FACTORS INFLUENCING ADOPTION OF ENTERPRISE RISK MANAGEMENT

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Received 13|04|2025 - Accepted 21|05|2025- Available online 23|06|2025

Abstract: In the new global economy, Enterprise Risk Management (ERM) becomes a main issue in making a good evaluation of a firm's risk situation and can increasingly improve decision-making to be effective in strategic and operational development for managing the risks. Thus, this paper aimed at reviewing some previous studies on Enterprise Risk Management, particularly on factors that significantly influence ERM, such size of the firm, board independence, organization culture, and the chief risk officer. The study was conducted based on secondary data by reviewing some of the past studies related to ERM. In conclusion, this study indicated that the firm's size has a considerably beneficial influence on the adoption of ERM, which is consistent with previous studies, even though there are still few empirical works and studies on ERM. It was also discovered that hiring a CRO had a positive effect on ERM adoption, indicating the establishment of an ERM program within the organisation.
Keywords: Factors, Influencing, ERM, Adoption, business, organization, companies

1. Introduction

The term "risk" is seen differently by individuals and from various perspectives. Risk, as per Oxford Dictionaries, is described as the chance that something unpleasant or unwelcome will happen. Risk is present in situations of uncertainty and is also described as something undesirable that may occur within a given period (Merna and Al-Thani, 2005). According to Bevin (2022), risk management in an organization aids in identifying and analysing threats, exploring alternatives, and deciding whether to accept or mitigate those threats. Many companies strongly believe that practicing risk management is essential for their business; however, traditional risk management has limitations, such as not covering financial risks and focusing more on systematic risks, unlike Enterprise Risk Management (ERM) which is a structured and systematic approach to managing and evaluating risks faced by firms as it creates values by methodologically aligning people with strategy, processes, knowledge and technology (KPMG, 2001). ERM is growing in popularity as the best way to improve the efficacy of risk management. Additionally, ERM helps boards and senior management better monitor the whole range of risks that their companies face (Beasley et al., 2005). ERM has grown in popularity and is currently seen as a key model for effective corporate governance (Anton & Nucu, 2020). In addition, the ERM offers a source of competitive advantage to firms that reflect strong capability and commitment to ERM (Stoh, 2005). In the new global economy, ERM has emerged to become an essential part of the firm's risk situation assessment and can boost decision-making in improving performance in terms of the firm's risk management, both strategically and operationally. This literature survey indicates that the main areas of the problem are the factors influencing the adoption of ERM. The shifting economic environment has made the use of ERM one of the best techniques to be used to handle the economic downturn currently experienced in many countries. There are, however, many factors leading to the adoption of ERM that should be analysed. For instance, this study concentrated on factors highly affecting firm size, board independence, organizational culture,

and the Chief Risk Officer (CRO). Beasley et al. (2005) observed that parameters such as the CRO and Size of Firm (SF), as well as other factors such as managerial support as well as Big Four auditor presence, influence ERM implementation in firms. A risk management-based organisational culture is an important element for ERM implementation (Cendrowski and Mair, 2009).

Empirical research into the relationship between risk culture and ERM implementation is necessary due to the lack of sufficient empirical support for the relationship between ERM and risk culture (Kimbrough & Componation, 2015). Risk culture affects how well ERM is implemented (Kimbrough & Componation, 2015). Determining and implementing ERM characteristics is significantly influenced by the board of directors' composition, including the separation of the chairman and CEO (Desender, 2007). Furthermore, a study on the pharmaceutical sector revealed that the composition of the board of directors affects the characteristics of companies engaged in ERM operations. The purpose of this study is to examine the variables affecting ERM adoption in the contemporary economic environment. Traditional risk management techniques might not be appropriate for the present economic climate, given how rapidly the global economy is changing.

2. Literature Review

According to some earlier research in the area, traditional risk management is a reactive model that can be characterized as a decision-making process or as an administrative or managerial procedure. The four management functions (planning, organizing, directing, and managing the company's activities) are all included in risk management, if it is considered a process. Its goal is to reduce the negative consequences of accidental and business losses for the organization at an affordable cost (Head, 2004). However, risk management consists of five consecutive processes if it is considered a decision-making process. Analysing and identifying risk exposure is the initial stage; this step requires identification and analysis of an organization's risk exposure in terms of severity and frequency. Examining feasible alternatives to reduce recognized exposures is the second phase, while choosing the most effective risk management strategy from those options is the third. The fourth phase involves implementing the selected risk management strategies. The final stage is to monitor the outcome of the selected technique.

The conventional approach to risk management, which views risk as a necessary evil that needs to be eliminated, is no longer adequate. Because of this, businesses now have to invest in risk management (Simona-Iulia, 2011). There are various terminologies used by various parties to describe ERM. "Corporate risk management," "business risk management," "strategic risk management," "integrated risk management," "holistic risk management," and "enterprise-wide risk management" have all been introduced and covered in a number of books and magazines (D'Arcy, 2011). Although the focus of each of these phrases varies, the overall idea behind them is very similar. According to COSO (2004), ERM is a process used in strategy setting and throughout the organization by the board of directors, management, and other staff members to identify potential events that could have an impact on the organization, as well as manage risk to provide a reasonable level of assurance regarding the accomplishment of the organization's goals. Enterprise risk management, according to the Casualty Actuarial Society (2003), is the process of determining and ranking the most important risks that a company faces, calculating how those risks will affect its financial and strategic goals, and putting organizational and financial solutions in place to deal with those risks. It is demonstrated that although the two definitions provided by the parties in question differ, the overall idea is almost the same. The Casualty Actuarial Society and COSO both assert that ERM is a procedure that is identical to traditional risk management. The purpose of ERM is to manage risks and identify any threats to an organization. This approach to risk management would presuppose that risks must be managed holistically, taking into account possible threats at every organizational level, whether during the planning phase of a new project or as part of ongoing strategic and operational management (Drennan and McConnell, 2007).

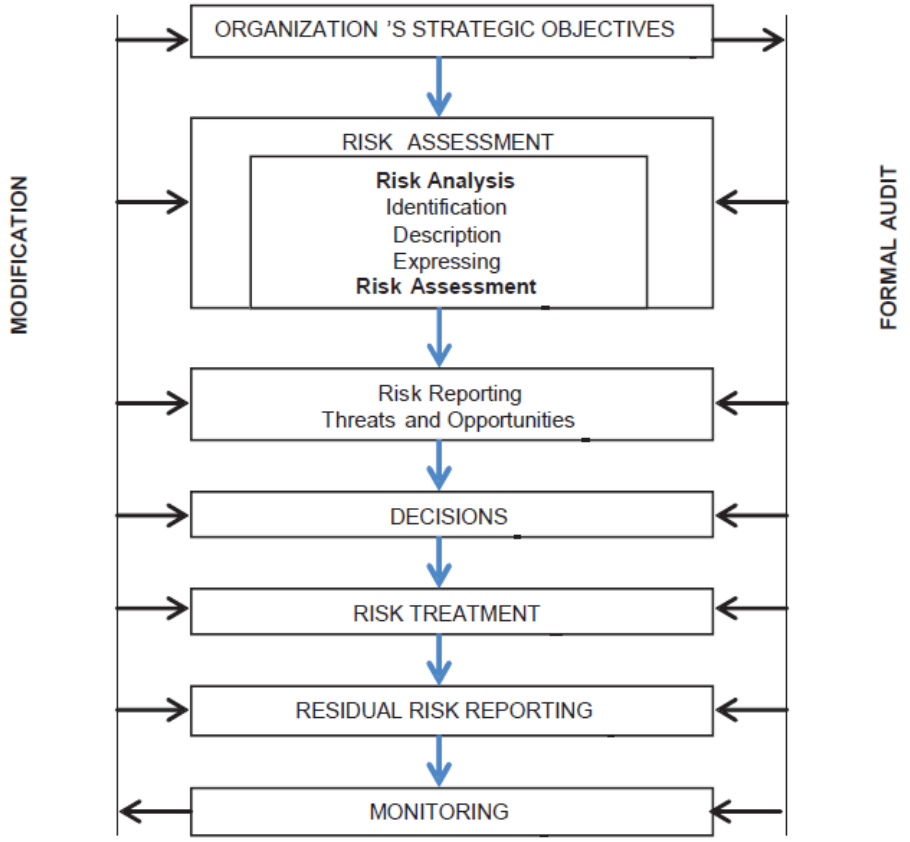

Figure 1. Enterprise Risk Management

Source: Simona-Iulia (2011)

Conventional risk management strategies concentrate on safeguarding the material assets listed on a business's books as well as the associated contractual rights and responsibilities. ERM strategies, on the other hand, are far more comprehensive and seek to safeguard and improve the unique combination of material and immaterial resources that make up the business model. To maximize shareholder value, ERM takes a comprehensive approach to risk, taking into account operational, financial, strategic, and hazard risk all at once (Wolf, 2011). This is in contrast to traditional risk management, which has historically been implemented in silos. Unlike the so-called silo or stovepipe strategy, which involves various overseers handling distinct risks, ERM advocates for high-level control of a company's whole risk portfolio (Banham, 2004). ERM is superior to traditional risk management because it manages risk continuously and methodically rather than relying on decentralization at a specific point in time (Simona-Iulia, 2011). Because various risk management departments are not coordinated, a decentralized strategy leads to inefficiencies (Simona-Iulia, 2011). There is minimal information and technique exchange with other departments or functions of the organization while using the "silo" strategy (Drennan and McConnell, 2007). However, this might lead to a misconception that ERM hinders decentralized risk management. Decentralized risk management enables functional units to make decisions more quickly than centralized risk management. While timing has always been a key concern in dealing with risk, decentralized risk management is more time-effective, allowing functional units to react promptly to situations where fast action can make the difference between loss and no loss.

Decentralized risk management is not excluded by Enterprise Risk Management's shift away from silo-based risk management (Banham, 2004), rather, it creates a hierarchy in which distinct risk managers usually report to a central figure through dashboard technology, which is business intelligence software that gathers and reports risk-based data to the ERM committee or CRO, who bears ultimate responsibility (Banham, 2004). With a modern or enterprise approach, the strategic

plan is facilitated, and the correlation between risk and profitability is optimized. The current (business) approach includes all forms of risk that the firm faces, including both pure and speculative hazards, whereas the traditional view concentrates on pure risk separately visualized and assessed (Simona-Iulia, 2011). Pure risks are those risks whose outcome is either loss or no loss; for example is fire risk. Speculative risks are those that have three potential outcomes: gain, no gain, or loss. Speculative risks, of which investing is a straightforward example, have the potential to yield benefits. To maintain an overall risk profile in line with the organization's strategic goals, ERM necessitates the ongoing assessment of the organization's risk progression and severity (Van Stavern, 2009). According to this perspective, the primary goal of risk management is to predict how each option will affect the organization's performance in the future (Hopkin, 2002). Identifying the range of organizational risks, measuring them, and differentiating between risk correlations (two risks that might mitigate each other's impact), and risk relationships (one risk that causes another) like a product recall that causes a public relations nightmare, are all benefits of holistic management (Banham, 2004).

Table 1. Review on Some past studies on ERM

Factors	Authors	Method	Findings
Size of firm	Gatzert & Martin (2015)	Qualitative and quantitative approaches	It has significant positive determinant since more diversified companies are faced with an increasing risk complexity, similar to company size, a positive relationship to ERM is assumed.
	Kanhai & Ganesh (2014)	Qualitative and quantitative approaches to commercial bank	It is a significant component influencing the adoption of ERM.
	Paape & Speklè (2012)	Qualitative and quantitative approaches	It is significant positive components to ERM.
Factors	**Authors**	**Method**	**Findings**
Chief Risk Officer (CRO)	Gatzert & Martin (2015)	Quantitative approaches	There is a significant positive relationship between the presence of a CRO and the ERM implementation stage.
	Paape & Speklè (2012)	Quantitative by survey was mailed to the board of organizations	The presence of a CRO is positively associated with the degree of ERM implementation
	Daud et al. (2010)	Quantitative approaches were distributed to the companies	There is a positive relationship between Quality of CRO and level of ERM adoption.
Factors	**Authors**	**Method**	**Findings**
Organization culture	Kanhai & Ganesh (2014)	Quantitative approaches were distributed to 18 commercial banks	A positive significant influence the adoption or ERM.
	Malik & Holt (2013)	Qualitative study	Strong significant

		through document review	influences the adoption or ERM. The organization need to have a risk aware culture in all level of peoples.
Factors	**Authors**	**Method**	**Findings**
Board Independence	Choi et al. (2015)	Quantitative approaches to the Australian top listed companies in years 2007 & 2008	A positive significant relationship to the adoption of ERM. The existence and independence of a broad is the dominant factors effecting rigour of ERM strategy adopted.
	Desender (2007)	Quantitative study to 75 firm by uses publicly available data	A negative significant relationship to the adoption and quality of ERM.

3. Research Method

This study utilized a secondary data approach to collect information on ERM and its adoption factors, as previously mentioned in the main aim of the study. Any dataset gathered by someone other than the user is referred to as secondary data (Hillier, 2022); it encompasses data that was not gathered by the author or the evaluation of information collected by another individual (Boslaugh, 2007). Secondary data can include previously collected data that is being evaluated for repurposing to answer novel questions that were not the initial purpose of the data collection (Vartanian, 2010). This study collected secondary data with regard to assumed secondary hypotheses. Cheng and Phillips (2014) observed that in secondary data analysis, a researcher might start an analysis with a question or hypothesis and then search for relevant data that can answer the question, from which he or she will make an analysis. On the other hand, sometimes, researchers may already be familiar with a dataset and use it to find out other questions that can be addressed based on it. All in all, the usage of secondary data in the research process has become a rather useful scenario for finding appropriate data (Ribeiro Serra et al., 2018). Moreover, researchers should be careful in making selections on secondary data to suitability and make sure that any changes or manipulations made on the data are recorded to identify whether the data can be safely used to accept or reject a given set of hypotheses. Through these guidelines, research can be followed with efficiency, devoid of the loss of quality and reliability (Ribeiro Serra et al., 2018).

4. Results and Discussion

4.1 Size of firm

The size of the firm is among the influencing factors in the adoption of ERM. Several empirical studies have revealed that firm size is important in the cases of ERM adoption. The study conducted by Gatzert & Martin (2015), a quantitative study, aims at surveying seven studies devoted to the influence of the determinants of ERM and eight studies centred on the impact of the ERM system for corporate performance; the study found that the relationship between company size and ERM is one of the determinants as the probability of ERM implementation increases with the increase of firm's size, a fact that is usually connected with an increased number of risks and their complexity. Furthermore, the empirical research repeatedly demonstrates that the adoption of ERM systems is

favourably correlated with business factors, such as size, which are broadly significant. Using data mostly from a 5-point Likert survey questionnaire, Kanhai & Ganesh (2014) studied the factors impacting the adoption of enterprise risk management in a sample of 18 commercial banks in Zimbabwe. According to Losby & Wetmore (2012), the Likert scale is an ordered scale where respondents select the response that most closely matches their opinion. Firm size is one of the factors impacting the adoption of ERM, according to a study by Paape & Speklè (2012). Data for the survey was gathered from 825 Dutch-based organizations. Consistent with earlier research, the results indicate that larger firms, especially those in the financial industry, typically have more advanced ERM systems. Overall, three studies have demonstrated that the use of ERM systems is significantly positively correlated with firm size. In keeping with earlier research, this study indicates a favourable correlation between firm size and the use of ERM.

4.2 Chief Risk Officer

Adopting ERM is important since it implies considerable organizational transformation and affects the entire company. Many companies show their dedication to ERM by clearly giving senior executives final say over risk management, frequently by appointing a Chief Risk Officer (CRO) (Beasley et al., 2005; 2008). Any organization that plans to implement an ERM strategy must designate a person or team to oversee the entire program and report to the board of directors on its objectives and outcomes. According to research by Tillinghast-Towers Perrin (2002), since organizations frequently do not publicly declare the existence of an ERM committee, they see the committee and CRO as complementing rather than opposing management bodies. As a result, hiring a CRO is an indicator that the ERM program has been established. This is consistent with a study by Liebenberg and Hoyt (2003), who hypothesized that certain experts would rather have an ERM committee oversee the organization's ERM function than a single person. Some contend that a single organizational unit directly in charge of controlling the entire process is a more effective way to manage risks than a committee or collection of committees. The COSO Report (2004) on ERM states that the CRO's responsibilities include monitoring progress, helping other managers report pertinent risk information throughout the business, and collaborating with other managers to build effective risk management. A successful CRO should also have the following attributes, according to COSO (2004): industry knowledge and experience; integrity; credibility; communication skills with business leaders, regulators, and stakeholders; managerial excellence; comprehensive risk management expertise; the ability to lead and inspire diverse professionals; strategic thinking; strong negotiation skills; and the ability to create risk management policies to accomplish strategic goals. According to Rosa (2006), a successful CRO should be well-versed in important business procedures, have a strong sense of risk, be educated in risk management, be able to communicate effectively with people at all levels, and be able to facilitate discussions in accounting, finance, and insurance. In conclusion, a company's implementation of an ERM program is indicated by the appointment of a CRO who is responsible for ERM implementation and coordination within the company.

4.3 Organization Culture

The culture of an organization consists of the values and behaviours that contribute to its unique environment. This culture has a significant impact on organizational performance. Organizational culture affects the consistency and adaptability of management practices (Ahmad, 2012). Research by Kanhai & Ganesh (2014) shows that organizational culture positively influences the adoption of Enterprise Risk Management (ERM). Through ERM adoption, all employees become risk managers and take on the responsibility of managing risk in their daily tasks. This helps in developing employees' awareness of risk within the organization. Organizational culture plays a crucial role in integrating ERM into an organization's operations and practices, ultimately affecting the success of ERM implementation (Malik & Holt, 2013). To effectively implement ERM, organizations must foster a risk-aware culture at all levels. Although most of the organizations have their risk management group, this culture often considers a risk only when required. There is misinformation regarding the understanding and perception of risk management between top management and the

employees at a lower level because they might not feel the need to manage risk. The need to teach the middle and low-level employees about the importance of risk management should be initiated through the training programs. These programs can create better risk awareness in the culture of the organization, and there is an increase in the adoption of ERM. Generally, the literature reviewed in this work illustrates the positive correlation between organizational culture and ERM adoption, as well as a strong influence of various cultures on the adaptability of ERM.

4.4 Independence Board

The board of directors is the governing body in any organization; this body has its members elected by shareholders during an annual meeting. The chief role of the board is observation and scrutiny of top management of the concerns of the shareholders (Abdelsalam & El-Masry, 2008). Khan et al. (2016) acknowledged that several reasons drive firms towards the ERM process, such as the likelihood of financial distress and its costs, low performance in terms of earnings, growth opportunities, and board independence. Independence is the degree to which procedures and structures address possibilities for interest conflicts (Cheah & Lee, 2009); for instance, conflicts of interest may exist between the chairman and shareholders. Choi et al (2015) found that board independence has a significant positive correlation with adoption of ERM, and having an independent board significantly influences the rigor of ERM strategy. Organizations with good corporate governance practices are in a better position to integrate risks as compared to those that do not actively govern their organizations. Desender (2007) observed a negative relationship between board independence and the adoption of ERM, which means that board independence could not be responsible for the voluntary adoption of ERM and the qualities of ERM. However, when considering the separation of the CEO and chairman roles, this separation can impact the adoption and quality of ERM. The separation of the CEO and chairman, along with an independent board, is significantly related to ERM adoption (Desender, 2007). In summary, previous literature reviewed indicates that board independence has a positive relationship with ERM adoption. Drivers of decision-making are influenced by the board's attributes. The CEO and chairman positions on the board are vital, even if Desender (2007) discovered a negative correlation between board independence and ERM adoption and quality. Segregation of these roles under board independence can impact the composition and characteristics of the board, indirectly affecting the level of independence.

5. Conclusion

The adoption of enterprise risk management in businesses and organizations is greatly influenced by a number of factors; four factors are considered in this study as some of the most important ones that businesses and organizations usually use while implementing ERM. These include the Chief Risk Officer (CRO), board independence, company culture, and firm size. According to earlier research, the adoption of enterprise risk management is strongly positively impacted by the firm's size. The implementation of an ERM program within the organization was indicated by the hiring of a CRO, which was also found to have a favourably significant impact on ERM adoption. Implementing and directing ERM across the entire company is the CRO's responsibility. Organizational culture was the third factor considered, showing a positive and significant influence on ERM adoption. Different cultures within a business organization can play a significant role in the adaptability of ERM, indirectly impacting the independence level of the board. In conclusion, all the factors mentioned above influence the adoption of enterprise risk management, bringing numerous benefits to companies. Some example benefits of ERM include improved focus and perspective on risk, effective resource utilization, and standardized risk reporting. While this study was not an extensive literature review, it highlights the need for further research on ERM adoption factors and effectiveness. ERM remains a fertile area for research, particularly in managing risks effectively. This literature analysis managed to provide a solid foundation for young researchers to explore new avenues in ERM research.

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