DO THE ATTRIBUTES OF A RISK MANAGEMENT COMMITTEE AFFECT COMPANY PERFORMANCE? A COMPARATIVE STUDY BEFORE AND AFTER THE COVID-19 PANDEMIC

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OPEN ACCESS

How to cite this paper: Alqatamin, R. M., Altawalbeh, M. A., & Shbeilat, M. K. (2024). Do the attributes of a risk management committee affect company performance? A comparative study before and after the COVID-19 pandemic [Special issue]. *Corporate & Business Strategy Review, 5*(1), 410–419.
https://doi.org/10.22495/cbsrv5i1siart14

ISSN Online: 2708-4965
ISSN Print: 2708-9924

Received: 31.08.2023
Accepted: 08.03.2024

JEL Classification: G32, L25, M10, M40
DOI: 10.22495/cbsrv5i1siart14

Abstract

This study focuses on the association between specific attributes of risk management committees (RMCs) and the performance of financial companies listed on the Amman Stock Exchange (ASE). The chosen period, from 2017 to 2022, allows for the examination of trends and changes over time (Callahan & Soileau, 2017). The results indicate that the size of the RMC, independence, and gender diversity within the committee are positively and significantly related to company performance. By contrast, the frequency of meetings and the experience of RMC members do not seem to have a significant impact on performance. The results have potential implications for both managers and boards of companies. By understanding the positive relationship between certain RMC characteristics and firm performance, decision-makers can make informed choices when structuring their RMC. This, in turn, would contribute to enhancing the overall corporate governance of the company, which is crucial for its success. We acknowledge that the association between RMC attributes and firm performance is not yet fully understood. Despite this ambiguity, our research contributes to prior studies by shedding light on the specific roles that various RMC characteristics play in driving firm performance, thereby deepening our understanding of the complex interactions between corporate governance mechanisms and company outcomes.

Keywords: COVID-19 Pandemic, Risk Management Committee, Financial Sectors, Amman Stock Exchange, Jordan

Authors' individual contribution: Conceptualization — R.M.A., M.A.A., and M.K.S.; Methodology — R.M.A. and M.A.A.; Formal Analysis — R.M.A., and M.K.S.; Investigation — R.M.A., M.A.A., and M.K.S.; Resources — R.M.A., M.A.A., and M.K.S.; Writing — Original Draft — M.A.A. and M.K.S.; Writing — Review & Editing — M.A.A. and M.K.S.; Visualization — R.M.A. and M.A.A.; Supervision — M.A.A. and M.K.S.; Project Administration — R.M.A., M.A.A., and M.K.S.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

The risk management committee (RMC) plays a significant role in assessing, monitoring, identifying, and mitigating risks that could impact a company's performance and objectives (Alduneibat, 2023). This type of committee is essential for maintaining the overall stability and sustainability of an organization (Callahan & Soileau, 2017). To build an efficient risk management strategy, a company's management must identify, evaluate, and apply an enterprise-wide strategy to manage the risks that collectively affect firm value and, consequently, to increase shareholder value (Callahan & Soileau, 2017). In recent years, risk management has changed from a limited approach to evaluating risk based on a silo perspective to an approach based on an all-encompassing holistic perspective (Abdel-Baki et al., 2011; Alduneibat, 2023; Gouiaa & Issa, 2022; Mashamba & Gani, 2023; Otman, 2021). A lack of coordination between distinct RMCs results in inefficiencies when each risk class is managed in a separate silo (Quon et al., 2012). Furthermore, according to agency theory, board size can influence RMC performance by moderating the RMC's relationship with the chief executive officer (CEO) and board. If the board is too small, the CEO may be able to influence the RMC more easily, which could lead to negative outcomes. Conversely, if the board is large enough, it can provide more independent oversight of the RMC, resulting in better risk management and better performance measures (Karim et al., 2022). Risk management and corporate governance are interconnected. The effectiveness of both components' roles is crucial for the stability and growth of a company's performance (Sobel & Reding, 2004).

The Great Recession has largely been attributed to the reputation of banks' risk-taking methods. Therefore, the development of frameworks such as Committee of Sponsoring Organizations of the Treadway Commission's Enterprise Risk Management (COSO's ERM) framework reflect the industry's recognition of the need for better risk management practices to ensure the stability and success of financial organizations (Gordon et al., 2009).

Financial service companies and nonfinancial organizations have different accounting requirements for asset valuation and reporting earnings. Gordon et al. (2009) focused on evaluating the effectiveness of RMCs in various companies. They searched for terms related to ERM in 10-K and 10-Q filings for the fiscal year 2005. Their approach aimed to address the criticism of only identifying companies with CEOs and resulted in a comprehensive evaluation of enterprise risk management (ERM) effectiveness. The three highly regulated businesses of utility (34.8%), financial trading (11.6%), and insurance (8.0%) accounted for more than half of the observations in their sample.

Different techniques for handling risk, such as political risk management, financial risk management, and insurance, have resulted from managerial discretion in detecting and responding to dangers. All of these methods have valid points, but their scope is constrained and dispersed. Several organizations have adopted comprehensive risk management strategies (Lai et al., 2011). One strategy that extends beyond the silo-based approach to risk is ERM. It is a comprehensive and integrated approach to managing risks across an entire organization (Gordon et al., 2009). It uses a comprehensive strategy to detect potential hazards and chooses appropriate risk appetite. Applying ERM may improve risk awareness within a company, which improves decision-making skills and ultimately maximizes business value (Razali & Tahir, 2011). This study examines and compares the influence of RMC attributes on the financial performance of financial institutions before and after the COVID-19 pandemic. Therefore, this study aims to answer the following question:

RQ: Do the attributes of a risk management committee affect company performance?

The findings indicate that specific attributes of an RMC and a company's performance are positively and significantly associated, including the size of the committee, its level of independence, and the diversity of gender within the committee. By contrast, the frequency of their meetings and the experience of RMC members do not seem to have a significant impact on performance. Thus, the current study contributes to prior studies by shedding light on the specific roles that various RMC characteristics play in driving firm performance, thereby deepening understanding of the complex interactions between corporate governance mechanisms and company outcomes.

The structure of this paper is as follows. Section 2 describes the theoretical framework and related literature, explaining how they were designed to test the argument proposed earlier. Section 3 outlines the fundamental argument and research design underpinning the present empirical study. Section 4 presents the main outcomes and discusses findings of the empirical study. Section 5 concludes the study with a discussion of the results and implications, offering some final remarks and insights based on the findings.

2. LITERATURE REVIEW

Previous studies have relied on a number of theories in their theoretical framework, the first being agency theory, which addresses agency-related concerns. These concerns originate from a principal–agent conflict of interest (Fama & Jensen, 1983). Agency theory predicts that management will seek to achieve its personal interests by adopting risky investment policies to obtain a high return; however, these policies may impinge on the rights of shareholders. In this context, the presence of an effective RMC will curb the tendency of management toward risky projects and help the board of directors mitigate potential opportunistic management behaviors (Rojas & Reardon, 2022). The second theory that previous studies have relied upon to explain the association between risk management and financial performance is stakeholder theory. Donaldson and Preston (1995) argued that this theory encompasses triple-bottom-line perspectives: descriptive, instrumental, and normative. The descriptive perspective identifies different types of stakeholders; it explains a firm's behavior and interactions with sound accountability and illustrates how management is accountable for the interests of the different stakeholders. The normative perspective specifies the manager's responsibilities in strategically steering the organization, providing an ethical underpinning to the theory (Donaldson & Preston, 1995). Tao and Hutchinson (2013) used 711 observations from Australian financial market and found a positive relationship between the formation of risk and remuneration committees and firm performance. Aebi et al. (2012) explored the association between risk governance mechanisms and bank performance during the 2007/2008 financial crisis. Using a buy-and-hold metric to measure bank performance, the authors investigated whether improved bank performance during the crisis had any association with the presence of a CEO on a bank's executive board, the reporting structure of the CEO, and the CEO reporting to the CEO versus directly to the board of directors. The results suggest that during the financial crisis, banks who are CEOs reported directly to the board of directors rather than to the CEO or other corporate entities experienced more favorable outcomes in terms of stock returns and ROE.

2.1. The size of RMC and its impact on company performance

Agency theory claims that increasing the size of an RMC will provide additional knowledge and expertise that will strengthen the risk management oversight process and ensure that investment decisions are made in accordance with strategic objectives to prevent financial distress. This may be accomplished by reducing adverse selection and moral hazard, both of which can affect performance (Yatim, 2010). This notion also depends on the theory of resource dependence, which states that a larger RMC implies more resources to handle problems and concerns (Karim et al., 2022; Wijethilake & Ekanayake, 2020). An RMC evaluates a firm's exposure to risk while considering the need to maximize profits, and it advises the board on the firm's risk exposure and future risk appetite (Sum & Khalik, 2020). Karim et al. (2022) claimed that an RMC should have a minimum of three members to work properly. However, Wang et al. (2013) stated that, in general, a larger number of directors may have negative impacts on performance due to inconsistency and challenges of coordination. Previous studies have yielded mixed results; some studies have found a positive relationship between the size of an RMC and financial performance (Malik et al., 2021), whereas others have found a negative relationship (Elamer & Benyazid, 2018), and some have found no effect of RMC size on financial performance. Using a sample of 17 Tunisian lending institutions, Zemzem and Kacem (2014) found that board size has a negative and significant effect on performance, suggesting that larger board sizes were associated with lower performance in these lending institutions during the specified time period. Furthermore, the presence of an RMC has a significant negative impact on performance. Using data from 21 Indian listed banks and 15 Chinese listed banks, Battaglia and Gallo (2015) investigated the relationship between boards of directors' involvement in risk management processes and financial performance during the 2007/2008 financial crisis. The results showed no significant relationship between RMC size and financial performance. By contrast, Malik et al. (2021) gathered a sample of 37 Malaysian financial firms from 2007 to 2011 to investigate how risk governance practices influence the association between several corporate governance tools and the financial performance of these firms. Their findings revealed a positive and significant impact of RMC size on financial performance. Given these contradictory empirical findings, our first hypothesis is formulated as follows:

H1: RMC size has a positive and significant impact on a firm's performance.

2.2. RMC independence and its impact on company performance

Stewardship theory assumes that independent members of an RMC a) may not provide effective monitoring over management's risk-taking decisions due to their poor knowledge of the company's operations, and b) will take unnecessary monitoring actions, which may impede management's response to urgent situations (Malik et al., 2021). By contrast, agency theory asserts that independent members of an RMC help protect shareholders' rights by monitoring managers' risk-taking actions and preventing opportunistic behaviors. Bensaid et al. (2021) empirically examined the influence of RMC characteristics on a firm's performance in a sample of 37 Malaysian financial firms from 2007 to 2011. The results revealed that independent members of an RMC positively influenced a firm's market value. Zemzem and Kacem (2014) examined the association between risk governance and financial performance and found that the proportion of independent members to the total number of RMC members has a positive impact on financial performance. Using data collected from 34 insurance firms between 2008 and 2013, Wu et al. (2016) examined the influence of RMC characteristics on a company's efficiency as well as the moderating influence of RMC prestige on the relationship between RMC attributes and a firm's efficiency. Their results indicate that the degree of independence of an RMC is positively associated with corporate efficiency. Based on the previous discussion, the second hypothesis is formulated as follows:

H2: RMC independence has a positive, significant influence on a firm's performance.

2.3. RMC effectiveness and company performance

Based on resource dependence theory, frequent meetings attract external resources to an organization and contribute to synchronizing managers' expertise and knowledge to ensure high-quality decisions that contribute to the effective use of those resources (Bensaid et al., 2021). In addition, agency theory asserts that holding periodic meetings at the appropriate frequency will enhance management's efficiency in using the available resources and reduce agency costs, which will reflect positively on performance. Frequent meetings are a suitable forum for RMC members to interact freely and discuss risk policies to improve a company's risk management; moreover, they enable board members to gain a deep understanding of the issues affecting the company (Ng et al., 2013). Few empirical studies have explored the relationship between RMC meetings and financial performance, and they have shown mixed results. Elamer and Benyazid (2018) reported a positive relationship between the frequency of RMC meetings and financial performance, while Aebi et al. (2012) and Ng et al. (2013) found a negative association between the two. In the present study, we posit that increasing the frequency of RMC meetings will provide an appropriate basis of information for making decisions that have a positive impact on financial performance. Accordingly, our thirt hypothesis is as follows:

H3: The frequency of RMC meetings has a positive, significant impact on a firm's performance.

2.4. RMC gender diversity and firm performance

Resource dependence theory considers gender diversity as one of the numerous tools that management may employ to promote access to vital resources, which should have a positive effect on corporate performance (Stiles, 2001). According to this theory, the function of the board of directors is to utilize its external networks of connections to attract scarce resources that the business requires to operate competitively and promote better performance (Daily et al., 2003). Agency theory claims that gender diversity may improve management monitoring functions since it enhances board independence, which is expected to improve performance. Carter et al. (2007) argue that companies with gender diversity on the board of directors are better able to break into new markets because they better reflect the demographics of their consumers and staff. In developed countries, numerous studies have addressed the influence of gender diversity on corporate performance. However, they have not yielded consistent findings (Gallego-Álvarez et al., 2010). In a leading study, Carter et al. (2003) investigated the correlation between gender diversity and company value for Fortune 1000 companies. The findings revealed a strong positive correlation exists between the percentage of female and minority board members and the financial performance of firms. Similarly, in the United States (US), Carter et al. (2007) found that firms' financial performance and value are positively related to gender diversity. Rose (2007) conducted a cross-sectional study of a sample of listed Danish enterprises over 1998–2001 and found no evidence of a significant correlation between gender diversity and company performance. In the same context, Marinova et al. (2016) investigated whether gender diversity has any impact on corporate performance. The sample consisted of 186 listed companies from Denmark and the Netherlands, and the findings found that gender diversity did not affect a company's performance. Other streams of research have reported a negative association between gender diversity and firms' performance. Adams and Ferreira (2009) collected data from 1,939 companies from different sectors in the US between 1996 and 2003. Their results revealed a negative correlation between the percentage of females on a board and the firm's performance. Moreover, the study found that boards with higher gender diversity consume more time and resources to oversee management. Based on the previous discussion, the fourth hypothesis is formulated as follows:

H4: Gender diversity on a risk management committee has a positive, significant impact on a firm's performance.

2.5. Qualifications of RMC members and firm performance

Based on signaling theory, the current study posits that a potential investor will feel more confident if the RMC consists of qualified members with relevant competence and experience, which will reflect positively on the value of the company. Dependency theory suggests that directors with greater expertise and experience may aid in restricting management's opportunistic earnings management (Kantudu & Samaila, 2015). Directors are better able to practice effective monitoring of a company's risks if they have accounting credentials and industry expertise (Shbeilat, 2023). This is because RMC members with accounting and financial backgrounds are better able to understand the process of risk management, which will be positively reflected in a firm's performance. Empirically, Al-Hadi et al. (2016) investigated whether the experience and qualifications of RMC members have any association with the level of market risk disclosure. The sample consisted of 677 observations covering 2007 to 2011. The results indicated that expert and qualified RMC members can enhance a company's value by mitigating problems and uncertainties. Based on the proceeding debate, our fifth hypothesis is as follows:

H5: The qualifications of RMC members have a positive, significant effect on a firm's performance.

3. RESEARCH METHODOLOGY

3.1. Sample and data collection

This study focuses on financial firms listed on the Amman Stock Exchange (ASE). Jordan has maintained a relatively stable political environment and strong socio-economic ties compared with some other countries in the region. In addition, it has worked on strengthening its financial sector by implementing reforms such as improving banking regulations, enhancing the regulatory framework for capital markets, and promoting financial inclusion (Alqatamin et al., 2017). These reforms have positioned Jordan as the most competitive and liberal country among Middle Eastern nations, largely due to its acceptance of more liberal economic strategies to enhance its economy. The modern financial sector in Jordan plays a vital role in attracting foreign investment (Tahat et al., 2018). As a part of the reforms, Jordan adopted the International Financial Reporting Standards (IFRS) in 2005, and their impact on economic development, foreign investments, and the quality of financial reports of Jordanian firms. The adoption of the IFRS is often seen as a way to align a country's financial reporting standards with international norms, which can attract foreign investments and improve the transparency and comparability of financial statements (Al-Htaybat, 2018). According to prior literature Antikarov (2012), financial firms exhibit distinct features in terms of financial leverage, investment prospects, and external governmental regulation. Financial service companies and nonfinancial organizations also have different accounting requirements for asset valuation and reporting earnings. The study covered the time range from 2017 to 2022; we chose this time range to be able to conduct a comparative analysis of the impact of RMC attributes on financial performance before and after the COVID-19 pandemic. We focused on four sub-sectors within the financial sector: the banking sector, which includes 15 banks; the insurance sector, which includes 20 companies; the real estate sector, which includes 32 firms; and diversified financial services, which includes 30 firms. Companies that were considered for inclusion must have been listed on the ASE throughout the entire study period. The annual reports of each company were examined for the period spanning from 2017 to the end of the study period in 2022. This review was conducted to ensure that the companies consistently adopted responsible RMCs. Eight companies were excluded from the sample because they did not disclose information about their adoption of RMCs. Our sample size was thus reduced to 89 companies (534 firm-year observations). Table 1 summarizes the final sample. The study variables were collected from the companies' annual reports available for the years 2017–2022. They are often released after the end of a company's financial year. In many cases, companies release their annual reports within the first quarter of the year following the end of their financial year. This timing allows investors and analysts to access and analyze the most recent financial information (Alqatamin et al., 2017). We employed the Securities Depository Center, the OSIRIS database, and the ASE to supplement information that might have been absent from the annual reports.

Table 1. Sample description

Explanation	*Number*	*Percentage*	*Pooled*
Primary sample			
Banking	15	17%	90
Insurance	20	22%	120
Real Estate	32	36%	192
Diversified financial services	30	34%	180
Excluded			
Firms with unavailable data	8	9%	48
Total	89	100%	534

3.2. Empirical model

We examined the relationship between RMC characteristics and a firm's performance by applying a similar model to the one used by (Callahan & Soileau, 2017). We used the net income before tax divided by total assets, expressed in Jordanian dinars, to measure company performance, and we employed the total number of RMC members as a proxy for RMC size. Using the ratio of independent members to the total number of members on an RMC as a proxy for RMC independence is a common practice in corporate governance analysis. The effectiveness of an RMC can be measured via several methods, including the number of RMC meetings held during a year. Gender diversity was calculated by dividing the number of female members on the RMC by the total number of members on the committee and then multiplying by 100 to express it as a percentage. The proportion of members with experience in finance or accounting can be a relevant factor in measuring the qualification of an RMC. The study controlled for several firm attributes that might affect company performance, including company size, leverage ratio, and company age. Table 2 lists the measurements and definitions of the study variables. The study employed the following empirical model:

$$COMPRE_{it} = \beta_0 + \beta_1 RMCSIZE_{it} + \beta_2\, RMCINDE_{it} + \beta_3\, RMCEFFE_{it} + \beta_4\, RMCGEND_{it} + \beta_5\, RMCQUAL_{it} + \beta_6\, COMSIZE_{it} + \beta_7\, COMLEVE_{it} + \beta_8\, COMAGE_{it} \quad (1)$$

where,

$COMPRE_{it}$ = net income before tax divided by total assets of firm *i* in year *t*;

$RMCSIZE_{it}$ = total number of RMC members of firm *i* in year *t*;

$RMCINDE_{it}$ = proportion of independent members to the total number of members on the RMC of firm *i* in year *t*;

$RMCEFFE_{it}$ = number of RMC meetings held during the year of firm *i* in year *t*;

$RMCGEND_{it}$ = percentage of female members on the RMC of firm *i* in year *t*;

$RMCQUAL_{it}$ = proportion of members with experience in finance or accounting;

$COMSIZE_{it}$ = size is measured by using the total assets of each company of firm *i* in year *t*;

$COMLEVE_{it}$ = total long-term debt divided by total assets of firm *i* in year *t*;

$COMAGE_{it}$ = using the difference between the years of the study period and the companies' dates of establishment of firm *i* in year *t*.

Table 2. Variables' definitions and measurements

Label	*Variable*	*Description*
COMPRE	Company performance	Measured as the net income before tax divided by total assets.
RMCSIZE	RMC size	Measured by using the total number of RMC members.
RMCINDE	RMC independency	Measured by using the proportion of independent members to total number of members on the RMC.
RMCEFFE	RMC effectiveness	Measured by using the Number of RMC meetings held during the year.
RMCGEND	Gender diversity	Measured by using percentage of female members on the RMC.
RMCQUAL	Qualifications of RMC	Measured by using the proportion of members with experience in finance or accounting.
COMSIZE	Company size	Measured by using the total assets of each company.
COMLEVE	Leverage ratio	Measured by total long-term debt divided by total assets.
COMAGE	Company age	Measured by using the difference between the years of the study period and companies' establishment date.

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics

Table 3 presents the statistical characteristics of the variables utilized in the study. Return on assets (ROA) ranged from -0.182% to 78.64%, indicating a wide spectrum of performance levels. However, the average ROA value was 63.72% suggesting that, on average, the companies had a relatively high ROA ratio. We considered the mean value of 63.72% as a benchmark for classifying high and low levels of ROA, with companies above this value categorized as having a high level of performance, and those below categorized as having a low level of performance. This approach aligns with previous research findings (Lückerath-Rovers, 2013). The mean (average) of the RMC committee size was 3.63 members, indicating that, on average, there were approximately three to five members on an RMC. The size of the RMCs followed the recommendation outlined in Jordanian corporate governance guidelines, namely that an RMC should comprise a minimum of three members. This size is likely chosen to ensure effective decision-making and to allow for a diverse range of perspectives during discussions and deliberations. Approximately 85.19% of RMC members were not involved in top management. This is a positive sign in terms of corporate governance mechanisms, as having independent members on an RMC helps to mitigate potential conflicts of interest and ensures that decisions related to risk management are made objectively and in the best interest of the company. The fact that a high percentage of RMC members were not involved in top management is seen as an enhancement to corporate governance tools. This enhancement in independence is important because it reinforces the integrity of the risk management process. Independent members are less likely to be influenced by internal pressures, and they can thus provide more unbiased assessments of a company's risks. We used the frequency of meetings to measure the efficiency of RMCs. The frequency of meetings in a fiscal year varied between seven and 17, with more meetings potentially indicating a more active and engaged committee. The study also focused on gender diversity within the RMC. The mean percentage of gender diversity on the committee was 12.00%, indicating that, on average, 12.00% of the committee members were of a different gender. The gender diversity percentages within the RMC ranged widely from 0% to 46%. This suggests that some RMCs had no gender diversity at all, while others had a significant representation of different genders. The study found that women seemed to have slightly higher participation rates on the RMCs. This implies that women were more likely than men to be part of the committee. The proportion of members with experience and backgrounds in finance and accounting ranged from 23.61% to 74.48%, with the average being 64.81%. This suggests that a significant portion of RMC members had accounting and finance experience. In relation to control variables, company sizes ranged from 78465715 to 2.97e+10, with a standard deviation of 1.74%. The mean value of the leverage ratio was 18.62%, with a range from 0% to 56.30%. The mean value of company age was 29.12%, with values ranging from 24 to 84 years.

Table 3. Descriptive analysis

Variables	*Obs.*	*Mean*	*Std. dev.*	*Min*	*Max*
COMPRE	534	3.6310	4.631189	-0.182	0.7864
RMCSIZE	534	4.034314	2.015653	3	5
RMCINDE	534	0.851902	0.631929	0.562	0.9881
RMCEFFE	534	9.476584	2.99468	7	17
RMCGEND	534	12.00206	0.155225	0	0.460
RMCQUAL	534	0.6481017	0.3052964	0.2361	0.7448
COMSIZE	534	1.99e + 09	1.7400	78465715	2.97e + 10
COMLEVE	534	0.18620	0.1584874	0	0.563
COMAGE	534	40.09804	5.088189	24	84

4.2. Multicollinearity

Multicollinearity arises when two or more explanatory variables in a regression model are highly correlated, which can cause issues with the stability and interpretability of the regression coefficients. The correlation coefficient matrices were used to assess multicollinearity among independent variables in a regression analysis (Alqatamin et al., 2017). Murtagh and Heck (2012) suggested that a correlation coefficient exceeding 80% between two independent variables could indicate a multicollinearity problem. However, based on our analysis, the highest correlation was 65.37% between the effectiveness of RMC and RMC size. Since this correlation is well below the 80% threshold, multicollinearity did not seem to affect the dataset used in the study, as Table 4 confirms.

Table 4. Correlation matrix

Variables	*RMCSIZE*	*RMCINDE*	*RMCEFFE*	*RMCGEND*	*RMCQUAL*	*COMSIZE*	*COMLEVE*	*COMAGE*
RMCSIZE	1.0000	-	-	-	-	-	-	-
RMCINDE	0.5312	1.0000	-	-	-	-	-	-
RMCEFFE	0,6537	0.6123	1.0000	-	-	-	-	-
RMCGEND	0.2231	0.4371	0.4178	1.0000	-	-	-	-
RMCQUAL	-0.3381	0.2639	-0.3954	0.2341	1.0000	-	-	-
COMSIZE	0.0765	-0.5492	-0.0242	0.1100	0.4189	1.0000	-	-
COMLEVE	0.5524	0.5391	0.0695	0.0803	-0.0233	-0.1115	1.0000	-
COMAGE	0.3276	0.06651	-0.2989	0.0060	-0.1132	-0.1765	-0.0302	1.0000

4.3. Regression analysis

The study used the panel regression random effect method, as reported in Table 5. This method enables researchers to obtain and analyze real data from published annual reports, rather than resorting to methodologies that give perceptions of the impact of RMC characteristics on companies' financial performance. The R^2 value of 84% indicates that approximately 84% of the variation in the dependent variable (company performance) can be explained by the independent variables (RMC characteristics). This suggests a relatively strong correlation between these variables and the dependent variable. The highly significant p-value at the level of 0.00 suggests that the statistical model used in the study is highly significant and has good explanatory power regarding the relationship between RMC characteristics and company performance. The results revealed a statistically significant and positive relationship between RMC size and company performance at the level of significance ($p < 0.03$). This indicates that as RMC size increases, company performance tends to increase as well. Our results are consistent with the dependence theory perspective, which suggests that larger RMCs are more effective than smaller RMCs because they possess more resources to address the challenges faced by the company. This aligns with previous research by Malik et al. (2021), who also found that larger RMC sizes were associated with enhanced company performance. Thus, the findings of the study support *H1*, which states that a significant and positive relationship exists between RMC size and company performance. Furthermore, the study found a statistically significant effect at the level of $p < 0.02$ between the independence of RMC members and company performance. This result supports the notion that an RMC with a higher number of independent directors has a positive impact on company performance. The results also confirm that such independence enhances monitoring capabilities by allowing the committee to resist managerial pressure. Furthermore, agency theory suggests that independent directors can play a crucial role in mitigating the conflict of interest between the principal and agent. Therefore, independent directors are considered to be a means of ensuring that managers act in the best interests of shareholders, thus effectively overseeing managers and leading to improved profitability and a decreased likelihood of opportunistic behaviour by managers. This aligns with studies (Malik et al., 2021; Umar et al., 2023) that drew similar conclusions regarding the positive relationship between RMC independence and company performance. Thus, our result supports *H2*, suggesting that RMC independence has a significant positive impact on a firm's performance. However, we found an "insignificant coefficient" (with a p-value less than 0.12) between the frequency of RMC meetings and firm performance. This suggests that no statistically significant relationship exists between the frequency of meetings and the performance of a company. This finding is consistent with a previous study by Aebi et al. (2012), which also concluded that there is no significant relationship between these two variables. Based on these results, we determined that *H3*, which proposed a connection between the frequency of RMC meetings and firm performance, should be rejected. This means that the study did not provide sufficient evidence to support the idea that more frequent RMC meetings lead to better company performance.

We found a statistically significant positive relationship between gender diversity within RMC and company performance. Specifically, the coefficient associated with RMC gender diversity had a p-value less than 0.03, indicating a significant result. This suggests that having more female members on an RMC is associated with higher company performance compared with committees with fewer or no female members.

The study's findings support *H4*, which posited the existence of a meaningful connection between company performance and gender diversity within RMCs. This finding is in line with previous research conducted by (Carter et al., 2007; Kallamu, 2015), who also reported a positive and significant correlation between gender diversity and performance. Conversely, the coefficient related to an RMC's educational experience did not show a significant effect on company performance. This means that the study's results did not provide evidence to support the idea that the experience of RMC members directly influences company performance. *H5*, related to RMC members' experiences and their impact on company performance, was hence rejected based on these findings.

Regarding the control variables, it is noted that a firm's performance is positively associated with company size, leverage ratio, and company age, implying that different sizes, ratios, and ages may have varying impacts on company performance.

Table 5. Regression results for panel sample companies

COMPRE	*Coef.*	*Coefficient*	*Z*	*P>|Z|*
RMCSIZE	+	0.0982	2.81	0.030*
RMCINDE	+	0.0741	2.18	0.021**
RMCEFFE	+	0.9191	0.681	0.120
RMCGEND	+	0.1834	0.965	0.031*
RMCQUAL	?	-1.854	-1.028	0.202
COMSIZE	?	0.1831	3.701	0.018***
COMLEVE	+	0.01746	-2.611	0.016***
COMAGE	+	0.00011	7.37	0.000***
R^2 value	84%			
p-value	0.000			

*Note: *** Correlation is significant at 1%; ** Correlation is significant at 5%; * Correlation is significant at 10%.*

4.4. Additional analysis

Examining the relationship between RMC characteristics and the performance of Jordanian financial companies before and after the COVID-19 pandemic could yield valuable insights into the dynamics of risk management and its impact on a firm's performance, making it an interesting research topic. This type of analysis could provide valuable insights into how changes in RMC characteristics may have impacted the financial performance of companies in Jordan, both before and after the pandemic. Our study investigated whether the relationship between RMC and company performance has been influenced by the COVID-19 pandemic. To achieve this aim, we split the sample into two groups based on the year: before and after the COVID-19 pandemic, with 2020 serving as the cut-off point. Thus, panel regression with random effects is a statistical method used to analyze panel data. Tables 6a and 6b display the estimation results: Table 6a refers to the period before, and Table 6b refers to the period after the pandemic. As observed from these panels, the R-squared values of 58.6% and 52.3% indicate that the study model explains 58.6% and 52.3% of the variance in the dependent variable for the respective periods. However, these R-squared values are relatively lower compared to the results from the primary analysis (Table 5). Table 6a shows that the coefficient of RMC size is positively and significantly ($p < 0.042$) related to company performance. These findings suggest that companies with larger RMCs are more likely to achieve high performance than companies with smaller RMCs. This result aligns with previous research (Malik et al., 2021), and the results reported in Table 5 further support this conclusion. Notably, a significant relationship exists between RMC size and company performance. Furthermore, the results from Table 6b indicate that there is a significant relationship between the size of the RMC and company performance. In other words, the COVID-19 pandemic does not appear to have had an impact on the relationship between RMC size and company performance. Furthermore, the findings in Tables 6a and 6b indicate that RMC independence is positively and significantly associated with company performance at the levels of $p < 0.023$ and $p < 0.034$, respectively, and they are hence consistent with our result reported in Table 5. In addition, Table 6a shows an insignificant relationship between the frequency of RMC meetings and company performance, whereas Table 6b shows a positive relationship between the two variables after the COVID-19 pandemic, suggesting that the pandemic has had an impact on this relationship. This finding is inconsistent with previous results in Table 5. However, Tables 6a and 6b indicate that RMC gender has a positive and significant relationship ($p < 0.028$ and $p < 0.036$, respectively) with company performance, which confirms our result reported in Table 5. The findings support the hypothesis that gender diversity in an RMC enhances company performance. Therefore, aspects of RMC that include gender diversity had and continue to have greater power in improving company performance during and after the COVID-19 pandemic period, respectively. Tables 6a and 6b show a positive and statistically significant relationship between RMC expertise and company performance. This positive relationship suggests that when RMCs have members with financial expertise, companies are more likely to achieve higher performance. The results indicate that expert and qualified RMC members can enhance a company's value by mitigating problems and uncertainties. However, these results are inconsistent with those reported earlier in Table 5. Thus, we found evidence to support the idea that COVID-19 has had a notable effect on how RMCs are related to company performance.

Table 6a. Association between RMC characteristics and company performance before COVID-19

COMPRE	*Coef.*	*Coefficient*	*Z*	*P>|Z|*
RMCSIZE	+	0.1782	1.71	0.042*
RMCINDE	+	0.8441	2.08	0.023**
RMCEFFE	+	0.5291	1.781	0.010
RMCGEND	+	0.1834	0.965	0.028**
RMCQUAL	?	-1.004	-1.928	0.049*
COMSIZE	?	2.1831	0.701	0.518
COMLEVE	+	1.0174	-0.611	0.516
COMAGE	-	0.00011	7.37	0.01**
R^2 value	58.6%			
p-value	0.000			

Table 6b. Association between RMC characteristics and company performance after COVID-19

COMPRE	*Coef.*	*Coefficient*	*Z*	*P>|Z|*
RMCSIZE	+	0.1780	1.81	0.032*
RMCINDE	+	0.8731	2.02	0.034*
RMCEFFE	+	0.5091	2.781	0.020**
RMCGEND	+	0.1434	1.965	0.036*
RMCQUAL	?	-1.014	-1.628	0.043*
COMSIZE	?	2.8761	0.591	0.759
COMLEVE	+	1. 174	-0.621	0.416
COMAGE	-	0.0011	6.37	0.02**
R^2 value	52.3%			
p-value	0.000			

5. CONCLUSION

We examined the relationship between specific RMC characteristics and the performance of Jordanian financial companies between 2017 and 2022. The motivation for this study stemmed from existing literature suggesting that effective RMCs can contribute to better company outcomes. We specifically investigated how RMC size, independence, frequency of meetings, gender diversity, experience, and certain company characteristics are associated with company performance. We found that the larger the RMC, the more positive the impact on company performance. Furthermore, an independent RMC is associated with improved company results, and gender diversity in an RMC also contributes positively to company performance. However, we found no significant evidence to support a relationship between RMC experience or the frequency of meetings and company performance. Overall, this study reinforces the idea that certain characteristics of RMCs, such as their size, independence, and gender diversity, are associated with positive company performance. Lastly, we identified a positive and significant relationship between three variables (RMC size, leverage ratio, and dividends ratio) and company performance. The results could be valuable for regulatory bodies and authorities outside of the study's focus area. The study likely investigated ways to enhance the effectiveness of RMCs. The findings relate to the financial sector. While these findings offer insights into the impact of RMCs on corporate governance and owner confidence, they might not necessarily apply to entities in the nonfinancial sector. Given the increasing significance of the nonfinancial sector in developing economies such as Jordan's, future studies could focus on understanding the role of RMCs in the development of the nonfinancial sector, especially in markets undergoing liberalization. We acknowledge that the results may not be directly applicable to other countries or even other Middle Eastern countries due to the distinct characteristics of Jordan's market liberalization process. Future research could also investigate whether RMC characteristics influence other aspects such as disclosures, earnings management practices, and company value. This broader perspective might provide comprehensive insights into the relationships at play. Finally, Jordanian companies are predominantly family-owned. Therefore, exploring the connection between RMC characteristics and company performance, specifically in the context of family-owned versus nonfamily-owned companies, is a potential avenue for research.

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