Corporate Governance and the Value Relevance of Accounting Information: Evidence from the Palestine Exchange

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Abstract This study examines the relationship between Corporate Governance (CG) and the value relevance (VR) of accounting information in companies listed on the Palestine Exchange from 2009 to 2019. The study uses Ohlson's (1995) model to measure the VR and conducts fixed effect regression analysis to test the study hypotheses. The results show that VR has a significant positive relationship with board size, board ownership, audit committee size, and audit quality. In contrast, a negative relationship was observed between VR and role duality, while no significant relationship existed between board activity and VR. The study highlights the importance of CG practices in enhancing the VR of accounting information and provides recommendations for policymakers, managers, and stakeholders to improve CG practices in Palestine.

Keywords Corporate governance · Value relevance · Accounting information · Ohlson model · The Palestine exchange

1 Introduction

Given the separation between ownership and management, the recent corporate collapse has highlighted the agency problem aspects [1–3]. Corporate Governance (CG) has been proposed as an effective tool to mitigate the conflict problem between managers and shareholders [2, 4, 5]. Good CG requires creating a culture of transparency through which management's information becomes visible, accessible and understandable for all market investors [6]. In fact, one of the aims of effective governance is producing information relevant for decision-making, where relevance is determined by the extent to which the reported accounting information is reflected in the firm stock price [6–8].

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Financial statements are the primary source of information that investors use for decision-making. In addition to enhancing the investors' confidence, they contribute to achieving useful, high-quality information, thus reducing the cost of investments [9, 10]. Adopting and complying with the International Financial Reporting Standards (IFRS) ensures that produced information is relevant, faithfully represented, free from errors and biases and verifiable [6, 11]. The International Accounting Standards Board (IASB) conceptual framework indicates that information should be characterized by relevance and faithful representation, as fundamental qualitative characteristics, in addition to comparability, verifiability, timeliness and understandability, as enhancing qualitative characteristics [12].

As governance becomes increasingly important, a serious debate exists about the relationship between governance mechanisms and accounting information quality in developed and emerging markets [13]. Good governance contributes to achieving economic growth by attracting investments since investors are more willing to pay a price premium on the shares of companies with good CG practices, especially in countries with weak legal protection for investors [14]. Many studies have proved the importance of CG in enhancing the quality of accounting information [1, 15]; however, most are in developed countries. Therefore, we address this issue in a developing country, Palestine, which lacks political stability [16]. Since its inception in 2004, the Capital Market Authority of Palestine has acted as a corporate watchdog to ensure the availability of high-quality financial information to different users. It also seeks to apply CG rules to increase transparency and improve the quality of the financial system [3, 17]. Since 1997, the companies listed on the Palestine Exchange (PEX) have been required to use the IFRS when preparing their financial statements. Before that, there was no financial reporting system, as no real business existed given the Israeli occupation. Therefore, Palestine represents a pure IFRS adopter without any previous accounting traditions [18, 19].

The study seeks to contribute to the literature by investigating the impact of CG practices on the value relevance (VR) of accounting information in Palestine, a developing country with unique characteristics that differentiate it from developed countries. The findings of this study provide insights for policymakers and companies in Palestine, as well as other emerging markets, especially those with similar attributes.

2 Theories, Literature Review and Hypotheses Development

CG and accounting standards requirements aim to produce high-quality accounting information to reflect the firm's reality and benefit investors in choosing the best available opportunities [20]. As a result, they contribute to attracting investors and capital investment, reducing risks, developing the firm performance and enhancing confidence in financial markets [13, 21].

CG has been broadly defined as a set of structures and processes employed to control the relationship between management, shareholders and stakeholders regarding economic and non-economic activities [22–25]. Related theories demonstrate the importance of CG in enhancing the quality of accounting information and ensuring transparency and accountability in financial reporting. The agency theory highlights the role of governance in establishing mechanisms for controlling company management and protecting shareholders' wealth by reducing agency costs [14, 26]. In contrast, the stewardship theory assumes that managers work to increase shareholders' returns to the greatest possible extent, and governance is described as a tool to improve the company's financial performance [14, 22]. The resource dependence theory focuses on the role of board members in providing and securing access to the resources that companies need through their relationships and ties with the external environment [22]. Stakeholder theory indicates that individuals or a group of individuals can influence and be affected by the achievement of the firm's goals [26]. This theory assumes that the primary purpose of governance is to coordinate the interests of stakeholders by creating structures that enable stakeholders to state their case, limit the effects of information asymmetry, and thus contribute to protecting the rights of stakeholders [26]. To summarise, CG plays a crucial role in ensuring the quality and relevance of accounting information, protecting shareholder interests, and attracting investors. Theoretical arguments highlight the importance of governance mechanisms in establishing control mechanisms to monitor management behaviour, increase shareholder returns, secure resource access, and coordinate stakeholders' interests. These arguments provide a foundation for examining the relationship between CG and the VR of accounting information.

Accounting information is a critical component for investors in making informed decisions. Accordingly, the IASB framework emphasises the importance of the relevance of financial information [27]. Therefore, the relevance of accounting information is one of the considerations on which the IFRSs are developed [28]. Furthermore, relevant financial information reduces the information asymmetry between providers and users of accounting information, which leads to more rational decisions [9, 29]. Thus, the IASB views VR as the ability of information to make a difference in the decisions made.

The relevance of financial information is represented by its effect on the firm's stock price [30]. Francis and Schipper [31] suggested that accounting information affects stock prices by capturing intrinsic share values towards which stock prices drift. Additionally, the relevance of financial information can be seen in terms of its valuation and prediction ability. A statistical association between financial information and prices or returns may also indicate it. For example, fundamental analysis theory estimates the fair value of shares based on analysing current and future earnings to evaluate their fair value and then comparing the results with the firm's market value to decide whether to invest [32].

The VR of accounting information can be measured by its ability to explain stock price movements [33]. In 1995, Ohlson developed the Residual Income Model to measure the relevance of accounting information based on the relationship between stock values and accounting variables. Compared to other models, this model is more efficient as it better explains the stock price and does not require an efficient market, making it applicable in emerging markets [32]. Most previous studies used the Ohlson model (1995) to estimate relevance using earnings per share and the book value per share as accounting information. However, few studies used dividends and cash flow to determine VR [8, 29, 33].

Many studies have addressed the VR before and after adopting IFRS, as they have been developed to improve the quality of accounting information [33], with mixed results. By the application of IFRS, the book value is supposed to be a better explanatory factor than earnings as the IASB has replaced the matching principle (Income-approach) with the Assets-Liability approach (Balance Sheet approach) [9]. Eng, Sun and Vichitsarawong [34] found that both earnings and book value are related to capital markets, but book value has higher explanatory power in Asian countries (Hong Kong, China, Singapore, Japan, and Korea). Conversely, [12] showed increased book value relevance after adopting IFRS in Turkey. While [8] results reported increased VR in Bahrain, a decrease was identified in the UAE after adopting IFRS.

3 Development of Hypothesis

The relationship between Board Size (BS) and the VR of accounting information is a widely debated topic in the literature. Some studies argue that large boards have more knowledge, skills, and experience, which leads to higher-quality financial reports, and thus enhances the VR of accounting information [35–37]. On the other hand, other studies suggest that smaller boards are more effective at communication, coordination, and decision-making, increasing the VR of accounting information [2, 38].

Despite the conflicting results in the literature, our hypothesis posits a positive relationship between BS and the VR of accounting information. This is based on the argument that larger board attributes allow them to bring broader perspectives and insights to the decision-making process [4]. Accordingly, the first hypothesis is:

H1: Board Size is positively related to the Value Relevance of Accounting Information.

CG mechanisms have been identified as crucial determinants of the quality of accounting information. Specifically, Board Ownership (BO) is one of the governance mechanisms that can influence the VR of accounting information. The relationship between BO and VR has been investigated in several studies with mixed results. However, many studies have indicated a positive relationship between BO and the VR of accounting information [2, 35, 38].

BO is assumed to reflect the effectiveness of governance practices, which can lead to better-quality financial statements [41]. Larger ownership may incentivises managers to act in the interests of shareholders and, thus, affect the accounting information positively [2]. Studies have also shown that BO positively affects the capital structure and increases the company's value [2]. Moreover, the increased ownership of the board members can reduce the agency problem between managers and shareholders. It creates an alignment of interests and reduces the likelihood of opportunistic behaviour from the managers, which may lead to more reliable and relevant financial statements [38]. Consequently, our second hypothesis is as follows:

H2: Board Ownership is positively related to the Value Relevance of Accounting Information.

The literature suggests that board activity, measured by the frequency of board meetings (BMET), significantly impacts CG practices and the quality of financial reports [39]. Holtz and Sarlo Neto [37] found that the frequency of BMET positively affects accounting information quality. This relationship was also supported by [36] arguing that the more frequently boards meet, the more knowledgeable and skilled they become, which results in better information. Many studies confirmed the positive relationship between BMET and the VR of accounting information [35–37]. This relationship is explained by [38] by arguing that increased board activity leads to improved communication, coordination, and decision-making. Nevertheless, other studies have not found a significant relationship between board activity and accounting information relevance [2, 30]. Therefore, we hypothesize the following:

H3: There is a positive relationship between board activity and the value relevance of accounting information.

Role duality (RD) is another CG mechanism that may affect the quality of financial reporting. The governance literature has suggested that RD can signify high agency costs due to the information asymmetry between managers and investors [38]. When the CEO serves as the chairman, the decision-making and control functions become concentrated in one person [40]. Thus, the board's monitoring capacity is reduced which may decrease the quality of financial statements [35]. Empirical studies have yielded mixed results regarding the relationship between RD and the VR of accounting information. Habib and Azim [38] indicated that RD has a negative impact on the VR of accounting information, whereas other studies have not found a significant relationship between them [2]. Therefore, based on the existing literature, we assume the following:

H4: There is a negative relationship between role duality and the value relevance of accounting information.

As an essential component of corporate governance, audit committee is responsible for monitoring the quality of financial reports and ensuring their accuracy and completeness [7]. The size of the audit committee is an essential determinant of its effectiveness, as larger committees are expected to have more knowledge, skills, and experience that can contribute to high-quality financial reporting [1, 38]. The existing literature provides evidence for the positive impact of audit committee size (ACS) on the VR of accounting information [2, 38]. The larger the audit committee, the more effective it is in overseeing the financial reporting process, resulting in higher-quality financial reports that are more relevant to investors. However, Ibanichuka and Briggs [30] found a negative relationship between the ACS and the relevance of

Table 1 The Selected Sample

Sector	Number of companies	Percentage (%)
Investment	10	24.39
Services	11	26.83
Insurance	7	17.07
Industry	13	31.71
Total	41	100

*Source PEX (*2021)

accounting information. This finding contradicts the notion that larger audit committees are more effective in improving the quality of financial reporting. Based on the previous discussion, we propose the following hypothesis:

H5: There is a positive relationship between audit committee size and the value relevance of accounting information.

4 Methodology

4.1 Sample Selection and Data Sources

From 48 companies listed on the PEX, only 41 (see Table 1) companies are included in the study, after excluding the banking sector. Data on CG and financial reporting quality were obtained from the companies' annual reports between 2009 and 2019 available on the websites of the Capital Market Authority, the PEX and the companies themselves.

4.2 Variables Measurement

Among the various models available to measure the relevance of accounting numbers, Ohlson's (1995) Price Regression Model (PRM) is the most commonly used [42]. This model is particularly suitable for emerging markets, based on book value and earnings rather than permanent profit or assets and liabilities. Previous studies, such as [35], have utilised this model to measure VR. The PRM is preferred over the Return Valuation Model as it better reflects how a firm's value relates to accounting numbers, earnings per share (EPS) and book value per share (BVPS), which play different roles in security pricing [42]. Therefore, this study uses the PRM to examine the VR of both income and balance sheet statements, aligning with our research questions. For more information about regression models the reader may refer to [43–45]

Table 2 Description of Variables Related to BOD Characteristics

Variables and abbreviation	Measurement of variables	References
Board size (BS)	The number of board members	[2, 6, 46, 47]
Board ownership (BO)	The percentage of shares owned by the board of directors	[2, 13]
Board activity (BMET)	The number of times the board of directors meets in a financial year	[14]
Role duality (RD)	A dummy variable if the chairman and the CEO are the same person is "0"; otherwise, "1".	[6, 38, 48]
Audit committee size (ACS)	The number of audit committee members	[2, 38, 53]
Audit quality (AQ)	Dummy variable "0" if the external auditor is one of the big four; otherwise ", 1."	[38, 54]

The independent variables are the CG mechanisms, including BS, BO, BMET, RD, and ACS. While audit quality (AQ) represents the control variable of the study. The measurements of all independent and control variables are presented in Table 2.

4.3 Regression Model

To test the proposed hypotheses, this study employs the following regression model:

$$\begin{aligned} P_{it} = \partial_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \beta_3 BS_{it} + \beta_4 BO_{it} \\ + \beta_5 BMET_{it} + \beta_6 RD_{it} + \beta_7 ACS_{it} + \beta_8 AQ_{it} + \varepsilon_{it} \end{aligned} \tag{1}$$

where dependent and independent variables are defined earlier, ε is the error term, and βk represents the regression coefficients.

5 Empirical Results

5.1 Descriptive Statistics

See Table 3.

Table 3 Descriptive statistics

	BS	BO	BMET	RD	AQ	ACS	P
Mean	8.844	0.097	6.208	0.373	0.59	4.461	2.343
Median	9	0.07	6	0	1	4	1.358
Min	5	0	2	0	0	3	0.3
Max	15	0.42	12	1	1	6	14.89
ST.DEV	2.195	0.078	1.624	0.484	0.498	1.12	2.158
Skewness	0.269	1.482	1.457	0.527	−0.38	0.042	1.112
Kurtosis	2.512	1.984	1.567	−1.73	−1.96	−1.34	−1.24

Table 4 Correlation matrix

	BS	BO	BMET	RD	AQ	ACS	P
BS	1						
BO	0.697**	1					
BMET	0.597**	0.671*	1				
RD	0.626**	0.412*	0.474*	1			
AQ	0.648*	0.774*	0.563*	0.551**	1		
ACS	0.676*	0.398**	0.687**	0.567**	0.744*	1	
P	0.571**	0.599*	0.048	-0.607*	0.579*	0.717*	1

5.2 *Correlation Matrix*

Table 4 presents the Pearson's correlation coefficient results for all variables, which were analyzed to detect multicollinearity. The correlation coefficients between the variables are either low or moderate, indicating the absence of multicollinearity among the study variables. Thus, the variables used in testing the study hypotheses are not highly correlated, and the results can be considered reliable.

5.3 *Corporate Governance and Value Relevance*

Prior to conducting the regression analysis, Hausman's test was performed to ascertain the appropriate panel regression model, whether fixed or random effects. The results of the Hausman test showed a p-value of less than 0.05, indicating that the fixed effect model was more suitable for the analysis. Hence, the fixed effect model was utilized in the regression analysis.

The fixed effect regression analysis results, presented in Table 5, support all hypotheses except H3. The analysis revealed that BS significantly positively affects the VR of accounting information (Coefficient = 0.368, $p < 0.01$). Therefore, H1 is

Table 5 Fixed Effect Regression

Variables	Coefficient	Std. Error
Constant	1.6789***	0.368
Board size	0.368**	0.045
Board ownership	0.997***	0.0771
Board activity	0.044*	0.091
Role duality	−0.714**	0.049
Audit committee size	0.147**	0.037
Audit quality	2.478***	0.0017

***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively

accepted. This finding provides evidence that the large board of directors contributes to increasing the cognitive skills, experience, and available resources and thus positively impacts the VR of accounting information. This result is consistent with theories of agency and resource dependence. Previous studies have confirmed the positive impact of BS on VR, including studies by [2, 13, 14, 35, 36, 38]. However, it contradicts the finding by [6].

Furthermore, our results support H2, indicating a significant positive effect on VR (Coefficient = 0.997, $p < 0.01$). This result is consistent with the governance literature, which states that increasing managers' ownership of the company's shares constitutes an incentive for them to increase its value and thus positively impacts the VR of the company's accounting information. The study of [2] reinforces this finding and differs from the [13] study.

On the other hand, RD has a significant negative effect on VR (Coefficient = −0.714, $p < 0.01$), supporting H4. This result is consistent with the agency theory, which requires separation between the CEO and the chairman of the board of directors because duplication gives great one-person power that affects the company's performance. Moreover, many studies, such as [49], have confirmed the negative impact of CEO duality on the VR of accounting information [6].

Additionally, ACS significantly positively affects VR (Coefficient = 0.147, $p < 0.05$); thus, H5 is accepted. The increase in the size of the audit committee leads to more frequent meetings, benefiting from their experiences and access to available resources, improving the quality of reports and, thus, the VR of accounting information. This finding is in line with the results of previous studies, including [2, 38, 55–57].

However, board activity has a non-significant effect on VR (Coefficient = 0.044, $p > 0.1$); thus, H3 is not supported. This finding is consistent with the study by [14], which emphasised that frequent board meetings do not increase the importance of the VR of accounting information in any way.

6 Conclusion

This study examines the relationship between CG practices and the VR of accounting information for companies listed on the PEX. The study used Ohlson's (1995) model to assess the VR of accounting information and collected data from 2010 to 2019. The study results indicate a significant positive impact of board size, board ownership, audit committee size and audit quality on the VR of accounting information. On the other hand, there is no significant relationship between board activity and the VR of accounting information, while role duality has a negative relationship with the VR of accounting information.

The study provides several practical implications for shareholders, policymakers and other stakeholders. First, the study highlights CG's importance in enhancing accounting information's relevance. Second, it emphasises the need for continuous development and review of the Palestinian CG Code to ensure the best governance practices. Third, enhancing the governance culture through training programs is recommended. Fourth, it is important to identify managers' and stakeholders' training and educational needs in governance. Fifth, the study recommends the establishment of a database for CG measurement to monitor the performance of companies and economies. Finally, the study emphasises the importance of increasing awareness of CG to reduce market risk, mitigate the negative impact of uncertainty economic and political instability in Palestine and improve the financial performance of companies.

However, the study faced some limitations. The first limitation is the difference in the number of views in each company listed on the PEX due to the difference in the year of listing for each company. The second limitation is that the study relied on Ohlson's (1995) model as a basis for evaluation, which creates a problem in its difference from other valuation models.

In conclusion, this study provides evidence about the relevance of IFRS-accounting information from a unique environment. Palestine had not used financial reporting frameworks before adopting IFRS, and thus current accounting practices have not been affected by previous accounting traditions. The study helps stakeholders and policymakers evaluate accounting information in the best way that reflects the reality of the companies. Additionally, the results of this study will add value to other studies in emerging countries with similar conditions. Finally, this study is considered one of the first in Palestine and a starting point for a critical research path.

Political stability and other surrounding circumstances, such as culture, affect accounting practices [50–54] and represent relevant topics for future research. Including such topics when examining the quality of an international set of accounting standards will contribute significantly to the extant literature. In addition, we used only two measures of the VR of accounting information, which creates a new research opportunity to use additional measures such as dividends and cash flow.

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