# GENDER DIVERSITY AND ENTERPRISE RISK MANAGEMENT: AN INSIGHT OF A FIRM IN THE EMERGING MARKET

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## **Abstract**

Motivated by recent regulatory reforms to boost female representation on corporate boards, such as Indonesia corporate governance, this study aims to look into the influence of boardroom gender diversity on enterprise risk management (ERM). These reforms aim to strengthen corporate governance by allowing a pool of female directors to be recruited to directorship positions and providing female directors with a fresher and more independent perspective, consequently increasing board monitoring and internal control systems. As a result, the purpose of this study is to look into whether and how female directors might better align managers' and shareholders' interests by enhancing investment efficiency and corporate risk management. The purpose of this article is to determine whether and how gender diversity and chief executive officer (CEO) gender affect ERM implementation in Indonesia, a rising market. From 2018 through 2021, this study examines Indonesia's publicly traded enterprises. The enterprises have been designated as state-owned enterprises (SOEs) and non-state-owned enterprises (NSOEs) for further study. ERM implementation is evaluated using the ERM index. According to the research, gender diversity and CEO gender play a crucial role in organisational decisions. The authors demonstrate that the participation of women on corporate boards is linked to the use of ERM. Women CEOs also boost ERMs, according to the statistics.

Keywords: Enterprise Risk Management, Emerging Market, Gender Diversity, Women on Board

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## 1. INTRODUCTION

According to Wasan et al. (2023), enterprise risk management (ERM) is a principal apprehension of managers when they make investment decisions. Companies urge to recognize and mitigate risk, hence will gain a competitive advantage in the long-range period (Chirico & Keelermans, 2022; Zhang, Guo, et al., 2023). ERM monitors the achievement of primary objectives in an ethical manner in order to maximise shareholder profit while also balancing stakeholder interests (Bandini et al., 2022; Hu & Kee, 2022).

Referring to Landi et al. (2022), ERM protects stakeholders from the negative consequences of risk through risk treatment in compliance with procedures. Implementation of good and correct risk management will support realizing good corporate governance through business planning by considering the risks that may occur. Zheng and Wu (2023) tested the hypothesis that cash flow unpredictability reduces business value. According to their findings, managers' efforts to make slick financial statements provide value through the cash flow component of earnings, which helps to appreciate the value of riskmanagement initiatives. According to their findings, managers' efforts to develop attractive financial statements add value through the cash flow component of earnings and, as a result, help to appreciate the value of risk-management initiatives.

Our study, which is driven by important corporate governance principles, examines how gender diversity in the boardroom implementation affects the implementation of the ERM process. Based on prior research, we use women in the boardroom as our gender diversity measure and The ERM index is a composite assessment of the effectiveness of ERM processes by Gordon et al. (2009). Previous research (Ojeka et al., 2019; González et al., 2020; Phung et al., 2023; Lechner & Gatzert, 2018) used a binary variable to assess the presence of ERM activity. Gordon et al.'s (2009) index, in comparison, evaluates the effectiveness of ERM procedures with respect to corporate strategy, operations, reporting, and compliance, as well as the presence of an ERM function within a company (Committee of Sponsoring Organizations the Treadway Commission [COSO], 2004).

According to our empirical results, women in the boardroom are favourably correlated with ERM implementation. The findings imply that women in the boardroom are increasing the effectiveness of ERM implementation.

This study adds two new chapters to the literature. First, we present fresh evidence to help us better understand the role of female directors, which has received increased attention in recent years. Second, the study's findings support the premise that female directors are as qualified as, if not more qualified than, their male counterparts in performing their jobs, at least in terms of risk management. Our work adds to the expanding debate on this topic by providing evidence on the impact of female directors on risk reduction.

The structure of this paper is as follows. Section 2 reviews the relevant literature. Section 3 analyses the uses of methodology and data. Section 4 provides empirical analysis. Section 5 presents a discussion including additional analysis. Section 6 concludes contributions, and limitations, and suggests future research.

## 2. LITERATURE REVIEW

## 2.1. Theoretical background

Scholars have long suggested that increasing diversity in decision-making bodies, such as boards of directors and senior executives, could lead to better outcomes. According to anecdotal evidence, some experts suggested that a lack of gender market diversity contributed financial to overheating, whereas greater gender diversity may have lessened the excessive optimism that fueled the housing bubble. The ego and bravado that drove blind adherence to mathematical models, as well as a cowboy culture that rewarded excessive risktaking, undoubtedly contributed to the convergence of risk management failures that led to the recent financial crisis. The observation of gender diversity, on the other hand, highlights various issues concerning diversity and risk management that require more exploration. These problems become much more pressing when considering the risk management shortcomings that significant and important financial institutions systemically experienced during the financial crisis.

academics decades, have extolled For the virtues of more inclusive gender policies. Some, however, contend that more evidence is needed to support the demand for more gender diversity. Women outperform men in terms of value judgment, risk attitude, and decision-making style (Ahmed et al., 2022; Luo & Salterio, 2022; Moueed & Hunjra, 2020; Jain et al., 2023; Skagerlund et al., 2022; Liu et al., 2022; Lilleholt, 2019). As a result, women are thought to be more capable of monitoring and advising on the board (Nadeem, 2020). An academic study has discovered that board gender diversity has a positive impact on board conduct and financial reporting quality (Dobija et al., 2022; Wahid, 2019; Ghaleb et al., 2021).

empirical However, data regarding the performance implications of gender-diverse boards is less than conclusive. While some studies demonstrate a positive relationship between female directors and firm valuation (Arayakarnkul et al., 2022; Belaounia et al., 2020; Huang & Mirza, 2023) and return on assets (ROA)/return on equity (ROE) (Khuong et al., 2022), others find conflicting results. Chatterjee and Nag (2023) and Martínez and Rambaud (2019), for example, find a negative link between the percentage of women on corporate boards and firm ROA and ROE performance. According to Mather et al. (2020), Adding a director is not gender-neutral, and the market's reaction to the announcement of adding female directors is minimal, implying that recruiting female directors is mostly motivated by tokenism. If, as many people believe, female directors can serve as stronger monitors and counsellors, increasing female board presence should result in beneficial economic consequences as well as improved financial reporting quality control. Although all studies on the relationship between female participation and firm performance follow this logic, they are likely to have confounding effects because aggregate firm performance measures such as Tobin's Q and ROE are influenced by factors other than gender diversity in the boardroom. Even if theory predicts a causal correlation between female participation and firm performance, the connection may be indirect. A more realistic scenario is that board gender diversity improves managerial decision-making, fostering a culture of sustainability and higher performance. However, empirical data tying female directors to specific managerial actions in which female directors play a more significant role are scarce in the literature. In the present study, we look at a risk management context in which female directors can better exploit their personalities and leadership talents. Female directors, by being better monitors and advisors, can improve risk management by increasing board effectiveness. Risk management is a fundamental component of corporate governance that is necessary for a firm's survival, and disregarding risk by the board is regarded as the primary cause of recent financial crises and company collapses (Ebaid, 2022).

Unethical action might pose a potential risk to a corporation. Brooks et al. (2023) illustrate in two well-known bankruptcy examples, Mirror Group Newspapers and Baring Bank, that a firm becomes riskier when its personnel act unethically. Ethical behaviour and risk management are inextricably intertwined. Pournader et al. (2020) argue that risk management is an operational embodiment of ethics. Zalata et al. (2019), for example, discover that: 1) female directors have a higher attendance rate than male directors; 2) male directors of firms with more female directors have fewer attendance issues; and 3) diverse boards hold more board meetings. According to Boukattaya et al. (2022), firms are less likely to commit accounting fraud when their boards include more female directors. Accounting and finance literature reveals favourable benefits of female directors' board behaviour, which is consistent with this line of ethical reasoning. According to Asiedu and Mensah (2023), female directors have a positive relationship with earnings quality. According to Harakeh et al. (2023), firms with gender-diverse boards have more firm-specific information, resulting in lower stock price synchronisation.

## 2.2. Hypotheses development

Previous research has found that gender plays a crucial role in affecting people's attitudes about risk. Women's risk aversion is one of their most distinguishing characteristics (Bannò et al., 2023). Several studies, for example, suggest that females choose reduced risk while making financial decisions (Kurian et al., 2022). Harakeh et al. (2023) also discovered that companies with more volatile stock returns have fewer women on their boards. Furthermore, studies show that people overestimate the accuracy of their knowledge, with men being more overconfident than women (Cervellati et al., 2022). Overconfidence is more common and severe for complicated activities with uncertain input, such as risk management (Kunz & Sonnenholzner, 2023). Men overestimate the precision of their risk knowledge. whereas women display less overconfidence and are hence less prone to take extreme actions. As a result, even if they have the same level of risk aversion, women's decisions may be less risky than men's. To summarise, based on women's risk attitudes and men's overconfidence, we predict female directors to behave differently than male directors in risk management, meaning that gender diversity in the boardroom will help to reduce risk in a firm.

Several other female features point to a link between board gender diversity and risk management. Women, for example, are thought to be stronger communicators who are open to exploring different points of view. Female directors have been shown to be more concerned with interpersonal relationships and to use more participative leadership, both of which make managers more inclined to freely contribute useful information. Female directors are more likely to comprehend and manage risk than their male counterparts because they are better informed. Furthermore, men and women process information in different ways, and women are more capable of providing superior responses to complex situations. In addition, females are more inclined to pay attention to evidence that contradicts their beliefs, whereas males tend to pay attention to hypothesis-confirming information. As a result, women are more likely to make appropriate decisions when both men and women initially hold incorrect assumptions. These attributes increase female directors' ability to manage risks successfully.

Besides, varied groups make greater efforts to attain consensus, resulting in more compromise and less radical final conclusions (Thomas & Anner, 2023). Gender-diverse boards also contribute to risk management by making fewer extreme decisions. We expect gender diversity to lead to a lower likelihood of excessive risk-taking based on our considerations of the role of female directors in risk management, as hypothesized below:

H1: Women in the board of executive director room affect enterprise risk management.

H2: Women as non-executive directors affect enterprise risk management.

H3: Women as the chief executive officer (CEO) affect enterprise risk management.

#### 3. RESEARCH METHODOLOGY

## 3.1. Research data and method

This study employs a population of 154 enterprises included on the Index Kompas100 from 2018 to 2021. Researchers use the purposive sample method to set specific criteria for sorting the population. In terms of some of the criteria established by researchers, particularly:

- companies that have been listed on the Kompas100 Index for at least two consecutive semesters in the same year between 2018 and 2021;
- companies in the Kompas100 Index have the requisite annual reports and financial data for the 2018–2021 timeframe.

## 3.1.1. Dependent variable

The solitary dependent variable will be *ERM*. The 2017 COSO framework is being utilized to analyse firm risk management disclosures in the upcoming research. This framework, which consists of 20 things that the corporation must publish in its annual report, encompasses five dimensions: governance and culture; strategy and objectives determination; performance; review and modification; and information, communication, and reporting. Whereas a dummy variable with a value of one is used for each item of firm risk management that has been effectively disclosed in the financial

and annual reports, and a value of zero is used if it has not. So, using the following formula, each company will have the highest score of 20 or the equivalent of 100% (Witjaksono & Sari, 2021; Gordon et al., 2009).

## 3.1.2. Independent variables

Women in the boardroom (*WoB*), women non-executive directors (*WoC*), and women chief executive officers (*WCEOs*) are the primary independent variables in this study. *WoB* and *WoC* are indicator variables that have a value of one if the company has at least one women director or non-executive director on its board, and a value of zero otherwise. We measured *WCEOs* using a dummy variable that returns one if the company has a woman as CEO and zero otherwise.

## 3.1.3. Control variables

Control variable: Following the literature (Bhat et al., 2018), we adjust for board-level traits (corporate governance characteristics) and firm-level factors that may influence *ERM*. Firm-level control variables

include firm size (*Size*), company effect (*Compeffect*), COVID-19 effect (*Cov-effect*), and profitability (*Profit*), whereas board-level control variables include board independent (*Indp*).

## 3.1.4. Method and model

We use regression analysis to determine the impact of gender diversity (*WoB*, *WoC*, and *WCEOs*) on *ERM*, as in previous studies (Ahmadi et al., 2018; Low et al., 2015). The following regression models are used:

$$ERM = \gamma_0 + \gamma_1 WoB + \gamma_2 WoC + \gamma_3 WCEOs + \gamma_4 Profit + \gamma_5 Size + \gamma_6 Indp + \gamma_7 Comp - effect$$
(1) 
$$+ \gamma_8 Cov - effect + \mu$$

## 3.2. Alternative and additional method

To anticipate autocorrelation matter, we also run auto-regression to the model. This task will enhance the econometric model by improving its fit and delivering a more stable coefficient of determination.

Table 1. Variable definition

Variables	Label	Definition
Dependent variable	,	•
Enterprise risk management	ERM	$ERM = \sum \frac{key \ item \ disclosure}{20} * 100$
Independent variables		
Women in the boardroom	WoB	An indicator that returns the value of 1 if there is one or more women as director and 0 otherwise
Women non-executive director	WoC	An indicator that returns the value of 1 if there is one or more women as non-executive directors and 0 otherwise
Women as CEO	WCEOs	An indicator that returns the value of 1 if the CEO is a woman and 0 otherwise
Control variables		
Profitability	Profit	Earnings before interest, taxes, depreciation and amortization (EBITDA) / Operating asset
Firm size	Size	Ln total asset
Company effect	Comp-effect	An Indicator that returns the value of 1 if the state-owned enterprise (SOE) and 0 otherwise
Board independent	Indp	$\sum$ Independent director
воити тисрепиет		$\sum Non - executive director$
COVID effect	Cov-effect	An indicator that returns the value of 1 if COVID-19 and 0 otherwise

#### 4. EMPIRICAL RESULTS

Table 2 contains descriptive statistics for all variables utilized in the models. To reduce the influence of outliers, we weight the variables (except for gender directorship variables, dummy variables, and discrete

variables) to the highest values of the 1st and 99th percentiles. According to Table 2, the maximum and lowest values attained by each *ERM* variable are 100% and 75%, respectively. 131 observations out of a total of 291 observations in this study have maximum value.

Table 2. Descriptive statistics

Measurement	Comp-effect	Cov-effect	ERM	Indp	Profit	Size	WoB	WoC	WCEOs
Mean	0.780069	0.498282	92.16495	0.455969	0.057627	31.03927	0.673540	0.584192	0.072165
Median	1.000000	0.000000	95.00000	0.428571	0.038071	30.89434	1.000000	1.000000	0.000000
Maximum	1.000000	1.000000	100.0000	0.833333	0.446758	35.08436	1.000000	1.000000	1.000000
Minimum	0.000000	0.000000	75.00000	0.250000	-0.450858	27.46694	0.000000	0.000000	0.000000
Std. dev.	0.414913	0.500858	8.301658	0.115298	0.080561	1.540112	0.469726	0.493710	0.259207
Skewness	-1.352336	0.006873	-0.489091	0.822338	0.376180	0.476985	-0.740170	-0.341648	3.306799
Kurtosis	2.828813	1.000047	1.764338	3.468627	11.16229	3.142817	1.547852	1.116723	11.93492
Observations	291		291	291	291	291	291	291	291

Table 3. Heteroscedasticity (White) test result

Measurement	Value	Prob.	p-value	
F-statistic	3.327799	F (40.250)	0.0000	
Obs. * R-squared	101.1077	Chi-square (40)	0.0000	
Scaled explained SS	57.81354	Chi-square (40)	0.0338	

Note: SS — sum of square.



**Table 4**. Autocorrelation test result: Breusch-Godfrey serial correlation Lagrange multiplier test

Measurement	Value	Prob.	p-value	
F-statistic	113.0614	F (2.280)	0.0000	
Obs. * R-squared	130.0114	Chi-square (2)	0.0000	

According to the results of the White test and the Lagrange multiplier (LM) test in Tables 3 and 4, the residual data still exhibits heteroscedasticity and autocorrelation. As a result, the regression will be performed by including the autoregression term (AR) in the equation model.

Table 5. Correlations

Variable	ERM	Comp-effect	Cov-effect	Indp	Profit	Size	WoB	WoC	WCEOs
ERM	1								
Comp-effect	-0.47196	1							
Cov-effect	0.05065	-0.00182	1						
Indp	0.10002	-0.04577	0.01693	1					
Profit	-0.18019	0.20913	-0.11039	0.10580	1				
Size	0.35404	-0.34287	0.01958	0.17791	-0.19921	1			
WoB	0.15534	-0.13965	-0.06834	0.05902	0.15729	0.16432	1		
WoC	0.16570	-0.27963	-0.12143	0.01456	-0.02820	0.06119	0.15610	1	
WCEOs	0.13546	-0.04429	0.01423	-0.15919	-0.04900	0.13990	0.05255	0.10055	1

## 5. DISCUSSION OF THE RESULTS

Financial companies have the greatest level of ERM, followed by companies in the property and real estate sectors. The fundamental reason for these two sectors is that the organizations with the highest risk management in the business sector have high-risk exposure.

Implementing ERM is critical to ensuring that the organization can limit risk. Furthermore, it is backed, specifically for the financial industry, by distinct legislation governing the execution and disclosure of corporate risk management (Pamungkas, 2019). Meanwhile, based on the company's ownership status, SOEs apply and disclose ERM at a higher level than private companies. The use of ERM in SOE is legally mandated by PER-09/MBU/2012 (Minister of State-Owned Enterprises, 2012), which was later tightened by PER-5/MBU/09/2022 (Minister of State-Owned Enterprises, 2022).

The average proportion of female directors is less than 10%, with a median of roughly one female director on each board. These figures are also consistent with earlier research.

According to the results of the White test and the LM test in Tables 3 and 4, the residual data still exhibits heteroscedasticity and autocorrelation. As a result, the regression will be performed by including the AR in the equation model.

## 5.1. Univariate analysis

Table 5 shows the Pearson correlation coefficients. This table displays the correlation coefficients for the variables included in the *ERM*-applied model. All women's directorship variables have a positive correlation with *ERM*, implying that women directors will increase *ERM*. However, only multivariate testing allows for an examination of their interacting roles in *ERM*.

Table 6. Regression result

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Comp-effect	-8.898096***	-8.523202***	-7.636096***	-7.401274***	-6.010470***	-7.244665***	-7.303088***	-6.028625***
Cov-effect	0.906594	0.790673	0.886600	0.740973	0.680730	0.830692	0.890036	0.629023
Indp	6.714659*			5.063100			-1.534357	-1.869872
Profit		-9.964677*		-8.027412		-2.347210		-2.002648
Size			1.066977***	0.918824***	1.230276***			1.240340***
WoB	1.442677*	1.861495**	1.118983	1.356867*	1.188809***	1.593749***	1.541193***	1.236616**
WoC	0.361209	0.383690	0.590427	0.547145	0.529836	0.526579	0.511614	0.509980
WCEOs	3.951708***	3.310046**	2.666208*	3.031931*	3.567961**	4.626555***	4.605265**	3.370292***
AR					0.691871***	0.688238***	0.692370***	0.693335***
Adj R <sup>2</sup>	0.239207	0.239296	0.264633	0.268228	0.606563	0.587063	0.587024	0.604711
Obs	291	291	291	291	291	291	291	291

Note: \*, \*\*, and \*\*\* are significant at 10%, 5%, and 1%, respectively.

## 5.2. Regression result

Table 6 displays the ordinary least squares (OLS) regression findings. The output of Models 1, 2, 3, and 4 using *ERM* as the dependent variable. In order to account for the residual data's autocorrelation and heteroscedasticity, Models 5, 6, 7, and 8 use an additional AR term.

We test the identical model in Models 1, 2, 3, 4, 5, 6, 7, and 8, but the control variable is substituted. We discover that business risk management is strongly and negatively correlated with *Comp-effect*.

Our findings are also in line with those of Hamid and Purbawangsa (2022), who discovered that

a larger board of directors and a CEO who is also the board chairman are both associated with higher levels of *ERM* implementation. Women are thought to communicate better and be more open to different viewpoints (Yudarwati & Gregory, 2022). Female directors are more concerned with interpersonal relationships and adopt more participatory leadership styles, both of which improve managers' willingness to proactively provide vital information (Zhang, Chu, et al., 2023). Female directors are presumably in a better position than their male counterparts to understand risk since they are more informed.

Men and women process information in different ways, and women are better able to offer

answers to challenging situations superior (Ramadani et al., 2022). In addition, although men tend to pay attention to evidence that supports their ideas, women are more inclined to focus on information that contradicts them. Therefore, in cases where both men and women initially hold faulty beliefs, women are more likely to make the right choices. These qualities also increase female directors' capacity to manage risks more skillfully. As a result, compromise and less radical final conclusions result from heterogeneous groups' increased efforts to attain consensus. Boards with a diverse representation of gender also help with risk management by helping them make fewer extreme judgments.

The method by which female directors could influence the board's decision-making through gender differences in risk propensity is another explanation for this outcome. An experimental investigation by Zhang, Barratt, et al. (2023) and Lilleholt (2019) found that women were less risk-takers than men. According to Harakeh et al. (2023), unmarried men and women make different types of financial decisions in terms of risk aversion. According to the authors' findings, investors' projected returns on investments would decrease the more risk-averse they are, which may result in lower company performance.

Women have more pessimism regarding rewards than men, according to gender variations in risk attitudes. However, it was shown that women had a comparative edge in terms of variety and communication tasks when it came to risk management. Because "a well established cooperation of men and women at the senior management level appears recommendable for firms that strive for an optimization of their risk analysis and risk management" (Schubert, 2006, p. 706), the author stated that these findings have ramifications for the performance of the company. Therefore, if board members make more compromising choices, this could lower the firm's performance volatility and, as a result, lower risk (Wang & Zhang, 2022).

In conclusion, we expect female directors to behave differently than male directors in risk management based on men's overconfidence and women's attitude towards risk, which shows that gender diversity in the boardroom will help to lower risk in a corporation.

## 6. CONCLUSION

To explore how managers measure risk measures assessing how managers measure risk — the extent to which it is a downside-only concept, the level of quantification, and so on — must be constructed. Management researchers can benefit identifying and measuring how managers evaluate risk. Because of their emphasis on historical data, finance, and accounting professors receive far less training in measurement issues than management scholars. Managers' risk judgements can differ from objective risk indicators. In ERM research, objective and subjective risk evaluations can serve a variety of goals. While objective risk indicators can be used to investigate the outcomes of risk-related actions, management perceptions of risk are required to explain managerial behaviour.

Managers make decisions based on their convictions. Perceptions of risk often differ

significantly from "objective" risk indicators. A large corpus of management research has attempted to explain why managers' perceptions of business settings differ so significantly from objective evaluations of those environments. Managers do risk assessments on a regular basis, such as in bank lending and insurance underwriting, and keep track of the results. One would think that comparing evaluations to outcomes will help develop risk assessment. Surprisingly, even in such cases, management risk assessments show systematic discrepancies from objective risk estimates. Such research can help us understand why (and to what extent) managerial risk assessments are consistent with (or mismatched with) objective risks.

The recent financial crises have been linked mostly to flaws in corporate governance in general and poor risk management in particular. As a result, regulators, practitioners, and academics have given corporate governance and risk management issues more attention. It has been advocated that increasing gender diversity in the boardroom will improve corporate governance and risk management because women are thought to have many positive personality and leadership traits, including risk aversion, less assertiveness, greater participation, and a higher ethical standard. However, the claimed contribution of women directors to management decision-making is not well supported by actual data. In conclusion, our data imply that board gender diversity has a substantial role in limiting the effect of risk by applying ERM, despite claims that the hiring of female directors is motivated by tokenism.

Even though there is a global movement to increase the number of women in boardrooms, scepticism is common in the business world. Fundamentally, the question at hand is whether a board's ability to govern and manage resources will improve with increased gender diversity. In this regard, it is essential to pinpoint managerial decision contexts that are essential to a company's long-term development and where female directors can contribute, as suggested. Information transparency and quality are positively correlated with board gender diversity, according to the body of existing studies. Despite its significance, the data is insufficient to persuade the business sector about the benefits of gender-diverse boards. Studies have also looked for evidence to support the concept that having more women on boards of directors leads to improved firm performance, but they were not successful. Researching the role of female directors in specific managerial decision-making scenarios where female directors can use their personality and leadership advantages is more successful than performancebased studies, which are likely to suffer from severe confounding effects. A future study can and should gather more data to enlighten the academic and practitioner communities on the best course of action for a stronger board governance structure by identifying and examining other critical management settings.

Our findings contribute to the body of evidence on the effects of having women in executive roles. We provide more evidence that gender differences in corporate governance have a major influence on company performance, risk management, and firm value. Therefore, it would be worthwhile for a company to try to specifically seek out women to serve on their boards and to get engaged with groups that aid women in obtaining directorships.

Due to the fact that this study solely considers how risk management is applied, it has some limitations. The study may include other risk indicators like return volatility, capital investments in research and development, and shifts in an organization's operating profit. A dynamic research model can be considered by the analytical approach from a methodological perspective.

However, in order to contribute to ERM, management researchers must use a different technique than earlier risk management research. Much of the risk management and strategy literature seeks to explain differences in corporate risk over time and among organisations. To contribute to the ongoing ERM discussion, management researchers must adopt a more prescriptive approach and focus on the effectiveness of specific strategies and activities. This role would be consistent with previous research on planning systems and organisational change management, as well as contemporary efforts to promote active scholarship among management researchers.

Practitioners must understand how different individuals and groups within an organisation define risk, potential biases in risk assessment, and challenges in implementing risk management techniques. These concerns allow organisations to investigate these issues internally and collaborate with researchers to create an engaging study. Practitioners should be aware that this text is cautious about the benefits of ERM. This indicates a predilection for empirical evidence. A sceptical stance is warranted until research definitively establishes that ERM produces the outcomes that its supporters claim. ERM has yet to be proven to provide consistent advantages in studies. Recent history also casts doubt on the efficacy of risk management as it was previously practised.

Overall, ERM provides a new realm for management scholarship, where management scholars can uncover fascinating and theoretically relevant topics with practical significance.

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