$, $p=0.146$), while, a positive insignificant impact with operating

cost to sales ratio ($\beta = 0.107$, $p=0.275$). The strongest effects are observed on free cash flow and operating cost to sales, signalling that independent directors play a key role in reducing managerial discretion and improving operational efficiency. Independent directors improve corporate oversight by curtailing self-serving managerial actions and ensuring that shareholders' interests are prioritized. The findings corroborate the existing literature, such as (Bhagat & Black, 2002), which emphasizes the importance of independence in enhancing board efficacy. However, it is worth noting that independence alone may not always suffice in highly family-dominated firms unless coupled with stronger regulatory enforcement and monitoring mechanisms.

Moreover, for board size significantly and negatively correlates with all measures of agency costs. In PEX, showed a negative and significant impact with free cash flow ($\beta = -0.009$, $p = 0.036$). Also, there was a negative impact with assets utilization ($\beta = -0.023$, $p = 0.216$) and, Tobin's Q ($\beta = -0.04$, $p=0.085$), while there was a positive impact with operating cost to sales ratio ($\beta = 0.018$, $p=0.03$). In ASE, showed a negative and significant impact with assets utilization ($\beta = -0.037$, $p < 0.001$), free cash flow (FCF: $\beta = -0.006$, $p = 0.004$), and Tobin's Q ($\beta = -0.022$, $p=0.05$). Also, regardless of the significance, we had a negative impact with operating cost to sales ratio ($\beta = -0.016$, $p=0.108$). This finding implies that larger boards enhance resource utilization by introducing diverse perspectives and improved oversight capabilities. However, the relationship becomes less significant for the operating cost-to-sales ratio, suggesting that excessively large boards may lead to coordination challenges and decision-making inefficiencies. This diminished marginal effect of board size has been previously highlighted in (Jensen, 1993), where oversized boards were associated with collective action problems.

Table (3): Regression outcomes to examine the impact of control variables on agency cost for the industrial firms listed on the PEX and ASE

			R2/AR2	P	SD	Beta
PEX	Firm Size	Asset utilization	0.399	0.063	0.001>	0.469/0.376
		Free cash flow	0.104	0.029	0.001>	0.423/0.322
		Tobin's Q	0.077	0.1	0.455	0.521/0.437
		Operating cost to sales ratio	-0.027	0.034	0.459	0.428/0.328
	Firm Age	Asset utilization	-0.76	0.134	0.001>	0.469/0.376
		Free cash flow	0.105	0.029	0.006	0.423/0.322
		Tobin's Q	0.562	0.117	0.008	0.521/0.437
		Operating cost to sales ratio	-0.204	0.039	0.007	0.428/0.328
ASE	Firm Size	Asset utilization	-0.042	0.039	0.349	0.184/0.142
		Free cash flow	0.021	0.013	0.05	0.145/0.1
		Tobin's Q	0.056	0.082	0.332	0.161/0.117
		Operating cost to sales ratio	-0.124	0.036	0.02	0.132/0.087
	Firm Age	Asset utilization	0.124	0.058	0.093	0.184/0.142
		Free cash flow	-0.018	0.01	0.312	0.145/0.1
		Tobin's Q	0.236	0.075	0.013	0.161/0.117
		Operating cost to sales ratio	0.031	0.041	0.727	0.132/0.087

* Source: Prepared by the researchers

The findings reveal that there is a multifaceted relationship between firm size and agency costs, and the impact varies according to different measures. Large firms tend to witness a decrease in agency costs owing to improved asset efficiency, higher Tobin's Q, and lower operating cost-to-sales ratios, which can be explained by economies of scale, better operating procedures, and governance structures that separate control from ownership. However, the positive relationship noted between a firm's size and its free cash flow suggests that larger companies may face increased agency costs as a result of their complexity, which makes it more difficult to monitor and align managerial behavior with shareholders' interests. On the other hand, smaller companies with simpler organizational designs and better monitoring ability tend to have lower agency costs.

The examination of the impact of firm age on agency costs indicates mixed results. The findings indicate that older companies in Jordan would be more likely to decrease agency costs because they are more efficient, as confirmed by the positive association with asset use and Tobin's Q and the negative association with free cash flow. However, the correlation between operating costs and sales ratio reveals a positive relation, implying that in some cases, firm size could lead to increased agency costs. On the other hand, findings from Palestine indicate a more significant relationship between firm age and increased agency costs, resulting in negative effects on asset utilization while positively affecting free cash flow. The contradictory findings emphasize that, although a company's age tends to decrease agency costs in Jordan overall, the impact does differ based on geographical areas and individual measures, indicating that governance structures can exert a significant influence on these results.

The regression analysis provides clear insights into the impact of board governance on agency costs. The

extent of financial expertise that board members possess is shown to play a fundamental role in reducing agency costs, as notably evidenced by substantial declines in operating cost-to-sales ratios and enhancements in general firm performance, as supported by H1. Managerial ownership, on the other hand, shows inconclusive performance, proving to be of limited effectiveness in reducing agency costs given the close concentration of ownership common in family firms, as partially endorsed by H2. Gender diversity proves to have some positive influences, namely on free cash flow; however, the overall influence is limited given the underrepresentation of women on boards in Palestine and Jordan, as partially confirmed by H3. CEO duality has mixed results, having substantial effect on asset utilization in certain instances but minimal effect in others, perhaps due to the prevalence of the duality phenomenon in family firms, as partially affirmed by H4. Board independence emerges as an important mechanism for reducing agency costs by demonstrating strong diminution of operating inefficiencies along with greater monitoring, as endorsed by H5. And conclusively, board size consistently operates to reduce agency costs; however, extremely large boards may be confronted by coordination problems that can marginally undermine their effectiveness, as supported by H6. The results place emphasis on key board governance while simultaneously revealing the influence of local ownership and cultural forces in the determination of governance outcomes.

5. Discussion

The findings of this study emphasize the significant role that board governance play in mitigating agency costs in industrial firms listed in PEX and ASE. Grounded in agency theory, the study evaluates the impact of board size, board independence, gender diversity, financial expertise, CEO duality, and managerial ownership on reducing agency costs. Beyond confirming several established governance perspectives,

this analysis also provides novel insights into the distinct economic, cultural, and institutional challenges faced by companies operating in emerging markets such as Palestine and Jordan (Najjar et al., 2024).

The findings indicate that bigger boards are, in general, related to lower agency costs, in particular in terms of asset utilization. A diverse and larger board appears to enable broader oversight capabilities, which improves resource efficiency and managerial accountability. This finding accords with the argument that boards with more members are representative of a broader base of stakeholders and therefore ensure better governance mechanisms. The larger boards are more capable of managing complex organizational matters because they have hired professionals with different expertise and perspectives (Adams et al., 2010).

However, the problem of diminishing returns with respect to larger board sizes is supported by greater operating cost-to-sales ratios, indicating problems in coordinating larger boards, a finding consistent with previous research (Jensen, 1993). This indicates that although increased board size may make strategic guidance more powerful, enormous inefficiencies can emerge in day-to-day management choices when the board size is excessively large. In the specific instance of Jordan and Palestine, where the majority of industrial companies are medium-sized, there are practical limits to the extent to which larger board sizes contribute to improved governance. Business organizations in these markets have to balance very carefully an optimum board size that allows for good governance without succumbing either to inefficiencies or to decision-making gridlock. In addition, the outcome with regard to board size indicates a typical conflict in the trade-off between local institutional contexts and global best practices for emerging market firms. While global corporate governance standards suggest large boards for increased monitoring capabilities,

small Jordanian and Palestinian companies might not be able to sustain large boards for economic or cultural reasons, such as extremely close family groups that are not receptive to non-family members.

Board independence emerged as one of the most important determinants of reduced agency costs across all proxies, including asset utilization, operating cost-to-sales ratio, free cash flow, and Tobin's Q. Independent directors bring an external perspective, ensuring that managerial decisions, especially in family-dominated firms, are not overly influenced by the controlling shareholders or self-serving managers. Independent oversight ensures that decisions are aligned with the interests of minority shareholders, which in many cases is lacking in both Palestine and Jordan due to concentrated ownership patterns. There is strong theoretical alignment with agency theory, as the independence of the board minimizes agency problems by reducing information asymmetry and enforcing managerial accountability (Tanbour & Nour, 2024). In the context of Palestine and Jordan, where family-controlled firms dominate, the inclusion of independent directors is a particularly effective mechanism for increasing transparency and addressing conflicts of interest. For example, family-controlled boards may act to protect family wealth instead of prioritizing shareholder returns; independent directors counteract this bias by providing impartial monitoring and accountability.

Yet, in such markets, board independence can be confronted with various challenges. Independent directors tend to be pressured by controlling shareholders or have their independence compromised in concentrated ownership structures. This emphasizes the necessity for more stringent regulatory provisions, including mandatory minimum percentages of independent directors, as witnessed in some developed economies. In addition, an understanding of the sig-

nificance of quality over quantity in board independence is paramount. The mere appointment of independent directors could be inadequate in a situation where such members do not possess the skills or mandate to challenge existing managerial practices.

One of the most striking outcomes of this study is the role of gender diversity in reducing agency costs, particularly its profound impact on Tobin's Q and the operating cost-to-sales ratio. The evidence indicates that boards comprised of female directors create firm value, enable better operation decision-making, and reduce inefficiencies. These findings are in accordance with existing literature, for example, Kilic (2015) and Bear, Rahman, and Post (2010), which contend that women directors bring different ideas, promote diversity in decision-making processes, and encourage ethical governance practices. Its value lies in shaping long-term strategies, promoting equity, and improving firm reputation.

In Palestine and Jordan, nevertheless, the under-representation of women on boards (average of less than 10%) indicates strong social impediments to women's inclusion in leadership positions. Such impediments stem from institutional barriers, social expectations, and cultural norms that limit the place of women within corporate governance. The conclusions of this study are that the addition of more women to boards of directors is more than a pursuit of diversity objectives; it is a strategic imperative in improving governance results. Female-dominated boards are more likely to carefully scrutinize managerial choices, keeping them transparent, as well as actively participating in those domains that require ethical judgment. But implementing gender inclusion into governance entails extensive societal changes, including changes in cultural attitudes towards women as leaders and more institutional support of women in the labour force.

The results validate that boards made up of members who are financially literate generate notably reduced agency costs. This is especially evident in terms of free cash flow and asset turnover since boards made up of financially savvy members better monitor and correct managerial decisions. Financially literate board members enable better-informed decision-making, better resource utilization, and less opportunistic action by managers who may utilize discretionary funds for their own benefit. This is in line with the findings of (Rashid, 2016), which highlight the role of financial knowledge in making boards more effective.

In countries like Palestine and Jordan, where there is relative lack of oversight and regulation compared to global norms, the availability of financial acumen on boards takes on increased importance. Boards with financial literacy can compensate to a certain extent for the lack of monitoring bodies outside by guaranteeing that organizations are run within responsible financial practices. Furthermore, board members with financial literacy have better ability in understanding advanced strategies regarding debt management, allocation of capital, and investment. As it stands, this study stresses the importance of placing financial qualifications ahead of all other considerations when appointing directors of the Jordanian and Palestinian industrial boards. However, financially experienced directors in the developing markets is a challenge since the lack of talent combined with the dominance of family control over most of the boards has the effect of resulting in a low representation of financial skills. Policymakers and business executives ought to consider investing in training or certification programs to bridge this gap and allow boards to have members with the expertise they need to navigate modern financial complexities.

The positive relationship between CEO duality and agency costs is a demonstration of the negative effect of vesting authority in one individual. In firms where the

Chairperson is also the CEO, the ability of the board to judge the performance of the CEO independently is hampered. Increased operating costs, lower use of resources, and managerially misguided decisions are evident in firms having CEO duality, in line with the explanation given in agency theory and corroborated by previous research works, such as (Jensen, 1993) and (Hamid Nour et al., 2024). In Palestine and Jordan, CEO duality is more evident in family-owned firms. The tradition is reflective of cultural value for centralized control as well as trust in members of the same family holding dual roles. However, the tradition of combining the roles of Chair and CEO creates a conflict of interest that weakens the board's independence. These findings should be taken into consideration by the regulators in these economies, as requiring the separation of the Chair and CEO positions is a low-cost high-gain governance reform.

The function of managerial ownership in corporate governance is complex. The findings of the present study indicate that medium levels of managerial ownership mitigate agency problems associated with free cash flow, as managers with equity holdings are more likely to align their interests with those of the shareholders. This agrees with Jensen and Meckling (1976) theory and Abualhassan et al. (2024), whereby managerial ownership is tied to fewer agency conflicts as the managers are incentivized to prioritize the interest of other shareholders. However, managerial ownership has also some limitations. High levels of ownership concentration have the potential for entrenchment effects, when decision-making tips in favour of insiders, curbing the interests of minority shareholders. This behaviour takes on special relevance in the case of Palestine and Jordan, where firms tend to be family-owned and have fairly high managerial ownership. The dualistic nature of managerial ownership means that governance reforms must strike a balance by requiring moderate levels of managerial ownership

to align incentives while adopting measures to protect minority shareholders from likely entrenchment consequences.

In summary, the findings of this study are in line with dominant global corporate governance theory but underscore the need to put governance practice within the context of individual countries like Palestine and Jordan. Compared to advanced markets with high-end regulatory regimes, these nations have less enforcement of governance, bigger concentration of ownership, and cultural constraints that are additional hurdles to the achievement of effective governance. The conflict between international norms of governance and domestic practices is most acute in the domains of board independence, gender diversity, and CEO duality. The findings suggest that effective practices in governance need to be reconciled with the unique institutional context of the region. For example, while independent directors are important in reducing agency costs, they are limited in an environment where entrenched family boards dominate. Likewise, enlarging board sizes or enhancing diversity necessitates structural adjustments as much as it does cultural adjustments in presumptions regarding inclusiveness and open-mindedness. Being aware of these drivers is key to the effective implementation of governance reforms to counter agency conflicts in Palestine, Jordan, and other similar emerging economies.

6. Conclusion and Future Research

This study undertakes a rigorous examination of the impact of corporate board attributes on agency costs of industrial firms listed on the PEX and the ASE between 2011 and 2020. The research analyses several board attributes like board size, independence, gender diversity, financial knowledge, CEO duality, and managerial ownership to identify their relevance in alleviating agency costs and improving corporate gov-

ernance performance. Using a panel data regression model, the results of the research provide strong evidence on the dynamics of governance of the emerging markets, i.e. Palestine and Jordan.

The empirical investigation did show some noteworthy results. Boards of larger size were most commonly associated with reduced agency costs, in particular with the utilization of assets, which suggests that diverse perspectives and more monitoring can lead to better resource allocation. However, a trend of diminishing returns is found when the board is too large, which seems to be explained by coordination problem and inefficiency in the screening process. Board independence was found to reduce agency costs significantly by compelling independent directors to increase transparency, prevent managerial opportunism, and align managerial conduct to shareholders' interests, increasing overall firm efficiency. Greater female representation on boards was found to be linked with lower operating costs and higher market valuations, reflecting the strategic significance of gender diversity in the development of superior governance culture and firm value creation.

In addition, the inclusion of financial professionals in the boards greatly minimized agency costs via effective control and sound decision-making possibilities, thereby assigning much value to the significant determinant of financial literacy to boost quality governance at the board level. CEO duality was associated with increased agency costs, yet it further emphasized separation of the Chairperson and CEO roles as instrumental in upholding effective independent control. While managerial ownership aligned the interests of managers and shareholders, over-ownership was linked to entrenchment risks, which came to illustrate the necessity for balanced managerial ownership structures.

The research has important theoretical implications. Precisely, the findings verify the implicit assumptions of agency theory and literature, which emphasize the importance of governance practices in reconciling managerial actions with shareholder interests. In addition, the research broadens agency theory by illustrating how the effectiveness of such governance practices can vary substantially in light of institutional and cultural settings that dominate markets. In practice, the research offers policy recommendations for Palestinian and Jordanian corporate governance. Companies are urged to increase board independence, gender diversity, and add financial skills to their boards in order to enhance governance performance. Policymakers in both nations must also implement policies to restrict CEO duality and encourage balanced managerial ownership to prevent entrenchment.

Despite its worthwhile contribution, the study has limitations which can be highlighted. The sample only includes industrial companies listed on the PEX and ASE, and this can limit the generalizability of the findings to other industries. The study duration (2011-2020) might not capture long-term trends or the impacts of recent reforms in governance. Limitations in data also limited analysis to publicly disclosed data, which potentially excluded other important determinants of governance not reported in financial statements. In addition, Palestinian and Jordanian cultural settings and institutional frameworks might condition the applicability of findings to other developing economies.

Subsequent research will be able to transcend these limitations by expanding the sample to cover a wider range of industries and geographic regions. Longitudinal studies of the long-term impact of governance reforms would provide more significant findings on the evolving nature of corporate governance

in emerging markets. Additionally, future research may explore year-on-year improvements to examine if ongoing reforms yield detectable changes over time. Comparative analyses with Palestinian and Jordanian companies can also offer useful information on how varying economic, political, and cultural determinants, including conflict settings, shape governance outcomes and agency costs. Furthermore, qualitative research that examines the sociocultural drivers of board behaviour would complement the quantitative evidence and provide a richer perspective of governance practices. Examining the interaction between various governance systems and how they together affect organizational performance might provide useful information for researchers and practitioners.

In conclusion, this study highlights the imperative role of board governance in mitigating agency costs and promoting corporate governance in emerging markets. By tailoring global best practices in governance to suit local settings, firms in these markets can effectively improve transparency, align executive incentives with shareholders', and thus achieve promising governance outcomes.

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