

The Effect Of Enterprise Risk Management In The Relationship Between The Balanced Scorecard And Organizational Performance In Jordan

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Abstract: The purpose of this study is to examine the relationship between balanced scorecard, enterprise risk management and organizational performance. Within this study ERM has been conceptualized as a mediator variable between BSC and organizational performance, in congruence with the literature. However, the academic inquiry of the effect of ERM in the relationship between the BSC and the organizational performance is at its nascent stage. This forms the motivation of the present work. The managers' perceptions of these three constructs were captured on a seven-point Likert scale using a country-wide survey in the Jordanian Industrial Public Shareholding Companies. The data were obtained from 85 managers working in 59 Jordanian Industrial Public Shareholding Companies then used to validate the framework and then test the hypothesized relationships between the study variables using PLS-SEM. The results indicate that the using ERM and BSC can lead to improved organizational performance of the Jordanian industrial public shareholding companies. Moreover, the results also indicate that ERM positively mediate the relationship between BSC and organizational performance. Results derived from this study might help companies to adopt ERM system and enhance the using of BSC in order to improve organizational performance.

Index Terms: Balanced Scorecard, Enterprise Risk Management, Organizational Performance, Jordan.

1. INTRODUCTION

Performance is the cornerstone of all business organizations. It represents the status of an organization's existence and embodies the important factor in achieving its goal of sustainability [1]. Moreover, until the end of the 20th century, the use of traditional financial indicators was mainly used to measure the performance of these organizations, which were based on assessing their activity to measure and evaluate financial indicators, and did not identify all factors affecting their development. Financial indicators only provide an incomplete assessment of organizations' performance where internal factors that describe their internal potential and future prospects are not taken into account [2]. Accordingly, it is necessary to combine financial and non-financial indicators, and to adopt composite measures to reflect the comprehensive perspective of measuring the overall performance of these organizations in order to demonstrate their achievement and to keep pace with the strategic changes and their reflection in the overall performance of these organizations [3]. [4] consider customer satisfaction, employee satisfaction, innovation; quality and reputation are some important aspects of performance indicators. As for [5], they have categorized performance indicators into three categories; two of which express financial indicators for performance expressed either by market or accounting standards, and the third category includes non-financial performance measures. On the other hand, Enterprise Risk Management (ERM) has emerged as a modern model for managing the various types of risk faced by organizations, which improves

the level of board of director's and CEO's risk control by working on compiling and analyzing all types of risks that the organization may face in the future and working to confront them in an integrated manner [6]. [7] believes that Enterprise Risk Management integrates risks and embraces an organization-wide approach through coordination between individuals, processes and domains, thereby reducing overall risk and improving its performance, and thereby increasing the value of the organization.

In the same vein, [8] pointed out that Enterprise Risk Management is an administrative process consisting of a set of actions aimed at achieving two objectives. The first is to achieve organizational objectives and maximize the value of the organization by improving its performance. The second is to integrate and manage the organizational risk in an integrated manner by coordinating the various risk management activities and not dealing with them individually, taking into account the effective use of scarce resources. Balanced Scorecard (BSC) is a strategic management accounting technique and the first systematic effort to design a performance evaluation system. It is concerned with translating the strategy of the enterprise into specific objectives and creating criteria aimed at continuous improvement. The Balanced Scorecard consolidates all measures used by the entity. This approach is distinguished from other approaches of performance measurement control and evaluation in that it combines financial and non-financial performance indicators that are easily tracked and linked to the enterprise strategy [9]. In addition, the Balanced Scorecard is the basis for financial and non-financial performance evaluation indicators through its four perspectives (Financial, internal business process, learning and growth and customer). The card is designed to set goals that companies validate as a way to compete with other companies through innovation, demonstrating their ability to manage tangible financial assets and intangible non-financial assets [10] as Balanced Scorecard translates the Organization's tasks and strategies

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into measurable targets. Several previous studies have indicated that there was an effect of Balanced Scorecard on organizational performance. Other studies have shown that there is a positive effect of Enterprise Risk Management on organization on its performance. Previous studies have also indicated that the Balanced Scorecard had positively affected Enterprise Risk Management. However, the effect of Enterprise Risk Management in the relationship between the Balanced Scorecard and the organizational performance was not addressed. Due to the interaction between the variables in the previous studies in terms of impact and effect, it is possible to say that there were a cause and a consequence between those variables. Thus, the current study has mainly aimed at identifying the effect of Enterprise Risk Management in the relationship between the Balanced Scorecard and the organizational performance in the Jordanian industrial public shareholding companies. Accordingly, the problem of the current study lies in answering the following question: What is the effect of Enterprise Risk Management in the relationship between the Balanced Scorecard and the organizational performance in the Jordanian Industrial Public Shareholding Companies?

2 THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 Theoretical Framework

Companies in different sectors face great competition in order to obtain the largest possible market share. This requires diligence in developing strategic plans that help to create opportunities and exploit them, overcome threats and deal with them in order to live up to their financial and non-financial performance. Therefore, these companies should work to evaluate the results of their decisions and evaluate their performance by various means and various indicators through the financial analysis of the financial statements and additional information contained in the annual report comparing them with the standards of the industry or other comparative analysis. The analysis goes beyond the financial aspect to include non-financial aspects through modern performance evaluation tools such as Balanced Scorecard. In evaluating performance, organizations need to take into account threats and potential risks that can reduce opportunities and through the Enterprise Risk Management, which necessarily needs to be aligned with the company's performance evaluation system. Organizational Performance Control over the performance of organization's management and evaluation of such performance are of the basic tasks of the administrative accountant, whom the management expects to give an evaluation through the use of various evaluation tools from budgets, measuring deviations from the actual performance of the plan and financial analysis using financial ratios (profitability ratios, debt ratios, liquidity ratios, etc.), cash flow, efficient utilization of machines, efficient utilization of raw materials, direct labor and other financial metrics, as well as non-financial performance measures such as productivity, customer evaluation process and internal processes such as efficient use of raw materials and efficiency of production process. Financial performance is defined as the outputs and outcomes of the operation of the resources and competencies available in an organization and that can be measured and evaluated by comparing the actual performance of the organization to what is planned " [11]. [12] have defined

Financial Performance as a review of what has been achieved depending on the performance indicators adopted at the organization's industry, and this can be achieved through the identification of strengths and weaknesses and investigating their causes to support areas of strength and correcting areas of weaknesses [13]. Evaluation is based on benchmarks and indicators that must include some features such as ease of use, and to be based on analysis of annual report containing financial and non-financial information, in particular the audited financial statements of the authorized auditors [14]. These indicators should also have a logical relationship between their content and the contents of the financial statements [15], which makes the financial and non-financial indicators used trustworthy. Researchers believe in the importance of financial evaluation because it has a clear impact on the policies and plans of the organization's future management, which should contribute to the well-being of owners and investors and increase their wealth, and thus, social welfare of society and stakeholders such as creditors, management, governmental bodies and other stakeholders. The importance of the financial assessment lies that it evaluates the organization in terms of: measuring liquidity adequacy of the organization, measuring the ability of the organization to pay its debts, and the ability of organization's management to achieve maximum profits through the operation of the organization 's various assets, the feasibility of investment in organizations, and thus, assess the success or failure of management the organization is achieving its short- or long-term goals based on the objective of the evaluation. Balanced Scorecard [16] defines the Balanced Scorecard (BSC) as a system "provides a relevant range of financial and non-financial information that supports effective business management" It also measures the performance of the organization through the four perspectives and the link between them is derived from the organization's vision and strategies. [17] has defined Balanced Scorecard (BSC) as "an integrated performance framework that contributes to the formulation, transmission and delivery of the organization's strategy to different units and levels of management by translating the strategy into operational objectives and practical indicators that achieve the vision of the organization. It also creates balance between the stakeholders in the organization. Balanced Scorecard often includes four perspectives [10]; [18], namely: Financial: which is the most prevalent, where the financial performance is evaluated by relying on the figures and data available in the financial statements and other sources of financial information, as the financial goals are set by the administrative accountant are based on the implementation of the measure to verify the organization's achievement and management of these objectives, such as profitability indicators, asset management, deviation from plans and other financial performance indicators. Customers: which requires identifying the market and market share of the organization (at the geographical level), targeting the age group of customers, the gender of the target customer and other sectors and patterns targeted for marketing and sale of products, which can be implemented through the development of a deliberate strategy to achieve the desired results of customer's loyalty, what makes the customer markets the organization's products by itself, which is the highest level of customer's loyalty that the organization has maintained by communicating with and satisfying it through good product's or service's specifications and

customer relations [19], the organization's reputation which includes credibility and safety of products and services, which are finally factors for the success of the organization. Internal business process: In light of this perspective, organizations should look at their success factors through value chain processes [9]; [20] starting with the proper identification of the needs and desires of the customers, identifying the target market, producing the product at the appropriate cost and quality through the matrix of quality, cost and tastes of the customers. Organizations should also open communication channels to deliver goods, pay attention to after-sales service and ensure customer satisfaction with the product or service. This comes through creativity at each stage of the value chain, giving value to the product and organization, and ultimately giving value to the customer, as the relationship is complementary. This is also achieved by raising the efficiency of internal production processes with the lowest costs of waste taking into account the time of delivery, production, the quality of the product or service, and the cost of this product. Learning and growth: Organizations establish an infrastructure for the skills and knowledge that the organization's employees must possess to ensure improvement and growth in the short and long term. Continuous development at the individual level will create value for customers and investors in organizations. Organizations shall work to raise the value of their employees and develop financial and administrative systems, control production and communication systems and communication with customers, as well as setting goals for these systems to maximize their benefits and contribution to the value of the organization, in addition to the establishment of regulatory procedures for work within the organizations, what would affect the behavior of customers positively [21]. As mentioned previously, these perspectives include financial performance evaluation perspective (financial perspective) and non-financial performance perspectives (Internal business process, learning and growth as well as customer), which can serve as a system for evaluating the overall performance of organizations, through which the administrative accountant and financial management are expected to account for the causes of undesirable deviations and correct them. Enterprise Risk Management System The complexity of operations and being concerned with areas of investment of funds has created a special risk assessment system to ensure the success and facilitation of these investments. This system will make accountants, financial managers or risk managers familiar with successful investment forms, resulting in the proper utilization of funds, ensuring a comprehensive assessment of these investment opportunities. This system is implemented through the internal control systems, where control measures are put in place to verify the administrative or investment steps or decisions to meet and reduce the potential risks through preventive control of these potential risks, control the detection of these risks in case of failure of the preventive phase. Accordingly, the procedures protect the assets of the entity, ensure the accuracy and integrity of the financial statements, increase production efficiency and prevent threats to business; such threats that may cause the organization to fail in achieving its objectives, implement its strategies or formulate inappropriate objectives [22]. Among the internal control systems responsible for risk management is COSO-ERM, which is an internationally accepted tool to track the positive and negative factors that affect the realization and achievement of enterprise objectives [23]; [24].

The internal control system COSO-ERM consists of the following elements:

- Internal Control Environment.
- Setting objectives to verify that management strategies are translated into operations at each administrative level, taking into account the development of a risk plan, and thus, applying these strategies and delivering their completion reports.
- Identify and determine the management of events that may affect the organization's ability to implement its plans as well as whether these events are a risk to be addressed or an opportunity to be exploited.
- Risk assessment where risk and threat are assessed and treated and how it will impact the organization's objectives.
- Risk response: whether to face it, reduce it or accept it as a loss in order to perform a cost-benefit analysis.
- Control activities and procedures: These activities are implemented by the management within its risk response regulations, control policies and procedures in various departments and divisions of the organization.
- Provide information and communication about the risk management system and work to inform the employees of the organization to ensure that they carry out their tasks and exchange between them.
- Monitoring: Control of risk management systems should be developed, evaluated and adjusted as needed, and the management should be provided with evaluation reports to address vulnerability.

2.2 Literature Review

Many researchers have addressed the issue of performance evaluation systems, which have been incorporated through this research from traditional methods of performance evaluation to modern and comprehensive methods of evaluation. Among the traditional methods that focused on the financial aspect of financial analysis are financial ratios such as profitability, indebtedness and other ratios, [25]; which, although they are traditional, they are still used effectively in assessing the performance of organizations. [26] have considered these financial indicators to support management decisions which measure the growth of the organization and help to estimate the inflows and outflows as a cash flow statement is considered as one of the financial analysis instruments. [27] believes that financial analysis and financial ratios can be used to evaluate investment decisions taken by the management of an organization. This is in agreement with the studies that carried out the financial analysis and the financial ratios in evaluating the performance of financial organizations such as study [28]; [29]. Performance evaluation tools have been developed to include comprehensive financial and non-financial evaluation tools in order to evaluate the strategic plan and the achievement of the objectives set. The Balanced Scorecard is a tool that evaluates the overall performance of organizations and addresses the evaluation of financial performance through the (financial) perspective of the card, Non-financial aspects through the three most common perspectives (Internal business process, learning and growth as well as customer), which is a translation of the management's vision based on creativity and innovation, and ensuring the effectiveness of the value chain that ends with customer satisfaction [30]; [18]. This comprehensive approach of performance evaluation is used as a feedback to redefine and develop the objectives set by management to increase the

way owners' wealth is achieved through continuous improvement. The objectives are redefined to include sustainability in improvement and development [31] through a strategic map based on the growth and development strategy, through the activation and improvement of operational management after addressing the unwanted deviations. Although there are several criticisms of the Balanced Scorecard, such as the number of perspectives and their applications in reality [32] and the dependence of many organizations in the evaluation process on the financial performance perspective and neglect non-financial perspectives due to the different level of confidence in the data included in the evaluation system [33], but there are many studies proved its success in applying the four perspectives, its role in improving future performance, its contribution to the elimination of factors that negatively affect performance, and more specifically and more accurate non-financial performance indicators [34]; [35]. A study carried out by [36]; [37] found that the use of the Balanced Scorecard is low in medium and small-sized organizations, which researchers believe it is due to the relatively high cost of full application of the Balanced Scorecard. [38] believes that there is a key factor in achieving the desired objectives set by the management, which would positively evaluate the management innovation of the organization, which is the purposeful link between the policies set for the organization and the strategies, on the one hand, and the performance evaluation system used, on the other hand. According to the researchers' opinion, this should be based on an in-depth study to prevent conflict and ensure consistency between the plan and the basis of evaluation. Thus, information technology can be used for this purpose where Balanced Scorecard can be activated electronically through the financial and non-financial performance reporting system [39]. A study carried out by [40] has examined the relationship between the performance evaluation system and the risk management system in the organization where it was found that the success of the relationship between the two systems has a positive - but weak - impact on the financial performance of the organization, which is measured only through (ROA), (ROE), (EPS). This result is in line with a study that concluded that the efficiency of Balanced Scorecard helps to assess the risks of the organization and achieve a competitive advantage by giving value to shareholders and owners. Also, this positive impact can be further activated through an effective risk management system that may be based on COSO-ERM as demonstrated by [41]; [42]. A study carried out by [43] applied to non-financial companies in Romania, found a statistically significant positive relationship between the level of implementation of ERM and corporate performance in the pre-global financial crisis (2001-2007). However, the results of the analysis indicated that there was no statistically significant relationship between the level of application of ERM and the performance of organizations during the period of financial crisis (2008-2011). A study carried out by [44] in Nigeria, which was applied to four banks listed on the Nigerian Stock Exchange, found a statistically significant effect of ERM on banks' performance. In the Arab environment, [45] in their study of the oil and gas sector in Qatar, concluded that ERM worked to reduce operational risks, market risks, political risks, health, safety and environmental risks, as it reduces the cost of capital of an organization and improves its strategic performance, and thus, increases its profitability and economic

value added.

According to what has been previously mentioned, the hypotheses of the current study can be formulated as follows:

- There is no effect of the Balanced Scorecard on the organizational performance in the Jordanian Industrial Public Shareholding Companies.
- There is no effect of the Balanced Scorecard on Enterprise Risk Management in the Jordanian Industrial Public Shareholding Companies.
- There is no effect of Enterprise Risk Management on the organizational performance of the Jordanian Industrial Public Shareholding Companies.
- There is no effect of Enterprise Risk Management in the relationship between the Balanced Scorecard and organizational performance in the Jordanian Industrial Public Shareholding Companies.

3 RESEARCH METHOD

3.1 Participants

The population in this study were managers who working in the Jordanian Industrial Public Shareholding Companies which numbered 59 companies. Data is collected by survey method then used to validate the framework and then test the hypothesized relationships between the study variables. The questionnaire was distributed among 150 managers who were randomly selected from 59 Industrial Public Shareholding Companies were identified. Of this sample, only 85 replied representing 56.6 percent response rate.

3.2 Measures

Organizational performance: this construct was measured by [46] and [47] ten-item instrument, with several dimensions as opposed to just a single one. The measure has two parts, the first in which the managers are requested to rate the level of importance of every performance dimensions, and the second in which they are requested to rate the level of managers' performance based on the dimensions, gauged through a 7-point Likert scale. The scale is anchored from 1 (significantly below average) to 7 (significantly above average). In so doing, organizational performance is measured by weighing each item by their relative importance. The instrument has been extensively utilized by prior literature including [48] and [49]. The study obtained Cronbach's alpha of 0.942. ERMS: this construct was measured using [50] and [51] eight-item instrument, where respondents were requested to point out the level of their agreement to the statements concerning risk management practices, gauged on a 7-point Likert scale that ranges from 1 (strongly disagree) to 7 (strongly agree), and the instrument obtained alpha coefficient value of 0.947. BSC: there were four perspectives of BSC constituting 13 items that were utilized for its measurement. The four dimensions contained items concerning financial perspective, customer perspective, internal perspective and learning and growth perspective as recommended by [52]; [53]; [54]; [55]. The instrument required the respondents to pinpoint the level of their agreement to the statements measuring BSC on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree), and the alpha coefficient reliability value of the instrument was 0.930.

4 RESULTS

Throughout the past years, PLS-SEM has become as an important tool for analyzing data, in exploratory research framework, particularly after the new linkages among the constructs are tested [56]. PLS-SEM's importance, according to [57] lies in the perspective of its prediction and thus, considering the research framework's exploratory nature, PLS-SEM was deemed to be an appropriate tool to analyze data. PLS-SEM analysis consists of two stages; first, the determination of reliability and validity, with the measures used as the operationalization of the supporting constructs (measurement model). The second stage involves the construction of the resulting model's coefficients (structural model) and both stages are detailed in the next sub-sections.

4.1 Assessment of the Measurement Model

The measurement model was assessed for reliability and validity using CR and CA, with CA values of 0.7 and over considered acceptable [58]. On the basis of the [59] study, to be acceptable CR value has to be 0.70 and over and accordingly, this study evaluated both CR and CA values, and the indicators reliability was tested using outer loadings (above 0.70 for acceptability) [56]. The standard loadings (λ) obtained for the present study were all acceptable exceeding the threshold (refer to Table 1). More specifically, three BSC items (BSC2, BSC3 and BSC9) were dropped as suggested by [60] and Table 1 indicates that CA, CR and OL values exceeded the threshold values and therefore remained. There are two components to construct validity and they are discriminant validity and convergent validity [56]. For the convergent validity evaluation, [61] recommended the average variance extracted (AVE) usage, and in this study the values were all above the threshold for every construct (refer to Table 1). Moreover, discriminant validity was also tested to confirm that each construct is unique and managed to encapsulate a certain phenomenon [56]. According to Fornell and Larcker's conditions, the each latent constructs' AVE square root is compared with the constructs correlations to evaluate discriminant validity. Table 2 tabulates the results and confirms that the AVE square root exceeds the constructs' correlations. To further establish discriminant validity, [62] condition was used. In particular, [62] proposed a new condition for discriminant validity assessment in the variance-based structural equation model known as the Heterotrait-Monotrait (HTMT) ratio of correlations that is a thorough method used for discriminant validity evaluation. In this regard, an HTMT value that is lower than 1 is required although the exact threshold remains debatable – researchers generally proposed a value of 0.85 (e.g., [63]; [62]; [64]). Accordingly, the present study also used the method for discriminant validity. Table 2 indicates that the constructs have HTMT values lower than 0.85. Thus, Fornell-Larcker and Henseler's (2015) criteria outcome established good discriminant validity. Following the confirmation of convergent and discriminant validity, the structural model was evaluated.

TABLE 1
RELIABILITY AND VALIDITY OF MEASUREMENT MODEL

Construct	Items	Loadings	CR	C. A	AVE
Balanced Scorecard	BSC-1	0.744	0.93	0.941	0.614
	BSC-4	0.788			
	BSC-5	0.743			

Enterprise Risk Management Systems	BSC-6	0.769	0.94	0.955	0.729
	BSC-7	0.795			
	BSC-8	0.823			
	BSC-10	0.770			
	BSC-11	0.736			
	BSC-12	0.817			
	BSC-13	0.844			
	ERMS-1	0.908			
Organizational Performance	ERMS-2	0.876	0.94	0.951	0.658
	ERMS-3	0.824			
	ERMS-4	0.843			
	ERMS-5	0.859			
	ERMS-6	0.841			
	ERMS-7	0.880			
	ERMS-8	0.790			
	OP-1	0.786			
	OP-2	0.776			
	OP-3	0.776			
OP-4	0.810				
OP-5	0.813				
OP-6	0.850				
OP-7	0.810				
OP-8	0.821				
OP-9	0.816				
OP-10	0.850				

TABLE 2
DISCRIMINANT VALIDITY OF CONSTRUCTS

Fornell-Larcker criterion			
Variables	1	2	3
Balanced Scorecard	0.784		
Enterprise Risk Management Systems	0.713	0.854	
Organizational Performance	0.778	0.802	0.811
HTMT criterion			
Variables	1	2	3
Balanced Scorecard			
Enterprise Risk Management Systems	0.744		
Organizational Performance	0.826	0.841	

4.2 Assessment of Structural Model

This section presents the result of the assessment of the hypothesized relationship and that of the explanatory power of the model. For this assessment, the PLS algorithm and the bootstrap procedures was used for the (R^2) estimation, path coefficients, standard error and t-statistics. The model has (R^2) value of 0.785, which shows that the variables explained 78.5% of the variance in organizational performance. Table 3 presents the results details, which are further illustrated in Figure 1. From the table, the hypothesis testing is carried out with the help of two-tailed analysis and based on the results, BSC positively and significant affected ERMS (coefficient = 0.713, $p < .05$), while ERMS positively and significantly affected organizational performance on an alpha level of $\alpha < 0.05$ (coefficient = 0.604, $p < .05$). This indicates that a one degree increase in ERMS will lead to enhancement of organizational performance by 6%. For BSC, it was found to have a positive and significant effect, with alpha level of $\alpha < 0.05$ on organizational performance (coefficient = 0.347, $p < .05$). The exact outcome, according to [65] can be achieved by

applying percentile bootstrapping to confirm a confidence interval of 95%. Accordingly, at a confidence level of 95%, an interval of zero shows a structural path coefficient that significantly varies from zero and thus, the path coefficient significance is confirmed. The results support hypotheses 1, 2 and 3.

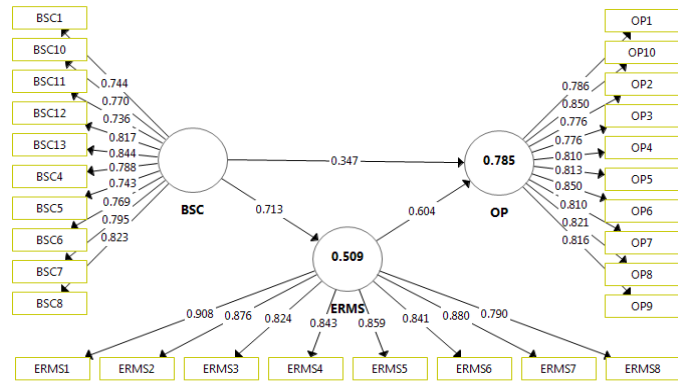


Fig 1. FINAL MODEL WITH STANDARDISED PATH COEFFICIENT AND R² VALUES

TABLE 3
HYPOTHESES VERIFICATION (DIRECT RELATIONSHIP)

Hypothesis	Standardized Coefficient	Standard error	t-value	Percentile 95% confidence intervals		p value
				95% LL	95% UL	
BSC->ERMS	0.713	0.08	8.331	(0.515 ; 0.854)		0.000
BSC->OP	0.347	0.11	2.953	(0.185 ; 0.633)		0.003
ERMS->OP	0.604	0.09	5.138	(0.282 ; 0.763)		0.000

Notes: BSC=Balanced Scorecard, ERMS=Enterprise Risk Management Systems, OP=Organizational performance.

Moving on to the proposed mediating effects, [66] procedure was adopted to test mediation and complex models. According to the authors, a bootstrap analysis is applied with a considerable number of sub-samples in order to assess the independent variable's indirect effect on the dependent variable, via a mediating variable. Every bootstrapping sub-sample's path coefficients of mediating relationship are calculated, after which they are multiplied to obtain a specific indirect product term. This is followed by calculating the indirect effects standard deviation, which is equivalent to the standard error (SE) in bootstrapping [67]. The SE values of the indirect effects that were obtained from the bootstrapping procedure are used, after which, a pseudo t-test is computed for the assessment of the indirect effects significance. Added to this method, this study also used [68] method for the calculation of confidence intervals for every specific indirect effect. More specifically, the confidence intervals for the indirect paths are calculated, with extreme cases eliminated using percentile formula. In relation to this, in case the confidence interval for a mediating variable excludes the value zero, this shows that the indirect effect significantly differs from zero and is thus deemed as significant. The mediation analysis estimations results are tabulated in Table 4. From the table, it is evident that ERMS has a mediating effect on the BSC influence on organizational performance (coefficient = 0.431, p < .05), with the direct BSC-organizational performance

relationship obtained being significant (as presented in Table 3). In other words, ERMS has a partial mediating effect on the direct BSC-organizational performance relationship, supporting the proposed fourth hypothesis.

TABLE 4
MEDIATION EFFECTS

Hypothesis	a Path coefficient	B Path coefficient	a*b Path coefficient	t- value	SE	Percentile 95% confidence intervals		Conclusion
						95% LL	95% UL	
BSC->ERMS->OP	0.713	0.604	0.431	5.435*	0.079	(0.230 ; 0.563)		Partial mediator

Notes: BSC=Balanced Scorecard, ERMS=Enterprise Risk Management Systems, OP= organizational performance, *p < 0.05.

5 CONCLUSION

Our study was motivated by the lack of evidence on the impact of ERM in the relationship between the BSC and the organizational performance. We explained the challenges associated with investigating the relationship, including the many other factors that influence the relationship between the BSC and the organizational performance. To our knowledge, our study is the first to be able to report on the impact of ERM in the relationship between the BSC and the Jordanian Industrial Public Shareholding company's performance. Our study has produced strong evidence for the positive impact of ERM and BSC on firm performance. Moreover, the finding indicates that ERM also positively mediate the relationship between BSC and organizational performance. Through this research, the researchers argue that firms hoping to improve their performance may not realize the indirect impact coming from using ERM system at the firms' level. The results emphasize the importance of BSC and ERM system in the Jordanian Industrial Public Shareholding Companies. If Jordanian Industrial Public Shareholding Companies want to survive intense competition in local market from other international companies, they need to improve their performance.

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