

THE EFFECT OF RISK MANAGEMENT COMMITTEE CHARACTERISTICS ON A COMPANY'S PERFORMANCE IN AN EMERGING COUNTRY

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Abstract

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This paper aimed at providing evidence regarding risk management committee (RMC) characteristics' effect on a company's performance in an emerging country, specifically Jordan. This is done using a sample of 190 non-financial companies (NFCs) that were listed on the Amman Stock Exchange (ASE) between 2018 and 2021. This study used descriptive statistics, regression, and correlation models to perform the data analysis and test hypotheses. Precisely, this study examines the association between business performance presented by return on assets (ROA) and the following RMC traits: size, competence, independence, non-executive, and frequency of meetings, controlled by firm size, and leverage (Shatnawi et al., 2020; Jia & Bradbury, 2021). Data required to test hypotheses are available on the website of the Securities Depository Center (SDC). The findings of this study show that all the above traits are positively associated with ROA except for the frequency of meetings which has a negative but not significant relationship. Furthermore, the regression findings indicated a negative relationship between leverage and performance. No evidence of any association between RMC and the company size. To the best of the author's knowledge, this study is one of the first studies that present and sheds more light on the concept of RMC in Jordan. This study provides important policy implications and recommendations for regulators authorities, boards, and policymakers in Jordan regarding these attributes to design a risk governance structure of the NFCs.

Keywords: Company, Performance, RMC, Jordan, Risk Committee

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1. INTRODUCTION

Recently, due to globalization, an increasing complication of risks, in response to global financial crises, and international regulatory requirements, a risk management committee (RMC) is becoming essential and recognized as a vital corporate governance tool for controlling a company's risk

(Lechner & Gatzert, 2018; Bohnert et al., 2017; Hoyt & Liebenberg, 2015; Mensah & Gottwald, 2015). Furthermore, Aldhamari et al. (2020) argued that the heavy duty of the audit committee and the absence of time and knowledge necessary to provide real risk management supervision have highlighted the need to find a distinct RMC. Li (2018) mentioned that risk management is used as a set of

harmonized activities that aims to guide and control the companies concerning the consequence of ambiguity in the purposes of the companies. Moreover, Jia and Bradbury (2020) and The ASX Corporate Governance Council (ASX CGC, 2014) considered RMCs an essential governance tool that monitors management's performance by exploring the firm's potential risk and then recommending a risk strategy.

The responsibilities and the primary roles of the RMCs are: first, observe and assess different types of risks that the company might be exposed to and which have been identified, second, set and review the company's risk management policy periodically and submits its recommendations to the board of directors (Jia & Bradbury, 2021; Farrell & Gallagher, 2015). It has been discussed that, in general, RMC assists companies to deal with a wide array of risks in an incorporated, business-wide approach and helps improve the company's performance (Hoyt & Liebenberg, 2015). Furthermore, RMC, or what is also called "enterprise risk management" (ERM), is considered a universal tactic and strategic tool used by management to encounter and respond to any potential firm's risk (e.g., credit, liquidity, information, and principle risk) (Aldhamari et al., 2020). These functions of RMC are based on booth agency, signaling, and stewardship theory, as it reduces agency costs and controls managers' opportunistic behaviors regarding risk-taking and risk management. Moreover, by more disclosure, companies that adopt RMC send signals to the investors and shareholders that its a commitment to risk management practices (Brogi & Lagasio, 2022; Jia & Bradbury, 2021; Hoyt & Liebenberg, 2015). Indeed, RMC may increase risk awareness which leads to improving the decision-making process which will be reflected in the performance of the company (Latif et al., 2022; Braumann, 2018).

In Jordan, a developing country, the concept of RMC is relatively new (Shatnawi et al., 2020). Governance guidelines that were issued in 2017 as part of the Securities Law No. 18 of 2017 stated that the board of directors of all firms listed on the Amman Stock Exchange (ASE) should establish and comply with the following permanent committees: The Audit Committee, the Nomination, Remuneration Committee, the Governance Committee, and the Risk Management Committee (ASE, 2017). Further, the instruction provides guidelines on the formation of RMC mainly about size (at least three members), independence (one of the three members is an independent member), frequency of meetings (not less than two per year), executive member, or not. These characteristics are shown on the annual reports of all listed companies on the ASE. In addition, the Ministry of Finance, Economic Planning and Development (2021) issued the risk management guide that summarizes the most important guidelines for designing and implementing a risk management framework, this guide is useful for public and private entities to manage their risks and achieve their objectives.

Many previous studies discussed some of the characteristics of RMC and linked it with company performance measured by Tobin's Q, return on assets (ROA), and return on equity (ROE) (Li, 2018; Shatnawi et al., 2020). On the other hand, due to the late adaption of RMC, a small number of researchers investigated the effect of

the characteristics of risk committees on the performance of companies in emerging countries and even very few in Jordan. The fact that most of the studies focus on RMC adoption and measurements in general (Shatnawi et al., 2020; Al Khattab & Hood, 2015), consequently, the purpose of the current study is to empirically examine whether Jordanian firm performance is affected positively or negatively by the RMC characteristics. This study is motivated by the previous studies, the spirit of agency theory, stewardship theory, and key corporate governance guidelines; considers the impact of RMC characteristics on the performance of non-financial companies (NFCs) listed on ASE (Wang et al., 2019; Elamer & Benyazid, 2018; Aebi et al., 2012; Ames et al., 2018; Saeed et al., 2016).

The final population of the current study comprises 190 non-financial companies listed in ASE for the period 2018-2021. This period is selected since it comes after the guidelines in 2017 were issued and implemented, which indicates the important role of adapting RMC in Jordan. The data about the RMC were gathered from the firm's annual governance reports available on the electronic site for these companies and the ASE site.

The current study is likely to bridge the gap and contribute to the literature pool on the debate about RMC effectiveness and company performance, except for Shatnawi et al. (2020) and Al Khattab and Hood (2015), who used the questionnaire to make comparisons between RMC practices in Jordan and Malaysia, has been conducted in Jordan as an emerging market. Therefore, this study, for the first time, aims to add to the minuscule knowledge of RMC characteristics (e.g., number of independent directors, non-executive directors, frequency of meetings, and financial experts on RMC controlled by the size of the company (total assets), leverage and firms' performance) measured by ROA.

The fundamental question of the current study focuses on the influence of RMC attributes on a company's financial performance. The research question can be as follows:

RQ: What is the effect of the RMC's characteristics on the performance of non-financial companies listed in ASE for the years 2018-2021?

The remainder of the current paper has the following structure. Section 2 analyses the previous kinds of literature corresponding to finding on RMC implementation, practice, and development, and discussed the characteristics of RMC and the main hypotheses. Section 3 describes the study methodology and research design, and sample selection, whereas Section 4 illustrated the model and variables used and the main results. Finally, Section 5 concludes the study and provides recommendations.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

According to the spirit of agency theory, risk-taking behavior is affected by conflicts between managers and shareholders. The principal-agent theory supposes that managers behave in their own best interest rather than those of shareholders (Jensen & Meckling, 1976). Therefore, managers pursue different organization objectives and display different risk-taking attitudes (risk-averse) than

firms' owners (risk-neutral or diversified). In this case, managers may deviate from protecting shareholders' interests (Al Matari & Mgamal, 2019) and may reject profitable risky investments (Tao & Hutchinson, 2013). This behavior creates a conflict of interest that causes agency problems and affects company performance (Alkelani et al., 2020; Jia, 2017). Risk is inherent in most business activities, and can be hard to identify and quantify, this risk may threaten the firm's success, which, in turn, decreases value (Al Khattab & Hood, 2015). For that reason, RMC is introduced to monitor the directors (Malik et al., 2020). On another hand, Keay (2017) suggested that stewardship theory, opposite to agency theory, deals with issues similar to professionalism, trust of directors, loyalty, faithfulness, and willingness that make them concerned for the interests of their companies and others. For that, we do not need the RMC at all to monitor the directors.

The Committee of Sponsoring Organizations of the Treadway Commission (COSO, 2009) defined ERM as a process that recognizes potential firm risk events, management of firm risks within risk appetite and tolerance levels, and assures the achievement of organizational objectives. Moreover, according to agency theory, RMCs that have a higher percentage of outside members may enhance firm performance by mitigating conflicting interests and monitoring the management (Malik et al., 2020; Ahmed Sheikh et al., 2013).

Elamer and Benyazid (2018) argued that RMC may decrease operating risk and ultimately improve firm performance by guaranteeing those top managers not only avoid profitable projects but risky ones. Thus, financial performance is likely to improve when there is an effective RMC, which is used as an effective corporate governance tool to minimize information asymmetry, as well as information risks, promote corporate culture strong risk assessment, approve corporate risk strategy, risk appetite, and monitor the organization's risk reduction plans (Malik et al., 2020; Lechner & Gatzert, 2018; Aldhamari et al., 2020; Kakanda et al., 2018; Jia, 2017). The primary objective of the RMC is not to decrease the risks facing the company, but rather to reduce the possibility of negative consequences by identifying, managing, and reporting on these risks and creating value and growth opportunities (Stulz, 2008). Indeed, the risk encompasses more than financial risk, it includes politics, economy, regulation, and market risk.

Enriching and improving performance is the ultimate goal for every business, which means the capability to make a profit in an environment of uncertainty and risk. Financial Reporting Council (FRC, 2014) suggested that listed companies should implement a strong and effective RMC scheme to protect against potential risks that can seriously affect companies' performance. Most previous studies, like Oyewo (2022), showed that ERM enhances and improves the long-term performance of the Nigerian banking sector. Lechner and Gatzert (2018) confirmed a significant positive impact of ERM on the performance and value of German firms. Hoyt and Liebenberg (2015) argued that the companies with RMC have a better understanding of the risk; have a greater ability to make a decision, allocate funds, select investments on an accurate basis, and reduce earnings and cash flow volatility,

which in turn lead to creating shareholder wealth and enhance performance. RMC, in general, expands risk responsiveness thereby improving the decision-making process (Shatnawi et al., 2020). The result of Ames et al. (2018) showed the effectiveness and value of risk committees for financial performance in the long run. Risk management provides an advantage to companies and enables them to compete with other companies by controlling prices, which leads to an increase in their market share and thus increases the company's profitability and performance (Jia et al., 2020).

Most previous empirical studies have concluded that RMC, in general, affects company results, and financial and market performance in a positive way, but the evidence is also mixed (Malik et al., 2020; Lechner & Gatzert, 2018; Aldhamari et al., 2020; Gatzert & Martin, 2015). In general, empirical research on RMC is categorized into three main types of research. The first one focuses on the determinants of RMC (Hoyt & Liebenberg, 2015), and the second type — on the level of RMC implementation using interviews, questionnaires, and surveys (Hoyt & Liebenberg, 2011). Lastly, the influence of RMC activities on a firm's value and performance is executed by Malik et al. (2020), Li et al. (2014), and Farrell and Gallagher (2015).

2.1. Risk management committee existence and firm's performance

Firms with RMC perform better than non-RMC firms. Jia et al. (2020) and Bhatt and Bhatt (2017) argued that the RMC should encompass more than one characteristic (i.e., compound index) that support each other to be an effective committee. However, ignoring any of the components may prevent the RMC from performing its responsibilities and the committee might become void. For instance, Al-Dhamari et al. (2018) suggested that RMC frequency of meetings alone will not improve the firm performance if the RMC composition is not right (i.e., independent members). Jia et al. (2020) argued that companies with RMC have a lower risk which leads to better performance. On the other hand, Laili et al. (2017) and Ong et al. (2015) argued that there is no impact but a negative relationship between the presence of RMC and firm performance and it may not able to prevent risk. Presenting the varied evidence, and considering numerous RMC characteristics, the study expects that the firm performance may be improved by the existence of RMC. For that, we developed the first hypothesis of the study as follows:

H1: There is a positive relationship between the existence of RMC and firm financial performance.

2.2. Risk management committee size

There is inconsistency in the debate regarding the appropriate size of RMC and the effect of the size on the firm's performance. There are two opposite opinions, on the one hand, a lot of studies argued that large RMC may provide many advantages, and positive impact, enhance RMC functions and strengthen the effectiveness of RMC (Nguyen, 2022; Al Matari & Mgamal, 2019; Abubakar et al., 2018; Tao & Hutchinson, 2013; Magee et al., 2019; Ng et al., 2013). Further, Bédard

et al. (2004) stated that the big size of RMC offers different ideas and opinions, strengths, suggestions, and recommendations leading to inclusive and refined decisions regarding the risk faced by the company and the insertion of external independent members. Moreover, Malik et al. (2020) contend that a large RMC might improve the effectiveness of RMC by increasing independence, gender diversity, the expertise of directors, skills, and knowledge. Along the same line, Jia et al. (2020) show that RMC size is one of the best practices in companies that plays important role in increasing firm performance. Al-Hadi et al. (2016), Badriyah et al. (2015), and Yatim (2010) found a positive impact of the size and qualification of the risk committee on the level of risk disclosure. Finally, Battaglia and Gallo (2015) argued that the performance of banks with larger RMCs is better in relation to profitability than banks with smaller RMCs. On the other hand, Kallamu (2015), Elamer and Benyazid (2018), Kakanda et al. (2018), and Gatzert and Martin (2015) found that large committees may have negative consequences on the firm such as free rider problems, decrease efficiency, and increase individuals and financial resources expenses. This matter advances the query of what size (small or large) RMCs are considered effective governance instruments. In Jordan, according to ASE (2017), three members should at least be appointed to the RMC. The second hypothesis is developed based on the two opposing views discussed above.

H2: There is a significant positive relationship between RMC size and firm performance.

2.3. Risk management committee independency

Directors' independence in RMC is considered an essential tool in the effective governance system (Aldhamari et al., 2020). Monitoring the activities and performance of management and executive directors is the main duty of an independent member (Fuji et al., 2016). The governance regulations in Jordan (ASE, 2017) required that at least one of the RMC members should be independent. "Independent" means that the member is not employed by the company, is not representative of another company, and is independent of the management.

Following Gull et al. (2022), Ng et al. (2013), and Elamer and Benyazid (2018), the current study represented RMC independence as the percentage of independent members to total RMC members. The independency of the RMC member is considered a beneficial element that affects RMC effectiveness. For example, RMC is associated with a better and high level of monitoring that prevents management from self-interested behaviors like fake reporting or information hiding (Malik et al., 2020). Furthermore, Xie et al. (2003) suggested that independent directors in RMC reduce management interference in the committee processes. In addition, Tonello (2012) showed that more independent members of the RMC may facilitate purposeful communication between RMC members and management about firm activities. Magee et al. (2019) argued that RMC independence supports RMC processes. Ng et al. (2013) claim that the valuation of key risk matters by independent RMC members may reduce the potential that the company will face major risks. Aldhamari et al.

(2020) argued that independent directors in the RMC will attempt to prevent any risk that may face the company's performance to maintain its reputation. Jia et al. (2020) show that the independence of the risk management committee is one of the best practices in companies that play an important role in improving firm performance. Shatnawi et al. (2020) ensured that the probability of bankruptcy can be lower when there are independent members within RMC. In the same direction, all of these advantages enhance the effectiveness of RMC, reduce agency costs and increase firm profitability and performance accordingly (Jensen & Meckling, 1976; Malik et al., 2020). Cornett et al. (2009) find that a more independent board is positively associated with good performance.

On the other side, stewardship emphasizes goal convergence (Van Slyke, 2006) and suggests that executive directors due to their superior knowledge, professionalism, trust, loyalty, faithfulness, and willingness are good stewards of their business which will qualify them to help and monitor the activities of the company (Keay, 2017). Kallamu (2015) indicated that independent RMC members harm ROA. Savitri (2016), Fuji et al. (2016), Rashid (2018), and Abdullah and Shukor (2017) revealed that the percentage of independent members does not influence the firm's performance. Reasons for these results could be explained by the lack of technical knowledge and experience and the busy schedule of the independent member leading to inadequate monitoring and poor role in the company (Tao & Hutchinson, 2013). Therefore, with mixed opinions, this study expects an appositive association between RMC independence and company performance. Thus, the following hypothesis is proposed:

H3: There is a positive relationship between RMC independence and firm performance.

2.4. Committee non-executive

The non-executive member, according to the governance regulations (ASE, 2017), is a member who is not a firm employee, nor in the management staff. Further, the same regulation does not require the RMC member to be non-executive unlike the other committees (e.g., audit committee). Previous literature on agency theory argued that outside directors (non-executive) with expertise and objectivity will contribute a lot of advantages to the firm. Indeed, RMC with a higher proportion of non-executive minimizes opportunistic behavior and expropriation of firm assets (Yatim et al., 2016). Furthermore, Ahmed Sheikh et al. (2013) showed that RMC with a higher proportion of non-executive members represent the check and balance mechanism that enhance the monitoring firm's capability, increase effectiveness, and improve the variety of skills, knowledge, and proficiency to monitor the management and executive members (Abdullah and Shukor, 2017). On the other hand, according to Kallamu (2015), the existence of executives at RMC has a significant positive association with ROA. Further, Tao and Hutchinson (2013) argued that compared to outsiders, executive directors at RMC can attain valuable, useful, and high-quality internal information that is used by RMC to monitor business activities, reduce financial

and non-financial risks and then improve performance. Having dual opinions, the current study expects that the association between non-executives on RMC and performance will be positive. Thus, the fourth hypothesis is developed:

H4: There is a positive relationship between non-executive members on RMC and firm performance.

2.5. Frequency of meetings

The fact that RMC function is considered a regular and continuous process for decision-making, especially during the period of crises and the likelihood of risks (Malik et al., 2020; Li, 2018). Agreeing with the spirit of agency theory, many advantages may be achieved through frequent meetings. First of all, it is possible to settle conflicts between agents and principals (Aldhamar et al., 2020). Second, improve the communication manner among the RMC members. Third, Abdul Rahman and Haneem Mohamed Ali (2006) argued that the frequency of RMC meetings considers an indicator of assurance and concentration in the treatment of the given responsibilities and problems, thus, right and timely risk responses can be expressed and represented. Kakanda et al. (2018) argued that companies with a high number of RMC meetings also have greater market performance. Moreover, another advantage of frequent meetings that allows for a diversity of opinions that strengthen the control of the firm. Eventually, this will enhance the firm performance (Nguyen, 2022). On the other hand, Malik et al. (2020) suggested that a large number of RMC meetings held indicates the existence of some problems directly related to the risks confronted by the company that requires the full attention of the RMC members. Moreover, previous studies revealed that companies that hold many RMC meetings are companies with poor financial performance and high risk (Ng et al., 2013; Elamer & Benyazid, 2018). Taking into consideration the above-mentioned arguments, the next hypothesis is presented:

H5: There is a positive relationship between the frequency of RMC meetings and firm performance.

2.6. Committee competence

Another factor that affects RMC function is competence or qualification. RMC competence is defined in this study as a proportion of RMC members who have practical experience and have a degree in accounting, in particular, or business, in general. Bearing in mind that Jordanian legislation did not specify the criteria for a person qualified to be a member of the RMC, it is noted from Table 2 that only 0.35 of RMC members in Jordan are qualified. The competence of RMC members includes essential specialized knowledge, education, experience, credibility, and efficiency to be able to understand and manage risks and challenges confronted by the company (Raimo et al., 2022; Li, 2018; Al-Hadi et al., 2016; Sweeting, 2011). Bédard et al. (2004) considered that the presence of at least one financial specialist in the risk committee is likely to help in discovering earnings management practices, reducing the chances of company failure, and even positively contribute to maximizing

shareholder wealth. Malik et al. (2020) suggested a significant positive relationship between directors' financial knowledge and their ability to control a company's risk which, in turn, improves the company's performance. Dionne et al. (2019) and Al-Hadi et al. (2016), depending on the agency theory and literature reviewed, found that in general, qualified RMC members can contribute significantly and add value to the company by reducing uncertainties and taking prudent measures to develop radical solutions that will reduce business risk and have a positive impact on the company's performance. Thus, the last hypothesis is stated as follows:

H6: There is a positive relationship between the competence of RMC and firm performance.

2.7. Leverage

Consistent with previous studies (Florio & Leoni, 2017; Jia, 2017), the current study uses leverage as the control variable. The financial leverage ratio indicates how much debt a firm is using to finance its assets to multiply shareholders' equity. Leverage is a measure of risk (Masoud & Halaseh, 2017). Firms with large assets tend to borrow from the capital markets to finance these assets, thus, companies with a high portion of long-term debts are more leveraged and impose greater financial risks to the company as a result of debt covenants. Indeed, the need for RMC and its role will be significant in this situation for monitoring and controlling purposes (Mishra & Kapil, 2018). According to Badriyah et al. (2015) and Yatim (2010), RMC effectiveness is correlated to the company's leverage positively. Usually, RMC is anticipated to be in large, highly leveraged enterprises where the agency cost is also anticipated to be high (Jia, 2017). Even though the relationship between financial leverage and RMC is not entirely clear (Hoyt & Liebenberg, 2011), financial leverage is expected to positively affect RMC.

2.8. Firm size

Firm size is an important characteristic of the company. Small firms connote easily adopting RMC activities compared to large ones. Previous studies normally measured size for statistical analysis by the natural logarithm of total assets. The larger the company is, the larger the assets it has (Badriyah et al., 2015; Yatim, 2010; Alkelani et al., 2020; Wang et al., 2019). Companies with larger assets usually need more external funds, which creates greater risks for the company (Raimo et al., 2022).

Further, Gatzert and Martin (2015), and Wang et al. (2019) recognized that firm size is one of the important characteristics that can impact a firm's choice to establish RMC. A study by Yatim (2010) shows a positive relationship between the set-up of RMC and the firm total assets. Shrieves and Dahl (1992) stated that large firms establish a separate RMC as they would be more effective in monitoring risk. Al Khattab and Hood (2015) show that there was no significant relationship between the integration of risk management and the size of the organization as measured in total assets.

3. METHODOLOGY AND RESEARCH DESIGN

3.1. Data collection and sample

To accomplish the objective and answer the research question of this study, we use the annual reports of 243 companies listed in the ASE for the years 2018–2021. The initial sample represents all Jordanian companies with a total observation of ($4 * 240 = 960$). However, financial companies ($n = 42 * 4 = 168$) were excluded from the sample, since the study focused

on NFCs only. Indeed, financial companies have their unique characteristics and special requirement. Data before 2018 are not available since the issuance and implementation of the guideline in 2017. Data after 2021 are not available during the data collection time. Companies with unavailable data were removed ($8 * 4 = 32$). Thus, the final sample of the study consists of 760 observations. Furthermore, the firms' annual financial reports and other needed information are available on the website of the Securities Depository Center (SDC).

Table 1. Sample selection procedure

Description	2018	2019	2020	2021	Number
Initial financial companies listed in ASE	240	240	240	240	960
Less: financial companies	42	42	42	42	168
Less: observations with missing RMC and financial data (unavailable data)	8	8	8	8	32
Final sample	190	190	190	190	760

For the purpose of analyzing the data, the Statistical Package for Social Sciences (SPSS Statistics) was used. Descriptive analysis: percentages, mean, max, min, standard deviation. Independent t-test, p-value, and adjusted R^2 were used to display the results. Furthermore, multiple linear regression and correlation were used for testing hypothesized relationships between the independent and dependent variables.

3.2. Variables measuring

3.2.1. Dependent variable

Preceding studies used diverse proxies for firm performance, e.g., liquidity, revenue, net income, ROA, Tobin's Q. Although the use of a specific proxy depends on the understanding of RMC's role, which is to enhance the firm performance (Jia et al., 2020), the last two proxies are the most widely used in previous literature (for instance, Lechner, 2018; Malik et al., 2020; Aldhamari et al., 2020).

Tobin's Q ratio is used to estimate market performance and is normally computed by dividing the firm's market value and the debt-carrying amount on total assets (Haniffa & Hudaib, 2006). Now, when the ratio is high this indicates more enhanced firm performance. whereas, Ahmed and Hadi (2017), Aldehayyat et al. (2017), Makhoul et al. (2017), Masoud and Halaseh (2017), Jia et al. (2020), and Vallascas et al. (2017) used ROA as a proxy. No agreement on the best measure has been reached. The current study follows the previous studies that used ROA as a proxy for a firm's performance and defined it as net income divided by total assets.

A favorable (ROA) ratio represents the capability of the company to generate operating revenue against operating expenses from a specific invested capital asset (Carter et al., 2010), which in turn enhances the performance of the company. ROA represents actual firm performance (Issah & Antwi, 2017). A greater value of ROA indicates effective

management and efficient use of the firm's assets, whereas, a lower ROA suggests the opposite case. Thus, ROA serves as an indicator of good governance mechanisms and operating performance in using a firm's assets.

3.2.2. Independent and control variables

Following the previous studies, RMC size (*RMCSIZE*) is measured as the number of directors on the RMC (Al Matari & Mgamal, 2019; Malik et al., 2020; Ng et al., 2013; Al-Hadi et al., 2016; Elamer & Benyazid, 2018). Further, we defined RMC independence (*RMCIN*) as a member of an RMC if he/she is independent of the management, not an employee of the firm. we, then, represented RMC independence as the percentage of independent members to the total of RMC members (Malik et al., 2020; Ng et al., 2013; Jia et al., 2020; Elamer & Benyazid, 2018). The number of RMC meetings (*RMCMT*) in a financial year was used to capture the RMC meetings (Elamer & Benyazid, 2018; Hoque et al., 2013). We measure committee competence (*RMCCO*) as the percentage of members in an RMC who have a degree or specialized experience in accounting or business to the total of RMC members (Tao & Hutchinson, 2013; Al-Hadi et al., 2016).

Further, following the previous literature (Hoque et al., 2013; Ng et al., 2013), we control for firm size (*SIZE*) by taking the natural log of total assets and leverage (*LEV*) as the ratio of total liabilities to total asset. Table 2 portrayed the definitions and measurements of the study variables.

This study uses the following multiple regression model to analyze data and examine the possible relationship between RMCs' characteristics as independent variables and firm financial performance proxy by *ROA* as a dependent variable.

$$PERF_{it} = \beta_1 + \beta_2 RMC_{it} + \beta_3 RMCSIZE_{it} + \beta_4 RMCIN_{it} + \beta_5 RMCCO_{it} + \beta_6 RMCMT_{it} + \beta_7 RMCNEX_{it} + \beta_8 FLEV_{it} + \beta_9 FSIZE_{it} + \varepsilon_i \quad (1)$$

Table 2. Variables definition, measurements

Abbreviation	Variable	Definition
PERF	Firm performance	Proxy with ROA, measured as net profit divided by total assets.
RMC	Risk management committee	A dummy variable takes the value of 1 if there is a risk management committee, otherwise, it takes 0.
RMCSIZE	Committee size	The total members of the RMC committee.
RMCIN	Committee independence	Percentage of independent members relative to the total members.
RMCNEX	Non-executive member	Percentage of non-executive members relative to the total members.
RMCCO	Committee competence	Percentage of members who have degrees or experience in accounting or business.
RMCMT	Meetings frequency	The number of RMC meetings during the year.
SIZE	Firm size	Firm size measured as a logarithm of the firm's total assets.
FLEV	Firm leverage	Depicted as the total liabilities/total assets.

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics

Table 3 shows the descriptive statistics of the study variables.

Table 3. Descriptive analysis of the sample

Variable (N = 760)	Max	Min	Mean	Std. deviation
PERF	0.6241	0.0120	0.1982	0.1258
RMCSIZE	5	2	3.156	1.269
RMCIN%	1	0.330	0.420	0.1254
RMCNEX%	1	0.33	0.780	0.564
RMCCO%	1	0	0.356	0.241
RMCMT	2	1	1.88	0.251
Size(log)	3.5420	0.9230	0.652	1.265
LEV%	0.9523	0.1282	0.1826	1.312

Table 4. Correlation matrix of the variables

PERF	RMCSIZE	RMCIN	RMCEX	RMCCO	RMCMT	SIZE	LEV
RMCSIZE	1.000						
RMCIN	0.389	1.000					
RMCNEX	0.152	0.022	1.000				
RMCCO	0.138	0.083	0.189	1.000			
RMCMT	0.113	0.184	0.105	0.014	1.000		
SIZE	0.096	0.025	0.127	0.054	0.251	1.000	
LEV	-0.018	0.009	0.298	0.014	0.050	0.032	1.000

4.3. Regression analysis and results

In order to meet the research purpose and examine the influence of RMC attributes on Jordan's company performance, regression analysis was conducted to test hypotheses and define the association between dependent and independent variables. As shown by Table 5, the adjusted R² of 0.484 indicates that the independent variables communally clarify 48% of the difference in the company's performance (dependent variable, ROA). Having the F-statistics value of 16.58 and the p-value significant at the level of 0.01 indicates the appropriateness of the estimated regression model for the study.

As shown in Table 5, the result of regression analysis indicates that *RMCSIZE* has an appositive and significant effect on *ROA* ($p = 0.012 < 0.05$). Therefore, *H2*, which states a significant positive relationship between RMC size and performance is accepted. As depicted in Table 3 above, the results of descriptive statistics show that the mean value of *RMCSIZE* among Jordanian companies is 3.156, which supports the current positive relationship. This result is consistency with some researchers (Jia et al., 2020; Al Matari & Mgamal, 2019; Tao & Hutchinson, 2013; Al-Hadi et al., 2016; Magee et al., 2019; Ng et al., 2013; Bédard et al., 2004; Malik et al.,

4.2. Multicollinearity

To test for incidents of multicollinearity between independent variables, this study, used a correlation coefficients matrix as shown in Table 4. Gujarati (2008) showed that a percentage of 80% or more is considered a sign of multicollinearity. As we can see from Table 4, there is no collinearity problem between the independent variable since all coefficient values are less than 80%. The highest correlation 38.9% is between *RMCIN* and *RMCSIZE*, which does not pose a problem in the regression analyses and supposed the validation of the data used. Furthermore, to define the direction and strength of the relationship between control variables, a correlational analysis was also performed.

2020), who found that large MRCs have a positive impact on company's performance due to diversity in skills, knowledge, opinions, suggestions, gender, recommendations.

On other hand, our result is inconsistent with the other previous studies (Kallamu et al., 2013; Elamer & Benyazid, 2018; Kakanda et al., 2018; Hoyt & Liebenberg 2011; Gatzert & Martin, 2015), who found negative consequences of large committees such as free rider problems, reduced efficiency, considerable expenditures in the form of human and financial resource.

Concerning *RMCIN* and performance (*ROA*), Table 5 shows a positive association between the independence of the RMC and *ROA* ($p = 0.013 > 0.05$). This result is consistent with agency theory, which proposed that independent members provide good monitoring of managers, reduce opportunistic behaviors, and finally, improve performance. The result is consistent with Kallamu (2015), who suggested that a higher percentage of independent members in the RMC provides better monitoring due to repelling pressure from the managers. On the one hand, our result is consistent with Malik et al. (2020) and Aldhamari et al. (2020), who found a positive impact of *RMCIN* on performance. On the other hand, our result is inconsistency with Kallamu (2015), Savitri (2016), and

Abdullah and Shukor (2017), who indicated that the independence of RMC members is negatively associated with ROA. Thus, *H3* is supported and accepted.

Concerning *RMCNEX*, the study expects a positive association between non-executive RMC (*RMCNEX*) and company performance. The result reported in Table 5 indicates a significant positive coefficient ($p = 0.026 > 0.05$), which means that RMC with more non-executive members influences company performance positively. This finding is in agreement with many studies (Yatim et al., 2016; Ahmed Sheikh et al., 2013) that showed a positive association between RMC involving a higher percentage of non-executives and performance. In addition, it stands as a balance mechanism that enhances the monitoring firm's capability, improves its effectiveness, and adds a variety of skills and proficiency. The result agrees with Kallamu (2015), who found that the existence of executives on RMC with access to more internal information than outside members has a significant positive association with ROA. Thus, *H4* is, therefore, approved. We can see that independent members have the same positive effect on ROA. Consequently, we can say that firms that intended to improve their performance have to include more independent, non-executive members in their RMCs.

Concerning *H5*, the result shows that *RMCMT* has a negative association ($p = -0.0044 > 0.05$). Therefore, *H5*, which proposes a significant and positive relationship between the frequency of RMC meetings and company performance is rejected. Even though the meeting shown in Table 3 is 1.88

which is less than 2 as required by the regulations, this result is not agreed with our expectations or with Kakanda et al.'s (2018), who reported that companies that have more RMC meetings achieve higher financial performance. Indeed, this result is opposite to the concept of agency theory which stated that the conflict between principals and agents can be solved through frequent meetings of the RMC (Aldhamari et al., 2020). However, the result is consistent with Ng et al. (2013), Elamer and Benyazid (2018), and Malik et al. (2020), who suggested that the relation between the number of RMC meetings and company performance is negative and indicates high-risk and less performance.

Regarding *H6*, which asserted that *RMCCO* has a positive association with ROA ($p = 0.013 > 0.05$), it is recognized that the qualification or competence of the RMC has a positive relationship with firm members of RMC with business and accounting can affect ROA positively. This result is consistent with the agency theory. Malik et al. (2020) justified a significant positive relationship between financial directors and their capacity to manage the risk of the company and protect its interests, which in turn enhances the performance of the company. Therefore, greater proficiency in accounting and business translates to greater enhancement. For that, *H6* is accepted.

Regarding the control variables, results in Table 5 show that there is a negative and insignificant relationship between *LEV* and ROA. However, the results criticize any effect of firm size and performance.

Table 5. Results of regression analysis and estimate

Variable	Expected sign	Coefficient	T-statistic	P-value
Constant	+	0.3654	3.25	0.000***
<i>RMCSIZE</i>	+	0.1825	5.26	0.012***
<i>RMCIN</i>	+	0.1462	3.75	0.013***
<i>RMCNEX</i>	+	0.0621	1.12	0.026*
<i>RMCCO</i>	+	0.7895	4.71	0.003**
<i>RMCMT</i>	+	-0.0044	0.05	0.65
<i>SIZE</i>	?	0.0256	0.65	0.51
<i>LEV</i>	?	-0.0130	2.10	0.04*
Adjusted R ²	48.4%			
F-statistic	16.58***			

Note: *, **, and *** are significant at 0.1, 0.05, and 0.01 levels, respectively.

5. CONCLUSION

Motivated by the results of the aforementioned studies, the current study, based on secondary data from 190 NFCs Jordanian companies during the period 2018-2021, examined the effect of RMC characteristics on the performance of companies. The dependent variable was measured by ROA, whereas independent factors included size, independence, competence, non-executive, frequency of meetings, and control variables were size and leverage. Results of the current study revealed that RMC size, non-executive, qualification, and independence have an appositive and significant effect on performance, these results ensure the importance of the selected RMC's characteristics in affecting company performance, these effects seem to be not direct but indirect and differ from one company to another.

Regression results indicate a negative association between leverage and performance. This

result is reasonable and justified by the nature of the leverage concept, especially when risk exists. In the last two results, RMC meetings have negative effects on performance. Whereas no evidence of any association between RMC's effectiveness and the company size because the formulation of the RMC is not dependent on the size of the company.

The results of the current study reveal an acceptable level of commitment on the part of non-financial Jordanian companies to implement corporate governance practices regarding the RMC and the fulfillment of the conditions to be met by the committee. The matter that helps these companies to improve their performance. Furthermore, the major results of the current study agree with the majority of preceding research, as well as with the agency theory that the characteristics of a good RMC have a positive role in improving Jordanian companies' performance.

Even though the study takes place during the coronavirus pandemic, the findings of the current

study ensure the need to comply with business governance practices and regulations. Furthermore, the findings should have been considered as recommendations for the managers and regulators' authorities to increase or incorporate the percentage of non-executives, education, independence, and experience of RMC members, these factors can be a basis for selecting the eligible member to be chosen to the RMC or not. As a result, the formulation of RMC in this manner would create more confidence

among the investors and enhance Jordanian companies' performance. The current study was limited to the NFCs listed on ASE. Future studies may be conducted using other sectors like financial, insurance, family, enlisted companies, and banks. Moreover, future studies may consider other attributes (e.g., interlock of directors (dual committee membership) and institutional ownership, gender diversity, ownership, and level of disclosures.

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