The Role of Corporate Governance in Managing Risks: An Applied Case on Companies Listed on the Palestine Stock Exchange

Mohammad Kamal Abuamsha(✉) and Bahaa Razia

Palestine Technical University - Kadoorei, Tulkarm, Palestine
m.abuamsha@ptuk.edu.ps

Abstract. This study aims to examine the role of corporate governance (characteristics of board management) and its role in dealing with systematic and unsystematic risks. This study includes 44 companies listed in the Palestinian stock market distributed in 5 sectors. The panel research method was used for data collection and analysis. Results show that there is a significant role of corporate governance (characteristics of board management) in dealing with systematic and unsystematic risks in companies listed in the Palestine stock market.

Keywords: Corporate governance · Risk · Systematic risk · Unsystematic risk · Characteristics board

1 Introduction

Following corporate scandals like Enron, corporate governance has gained international attention. Its importance has further grown in the wake of the 2007–2008 global financial crisis. Corporate governance is considered a comprehensive strategy to effectively manage business affairs and safeguard and advance the interests of shareholders while also taking into account those of other stakeholders (Tarraf and Majeske 2013; Quang Trinh 2022). Corporate governance suffers when the risk is not adequately managed (OECD 2009). As a result, financial firms suffer enormous losses, like those that worsened the global financial crisis (Bebchuk et al. 2009). The likelihood of financial crises tends to decline with improved corporate governance (Claessens and Yurtoglu 2013).

Risk management behaviour that affects a company's success is influenced by the agency conflict between shareholders and managers (Jenson and Meckling 1976). Numerous research has looked at the connection between corporate governance and business performance to comprehend this conflict and the ensuing firm performance, but the findings have remained contradictory. However, little research has been done to examine the empirical connection between risk management and corporate governance. Since there is little literature on both corporate governance and risk management, one can wonder if risk management belongs in the category of corporate governance (Gericke 2018). The board of directors of a firm is ultimately in charge of risk management (McNulty et al. 2012; Aslam et al. 2021). Risk management is a mediating variable to

B. Alareeni et al. (Eds.): ICBT 2022, LNNS 621, pp. 415–427, 2023.
https://doi.org/10.1007/978-3-031-26956-1_40

determine if risk significantly influences the relationship between corporate governance and a firm's financial success.

Most studies on corporate governance only took into account commercial banks, but this leaves out significant players in the financial sector and does not give a complete picture of corporate governance and risk management. The lines separating different financial institutions have blurred. As a result of developments in the financial market. Additionally, the majority of the risks that financial institutions (commercial banks, investment banks, and insurance businesses) confront are similar. Therefore, this study aims to investigate the impact of corporate governance on managing risks in the companies listed on the Palestine stock exchange. These companies include the Banking and financial market, services sector, industrial sector, Insurance Department and investment sector.

The structure of this study contains the First literature review about the characteristics of the board, second the methodology and the hypotheses of the study, third the statistical analysis and finally the results and conclusion.

2 Literature Review

Corporate Governance includes the rules and regulations required to operate the business in the interests of the shareholders. Additionally, it identifies the rights of directors and managers and clarifies the steps owners take to influence the choices of the company. Khan et al. (2018) indicated that the major role is played by corporate governance, a growing field, in the overall operation of a firm. An association between shareholders and senior management is a straightforward way to describe it and leads to success in organisations (Mathew et al. 2018). Corporate governance is an organization that brings together all relevant parties, including management, the board of directors, shareholders, employees, consumers, and investors (Ltifi and Hichri 2021). By providing checks and balances between the administration and investors, effective Corporate governance helps to resolve agency issues. Companies with effective governance practices should experience fewer agency issues in the future (Nakpodia and Olan 2022).

Risk management (RM) is "a process of recognising, evaluating, and prioritising risks of various types." Once the risks are identified, the risk manager develops a plan to reduce or eliminate the impact of unfavourable events (Altaf et al. 2021). Because risk management is integrated into the credit administration division, banks do not have risk management units (Munawar et al. 2022). Risk management procedures and policies are crucial for the stability of a long-term investment environment. Investors and partitioners need to be aware of the potential risk that may affect their business, to avoid losing money or facing business failure (Polinkevych et al. 2021). The Risk management practices of companies and businesses depend on the management's strategies, so the investor's confidence is maintained in the accompanying corrective actions (Mathew et al. 2018).

Several factors positively or negatively impact managing and dealing with risks. These factors are classified into dependent and independent variables. Independent variables include board size, board independence, gender diversity, CEO turnover and audit committee independence (Nakpodia and Olan 2022; Maher and Aquanno 2022). Independent variables include capital risk, credit risk and liquidity risk.

The ideal board size is considered a function of the directors' and the firm's characteristics (Elbahar 2016). Firm risks and Board size has a good working relationship since they shared information with the board's associates. Allam and Ali Shah (2013) also confirmed that Board size and firm risk are strongly correlated to each other. Larger boards are associated with lower risk, while smaller boards are associated with higher risk. There is evidence from previous literature indicating that risks and board size have a bad and strong relationship (Khan and Ali 2018; Nakpodia and Olan 2022).

Numerous studies demonstrated that risk-taking and board independence are positively correlated (Koerniadi et al. 2014; Khan et al. 2019). Mathew et al. (2018) indicated that board independence is negatively associated with risks. In large companies, the lower capital risk is one of the major benefits that can be created in companies with a larger number of independent or external directors who are not part of the executive team (Khan and Ali 2018). Maher and Aquanno (2022) confirmed that there is a positive relationship between risk related to firms and board independence.

Gender diversity including females and males is related to firm risk. Khan and Ali (2018) stated that women are more willing to take risks compared to men in business at different levels of management. However, female employees are required to abide by the company's rules, which lowers the risk level for the company. Mathew et al. (2021) demonstrated that there is a positive relationship between the number of female employees on board and risk management. Gender diversity inboard also impacts corporate governance and is linked with lower risk levels (Green and Homroy 2018). Another variable that affects managing risks is related to audit committee independence. Several adit members indicated that they had increased their direct engagement with management, and they suggested altering the kind and degree of their inaccuracy to enhance the company's performance and deal with risks effectively (Khan and Ali 2018). In many situations, investors encourage bank management to finance high-risk projects based on the options theory. Because of the high amount of risk, this could lead to management taking the chance of making money from underperforming investment projects that don't yield the high returns that were anticipated (Kyere and Ausloos 2021). Through risk analysis and risk management errors, Audit Committee independence is anticipated to have an impact on management decisions (Maher and Aquanno 2022). The risk-taking of banks with high audit committee independence efficiency is anticipated to be correlated with bank performance in banks with poor audit committee independence efficiency. The final independent variable is CEO turnover, where CEO leaves or resigns from the firm and another person takes their place and duties (Saeed and Saeed 2018).

3 Research Hypotheses

Depending on the above arguments, the following hypotheses were formulated: The first main hypothesis: There is a negative and significant relationship between the characteristics of the board of directors and systemic risks in the Palestinian stock market.

H1: There is a negative and significant relationship between the number of boards (NB) and Systematic Risk in the Palestinian Stock Market (PEX).
H2: Independence Board (IB) and Systematic Risk in the (PEX) have a negative and significant relationship.

H3: There is a negative and significant relationship between several meetings (NOM) and Systematic Risk in the (PEX).
H4: There is a negative and significant relationship between Director's independence (DI) and Systematic Risk in the (PEX).

Second Main hypothesis: There is a negative and significant relationship between Board characteristics and unsystematic Risk in the (PEX).

H1: There is a negative and significant relationship between the (NOB) and Unsystematic Risk in the (PEX).
H2: Independence Board (IB) and Unsystematic Risk in the (PEX) have a negative and significant relationship.
H3: There is a negative and significant relationship between (NOM) and Unsystematic Risk in the (PEX).
H4: There is a negative and significant relationship between (DI) and Unsystematic Risk in the (PEX).

3.1 Data and Methodology

3.1.1 Data

This paper aims to test whether corporate governance mechanisms (CGM) (Board characteristics) affect the Risk management (RM) of Palestinian firms listed in (PEX). Relevant Data to Board characteristics were taken from the annual reports of firms listed on the (PEX), during 2016–2021. Every listed firm is bound to organize its financial statements by the company's laws in Palestine Territories. Relevant data from (PEX) were taken according to calculate Systematic and Unsystematic Risk the researchers collected data from (PEX) about monthly Closing prices. There are 48 companies listed in (PEX), we element 4 companies because data is incomplete, consisting of 264 observations for 44 firms over a period of six years. Firms included in the sample belong to five sectors such as industrial, investment, banks, services and insurance.

3.1.2 Variables

In this study, the research objectives and variables (dependent and independent) used in this study and their definitions were adopted from the literature. Notably, market-based risk measures such as systematic risk computed by (Beta), and non-systematic risk computed by (Std. Dev.) were used as dependent variables. The main independent variables (CGM) are board characteristics (NOB), (IB), (NOM), and (DI). Furthermore, we use two control variables, leverage (LEV) and firm SIZE are also included in the estimation model to control for company-specific characteristics that may affect systemic and unsystematic risk.

The definitions of these variables are listed in the methodology of Table 1. This examination is to consider the effect of the components of board characteristics on systemic and systemic risk: Board characteristic information was collected from annual reports of Palestinian organizations registered in PEX covering the period from 2016 to 2021, and researchers used the information board for a period of six years in an average

period as board characteristic information yields more enlightening information, greater uncertainty, less linear relationship between factors, more levels of opportunity and more productivity, board characteristic information is better prepared to identify and identify unperceived influences in an area pure transpiration or time-series information that is not falsified again (Jager 2008).

The free factors in this investigation are the distinctive tools of the board that were identified with the Palestinian organizations registered in the Palestine Exchange. They can be predicted with previous checks, and we use some factors as shown in Table 1. The table shows the factors used and their estimates. It also hints at the concentrations at which these estimates are used.

3.1.3 Limitation

The data was collected from annual reports concentrating on the Board characteristic of Systematic and Unsystematic Risk for 44 firms listed in PEX from 2016 to 2021.

4 Methodology

This analysis aims to investigate how Board distinctive elements affect Systematic and Unsystematic Risk. The analysts used board information for six years because it provides more illuminating information, greater inconstancy, less collinearity among the factors, more levels of opportunity, and higher productivity. Board characteristic information was gathered from the annual reports of the Palestinian organizations recorded in the PEX covering the period from 2016 to 2021. Additionally, board characteristic data is easier to recognize and measure. Unadulterated cross-area or unadulterated time-series data do not reveal impacts that cannot be felt (Jager 2008). The Board identifying elements associated with the Palestinian groups included in the PEX serve as the investigation's free variables. We use a few variables that are shown in Table 1 and are predictable based on past tests. The factors used and their estimates are listed in the table. Additionally, it makes references to the concentrations where these estimations are applied.

The variable adopted in this investigation is systemic and non-systemic risks. In general, systemic and non-systemic risks can be estimated by calculating them in the beta of systemic risk and the standard deviation of the firm. Since no direct quantitative measure of these traits can be traced, and various tests are followed by Kyere and Ausloos (2021), the supply is estimated as market risk as the sensitivity to change in a stock caused by a change in the market, and the unsystematic risk of deviation of values from its mean. We recommend that the risks be linked to the characteristics of the board of directors and practice how to reduce them to the lowest possible level. Since the risk is obtained from the nature of the market and the company that was calculated from the closing prices of companies listed on the Palestine Exchange, the risk is estimated in the market and for the stock by calculating it from the data collected every month and computed for each year. This is consistent (Abuamsha 2021). In light of this view, the higher the degree of the independence of the board, the lower the risks, both systemic and informal, and the results presented in it are assumed, accordingly, the higher the independence of the board, the lower the risks in the business sectors presented by the organization (Shumali and Abuamsha 2023).

Table 1. Variables

Dependent variable	Measuring method	reference
Systematic	Measurement by Beta = $\frac{\rho a,m \sigma A}{\sigma m}$ Pa,m: Covariance between stock returns and market portfolio returns σA: Standard Deviation on stocks σM: Standard Deviation on Portfolio	Kamal Abu Amsha, (2017)
Unsystematic	σA: Standard Deviation on stocks	Kamal Abu Amsha, (2017)
Independent variable		
Number of Board	The number of board members	Aslam, al. et. (2021) Altaf, al. et. (2021)
Independence Board	It is measured by the percentage of members who are outside the executive management	Khan, S al. et. (2019) Koerniadi, H., al. et. (2014)
number of meetings	The number of board meetings	Kyere, M. (2021) Shumali, & Abuamsha. (2023).
Director's independence	It is measured by giving a dummy variable with a value of (1) if the manager combines the positions of CEO and Chairman of the Board of Directors, and a value of (0) otherwise.	Abuamsha, M. K. (2021). Kyere, M. (2021) Shumali, & Abuamsha. (2023).
Control Variable		
Size	Calculating the natural logarithm of total assets	Shumali, & Abuamsha. (2023) Abuamsha, M. K. (2021).
Leverage	It is measured as total liabilities divided by total assets	Khan, S al. et. (2019)

4.1 Research Model

Literature Consistent (Kamal Abu Amsha (2017), Shumali and Abuamsha (2023), Abuamsha (2021)), we developed the following model to examine the effect of Board characteristics on Risk.

$$\text{Systematic Risk} = \alpha + \beta 1\ \text{NOB} + \beta 2\ \text{IB} + \beta 3\ \text{NOM} + \beta 4\ \text{DI} + \beta 5\ \text{LEV} + \beta 6\ \text{SZ} + \varepsilon$$

$$\text{Unsystematic Risk} = \alpha + \beta 1\ \text{NOB} + \beta 2\ \text{IB} + \beta 3\ \text{NOM} + \beta 4\ \text{DI} + \beta 5\ \text{LEV} + \beta 6\ \text{SZ} + \varepsilon$$

The information obtained must be investigated and disclosed to be of value to the achievement of exploration objectives and to answer their inquiries. In the analysis, the researchers used charm measurements to depict key features and summarize a particular arrangement of information as follows. First, of all, researchers present mean, standard deviations, least value, largest value, skew, kurtosis and F-test, B-P LM test (X2), Hausman test (X2), Breusch-Pagan/Cook Weisberg test (X2), Wooldridge test,

For each model of the investigation. Second, the Pearson correlation matrix is used to check whether there is a linear multi-linear problem between the independent factors and the force measure and the address of the connection between the free and wing factors. Finally, due to the non-stationary framed information, generalized random regression was used to test the screening predictions.

5 Applying Study

The study used a random-effects panel data regression model to examine whether corporate governance mechanisms (CGMs) act as SV drivers are corporates listed in the Palestine Stock Exchange distributed over five sectors. The preference for using the random-effects model over the pooled ordinary least squares and the fixed-effects models researchers was a result of the F-test and B-P LM estimates for all panel data regression models. The study used a random-effects panel data regression model to examine whether CGMs act as SV drivers are corporates listed in the Palestine Stock Exchange distributed over five sectors. The preference for using the random-effects model over the pooled ordinary least squares and the fixed-effects models researchers was a result of the F-test and B-P LM estimates for all panel data regression models. The estimates of the Hausman specification test for all panel data regression models were not significant as shown in Table 2. The table also shows that the estimates of the BreuschPagan/Cook-Weisberg test for the panel data models were not significant, indicating that elastic covariance is not likely to be a problem in all models. For the Wooldridge test for models in Table 2, the values are large, which indicates that the models are affected by autocorrelation in models 1 and 2.

Table 2. Estimations for tests of the appropriate model selection

Types of Tests	Model 1 (Dep. Var: EVA-Ln)	Model 2 (Dep. Var: EVA-Ln)
F-test	6.43***	2.76***
B-P LM test (X2)	78.26***	55.01***
Hausman test (X2)	9.76	18.10
Breusch-Pagan/Cook Weisberg test (X2)	0.025	2.84
Wooldridge test	0.979	2.41

Notes: (i) ***, **, and * indicate the p-value is statistically significant at 1%, 5%, and 10%, respectively.

(ii) F-test refers to the F-test in a fixed-effects model.

(iii) The B-P LM test (X 2) refers to Breusch and Pagan's Lagrange Multiplier test.

(iv) The Hausman test (X 2) refers to the Hausman specification test.

Table 3. Summary of descriptive statistics for variables

Variables	No. of Obs.	Mean	Min	Max	Std. Dev.
Systematic risk (Beta)	264	0.5757932	0	1.78	0.3818835
Unsystematic risk (Std. Dev.)	264	0.1120506	0.026	0.3469142	0.0808487
Number of Board	264	8.844444	5	15	2.195323
Independence Board	264	0.2382307	0.05	0.6	0.1441085
number of meetings	264	6.208889	2	12	1.624563
Director's independence	264	0.373333333	1	0	0.484633099
Size	264	6.661648	3.8	8.48	0.9174641
Leverage	264	0.1435622	0	1.239175	0.1796287

Table 3 summarizes the descriptive statistics. First, dependent variables: Systematic risk (Beta) averaged 0.576 and standard deviation 0.382 Unsystematic risks (Std. Dev.) averaged 0.11 per cent, with standard deviations of 0.082, respectively. Second, Board Characteristic: The average board size was 8.84 members, independent directors were 0.238 per cent of boards and the average number of meetings was 6.21. The Director's independence averaged 0.373.

Table 4. Pearson correlation matrix

Variables	Systematic risk (Beta)	Unsystematic risk (Std. Dev.)	Number of Board	Independence Board	number of meetings	Director's independence	Size	Leverage
Systematic risk (Beta)	1							
Unsystematic risk (Std. Dev.)	0.380***	1						
Number of Board	0.176*	0.371***	1					
Independence Board	0.120	0.055	-0.012	1				
number of meetings	-0.021	-0.121	0.182**	-0.209***	1			
Director's independence	0.024	0.022	0.261***	0.375***	-0.073	1		
Size	0.013	-0.129	0.10	-0.330***	0.201**	-0.291***	1	
Leverage	0.343***	0.181**	0.302***	0.102	0.332***	0.091	-0.149*	1
VIF			1.89	2.21	1.72	1.41	3.24	2.89
TOL			0.521	0.489	0.599	0.810	0.499	0.399

Table 4 shows that Director's independence and Size have a weak positive correlation with systemic risks and several meetings have a weak and negative correlation with systemic risks, as Table 4 shows that Independence Board and Director's independence have a weak and positive correlation with unsystematic risks. The table also shows the correlation coefficients (positive/negative) across the variables less than 0.64 in the matrix,

indicating that there is no severe linear problem. Table 4 also shows that the variance inflation factor (VIF) and the statistics for tolerance (TOL) have the highest values of 3.24 and 0.912, respectively, confirming that the data set is devoid of multicollinearity (Table 5).

Table 5. Random-effects regression estimations: CGMs as the drivers of SV

	Model 1 Dependent variable: Systematic risk	Model 2 Dependent variable: unSystematic risk
Chi^2	50.5	175.1
Prob > Chi^2	0.0001	0.0000
R^2 (within/between/overall)	0.658	0.677
No. of observations	264	264
Number of Board	0.021 (0.01)	-0.008 (0.000)
Independence Board	0.1831 (0.0424)	0.0373 (0.0226)
number of meetings	0.0995 (0.0325)	0.059 (0.0013)
Director's independence	-0.0218 (0.0035)	-0.0018 (0.0003)
Size	0.6042 (0.1517)	0.0056 (0.0162)
Leverage	-0.0065 (0.0089)	-0.0002 (0.0011)

It is clear from Table 6 that it has a statistically significant relationship with Systematic risk, and we reject the hypothesis that there is no effect of governance mechanisms (characteristics of the board of directors) on systemic risks. This result indicates that the number of boards as a corporate governance mechanism contributes to reducing systemic and non-systematic risks. Similar to Swami (2011) and Matari et al. (2012), Models 1 and 2, however, reveal consistent results with the results for systematic risk and non-systematic risk in that there is a statistically significant positive effect of the Number of Board on regular risk and nonsystematic risk at $p < 0.01$ and $p < 0.000$, respectively, so We reject the hypothesis that there is no effect. The results also indicate that the Independence Board acts as a driving force in the impact of reducing systemic and irregular risk in the market and the company, as measured by beta and standard deviation. Again, a statistically significant effect of several meetings on regular risk and disorganised risk was reported in Models 1 and 2. Therefore, these results reject the hypothesis of no effect. The results also indicate that there was a statistically significant negative Director's independence effect on systemic and non-systemic risks at $p < 0.0035$ and $p < 0.0003$, rejecting the hypothesis that there was no effect. This result indicates that the independence of directors is a governance mechanism that increases the systemic and informal risks if the directors are not independent. The study reveals that Size is not statistically significantly associated with systemic and non-systemic risk,

as reported in Model 1 and Model 2. Thus, this result accepts the assumption that size has no effect on systemic and informal risks, which contradicts the study of……. This result indicates that the size of companies as a controlling variable is not one of the mechanisms of governance. Models 1 and 2 show evidence of Leverage's statistically significant negative effect on regular and non-systemic risk at $p < .0089$ and $p < 0.0011$, respectively. Thus, these results also reject the hypothesis that debt does not affect risk, as the researchers explain that the higher the financial leverage, the higher the risk.

Table 6. Random-effects regression estimations: CGMs as the drivers of SV after alternative measurement of companies' size

	Model 1 Dependent variable: Systematic risk	**Model 2 Dependent variable: unSystematic risk**
Chi^2	60.15	138.69
Prob > Chi^2	0.0002	0.0000
R^2 (within/between/overall)	0.72	0.76
No. of observations	264	264
Number of Board	0.032 (0.001)	0.042 (0.010)
Independence Board	0.542 (0.0021)	0.0373 (0.0013)
number of meetings	0.4521 (0.0021)	0.059 (0.0031)
Director's independence	-0.532 (0.0001)	-0.965 (0.0002)
Size	0.7215 (0.0105)	0.0056 (0.010)
Leverage	-0.0102 (0.001)	-0.0002 (0.0095)

Sensitivity and Durability Check

The sensitivity of the main results to the proxy measure of the firm's size variable—initially triggered by the natural logarithm of total assets (Size-Ln) in the sample during a fiscal year—was validated, and all regressions restarted. The results shown in Table 6 are similar to the main results.

Table 7. FGLS regression estimations: CGMs as the drivers of SV

	Model 1 Dependent variable: Systematic risk	Model 2 Dependent variable: unSystematic risk
Chi^2	87.72	150.70
Prob > Chi^2	0.000	0.000
R^2 (within/between/overall)	264	264
No. of observations	0.752 (0.004)	0.21 (0.0009)
Number of Board	0.552 (0.0252)	0.298 (0.0012)
Independence Board	0.49 (0.0043)	0.15***(0.0003)
number of meetings	0.6231 (0.0011)	0.19 (0.0024)
Director's independence	0.165(0.001)	0.51 (0.0014)
Size	0.777 (0.0057)	0.246 (0.00185)
Leverage	- 0.112 (0.00568)	- 0.1651 (0.0059)

The original results were also confirmed using an alternative regression model, a feasible generalized least squares (FGLS) regression model at the heteroscedasticity point and AR(1) autocorrelation within the panels, to ensure their robustness. The results presented in Table 7 are consistent with the original. In general, the results are consistent with the main findings.

6 Discussion

It is clear from the results of the two models that were tested that governance mechanisms (characteristics of the board of directors) play a driver in risk management, resulting from the risks to which the company is exposed (unsystematic risks), and market risks (systematic risks). This study shows that only one mechanism of corporate governance, which is the presence of board meetings or the independence of directors, or the size of the board, or the independence of the director, acts as a real driver in managing risks and working to reduce them to the lowest possible level. The positive finding of manager independence, director independence, board size Management and several meetings help disseminate impartial accounting information promptly to shareholders, resulting in lower risk of agency costs and information asymmetries, and thus creating shareholder value. One reason may be that the board members have extensive experience in the outside business environment, which makes them able to bring in diverse knowledge and skills and create business contacts from different backgrounds. The result of the independent non-executive directors can be explained by the fact that

they were chosen from individuals who have no social or family ties to the group of controlling shareholders. Thus, it is possible that they played a vital role in the board of directors and made independent decisions.

7 Conclusion

The results show that governance mechanisms (characteristics of the board of directors) have a positive relationship with risk management, because of the independence of the board of directors, the independence of managers, the number of board meetings and the number of board members, who tend to apply more efficient and effective measures to enhance the company's management through disclosure, transparency and independence of several members The board of directors and managers, are working to reduce the levels of risk through good management of the company and its work in the market, which in turn will be reflected in the company's continuity and profitability. The other result is that the characteristics of the board of directors also have a positive relationship to raising the returns of stocks, and this is as mentioned earlier because of the better understanding and information that foreign investors have compared to local investors and because the Palestinian Stock Exchange is a relatively new market. Most of the traders in this market are less experienced than foreign investors. The final result is that the board of directors' characteristics positively impact risk management and work to reduce it by the company's management. According to the researchers, this is due to the development in the application of the concept of governance in Palestine over time, and this focuses on the decision-making process either in a group that has experience and competence in The concept of risk management. This reflects positively on investor returns.

Acknowledgement. We are indebted to Palatine Technical University Kadoorie, for their support in completing this paper.

References

Alam, A., Ali Shah, S.Z.: Corporate governance and its impact on firm risk. Int. J. Manag. Econ. Soc. Sci. **2**(2), 76–98 (2013)

Abuamsha, M.K.: The impact of corporate governance mechanism on financial performance in the Palestinian firms listed in the stock exchange. Acad. Account. Financ. Stud. J. **25**, 1–13 (2021)

Aslam, E., Haron, R., Ahmad, S.: A comparative analysis of the performance of Islamic and conventional banks: does corporate governance matter? Int. J. Bus. Excell. **24**(1), 53–67 (2021)

Altaf, K., Ayub, H., Shabbir, M.S., Usman, M.: Do operational risk and corporate governance affect the banking industry of Pakistan? Rev. Econ. Polit. Sci. **7**, 108–123 (2021)

Bebchuk, L., Cohen, A., Ferrell, A.: What matters in corporate governance? Rev. Financ. Stud. **22**, 783–827 (2009)

Claessens, S., Yurtoglu, B.B.: Corporate governance in emerging markets: a survey. Emerg. Mark. Rev. **15**, 1–33 (2013)

Elbahar, E.: Corporate governance, risk management, and bank performance in the GCC banking sector. University of Plymouth (2016)

Gericke, R.: Corporate Governance and Risk Management in Financial Institutions: An International Comparison between Brazil and Germany. Springer, Heidelberg (2018)
Corporate Governance: The financial crisis: key findings and main messages; organization for economic cooperation and development (OECD), Paris, France, vol. 19, pp. 19–32 (2009)
Green, C.P., Homroy, S.: Female directors, board committees and firm performance. Eur. Econ. Rev. **102**, 19–38 (2018)
Jenson, M.C., Meckling, W.H.: Theory of the firm: managerial behaviour, agency costs and ownership structure. J. Financ. Econ. **3**, 305–360 (1976)
Kamal Abu Amsha, M.: Evaluation and predictability of performance sector portfolios and Al-Quds index/evidence from Palestine exchange. Palestine Tech. Univ. Res. J. **5**(1), 16–34 (2017)
Khan, S.N., Ali, E.I.: The moderating effect of intellectual capital on the relationship between corporate governance and companies performance in Pakistan. J. Gov. Integrity **2**, 12–22 (2018)
Khan, S.N., Yaseen, M.N., Mustafa, F., Abbasi, S.: The interaction effect of financial leverage on relationship between board attributes and firm performance evidence of non-financial listed companies of Pakistan. J. Account. Financ. Emerg. Econ. **5**(1), 115–122 (2019)
Koerniadi, H., Krishnamurti, C., Tourani-Rad, A.: Corporate governance and risk-taking in New Zealand. Aust. J. Manag. **39**(2), 227–245 (2014)
Kyere, M., Ausloos, M.: Corporate governance and firms financial performance in the United Kingdom. Int. J. Financ. Econ. **26**(2), 1871–2188 (2021)
Ltifi, M., Hichri, A.: The effects of corporate governance on the customer's recommendations: a study of the banking sector at the time of COVID-19. J. Knowl. Manag. **26**, 165–191 (2021)
Mathew, S., Ibrahim, S., Archbold, S.: Corporate governance and firm risk. Corporate Gov.: Int. J. Bus. Soc. **18**(1), 52–67 (2018)
Maher, S., Aquanno, S.: The new finance capital: corporate governance, financial power, and the state. Crit. Sociol. **48**(1), 55–73 (2022)
Munawar, H.S., Mojtahedi, M., Hammad, A.W., Kouzani, A., Mahmud, M.P.: Disruptive technologies a solution for disaster risk management: a review. Sci. Total Environ. **806**, 151351 (2022)
McNulty, T., Florackis, C., Ormrod, P.: Corporate Governance and Risk: A Study of Board Structure and Process; ACCA Research Report; ACCA, vol. 129 (2012)
Nakpodia, F., Olan, F.: Corporate governance reform in Nigeria: upstream and downstream interventions. Corporate Gov. Int. J. Bus. Soc. (2022)
Polinkevych, O., Khovrak, I., Trynchuk, V., Klapkiv, Y., Volynets, I.: Business risk management in times of crises and pandemics. Montenegrin J. Econ. **17**(3), 99–110 (2021)
Saeed, M.B., Saeed, S.K.: Corporate governance and accounting conservatism: moderating role of audit quality and disclosure quality. Bus. Econ. Rev. **10**(2), 123–150 (2018)
Shumali, S.I., Abuamsha, M.K.: The impact of ownership concentration on stock performance in the Palestinian firms listed in the stock exchange. In: Alareeni, B., Hamdan, A. (eds.) ICBT 2021. LNCS, vol. 487, pp. 385–402. Springer, Cham (2023). https://doi.org/10.1007/978-3-031-08084-5_29
Tarraf, H., Majeske, K.: Impact of risk-taking on bank financial performance during 2008 financial crisis. J. Financ. Account. **13**, 1–18 (2013)
Quang Trinh, V.: Corporate Governance in Banking. In: Quang Trinh, V. (ed.) Fundamentals of Board Busyness and Corporate Governance. Contributions to Management Science, pp. 19–27. Springer, Cham (2022). https://doi.org/10.1007/978-3-030-89228-9_2