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Enterprises' Financial Performance and Operational Risk Management: A Theoretical Assessment of the Literature

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Abstract: *The scope of the operational risk phenomena and its management has been made clear, among other things, by scandals that have happened in the financial sector. It has become crucial to implement an operational risk management system because performance cannot be achieved without having addressed the operational risk management-related issues. Operational risk management is a process by which businesses identify and evaluate the risks impacting their business. Performance is the culmination of an organization's efforts to reach its goals in the field of management. In fact, due to the negative effects of this kind of failure on a company's performance and stability, operational risk has a significant impact on the performance of a firm, regardless of its industry of operation. The purpose of this article is to examine the impact of operational risk management on the financial performance of companies to review the literature and determine whether risk management has a positive or negative impact on financial performance.*

Key Words: Risk, Operational Risk, Operational Risk Management, Performance, Financial Performance

Introduction

Operational risks are getting more and more attention, especially in the wake of financial scandals (the Barings Bank failure in 1995, the loss at the National Australia Bank in 2001, the Enron scandal in 2005, the Society General case, and the most recent subprime crisis in 2007). These crises have demonstrated to regulators and financial institutions alike that operational risks can take many different shapes and produce losses of virtually any proportion. Because of this, operational risk management has become essential. The financial and economic climate is progressively becoming a risk environment. Companies might take significant risks because they diversify their business endeavors and operations to differentiate themselves from the competition. Although it has always existed, operational risk has frequently been ignored. The economic and financial literature highlights the importance of operational risk management by putting it at the root of catastrophic events and well-publicized financial scandals. The worsening of financial performance is attributed to several factors, one of which is operational risk. Studies have examined the relationship between operational risk management and financial performance. On the connection between operational risk control and financial performance, researchers are divided. While Giorgio B. et al. (2013) and Nocco & Stulz (2006) demonstrate a positive relationship between risk management and organizational performance, other studies by Pagach & Warr (2010) and Roslida & Normah (2015) show no effect of the adoption of a risk management system on the financial performance of the organization. We felt it was important to further investigate the subject in light of this work. This study attempts to determine the effect of operational risk management on business financial performance. In this study, we evaluate the existing literature to examine how operational risk management affects financial performance. What effect does operational risk management have on a firm's financial success is the next topic we address.

This paper is organized as follows: the first section provides a theoretical framework on operational risk, the second section elaborates on a literature review by defining the concept of performance, and the third section discusses how operational risk affects a company's financial performance.

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Operational Risks Associated with the Business's Activity

Business involves risk inherently (Olivier, 2008). Economists claim that it is its essence and that it has always existed. Risk-taking begins with starting a business. It's never guaranteed to survive. Even enormous corporations cannot ensure their survival. Examples of global corporations that failed or had to struggle for survival include Enron, Arthur Andersen, Alstom, and Parmalat. All businesses, regardless of their size or the nature of their business, confront risks, which is why risk management has grown to be a major concern, as businesses today view a sustainable competitive edge as being crucial. Management of operational risk appropriately identifies, evaluates, regulates, and assures a thorough follow-up, and it is now a foundational point within the framework of good corporate governance.

Operational Risk Management: A Brief History

After the Second World War, between 1955 and 1964, researchers first started to examine risk management. Models for controlling technology hazards were created by engineers and are now being used by financial institutions to manage operational risk (Bari, 2016). Many company risks, however, were either impossible to insure or extremely expensive to do so. The 1980s also saw the emergence of financial risk management as a concept that many businesses used in addition to traditional risk management. Complexity theory must be applied because of the movement's acceleration over the past 20 years, and more specifically since the start of the 21st century, which can be attributed to the growing complexity of the relationships between economic actors and the interdependencies that go hand in hand with them (Jean & Nicolas, 2016). The OCEG Red Book authors emphasize that the environment in which businesses operate is today more complicated and demanding than ever in a frequently updated book. Even small and medium-sized firms, non-profit organizations, and public sector players now face difficulties that in the past were only encountered by big, global businesses. Internal and external stakeholders want more than just excellent performance—they want transparent management. The dangers and regulatory requirements that are put on enterprises today are a thick, shifting thicket that might suddenly strike. On top of that, the expenditures associated with reducing these risks frequently spiral out of control. Simply said, the current situation in many businesses is neither sustainable nor acceptable (Jean & Nicolas, 2016). The development of a set of universally accessible tools is implied by the explosion in the practice of risk management and its expansion to include all strategic and operational managers. Since its inception as a technical role in some US corporations' insurance budgets 60 years ago, risk management has seen a significant evolution. This evolution is the product of both the reflection of academics from various backgrounds who have attempted to build a scientific basis for constructing certain instruments and the irritation of practitioners who sensed the limitations of the exercise. To guard against unanticipated risks, financial firms created internal risk management models and capital formulas during the 1990s (Bari, 2016). In a similar vein, integrated risk management was implemented, and the first risk manager posts were established. The managerial risk management procedures used from 1990 to 2000 (Sourour, 2018) have changed, and they now call for input from all organization personnel (COSO II, 2005). Since it cannot be regarded as a traditional practice, the internal auditor's contribution to Enterprise Risk Management (ERM), which is empirically little understood, is conceptualized as an innovation. The fraud committed by trader Kerviel, who was able to get around internal control measures, emphasizes the significance of operational risk management. In this context, Basel I (1988), Basel II (2004), and more recently, Basel III (2010), an attempt to enhance risk management, were implemented before Basel IV (2019), according to Haouat (2011). Since information is the foundation of good management, it is essential to understand operational risks, identify them, and then evaluate them to manage them. In other words, any operational manager's main responsibility becomes the study of operational hazards. Therefore, any future manager, engineer, administrator, or politician must include learning about operational risk analysis in their curriculum.

Concept of Operational Risk

The frequently accepted definition of "operational risk" used in the European Directive is "risk of loss resulting from inadequate or failed internal procedures, personnel, and systems, or from external events" (Daniel, 2006). The concept of operational risks is extremely broad, according to (Jean David Dersa, 2015): it expresses all risks that could result in harm, loss, or cost created during the performance of the current activity of the company, including infrastructure, production cycles, distribution, logistics processes, document management, etc. (Daniel, 2006) claims that operational risk includes legal and administrative

risks as well as technical and technology risks like those related to information systems, management, and procedures as well as environmental hazards including climatic, political, social, and systemic risks. It is challenging to accurately detect operational risk because of the accumulation of heterogeneous risks, particularly because its symptoms are frequently challenging to differentiate. There are three types of risk: internal (such as fraud), external (any uncontrollable external event, such as a geopolitical event), and strategic (such as a price war brought on by competition). According to other definitions, operational risk is the possibility of suffering a loss due to internal control, human or technological error failures, information system failures, or other factors. The operational risk was characterized by what it wasn't before Basel 2 was put into effect: neither market risk nor credit risk. The lack of risk visibility, especially in financial reporting, strengthened this precarious position. Operational risk-related costs weren't always recognized as such. Operations risk, according to the Basel Committee, is "the risk of direct or indirect loss resulting from failed or inadequate internal processes, systems, and people, or from external events" (Benoit & Jean, 2004). Unlike other hazards, operational risks arise naturally in the course of a company's operations or activities. Poor risk management can expose the organization to potentially high losses that have an impact on its performance and output by presenting an inconsistent risk profile. The Basel Committee offered the following definition following extensive discussion and drawing influence from BBA, ISDA, and PWC's (1999) definition: "The risk of loss due to inadequate or failed internal procedures, personnel, systems, or external events" (BCBS, 2003) is what operational risk is. Operational risks, in essence, are all the direct or indirect effects that the company produces during its normal business operations, independent of the scale or type of activity. They follow the financial risks that come from the company's "operational core" in the risk pyramid. Major process families will perform their analysis. The agreements of Basel II allow the financial company to better understand and enrich their risk culture, especially if they take into account the operational risk, which is a diffuse risk, i.e., can be found within all departments of a company, as well as operational risks will materialize all the direct or indirect impacts generated by, While Bale III required a strengthening of the necessary capital (common shares and results placed in reserves), measures to account for significant risks (particularly those related to the activities of trading securities, of the counterparty risk for the activities on derivatives), while Bale III aims to reinforce the stability of the system of the company or a bank thanks to measures which are applied from 2013, Bale IV considered as a new regulatory framework The operational risk, which reflects any company's operational core, follows the financial risk in importance.

Operational Risk Elements

According to Djekna and Timba (2018), operational risk is supported by three distinct elements: legal risks, IT risks, and social and psychosocial hazards. All the elements of operational risk are depicted in the diagram below, according to Djekna & Timba (2018).

Figure 1

Operational Risk Elements

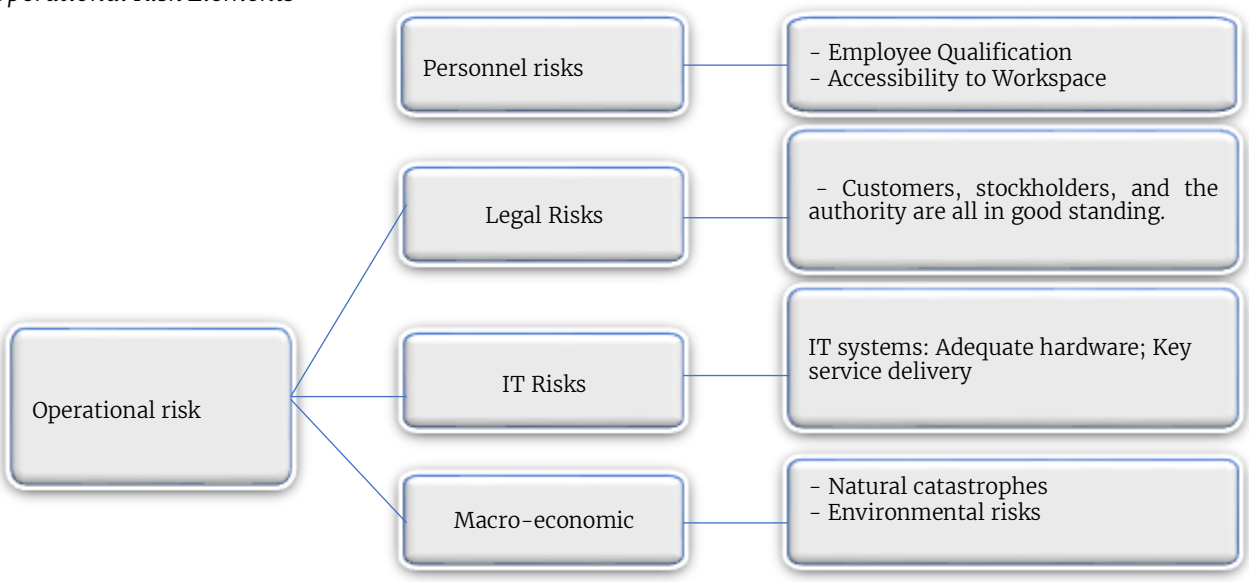


Figure 1 illustrates that operational risk generally consists of overhead expenses, labor costs, and extrinsic variables that are connected, either directly or indirectly, to the performance of financial assets. Generally speaking, operational risk consists of overhead costs, employee salaries, and extrinsic variables that are connected directly or indirectly to the performance of financial assets.

Corporate Performance

Understanding performance is a challenging subject. Performance has multiple definitions, which helps to make the notion a "catch-all word" that has been assigned many interpretations, according to a simple search of the literature (Saulquin & Maupetit, 2004). It is challenging to get to an a priori consensus on the definition of this notion, according to the writers (Bourguignon, 1995; Lebas, 1995; Bessire, 1999). This idea has recently been used in managerial literature to assess how well-communicated sustainable development initiatives are being implemented by the organization (Capron & Quairel, 2005; Boutti, 2010). The ability of the business to produce results at a lesser cost is referred to as financial performance. A business is lucrative when results (earnings) are produced while keeping expenses to a minimum. Market-based or accounting-based metrics can be used to measure financial success (Djenka & Timba, 2018).

Idea for the Performance

Performance is still a challenging topic to define in the field of management science, and most businesses, especially small businesses, have a hazy idea of what it means. Performance measures how well the desired outcome is accomplished. According to (Michel, 2002), the degree of target achievement can be used to determine performance inside an organization. There are two key elements to this performance: Effectiveness: The extent to which the goals put forth for the organization are achieved. Efficiency is the pursuit of "optimal" resource distribution among activities. The majority of the literature studied indicates that there are various conceptually acceptable but different definitions of performance depending on the area and use scenario. Results are achieved when three sub-notions, relevance, efficacy, and efficiency, are all met, according to Bonvoisin et al. (2008). This equation serves as a definition of performance:

Performance = Effectiveness + Efficiency + Economy + Relevance

The notion lacks a unified definition, according to Bourguignon (1995), which is a reflection of the word's polysemy. In her integrative definition, she offers three key meanings (Jianu, 2007):

- Performance equates to success. It is a result of representations of success, which change depending on the organizations and actors and does not exist in and of itself. Productivity alone cannot adequately represent performance; it can only describe its economic aspect.
- Performance is the result of action. Here, performance assessment is considered as the ex-post analysis of the outcomes.
- Performance is action. It is a process rather than a product that occurs at a specific time. Generally speaking, risk management cannot be a performance lever without sustainable performance. Trace the ascent to authority inside management control and the spread to all organizational areas to demonstrate how corporations have internalized the concern for performance. The authors separate four timeframes (Bititi, 2012).
- The idea of standard, which may be applied to both costs and physical units, shaped management tools around industrial management from the 1920s to the 1950s. Effectiveness, efficiency, economy, and relevance all contribute to performance.
- Marketing grew in importance in numerous industries starting towards the end of the 1950s. Break-even points, margin, and partial costs are all developing concepts. They become businesses' and consultants' top priority.
- Japanese industry threats to European and American industries, as well as quality-based competitiveness, characterized the 1980s. Management control is the interpreter of these new priorities by integrating quality measurement into dashboards, revisiting the method of calculating the cost of quality due to hidden costs that replace the standards of cost-quality arbitration, and integrating Total Quality Management (TQM).

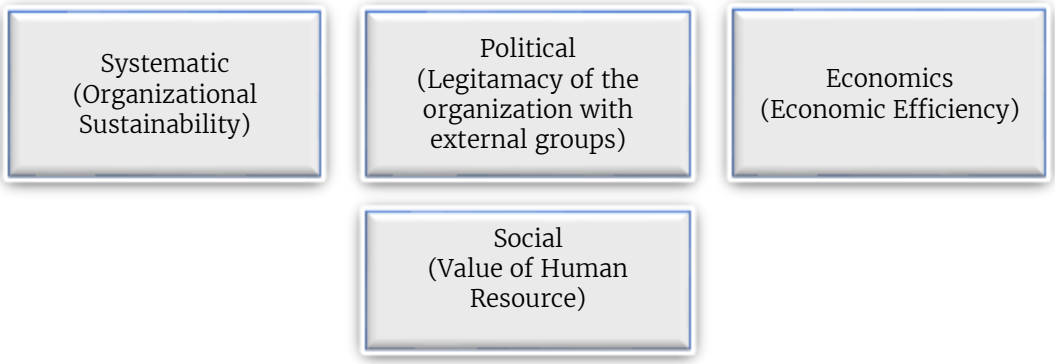
- The 1990s were marked by a focus on performance and the significance of financial issues. Beyond profitability, this idea is more general. It emphasizes the need for administrative or, more broadly, functional services to contribute to the generation of value.

The Performance Parameters

It is required to distinguish between levels or dimensions, the number of which fluctuates in the majority of performance studies. (Dominique, 1999) defines four dimensions listed below in the diagram:

Figure 2

Performance Dimensions



Similar to organizational goals, the concept of performance is multifaceted, subjective, and based on the chosen references (goals, targets). Using this concept as a guide, we can classify performance into several categories, such as organizational performance, strategic performance, financial performance, and non-financial performance. In actuality, the definition of the term "performance" depends on the type of performance. Below, we list a few types of performances.

Figure 3

Performance Parameters

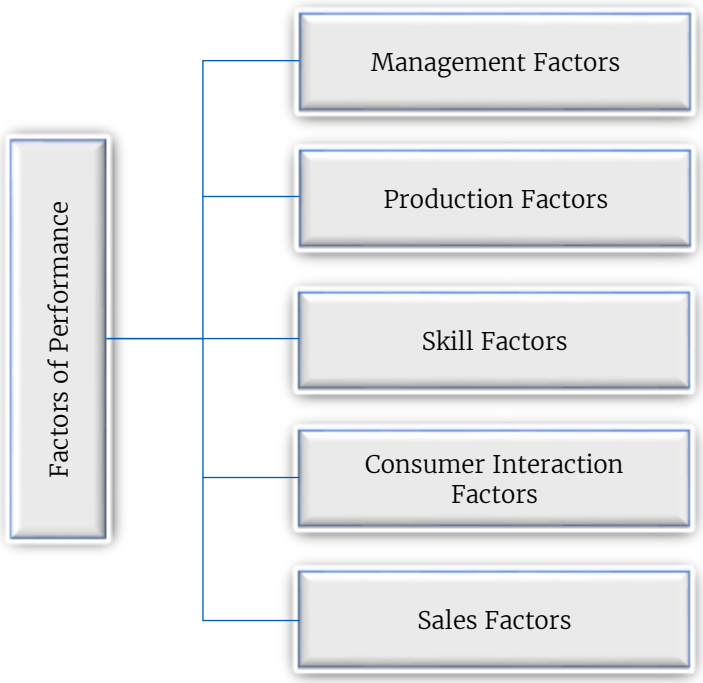
Economic Performance	The performance of an organization has been long studied using financial, accounting, and stock market measures. These indicators include the economic dimension, the social dimension, the political dimension, and the systemic dimension (Djekna & Timba, 2018).
Financial Performance	Financial performance is the ability of the business to produce results at a lesser cost. When outcomes are obtained while keeping costs to a minimum, a business is considered successful. (Assienin & Ouattara, 2016).
Social Performance	Represents the company's ability to pay attention to the social sphere and the state of social or human connections within the organization. It is a key idea in study on business ethics (Bertrand, 2010).
Sales Performance	The performance that is related to meeting the needs of the company's clients is known as marketing performance.
Organizational Performance	Emphasizes that a company's performance is directly tied to the effectiveness of its organizational structure and not to any potential social or economic ramifications when discussing how it is organized to achieve its goals and how it does so.

The Factors that Explain the Performance of Companies

The latter classifies these elements into five categories: management factors, production factors, sales factors, customer interaction factors, and skill factors; the latter depends on the size and type of the company's activity. These are elements that are connected to the company's CEO and, in general, to how the management team is set up. The other two pertain to the company's profile and sociocultural elements. The development of the company depends greatly on the latter category, despite the lack of a functional relationship between business performance and the extent to which socio-cultural aspects are taken into account (Bertrand, 2005). Even though there is no statistically significant link between social networks and performance, the presence of such networks is crucial for enterprises' ability to distribute their goods.

Figure 4

Performance Factors



Operational Risk Management and Financial Performance

Derivatives were first used as instruments for controlling different insurable and non-insurable risks in the 1970s, and their use grew quickly in the 1980s. The 1980s also saw the emergence of the financial management of operational risks as a complementary practice to pure risk management for many businesses. Operational risk management and financial performance is a traditional strategy, but it's significant since it serves as the foundation for operational risk management (Bessis, 1995). Management researchers have operationalized the concept of performance in a variety of ways. This idea has long been simplified to a straightforward dimension that only considers the financial aspect (Bertrand, 2010).

To determine and evaluate the company's primary prospective threats and opportunities to build and maintain the company's worth, assets, and reputation. Thus, it seeks to foresee dangers rather than experience them.

- To protect the company's decision-making and processes to encourage the achievement of its objectives by identifying the key occurrences and circumstances that could materially impair that achievement. Thus, managing these risks aids in achieving the stated goals.
- Encourage activities to be consistent with the company's values: Many hazards are a result of inconsistent daily decisions and actions about the company's values. The company's reputation is mostly affected by these concerns.
- Assemble the staff of the company around a shared understanding of the primary risks and inform them of the risks specific to their work.

The Connection between Operational Risk Management and Financial Performance

Financial performance, as reported by accountants, provides a historical perspective on the assessment of the company's (accounting) profitability. Markowitz (1952) investigated the performance and optimization process of portfolios based on their profitability and risk level, which resulted in the first theories of portfolio management. This is an expectation-variance plane utility maximization. The definition of an "efficient frontier" reflects the contribution of his theory. This definition states that the efficient portfolio is either the least risky for a given level of profitability or the most profitable portfolio for a given level of risk. Numerous non-efficient portfolios, also known as dominated portfolios, are rejected or deleted because they do not sit on the efficient frontier; they are either overly risky (for a given level of profitability) or unprofitable (for a given level of risk) (Bari, 2016). The investor will select the stock with greater profitability when the risk and reward are equal. According to Markowitz (1952), the father of portfolio theory, diversification enables a given level of profitability to lower risk or a given level of risk to increase profitability. On the other hand, a diversified portfolio has a lower risk than the average risk of the assets that make up the portfolio if the profitability of the portfolio is equal to the average profitability of those assets. Despite these objections, Markowitz's model from 1952 is the foundation of scientific advancements in finance. It cleared the path for future studies devoted to the evaluation of performance itself and gave rise to other models. As a result, single-factor or multifactor models first emerged with the work of Sharpe (1963; 1964), Lintner (1965), and additional models that came after, including those of Ross (1976), Fama and French (1992; 1993), etc. The work of numerous academics (Sharpe, 1964; Lintner, 1965) led to the development of a new model known as the Capital Asset Pricing Model (CAPM) to illuminate a connection between the risk and profitability of financial assets. In light of these discrepancies, research has examined additional factors (diversification, size, industry competitive rank) that may help to explain the link. (Bari, 2016).

Numerous studies have looked at how the solvency ratio, used as an operational risk management tool, affects how businesses behave when faced with operational risk and how well they perform financially. Researchers Koehn and Santomero (1980), Kim and Santomero (1988), Rochet (1992), and Shrieves and Dahl (1992) found that excessive risk-taking hurts their performance. However, other authors, like Aggarwal and Jacques (1998), discover that risk diminishes in banks that boost their capital levels to meet regulatory criteria and that they are impervious to financial distress. According to Barth et al. (2004), there is no discernible relationship between capital level and bank activity (Bari, 2016).

There has been some controversy in the past over the relationship between risk management procedures and business financial performance. Numerous studies (Hoyt, Moore, and Liebenberg, 2006; Nocco & Stulz, 2006) show a beneficial relationship between risk management and firm performance. Other studies, however, like those by Pagach & Warr (2010), Tahir & Razali (2011), and Ramlee & Ahmad (2015), contend that the implementation of a risk management system has no impact on the company's financial performance.

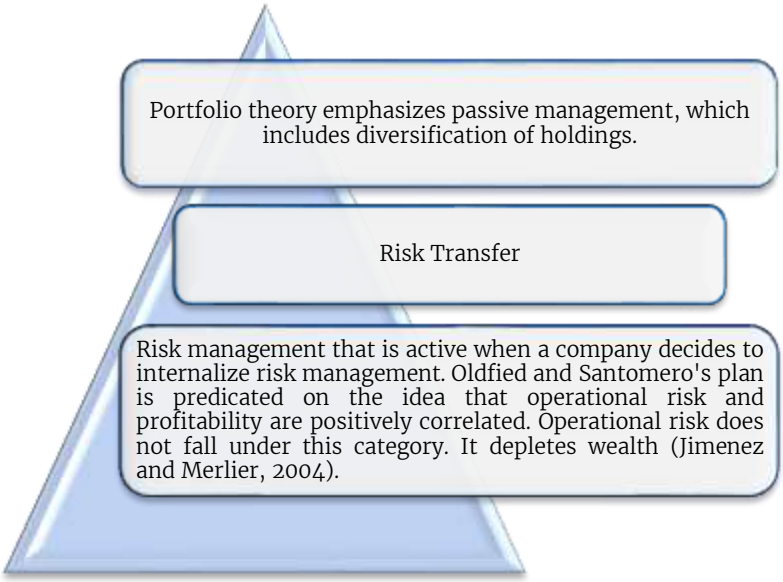
A Company's Financial Performance Benefits from Operational Risk Management

The study of Nocco and Stulz demonstrates how risk management increases shareholder value. They outline the advantages of the operational risk management framework. They contend that operational risk management boosts the company's worth and gives it a competitive advantage. (Assienin and Ouattara, 2016).

Giorgio B. et al. (2013) study looked into the factors that influence risk management decisions as well as the effects of adopting "operational" risk management on company value. They examined a sample of 200 businesses, both in the financial and non-financial sectors. The results of the study demonstrated that operational risk management increased company value (Assienin and Ouattara, 2016). A framework for examining operational risk management techniques in businesses was created by Oldfield and Santommero in 1997 (Tchuigoua & Lamarque, 2009). These authors can lessen how risks affect their effectiveness by utilizing three strategies:

Figure 5

Strategies for Mitigating Risk



The Financial Performance of Businesses is Negatively Impacted by Operational Risk Management

In their 2015 study, Ramlee and Ahmad assessed the financial performance of the non-financial firm. The authors gathered their data from a sample of 74 businesses, some of which had operational risk management committees and others didn't. Using ROE, ROA, and Tobin's Q, financial performance was assessed. According to their research findings, operational risk management had little to no effect on the financial performance of non-financial enterprises. Their research indicates that businesses using operational risk management do not do any better than those that do not (Assienin & Ouattara, 2016).

The effects of operational risk management on the performance of small and medium-sized enterprises (SMEs) were the subject of Genrikh Lukianchuk's MSc thesis research (2015). The information about the companies is provided by a financial database from which the data was taken. From all of the major industries, the author chose 208 companies as a sample. The study's findings were unable to confirm the relationship between financial performance and operational risk management (Assienin & Ouattara, 2016).

To study the various aspects that affect the performance of the project, we were able to develop a conceptual model after our literature research. We will attempt to use this model empirically. To investigate the many variables and test our research's main hypothesis—"the relationship between operational risk management operational risk management and financial performance inside firms—we will attempt to adopt an empirical technique. Following is our conceptual model, which is based on our literature review.

Figure 6

Conceptual Model

Conclusion

Through this research, we have attempted to address the concepts of operational risk and performance within businesses. We have discovered that these ideas have experienced a rapid evolution.

The business environment of today is more sophisticated and complicated, which exposes businesses to a wider range of risks, including operational hazards. The evolution of industry, the rise of new technology brought about by modernization, and the complexity of organizational activity have significantly altered the nature and extent of hazards. Threats are coming from several places. Operational risks are caused by this growth of society and are no longer related to exogenous forces or found in the natural world; instead, they are now a part of human action itself and, in a manner, are the cost of human glory and progress. Risks are combined, merged, and linked in this new century. They are distinguished by their size, their unpredictable nature, and their destructive effects on both the firm and the environment in which it operates. Companies must thus manage their risks, especially operational risk, in an integrated and proactive manner to maintain their sustainability and competitiveness. This will boost business performance and help them reach their goals. Since operational risk influences financial performance through multiple channels (organizational, macro-financial, external...), creating an appropriate environment within the company generally enables better management of operational risks to improve the performance of the company. Regardless of a company's size or line of business, effective operational risk management generally affects its financial performance.

Limitations

Any system or device has inherent limitations, and these limitations are caused by a variety of variables, such as environmental uncertainty, the business environment, and errors made by humans or technology.

Recommendations

Future studies can be done to fill in these gaps, and this research can be finished by adding operational risk management as a crucial component to achieving financial performance in businesses. This study suggests, as a final suggestion, that future studies emphasize the significance of operational risk management and its impact on firms' financial success.

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