

Shahzad, Akmal et al.

Article

Mediating role of formalization of RM methods among the perceived business risk and organization performance

Cogent Business & Management

Provided in Cooperation with:

Taylor & Francis Group

Suggested Citation: Shahzad, Akmal et al. (2022) : Mediating role of formalization of RM methods among the perceived business risk and organization performance, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 9, Iss. 1, pp. 1-15, <https://doi.org/10.1080/23311975.2021.2024116>

This Version is available at:

<https://hdl.handle.net/10419/288291>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

Mediating role of formalization of RM methods among the perceived business risk and organization performance

Akmal Shahzad, Bushra Zulfiqar, Mumtaz Ali, Ayaz ul Haq, Maryam Sajjad & Ahmad Raza

To cite this article: Akmal Shahzad, Bushra Zulfiqar, Mumtaz Ali, Ayaz ul Haq, Maryam Sajjad & Ahmad Raza (2022) Mediating role of formalization of RM methods among the perceived business risk and organization performance, Cogent Business & Management, 9:1, 2024116, DOI: [10.1080/23311975.2021.2024116](https://doi.org/10.1080/23311975.2021.2024116)

To link to this article: <https://doi.org/10.1080/23311975.2021.2024116>



© 2022 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.



Published online: 20 Jan 2022.



Submit your article to this journal [↗](#)



Article views: 1850



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)



Received 1 April 2021
Accepted 24 December 2021

*Corresponding author: Akmal Shahzad, Preston University - Pakistan, Pakistan
E-mail: everbrighter2011@gmail.com

Reviewing editor:
David McMillan, University of Stirling, United Kingdom

Additional information is available at the end of the article

BANKING & FINANCE | RESEARCH ARTICLE

Mediating role of formalization of RM methods among the perceived business risk and organization performance

Akmal Shahzad^{1*}, Bushra Zulfiqar², Mumtaz Ali³, Ayaz ul Haq⁴, Maryam Sajjad⁵ and Ahmad Raza⁶

Abstract: The rapid changes in technology and globalization lead to mediating role in formalization of RM methods among perceived business risk and organization performance. Questionnaire distributed among 301 financial professionals of selected industries and duly filled questionnaires received back 204. Pilot study was conducted at 96 responses to check the validity and reliability of instrument. Questionnaire distributed among CFOs/Finance managers/Risk Managers of selected industries. The study results imply that the performance of the organization has a significant positive relationship with all components of perceived Business risk (PBR) such as economic factors, financial indicators, technological change, political uncertainty, and market competition. It is also found that the Formalization of RM Methods mediates among the component of PBR and organization performance. The results provide meaningful insights for managers, which are used generally by any organization as a guideline to improve the organization's performance.

Subjects: Finance; Corporate Finance; Business, Management and Accounting; Risk Management; Strategic Management

Keywords: Perceived business risk; organization performance; formalization of RM methods; risk management



Akmal Shahzad

ABOUT THE AUTHOR

Akmal Shahzad has research interests in corporate finance, corporate governance, capital market, and Islamic financial system. Currently, Akmal Shahzad works at the Faculty of Management Sciences, as an Assistant Professor. Bushra Zulfiqar has research interests in working capital management, corporate governance, and Islamic financial system. Currently, Bushra Zulfiqar works at the Faculty of Management Sciences, as an Assistant Professor in PMAS-AAUR, Rawalpindi, Pakistan. Mumtaz Ali works at Federal Urdu University of Arts Science and Technology. Ayaz ul Haq has research interests in Financial Market, Investment Management, and financial management. Currently, Ayaz ul Haq works at the Faculty of Management Sciences, as an Assistant Professor. Maryam Sajjad has interest in finance and an independent researcher. Ahmed Raza did his MS finance from Iqra University.

PUBLIC INTEREST STATEMENT

This study investigates the impact of business environmental factors on organizational performance. Business environmental factors are economic factors, financial market indicators, technological change, political uncertainty, and market competitions. The finding shows that the performance of the organization has a significant positive relationship with all components of perceived business risk (PBR) such as economic factors, financial indicators, technological change, political uncertainty, and market competition. It is also found that the Formalization of RM Methods mediates among the component of PBR and organization performance. The results provide meaningful insights for managers, which are used generally by any organization as a guideline to improve the organization's performance.

1. Introduction

With the advent of new technology and globalization, the business environment has become more dynamic. Therefore, business activity has become complex and challenging as compared to the last century. The increasing pace of changes and globalization both put risk base control high on the agenda for companies. As per Welch and Welch (2005), inclusive scanning of business indicates that the external business environment for any organization is filled with uncertainty and risk. The management has to comprehend the external business environmental factors in order to effectively deal with risk and to improve the organization's performance. Irrespective of the sector, organizations deal with rapid changes in the external business environment, which influence firm performance (Hitt, Ireland, Sirmon & Trahms, 2011). Therefore, a comprehensive risk management framework needs to adopt by the business organization to survive in the market. In the current scenario, the management of risk is one of the foremost important issues facing organizations today. In a dynamic business environment, balancing risk is an efficient approach to handle corporate risk (Berinato, 2004). The efficient RM not only reduces the influence of risk on business operation but also generates several beneficial prospects for organizations in uncertainty. The aforesaid motivates the management to dig out different techniques to cope with risk in business operation. A business has to survive in a volatile business environment, therefore every organization tries to exclude the risk (Renn & Klinke, 2016). It is well-established fact that risk only is reduced by different tools and techniques but can not fully eliminate from the business. Akpoviroro (2018) describes the business environment as anything which can affect the business activity, e.g strategy, performance, process, and decision. The key components of the business environment are political, economic, technological, and legal, he added. A business may face various jeopardies arises from the external business environment, e.g. technological, political, legal, and many other fluctuations (Kannadhasan, Aramvalathan, Tandon et al., 2013a; Saiful, 2017). In general notation, the uncertainty of the outcomes is a risk. In nutshell, it is very important to realize the risk perception phenomena to develop understanding among the managers engage in finance office as well as RM activities to deal with business environment volatility.

The previous research works have been conducted either for a specific industry or for some particular geographic area. Haque and Ali (2016) has focused on the individual sectors, e.g. cellular sector, whereas some other researchers have focused on a specific area like Pagach and Warr (2011) worked on US data; Abdullah et al. (2017) have worked on Malaysian data; Olson et al. (2010) have worked on Chinese data and Lechner et al. (2016) have worked on Germany data. A substantial review of theoretical and empirical literature has been conducted to explore the effect of risk management on organization performance in different contexts. The link between perceived business risk, Formalization of RM Methods, and organization performance is completely dynamic which depends upon the context of the study, more specifically, country and time-specific. This relationship also varies across companies and sectors. Management may change their approach to deal with uncertain business environments. As there is uncertain business environment in Pakistan which increase in risk at organizational level. Therefore, lack of formal RM methods exploits the organizational resources which in turn may reduce organization performance. Furthermore, the Pakistan has quite a different business environment than developed countries studies earlier; therefore, the researcher investigates the perception of risk and formalization of RM Methods in the uncertain business environment.

This study added literature to existing in several ways. First, this study is among the first to find the relationship in Pakistan. Second, it outlines recommendations for management to improve RM in a dynamic business environment by assessing the management commitment to RM in Pakistan. It also focuses on questions such as how a manager in Pakistan perceives business risk, whether

they deemed the Formalization of RM Methods base RM as a strategic activity, and if so how frequently they use RM tools to scan the business environment.

The rest of the paper is structured within the following sections. Section 2 explains the underpinnings and hypotheses development while section 3 deals with the identification of method, data, and variables utilized in the empirical analysis. Section 4 discusses the empirical results followed by a conclusion in section 5.

2. Literature review and theoretical framework

2.1. Perceived business risk and organization performance

The investigation link between perceived business risk and organization performance is considered as the important part of business analysis as discussed by Silva & Ferreira (2017). Milliken (1987) had earlier stated that the risk profile of any business tends to change due to external factors, which are considered crucial for the success of a business, and thus changes in these factors lead to formalized risk management methods in an organization as part of risk management. Thus, changes in the external factors (economic factors, financial market indicators, technological change, political uncertainty, and market competitions) lead to management concern to adopt the level of formalized risk management methods by gauging the impacts of environmental changes on the organization (Duncan, 1972). In this way, the business environmental factors are considered as an essential determinant of its structure (Crawford, 2017; Dunford et al., 2007; Oppong et al., 2016; Thompson, 1967). Further to this, a number of researchers conducted research to investigate the importance of business environment factors and how these factors develop organizational management risk approaches and implementation. A few other researchers inspected and discovered the contribution of components in developing risk management strategy, for example, environmental uncertainty, business system, and innovation are the key determinants of the adequacy of management and control. Similarly, accounting profit, dependence on bookkeeping-based operational measures, and budgetary control (Chenhall, 2003; Govindarajan & Gupta, 1985; Hassan et al., 2019;). The study concluded that PBR will result in higher levels of formalized RM methods which leads to better organizational outcomes.

2.2. Perceived business risk and formalization of RM methods

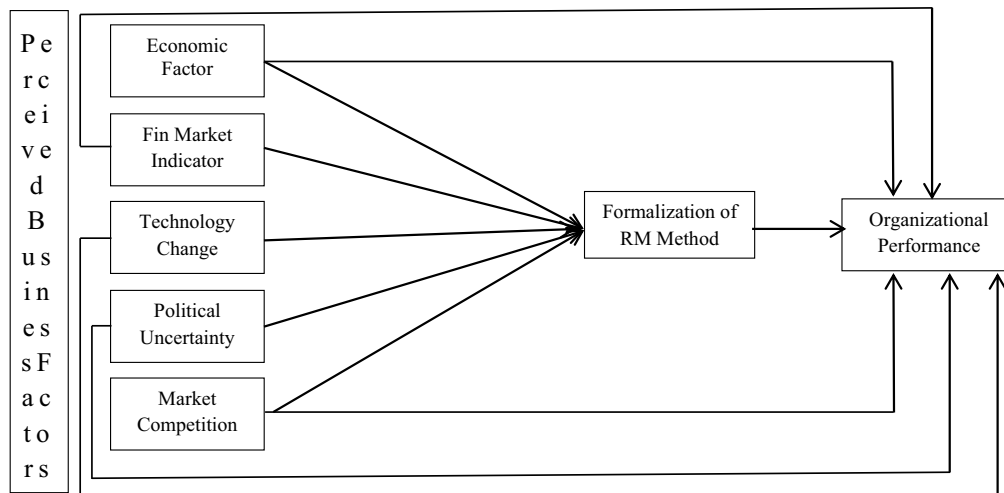
RM involves the main identification of risk along with evaluation and ways to counter it using suitable internal controls. This can only be effective if this information is shared amongst the organization on a timely basis while having formal, straightforward approaches and methodology advances, regular information among representatives on what should be “the set-in-stone activity” in a given condition. It is in this manner contended that formalization is probably going to satisfy both a control and a coordinated work (Vlaar et al., 2007). Customarily, formalization is seen as an aspect of authoritative structure and identified with how much an association depends on rules and standard working methodology to coordinate the conduct of representatives (Abdulkadir, 2014; Dawes et al., 2007).

For the motivations behind this investigation, we characterize RM formalization as the degree to which “RM strategies and procedures are formalized and embraced in a straightforward and precise way”. In this investigation, we contend that as Perceived Business Risk expands, organizations will progressively confront data which is unstable and will, therefore, not have the option to dole out probabilities with any level of certainty as to how natural variables will influence the firm (Bae, 2017; Duncan, 1972b; Gordon & Narayanan, 1984). In such conditions, we accept that organizations will endeavor to FRMM as formalization encourages the preparation of material and information that are available to instability in an increasingly methodical and cautious way.

2.3. Theoretical framework

Perceived risk is a crucial factor for an organization that influences multiple aspects of their firm's performance, such as service quality performance, financial performance, and reputation

Figure 1.



performance. Therefore, perceived risk has gained the center position among policymakers and researchers for a few decades. Several studies (e.g. Carter, Rogers, Simkins, & Treanor, 2017; Cendrowski & Mair, 2009; Nottingham & User, 2016) discussed the relationship between the risk and risk management. Formalization refers to the use of accepted measures, guidelines, and activities (Sivadas & Dwyer, 2000a; Vlaar et al., 2007). A typical theory relates to the potential benefits of formalization for all types of organizations along with some potential drawbacks (Benhassine, McKenzie, Pouliquen, & Santini, 2018;; Song, I'm, Van Der Bij, & song, 2011). Strategy formalization reduces potential risks as it also produces consensus within the organization and acceptability of strategic direction (Abdallah & Langley, 2014; Grant, 2016). It also enables the organization to clarify its objectives and raises the potential collaboration within the organization leading to clear lines of communications (Sivadas & Dwyer, 2000b). Foguem and Tiako (2016) discussed the adoption of formalized risk management in a logistic organization. They divided the risk management into three steps such as risk identification, risk assessment, and risk control. Krykavskyy and Savchenko (2018) declared formalization as a strategic tool to streamline the operations along with the objective of the organization. Power (2004) argued through risk management has been formalized. This formalization is expected to provide opportunities to enhance managerial control, for example, via improved forecasting, more sophisticated measurement indicators, faster means of negative feedback, and greater stability (; (1998); Kearney & Kaplan, 1997; Vosselman, 2002). Moreover, this formalization gives rise to research and is more concerned with organization design and practical challenges than with opportunities for risk measurement. Practical challenges potentially erode the opportunities to maximize shareholder value and it may hinder the expansion of managerial control (Mikes, 2009, 2011; Power, 2007; Wahlström, 2018). Rad (2017) described risk management in the banking sector. He noted that formalized risk management results from effective internal controls. Frechet and Goy (2017) illustrated the importance of formalization in small and medium-sized organizations. He added that formalization may help the organized business process. Formalization also simplifies procedures within the organization (Song, et al., 2011) and acts as a bridging device (Ketokivi & Castañer, 2004). Consistent with this argument, some researchers have found that the formalization process increased the performance of the old organizations as well as the persistence of newly established (Burke et al., 2010). Whereas (McKenzie & Seynabou Sakho, 2010) admitted that high formalized organizations and less formalized companies had prominent differences in their earning. Formalized firms had higher profits than others they further added. Mayegle & Nguidjol (2017) highlighted the elements of formalized management and confirmed the importance of

Table 1. Sector-wise survey responses

Sector	Selected companies	Response received
Bank	35	25
Insurance	45	20
Modarabah	10	05
Sugar	45	32
Pharmaceutical	08	03
Cement	22	12
Automobile	20	8
Textile	140	89
Oil & Gas	20	7
Telecommunication	06	3
Total	351	204

formalization. They added that the formalized process leads to reduce doubt which leads to prompt and confident judgments In the light of the review of past literature and relevant theories, the proposed framework is shown in [Figure 1](#)

H1: Economic factors have a positive impact on organizational performance.

H1: Formalization of RM Methods mediate economic factor and organization performance.

H2: Formalization of RM Methods mediate financial indicator and organization performance.

H3: Formalization of RM Methods mediate political uncertainty and organization performance.

H4: Formalization of RM Methods mediate technological change and organization performance.

H5: Formalization of RM Methods mediate market competition and organization performance.

3. Data and methodology

The leading industrial sectors are included in this study. Questionnaire distributed among CFOs/ Finance managers/Risk Managers of selected industries. 204 responses were received out of 351 distributed questionnaires. The survey method may be a useful and bona fide approach to explain and explore variables and construct of interest (Ponto, 2015). In this study, the author employed Structural Equation Modeling (SEM) to test the proposed model as proposed by Greenfield and Greener (2016). . [Table 1](#) describes the industry-wise response of the survey.

4. Pilot testing

This study employed a questionnaire to record responses on a 5-point Likert scale. Confirmatory correlational analysis (CFA) was used to confirm the validity of the instrument. Scale validity provides adequate support to the instrument in several cultures (Shirali, Shekari, & Angali, 2018). This approach is to live the intensity of the latent variables (Lewis, 2017). In the preliminary investigation, 96 respondents were included. The results of the pilot study confirm the validity and reliability of the questionnaire used to collect data from respondents (see, [Tables 2–4](#)). According to Kim, Ku, Kim, Park, & Park (2016), a construct having factor loadings above 0.5 is considered a practically significant construct. Analysis showed that maximum questions included in the instrument were found valid in the Pakistani scenario. Hair, Black, Babin, & Anderson (2014) suggested that average variance extracted (AVE) and Construct Reliability (CR) of the construct

Table 2. Convergent validity

Economic factor		Formalization of RM methods		Organizations performance	
Items	Std. Est. ($\lambda > 0.50$)	Items	Std. Est. ($\lambda > 0.50$)	Items	Std. Est. ($\lambda > 0.50$)
EF-1	0.71	FRMM-1	0.73	PER-1	0.67
EF -2	0.64	FRMM-2	0.65	PER-2	0.67
EF -3	0.76	FRMM-3	0.64	PER-3	0.64
EF-4	0.74	FRMM-4	0.77	PER-4	0.61
AVE = 2.04 /4 = 0.51		FRMM-5	0.69	PER-5	0.86
CR = 8.12/(8.12 + 1.96) = 0.80		FRMM-6	0.77	PER-6	0.73
Financial market indicator		FRMM-7	0.75	PER-7	0.66
Items	Std. Est. ($\lambda > 0.50$)	FRMM-8	0.64	PER-8	0.77
FI-1	0.83	FRMM-9	0.79	PER-9	0.70
FI-2	0.76	FRMM-10	0.75	PER-10	0.82
FI-3	0.59	FRMM-11	0.75	PER-11	0.79
FI-4	0.81	FRMM-12	0.67	PER-12	0.66
FI-5	0.71	FRMM-13	0.76	PER-13	0.79
FI-6	0.60	FRMM-14	0.76	PER-14	0.75
AVE = 3.13/6 = 0.52		FRMM-15	0.79	AVE = 7.38 /14 = 0.53	
CR = 18.49/(18.49 + 2.86) = 0.86		AVE = 7.76 /15 = 0.52		CR = 311.87 /(311.87 + 12.42) = 0.96	
Technological change		CR = 102.3/(102.3 + 6.62) = 0.94		Political Uncertainty	
Items Std. Est. ($\lambda > 0.50$)		Market competition		Items Std. Est. ($\lambda > 0.50$)	
TC-1	0.82	Items Std. Est. ($\lambda > 0.50$)		PU-1	0.70
TC-2	0.72	MC-1	0.71	PU-2	0.69
TC-3	0.78	MC-2	0.79	PU-3	0.73
TC-4	0.65	MC-3	0.66	PU-4	0.79
TC-5	0.71	MC-4	0.73	PU-5	0.67
TC-6	0.68	AVE = 2.09 /4 = 0.52		AVE = 2.58/5 = 0.51	
AVE = 3.13/6 = 0.53		CR = 8.3/(8.3 + 1.90) = 0.81		CR = 12.88/(12.88 + 2.41) = 0.84	
CR = 18.49/(18.49 + 2.86) = 0.86					

EF = Market Uncertainty, FI = Financial Uncertainty, TC = Technological Change, MC = Regularity Uncertainty, PU = Political Uncertainty, IC = Formalization of RM Methods, PER = Performance.

should be above or adequate to 0.50 and 0.70, respectively. The AVE values of every construct found quite the prior stated acceptance criteria. The CR of the entire construct was greater than the aforementioned criteria, which means internal consistency exists.

Table 3 shows the valid items for the construct of study alongside their source and reliability. Cronbach’s Alpha was employed to live the reliability of constructs suggested by Hair, Anderson, Tatham, & Black (1998). The results in Table 3 shows that each construct has a value above 0.70, which suggests that the instrument that would not collect that for this study is reliable.

5. Empirical analysis

This study employed various analysis techniques to examine the collected data. Table 4 contains the results of indicators regarding the adaptability of the model as suggested by Hair et al. (1998). Results revealed that all criteria mentioned in the table are within the range for the proposed study model.

The researcher has also used Common Method Bias (CMB) and found variables are not biased with each other’s. After validating the model, the next step was to scrutinize the hypotheses formulated. This study followed (Hunjra, 2018) methodology to check mediation. The indirect relationship among

Table 3. Cronbach's alpha

Variables	Source	Items	Valid Items	Cronbach's Alpha
Economic factor	Hammad, Jusoh, and Ghozali (2013) Miles et al., (1978)	6	4	0.78
Financial indicator		9	6	0.86
Technological change		10	6	0.81
Political uncertainty		8	5	0.82
Market competition		8	4	0.80
Formalization of RM methods	(Miles et al., 1978; Subramaniam et al., 2011)	15	15	0.96
Organization performance	Govindarajan (1985)	14	14	0.94

Table 4. Model fit index

Model fit criteria	Measurement model	Acceptable range*
χ^2	1.39	-
χ^2/Df	1.39	1-3
GFI	0.99	>0.90
AGFI	0.96	>0.80
CFI	0.99	>0.95
TLI	0.98	>0.90
NFI	0.99	>0.90
RMR	0.01	<0.09
RMSEA	0.04	<0.08
PCLOSE	0.35	>0.05

independent and dependent variables through the mediating variable was tested. A two steps procedure is employed to see the mediating effect of dividend policy, which is shown in [Figure 2](#).

The sixth hypothesis describes the association between perceived risk due to economic factors and perceived Formalization of RM Methods. The result in [Table 5](#) depicted that the effect of perceived volatility in economic factors on the Formalization of RM Methods is significant and positive. Hence, the result supports the suggested relationship between both variables, i.e. there is a significant and positive association between perceived economic factor risk and the Formalization of RM Methods. The association between perceived risk due to financial factors and the Formalization of RM Methods was also examined. The statistics of the study illuminated the positive association between perceived uncertainty in financial factors and the Formalization of RM Methods with a significant path coefficient. The results confirm the implication that perceived uncertainty in financial factors and the Formalization of RM Methods associate with each other significantly and positively.

The association between perceived risk due to political factors and the Formalization of RM Methods was also examined. The statistics of the study illuminated the positive association perceived uncertainty in political factors and the Formalization of RM Methods with a significant path coefficient. The results confirm the implication that perceived uncertainty in political factors and the Formalization of RM Methods associate with each other significantly and positively.

The association between perceived risk due to technical factors and the Formalization of RM Methods was also examined. The statistics of the study illuminated the positive association between perceived uncertainty in technology factors and the Formalization of RM Methods with

Figure 2. Structural equation models: Indirect effects with mediating variables.

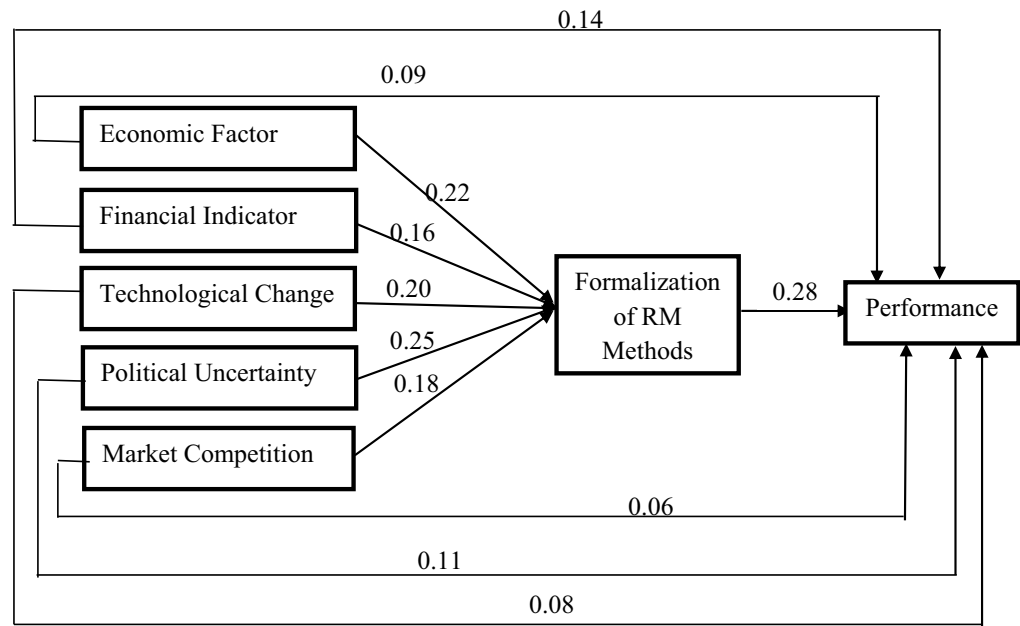


Table 5. Structural equation models: Indirect effects with mediating variables

Variables			Estimates	P value
Formalization of RM methods	←	Economic factors	0.22	0.005
Formalization of RM methods	←	Financial indicators	0.16	0.000
Formalization of RM methods	←	Technological change	0.20	0.021
Formalization of RM methods	←	Political uncertainty	0.25	0.010
Formalization of RM methods	←	Market competition	0.18	0.003
Organization performance	←	Formalization of RM methods	0.28	0.001

a significant path coefficient. The results confirm the implication that perceived uncertainty in technology factors and the Formalization of RM Methods associate with each other significantly and positively.

The association between perceived risk due to market factors and the Formalization of RM Methods was also examined. The statistics of the study illuminated the positive association between perceived uncertainty in market factors and the Formalization of RM Methods with a significant path coefficient. The results confirm the implication that perceived uncertainty in market factors and the Formalization of RM Methods associate with each other significantly and positively. It further reveals that the connection between the Formalization of RM Methods and organization performance is statistically significant.

Table 6. Comparison of direct and indirect effects (Formalization of RM methods)

Variables		Direct effects		Indirect effects		Hypothesis Support	
		Estimate	P-value	Estimate	P-value		
PER	←	Economic factors	0.19	0.005	0.14	0.006	H1 Accepted
PER	←	Financial indicators	0.33	***	0.09	0.020	H2 Accepted
PER	←	Technological change	0.23	***	0.08	0.011	H3 Accepted
PER	←	Political uncertainty	0.16	0.005	0.11	0.004	H4 Accepted
PER	←	Market competition	0.12	0.019	0.06	0.001	H5 Accepted

According to Baron and Kenny (1986), to test the mediation effects, compare the estimate of the direct and indirect path and significance. In literature, generally, this method has been employed by most of the researchers to check the mediation. The researcher also used similar methods in this study in order to check the mediator, i.e. Formalization of RM methods influences the relationship among components of perceived business risk and organization performance. It is evident from the analysis results described in Table 6 that regression weights have reduced from 0.19, 0.33, 0.23, 0.16 and 0.12 to 0.14, 0.09, 0.08, 0.11 and 0.06, respectively, with insignificant relationships. This reduction in regression weight with insignificance means that there is full mediation exist in the relationship between factors of perceived business risk (e.g. economic factors, financial indicator, political uncertainty, technological change, and market volatility) and organization performance is supporting the hypothesis H1 to H5.

The model is found to be fit, which applies that perceived business risk is contributing to the Formalization of RM Methods, which causes organization performance. Environmental factors are long considered critical determinants of organizational control systems.

Accordingly, this study reaffirms the findings of Vasile and Croitoru (2016) in the context of the Pakistani corporate sector. The businesses which are relatively more profitable, less risky, mature and stable, it means organizations has simpler and efficient Formalization of RM Methods as compared to companies that do not develop controls to satisfy the danger. This study finds that perceived business risk features a direct impact on the financial performance also because of the mediation role of Formalization of RM Methods with financial performance. A Formalization of RM Methods system potentially enhances a firm’s monitoring and reporting processes, also ensuring compliance with laws and regulations. In this way, effective control features a critical role to play during a firm’s success.

6. Conclusion

The findings of this study provide meaningful insights for managers of personal sector organizations for achieving higher organizational performance. These insights are often used generally by any organization as a guideline, or they will be specifically applied to the danger perception—organization performance within the private sector during a developing country. With reference to general implications for managers, the first questions proposed by this study were: How does perceived business risk influence organizational performance through control, and whether control mediates the perceived business risk-performance relationship? The solution obtained from the results of this study was that perceived business risk definitely influences organizational performance and the Formalization of RM Methods mediates this relationship. Therefore, to realize

higher organizational performance it is vital for organizations that managers should adopt a robust control that is, first, according to the business goal and, second, according to the regulatory guidelines. Therefore, this finding is extremely important for firms to counter business risk. Organizations inevitably have to undergo changes including structural, procedural, and managerial. It is important for managers to know the risk perception and control relationship in two ways because both have an enormous impact on organizational performance and that they can not be separated from one another since uncertainty in the business environment influences the level of control and the other way around. The limitation of this study is measurements for all variables are supported the perceptions of respondents who were senior management. As such, their observations could also be hospitable biased.

Funding

The authors received no direct funding for this research.

Author details

Akmal Shahzad¹
E-mail: everbrighter2011@gmail.com
E-mail: drakmalshahzadbutt@gmail.com
ORCID ID: <http://orcid.org/0000-0003-3058-3289>
Bushra Zulfiqar²
E-mail: busharazulfiqar@uaar.edu.pk
Mumtaz Ali³
E-mail: mumtaz005@yahoo.com
Ayaz ul Haq⁴
E-mail: drayazulhaq16@gmail.com
Maryam Sajjad⁵
E-mail: maryamayaz84@gmail.com
Ahmad Raza⁶
E-mail: ahmadphd29@gmail.com
David McMillan⁷

¹ Preston University, Islamabad, Pakistan.

² PMAS-UAAAR, Rawalpindi, Pakistan.

³ FUUAST, Islamabad, Pakistan.

⁴ Islamabad Business School, QAU, Islamabad, Pakistan.

⁵ Independent Researcher, MS Finance COMSATS, Islamabad, Pakistan.

⁶ Iqra University, Pakistan.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Citation information

Cite this article as: Mediating role of formalization of RM methods among the perceived business risk and organizational performance, Akmal Shahzad, Bushra Zulfiqar, Mumtaz Ali, Ayaz ul Haq, Maryam Sajjad & Ahmad Raza, *Cogent Business & Management* (2022), 9: 2024116.

References

- Abdallah, C., & Langley, A. (2014). The Double Edge of Ambiguity in Strategic Planning. *Journal of Management Studies*, 51(2), 235–264. <https://doi.org/10.1111/joms.12002>
- Abdulkadir, H. S. (2014). Challenges of implementing internal control systems in NonGovernmental Organizations (NGO) in Kenya: A case of FaithBased Organizations (FBO) in Coast Region. *IOSR Journal of Business and Management*, 16(3), 57–62. <https://doi.org/10.9790/487x-16325762>
- Abdullah, M. H. S. B., Yatim, P., Yatim, P., & Yatim, P. (2017). The effect of enterprise risk management on firm value: Evidence from Malaysian technology firms. *Jurnal Pengurusan*, 49, 3–11. <https://doi.org/10.17576/pengurusan-2017-49-01>
- Akpoviro, K. S. (2018). Impact of external business environment on organizational performance. *IJARIE-(O)-2395-4396*, 4(3), 498–505. [https://doi.org/10.1016/0925-5273\(92\)90020-8](https://doi.org/10.1016/0925-5273(92)90020-8)
- Bae, H. S. (2017). Empirical Relationships of Perceived Environmental Uncertainty, Supply Chain Collaboration and Operational Performance: Analyses of Direct, Indirect and Total Effects. *Asian Journal of Shipping and Logistics*, 33(4), 263–272. <https://doi.org/10.1016/j.ajsl.2017.12.010>
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Bento, R. F., Mertins, L., & White, L. F. (2018). Risk management and formalization of RM methods: A study of management accounting practice. In *Advances in management accounting* (Vol. 30, pp. 1–25). Emerald Group Publishing Ltd. <https://doi.org/10.1108/S1474-787120180000030002>
- Berinato, S. (2004). *Risk's Rewards*. https://www.cio.com.au/article/181713/risk_rewards?pp=5
- Burke, A., Fraser, S., & Greene, F. J. (2010). The multiple effects of business planning on new venture performance. *Journal of Management Studies*, 47(3), 391–415. <https://doi.org/10.1111/j.1467-6486.2009.00857>
- Carter, D. A., Rogers, D. A., Simkins, B. J., & Treanor, S. D. (2017). A review of the literature on commodity risk management. *Journal of Commodity Markets*, 8 (August), 1–17. <https://doi.org/10.1016/j.jcomm.2017.08.002>
- Cendrowski, H., & Mair, W. C. (2009). Enterprise Risk Management and COSO A Guide for Directors, Executives, and Practitioners. In *The British Journal of Psychiatry* (Vol. 112, Issue 483). John Wiley & Sons, Inc <https://doi.org/10.1192/bjp.112.483.211-a>
- Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28 (2–3), 127–168. [https://doi.org/10.1016/S0361-3682\(01\)00027-7](https://doi.org/10.1016/S0361-3682(01)00027-7)
- Crawford, J. (2017). Regulation 's Influence on Risk Management and Management Control Systems in Banks. In phd desertation, Department of Business Studies, Uppsala University phd desertation.
- Dawes, P. L., Lee, D. Y., & Midgley, D. (2007). Organizational learning in high-technology purchase situations: The antecedents and consequences of the participation of external IT consultants. *Industrial Marketing Management*, 36(3), 285–299. <https://doi.org/10.1016/j.indmarman.2005.06.009>
- Duncan, R. B. (1972). Characteristics of organizational environments and perceived environmental uncertainty. *Source: Administrative Science Quarterly*, 17(3), 313. <https://doi.org/10.2307/2392145>
- Dunford, R., Palmer, I., Benveniste, J., & Crawford, J. (2007). Coexistence of “old” and “new” organizational practices: Transitory phenomenon or enduring feature? *Asia Pacific Journal of Human Resources*, 45

- (1), 24–43. <https://doi.org/10.1177/1038411107073597>
- Fraser, J., & Simkins, B. (2010). Enterprise risk management_ Today's leading research and best practices for tomorrow's executives. *The British Journal of Psychiatry*, 112(483).
- Fréchet, M., & Goy, H. (2017). Does strategy formalization foster innovation? Evidence from a French sample of small to medium-sized enterprises. *Management (France)*, 20(3), 266–286. <https://doi.org/10.3917/mana.203.0266>
- Gordon, L. A., & Narayanan, V. K. (1984). Management accounting systems, perceived environmental uncertainty and organization structure: An empirical investigation. *Accounting, Organizations and Society*, 9(1), 33–47. [https://doi.org/10.1016/0361-3682\(84\)90028-X](https://doi.org/10.1016/0361-3682(84)90028-X)
- Govindarajan, V., & Gupta, A. K. (1985). Linking control systems to business unit strategy: impact on performance. *Accounting, Organizations and Society*, 10(1), 51–66. [https://doi.org/10.1016/0361-3682\(85\)90031-5](https://doi.org/10.1016/0361-3682(85)90031-5)
- Grant, R. M. (2016). Contemporary strategy. In *Analysis, concepts, techniques, applications*. John Wiley & Sons Ltd. UK.
- Greenfield, T., & Greener, S. (2016). *Research Methods for Postgraduates* (3rd ed.). John Wiley & Sons, Ltd
- Hair, J. F. J., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Univariate Data Analysis*. In *Exploratory Data Analysis in Business and Economics*. https://doi.org/10.1007/978-3-319-01517-0_3
- Hammad, S. A., Jusoh, R., & Ghazali, I. (2013). Decentralization, perceived environmental uncertainty, managerial performance and management accounting system information in Egyptian hospitals. *International Journal of Accounting and Information Management*, 21(4), 314–330. <https://doi.org/10.1108/IJAIM-02-2012-0005>
- Haque, M., & Ali, I. (2016). Uncertain environment and organizational performance: The mediating role of organizational innovation. *Asian Social Science*, 12(9), 124–138. <https://doi.org/10.5539/ass.v12n9p124>
- Hassan, M. K., Khan, A., & Paltrinieri, A. (2019). Liquidity risk, credit risk and stability in Islamic and conventional banks. *Research in International Business and Finance*, 48, 17–31
- Hitt, M. A., Ireland, R. D., Sirmon, D. G., & Trahms, C. A. (2011). Strategic Entrepreneurship: Creating Value for Individuals, Organizations, and Society. *Academy of Management Perspectives*, 25(2), 57–75. <https://doi.org/10.5465/AMP.25.2.57>
- Hoque, Z. (2005). Linking environmental uncertainty to non-financial performance measures and performance: A research note. *British Accounting Review*, 37(4), 471–481. <https://doi.org/10.1016/j.bar.2005.08.003>
- Hunjra, A. I. (2018). Mediating role of dividend policy among its determinants and organizational financial performance. *Cogent Economics and Finance*, 6(1), 1–16. <https://doi.org/10.1080/23322039.2018.1558714>
- Jansen, T., Claassen, L., van Poll, R., van Kamp, I., & Timmermans, D. R. M. (2018). Breaking down uncertain risks for risk communication: A conceptual review of the environmental health literature. *Risk, Hazards & Crisis in Public Policy*, 9(1), 4–38. <https://doi.org/10.1002/rhc3.12128>
- Jusoh, R. (2008). Environmental uncertainty, performance, and the mediating role of balanced score-card measures use: Evidence from Malaysia. *International Review of Business Research Papers*, 4(2), 116–135.
- Kamsu-Fogueu, B., & Tiako, P. (2017). Risk information formalisation with graphs. *Computers in Industry*, 85, 58–69. <https://doi.org/10.1016/j.compind.2016.12.004>
- Kannadhasan, M., Aramvalarthan, S., & Tandon, D. (2013a). Perceived environmental uncertainty & company performance: An effect on strategic investment decisions. *International Journal of Accounting and Financial Management Research (IJAFMR)*, 3(4), 107–118. http://www.tjprc.org/view_archives.php?year=2013&id=35&jtype=2&page=3
- Kannadhasan, M., Aramvalarthan, S., & Tandon, D. (2013b). Perceived environmental uncertainty & company performance: An effect on strategic investment decisions. *International Journal of Accounting and Financial Management Research (IJAFMR)*, 3(4), 107–118. www.tjprc.org/view_archives.php?year=2013&id=35&jtype=2&page=3
- Ketokivi, M., & Castaner, X. (2004). Strategic Planning as an Integrative Device Mikko
- Kim, H., Ku, B., Kim, J. Y., Park, Y. J., & Park, Y. B. (2016). Confirmatory and exploratory factor analysis for validating the phlegm pattern questionnaire for healthy subjects. *Evidence-Based Complementary and Alternative Medicine*. <https://doi.org/10.1155/2016/2696019>
- Krykavskiy, Y., & Savchenko, Y. (2018). Formalization of the process of the strategic adaptation of the manufacturing company to integration of complex-technical systems in the supply chain. *Technology Audit and Production Reserves*, 1(4(39)), 56–64. <https://doi.org/10.15587/2312-8372.2018.124536>
- Lechner, P., Gatzert, N., & Paper, W. (2016). *Determinants and value of enterprise risk management: Empirical evidence from Germany*.
- Lewis, T. F. (2017). Evidence regarding the internal structure: Confirmatory factor analysis. *Measurement and Evaluation in Counseling and Development*, 50(4), 239–247. <https://doi.org/10.1080/07481756.2017.1336929>
- Mayegle, F.-X., & Nguidjol, S. N. (2017). Determinants of Choice of Management Control System in Cameroonian SMEs: A Contingency Approach. *Journal of Management and Strategy*, 8(2), 25. <https://doi.org/10.5430/jms.v8n2p25>
- McKenzie, D., & Seynabou, S. Y. (2010). Does it pay firms to register for taxes? The impact of formality on firm profitability. *Journal of Development Economics*, 91(1), 15–24. <https://doi.org/10.1016/j.jdevco.2009.02.003>
- Mikes, A. (2009). Risk management and calculative cultures. *Management Accounting Research*, 20(1), 18–40. <https://doi.org/10.1016/j.mar.2008.10.005>
- Mikes, A. (2011). Risk Management at Crunch Time: Are Chief Risk Officers Compliance Champions or Business Partners? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1138615>
- Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman, H. J. (1978). Organizational strategy, structure, and process. *Academy of Management Review*. *Academy of Management*, 3(3), 546–562. <https://doi.org/10.5465/AMR.1978.4305755>
- Milliken, F. J. (1987). Three Types of Perceived Uncertainty about the Environment: State, Effect, and Response. In *Source: The Academy of Management Review* (Vol. 12, Issue 1). <https://about.jstor.org/terms>

- Nottingham, T., & User, N. E. (2016). Measuring and managing risk in UK listed firms.
- Olson, D. L., Dash, D., & Dash Wu, D. (2010). A review of enterprise risk management in supply chain. *Kybernetes*, 39(5), 694–706. <https://doi.org/10.1108/03684921011043198>
- Oppong, M., Owiredu, A., Abedana, V. N., & Asante, E. (2016). The Impact of Internal Control on the Performance of Faith-Based NGOs in Accra. *Research Journal of Finance and Accounting*, 7(12), 110–125. https://www.researchgate.net/publication/304674283_The_Impact_of_Internal_Control_on_the_Performance_of_Faith-Based_NGOs_in_Accra
- Pagach, D. P., & Warr, R. S. (2011). The effects of enterprise risk management on firm performance. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1155218>
- Ponto, J. (2015). Understanding and Evaluating Survey Research. *Journal of the Advanced Practitioner in Oncology*, 6(2). <https://doi.org/10.6004/jadpro.2015.6.2.9>
- Power, M. (2004). The Risk Management of Everything. Rethinking the politics of uncertainty. *Journal of Risk Finance The*, 74. <https://doi.org/10.1108/eb023001>
- Power, M. (2007). *Organised Uncertainty: Designing a World of Risk Management*. Oxford University Press <https://doi.org/10.1080/13603100802475535>.
- Rad, A. (2017). Bank risk management: How do bank employees deal with risk at the strategic and operational levels?
- Saiful, S. (2017). Contingency factors, risk management, and performance of Indonesian banks. *Asian Journal of Finance & Accounting*, 9(1), 35. <https://doi.org/10.5296/ajfa.v9i1.10372>
- Shirali, G., Shekari, M., & Angali, K. A. (2018). Assessing Reliability and Validity of an Instrument for Measuring Resilience Safety Culture in Sociotechnical Systems. *Safety and Health at Work*, 9(3), 296–307. <https://doi.org/10.1016/j.shaw.2017.07.010>
- Sivadas, E., & Dwyer, F. R. (2000b). An examination of organizational factors influencing new product success in internal and alliance-based processes. *Journal of Marketing*, 64(1), 31–49. <https://doi.org/10.1509/jmkg.64.1.31.17985>
- Song, M., Im, S., Van Der Bij, H., & Song, L. Z. (2011). Does strategic planning enhance or impede innovation and firm performance? *Journal of Product Innovation Management*, 28(4), 503–520. <https://doi.org/10.1111/j.1540-5885.2011.00822.x>
- Subramaniam, N., Collier, P., Phang, M., & Burke, G. (2011). The effects of perceived business uncertainty, external consultants and risk management on organisational outcomes. *Journal of Accounting and Organizational Change*, 7(2), 132–157. <https://doi.org/10.1108/18325911111139671>
- Thompson, J. d. (1967). *Organizations in Action Social Science Bases of Administrative Theory*. mc graw-hill book company NEW YORK.
- Vasile, E., & Croitoru, I. (2016). Integrated Risk Management System – Key Factor of the Management System of the Organization. *IntechOpen* <https://doi.org/http://dx.doi.org/10.5772/47883>.
- Vlaar, P. W. L., Van Den Bosch, F. A. J., & Volberda, H. W. (2007). Towards a Dialectic Perspective on Formalization in Interorganizational Relationships: How Alliance Managers Capitalize on the Duality Inherent in Contracts, Rules and Procedures. *Organization Studies*, 28(4), 437–466. <https://doi.org/10.1177/0170840607078003>
- Vosselman, E. G. J. (2002). Towards horizontal archetypes of management control: A transaction cost economics perspective. *Management Accounting Research*, 13(1), 131–148. <https://doi.org/10.1006/mare.2002.0182>
- Wahlström, B. (2018). Systemic thinking in support of safety management in nuclear power plants. *Safety Science*, 109, 201–218. <https://doi.org/10.1016/j.ssci.2018.06.001>



© 2022 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.

You are free to:

Share — copy and redistribute the material in any medium or format.

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.



***Cogent Business & Management* (ISSN: 2331-1975) is published by Cogent OA, part of Taylor & Francis Group.**

Publishing with Cogent OA ensures:

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

Submit your manuscript to a Cogent OA journal at www.CogentOA.com

