

T.C.  
ISTANBUL KÜLTÜR UNIVERSITY  
INSTITUTE OF GRADUATE STUDIES

RISK MANAGEMENT PRACTICES IN SMALL AND MEDIUM ENTERPRISES IN  
MOROCCO: A STUDY OF PERFORMANCE

MASTER OF THESIS

BY OMAR GARTI

2100000411

DEPARTMENT: ECONOMICS

PROGRAMME: INTERNATIONAL ECONOMICS AND FINANCE (IN ENGLISH)

SUPERVISOR: ASST. PROF. DR. NAZIFE MERVE HAMZAOGLU

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MEMBERS OF EXAMINING COMMITTEE:  
ASSOC. PROF. ÇIGDEM BORKE TUNALI ÇAKIR  
ASST. PROF. NAZLI ŞAHANOĞULLARI

OCT 2024

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*Omar Garti*

## KISA ÖZET

Küçük ve Orta Ölçekli İşletmeler (KOBİ'ler), kendilerine özgü yapısal esneklikleri sayesinde ekonomideki değişikliklere hızla uyum sağlayabilmekte ve müşteri ihtiyaçlarını karşılayabilmektedir. Bu uyum yeteneği, KOBİ'lerin hızla büyüyüp büyük, güçlü işletmeler haline gelmesine ya da kurulduktan kısa süre sonra batmalarına neden olabilir. Fas'taki tüm firmaların %93'ünü şaşırtıcı bir şekilde oluşturan KOBİ'ler, ülke ekonomisinin omurgası olarak kabul ediliyor. Bu işletmeler, önemlerine rağmen para, ekonomik büyüme ve çevre ile ilgili, uzun vadede ayakta kalmalarını tehlikeye atabilecek birçok riske maruz kalmaktadır. KOBİ'ler sıklıkla kapsamlı bir risk yönetimi kültürüne sahip olmadıkları için bu tehlikelere karşı daha büyük emsallerine göre daha duyarlıdırlar.

Bu çalışmanın amacı Fas KOBİ'leri tarafından kullanılan risk yönetimi prosedürlerinin kapsamlı bir değerlendirmesini yapmaktır. Bu işletmelerin karşı karşıya olduğu temel riskleri inceliyor ve bu risklerin şu anda ne kadar iyi yönetildiğini değerlendiriyor. Çalışma, KOBİ'leri etkileyen başlıca tehlikeleri belirleyerek operasyonel risk yönetimi sistemlerinin benimsenmesini etkileyen değişkenlere ışık tutmayı amaçlamaktadır. Ayrıca bu yöntemlerin, özellikle ekonomik durgunluk dönemlerinde Faslı KOBİ'lerin mali performansını nasıl etkileyebileceğini araştırıyor.

Bu araştırmayı yapmaktaki amacımız, KOBİ'ler için etkin risk yönetimine sahip olmanın ne kadar önemli olduğu konusunda farkındalık yaratmaktır. Çalışmanın amacı, zorlukları anlayarak ve en iyi uygulamaları bularak Fas KOBİ'lerinin dayanıklılığını ve finansal istikrarını artırabilecek güçlü risk yönetimi çerçevelerinin oluşturulmasına katkıda bulunmaktır. Bu, riskleri azaltarak ve kalkınma ve sürdürülebilirlik şansını en üst düzeye çıkararak ülke ekonomisindeki kritik rollerini destekleyecektir.

Anahtar Kelimeler: Risk, Risk Yönetimi, Küçük-Orta Ölçekli İşletmeler, Performans

## **ABSTRACT**

Small and Medium-Sized Businesses (SMEs) are able to quickly adjust to changes in the economy and satisfy customer needs because of their distinctive structural flexibility. This adaptability can cause SMEs to grow quickly and become big, powerful businesses, or it can cause them to fail soon after they are founded. With SMEs accounting for an astounding 93% of all firms in Morocco, they are considered the backbone of the country's economy. These businesses, despite their importance, are exposed to many risks related to money, economic growth, and the environment that may jeopardize their long-term viability. Because they frequently lack a thorough risk management culture, SMEs are more susceptible to these hazards than their larger counterparts.

The purpose of this study is to give a comprehensive evaluation of risk management procedures used by Moroccan SMEs. It examines the main risks that these businesses face and assesses how well-managed those risks are now. The study aims to shed light on the variables influencing the adoption of operational risk management systems by identifying the major hazards affecting SMEs. Moreover, it investigates how these methods might affect Moroccan SMEs' financial performance, especially during recessionary times.

Our objective of conducting this research is to raise awareness of how crucial it is for SMEs to have efficient risk management. The study is to contribute to the creation of strong risk management frameworks that can improve the resilience and financial stability of Moroccan SMEs by comprehending the difficulties and finding best practices. This will support their critical role in the country's economy by reducing risks and maximizing chances for development and sustainability.

**Key Words:** Risk, Risk Management, Small-Medium Enterprises, Performance.

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## **LIST OF ABBREVIATIONS**

SME: Small and Medium Enterprises

EU: European Union

ISO: International Organization for Standardization

GDP: Gross Domestic Product

ERM: Enterprise Risk Management

PRM: Project Risk Management



# INTRODUCTION

Risk management in the workplace is certainly not a new topic. While spreading the activities of the enterprises in 1916, Henri Fayol did not forget to mention the critical role, which was to ensure the safety of commodities and persons. To increase the effectiveness of entrepreneurship and ensure its contribution to development, Servet (2005) places risk management at the core of new project challenges.

Furthermore, professionals now realize that there is no sustained performance without competent risk management. Risk management may thus be viewed as leverage for financial success and the long-term viability of new ventures.

Because of their basic structure, most SMEs can adjust rapidly to shifts in the economy and satisfy the demands of clients, either expanding into big and powerful companies or failing within a short period after the firm's establishment.

Embedded within the intricate fabric of the Moroccan economy, Small and Medium-Sized Enterprises (SMEs) command a formidable 93% share, rightfully establishing themselves as the backbone. Like their business brethren, these entities confront financial, economic, and environmental risks. Unlike their larger counterparts, SMEs often find themselves bereft of a robust risk management culture.

Many studies demonstrate considerable disagreement regarding the relationship between risk management and the financial performance of companies.

Some studies find a positive relationship between risk management and the performance of enterprises (Hoyt, Moore & Liebenberg, 2006) [2] (Nocco & Stulz, 2006) [3], while other studies (Pagach & Warr, 2010) [4] find that adopting a risk management system has nothing to do with the performance of the organization.

They identified operational risk management aids in anticipating changes in the company and economic situation. (Adeleye, Annansingh, and Nunes 2004) examined operational changes in the risk characteristics of commercial bank liability performance; the author outlined the primary risk management challenges.

The adoption of the Moroccan context is supported by the country's substantial amount of company failures. Indeed, there has been an alarming increase in the number of collapses at the level of Moroccan companies in recent years. Aside from the difficult situation faced by the country's economic collaborators, external and internal limitations can explain the failure of SMEs in Morocco.

This thesis aims to investigate the risks faced by Moroccan SMEs and explore the strategies and approaches used by these businesses to manage and mitigate these risks. The study will focus on a range of different sectors and will consider the impact of internal and external factors on risk management in Moroccan SMEs.

The findings of this research will provide valuable insights into the challenges faced by Moroccan SMEs and will offer potential solutions and recommendations for improving risk management practices in these businesses. Ultimately, this study will contribute to the ongoing efforts to support the growth and success of Moroccan SMEs and the broader national economy.

# GENERAL REASERCH

## 1.1 Background of the Problem:

Risk fills all aspects of life and is ever-present. Unexpected events provide a serious risk of loss to business sectors. Additionally, to micro and small businesses (also known as SMEs) where the capital backdrop is insufficiently solid, A disaster might probably result in a halt to business operations, financial loss, and insolvency. Small and Medium-Sized Enterprises (SMEs) are essential to Morocco's economy because they stand in innovation, job creation, and economic development. SMEs constitute around 93% of all enterprises in Morocco, demonstrating their importance as the foundation of the nation's economy (OECD, 2012). These businesses contribute considerably to the GDP and employment by operating in a variety of industries, including manufacturing, services, commerce, and agriculture (El Ghazali, 2018).

In Morocco, SMEs play a key role in employment generation and economic growth. They account for over 50% of employment in the private sector and about 40% of the country's GDP (Benhaddad & Akesbi, 2017). Despite still being small, their share of exports is increasing as these businesses join more global value chains (Ghanem & El Karmouni, 2016). The Moroccan government has positioned some programs to assist SMEs in increasing and integrating into the larger economy since it understands how important they are (El Gharbi, 2020).

Contempt their importance, Moroccan SMEs face numerous challenges that hinder their growth and development. Therefore, risk management is crucial for any small firm to minimize and reduce loss exposure. Even though they are essential, a lot of SMEs and micro businesses hardly ever implement thorough risk assessment and management plans. This is mostly because doing risk assessment and management calls for financial and human resources, both of which are frequently scarce in small businesses.

As a result, these businesses' choices about what and how to invest in are mostly influenced by their current operations and financial standing. Smaller companies typically move their risk management procedures into project-based methodologies. It begs the issue of whether SMEs

would benefit more from a tailored project risk management strategy or a conventional risk management plan.

This article discusses the primary risks encountered by Moroccan SMEs and the current condition of these businesses in terms of risk management. The goal is to identify the significant risks impacting SMEs and to emphasize the factors that influence the use of an operating risk management system and the potential impact on the financial performance of Moroccan SMEs in the context of an economic downturn.

### **1.2 Importance of the study:**

Because of their unique weaknesses, SMEs in particular must conduct research on risk management strategies. Compared to larger businesses, SMEs are usually more vulnerable to a variety of hazards, such as financial, operational, and environmental risks. This study helps in the identification and analysis of these risks, offers insightful information about practical qualification techniques, and assists SMEs in averting large losses or the collapse of their businesses (Lam, 2014).

The financial success of SMEs is directly impacted by effective risk management. Businesses can attain steady and sustained growth by recognizing, evaluating, and controlling risks. To determine if risk management methods improve profitability and long-term viability, this study intends to investigate the relationship between risk management practices and financial outcomes in SMEs (McShane, Nair, & Rustambekov, 2011).

The research has practical consequences for Moroccan SMEs, as it offers advice on how to apply strategies for successful risk management. One way to do this is finding scalable and reasonably assessed solutions that fit into their operations without requiring a lot of resources is one way to do this (Ghanem & El Karmouni, 2016).

All things considered, studying Moroccan SMEs' risk management strategies is crucial to raising their performance and resilience. It encourages the creation of focused policies, promotes a risk-aware culture, advances scholarly understanding, and offers SME owners useful advice. The research could significantly improve the sector and foster stability and economic progress by addressing the particular difficulties Moroccan SMEs experience.

### **1.3 Research Objective and questions:**

This article discusses the primary risks encountered by Moroccan SMEs and the current condition of these businesses regarding risk management. The goal is to identify the significant risks impacting SMEs and to emphasize the factors that influence the use of an operating risk management system and the potential impact on the financial performance of Moroccan SMEs in the context of an economic downturn. As a result, the questions that emerge are:

- What are the main risks that face SMEs in Morocco?
- What risk management techniques do Moroccan SMEs use?
- How does risk management impact the financial performance of Moroccan SMEs?



# **LITERATURE REVIEW:**

## **Introduction:**

In the world of business, risk and risk management are important ideas, principally for Small and Medium-Sized Businesses (SMEs). For these organizations, knowing and handling risks well can mean the difference between success and failure in a continuously fluctuating economic environment. In the context of SMEs, this chapter seeks to explore the nature of risk, its several forms, and the importance of risk management.

We will start by going over the definitions of risk and uncertainty and highlighting how they function in the processes of corporate decision-making. The chapter will then group the various hazards, including financial, operational, legal, and strategic risks, that SMEs frequently come across. Every one of these risk categories has different difficulties and calls for different approaches to management.

We'll take a close look at the idea of risk management, as well as how it's changed through time and how crucial it is to the growth and sustainability of SMEs. We'll talk about the risk management process, which involves locating, evaluating, and controlling possible risks to the resources and profits of a company. The chapter will also debate the difficulties SMEs have in putting into practice effective risk management measures, especially in the Moroccan environment. To give a thorough hold of the topic, the cultural, economic, and legal aspects that affect risk management in Moroccan SMEs will be explored.

By the end of this chapter, we will have a thorough understanding of the essential role that risk and risk management play in the process and success of SMEs. This groundwork will set the stage for the following chapters, which will investigate more deeply the specifics of risk management in Moroccan SMEs and its impact on their overall performance.

## **1. Risk and uncertainties**

Risk and uncertainty are two terms often used in the language of statistical probability. Uncertainty is a broader term, while risk is just a part of uncertainty. (Frank Knight,2006) describes risk as a term that describes cases of known probabilities. For example, a coffee shop



can predict the probability that the barista may ruin an order or two for every number of customers; therefore, the shop will lose some balance. As for Uncertainty, Assumptions cannot be forecasted, nor can a probability be calculated—for instance, a stock market price thirty years in advance. However, even though these terms have different perspectives, they both may positively or negatively impact business operations and require proper management.

## **2. Risk**

Risk is inherent in life in many different areas, from personal decisions to business operations. In general, the higher the potential reward, the greater the potential risk. However, it is essential to carefully assess and manage risks to minimize their potential impact and maximize the potential benefits. Risk has become a buzzword for managers, whether in the commercial (Risk of unsold items, competitive Risk, .), financial (customer risk, exchange rate risk.), or social (danger of conflict, risk of 'absenteeism...') spheres. This fact indicates the word's complex nature, and we believe it is helpful - even vital - to disclose the various essential meanings of risk. Gourc sees risk as the probability of an event happening, the occurrence of which would have an impact on the project activity's development. (Gourc, 2006). Risk is the potential for loss or harm from exposure to danger or uncertainty. It can refer to the possibility of something terrible, such as financial loss, injury, or property damage. Uncertainties within management, natural disasters, politics, and cultural factors may all present risks. (Köster, 2009).

## **3. Types of risks**

There are many different types of risks that organizations and individuals can face. Some common types of risks include:

**Financial risks:** Financial risks cover a variety of adverse risks associated with financing, and they are related to the potential loss of money or assets. This can include risks such as bankruptcy, market volatility, or changes in interest rates. This type of risk can result in profit for one company and loss for another.

**Operational risks:** Operational risks are related to business operations' potential loss or disruption. This can include risks such as supply chain disruptions, equipment failures, individual failures, natural disasters, and outside influence. (Global Association of Risk Professionals, 2011).

**Legal risks:** Legal risks are related to the potential for legal action or penalties. This can include risks such as lawsuits, regulatory violations, or breach of contract.

**Reputational risks:** Reputational risks are related to the potential damage to an organization's reputation or image. This may involve negative publicity, customer complaints, or a loss of trust.

**Strategic risks:** Strategic risks are related to the potential for a company's strategic plans or initiatives to fail. It may occur due to a poor strategic business plan, decision, or incompatible and ineffective execution of the plan. This can include risks such as market shifts, changing customer preferences, or competitive threats.

Organizations' and individuals' risks can vary depending on a specific industry and context. It is significant for organizations and individuals to identify the risks that are relevant to their operations and to develop strategies to manage and mitigate these risks.



*Figure 1 Three types of risk and their management.*

*Source: Duong, L. (2013). Effective risk management strategies for small-medium enterprises and micro companies: A case study for Viope Solutions Ltd. [Master's thesis, Arcada University of Applied Sciences].*

#### **4. Risk Management:**

Risk management is not a new subject; what began as a simple act of anticipation against climate change has now become a daily act of Humanity. The phrase Risk Management initially arose in the world of business professionals in the 1950s in the United States by Russel Gallagher, published in the Harvard Business Review in 1963. Risk management identifies, assesses, and controls potential threats or hazards that could affect an organization or project. This process is vital because it helps organizations and individuals minimize the potential impact of risks on their operations and objectives.

In general, managing risk means taking the necessary measures to protect all company assets (material, intellectual and human). Risk management focuses on identifying the risks that weigh on the company's assets (its means and property) and its values in the broad sense, including, and perhaps even above all, on its personal.

##### **4.1. Risk Management as a Process:**

The traditional risk management process, which follows the International Organization for Standardization (ISO 31000:2009) guidelines, consists of three basic steps.

The first step is establishing the context, which involves determining and evaluating every possible risk and its related impacts. This evaluation serves as the foundation for developing a comprehensive risk management strategy. The second step is the identification stage. After establishing the context for potential business risks, the risk management process concentrates on finding the causes of these risks, such as problems, threats, or weaknesses. Selecting an appropriate method for risk identification and analysis is critical because it improves the efficacy of subsequent preparation and preventative measures. However, it is essential to note that cultural, organizational, political, and other contextual factors can affect the methods chosen.

Assessment is the final step in the risk management process, and it is divided into several sub-steps. These sections include explaining the probability and implications of the identified risks and calculating a risk rating index. A suitable control method can be developed by creating criteria distinguishing extreme risks from those with a lower degree of severity. It is suggested to develop risk management methods while establishing the level and possible effects of each risk—control approach.

Nowadays, businesses face numerous threats to their survival and growth. As a result, it is critical to understand the fundamental principles of risk management and to extend the risk management process to the monitoring and post-process evaluation stages. To ensure the success of their operations, they must review and update the risks regularly.

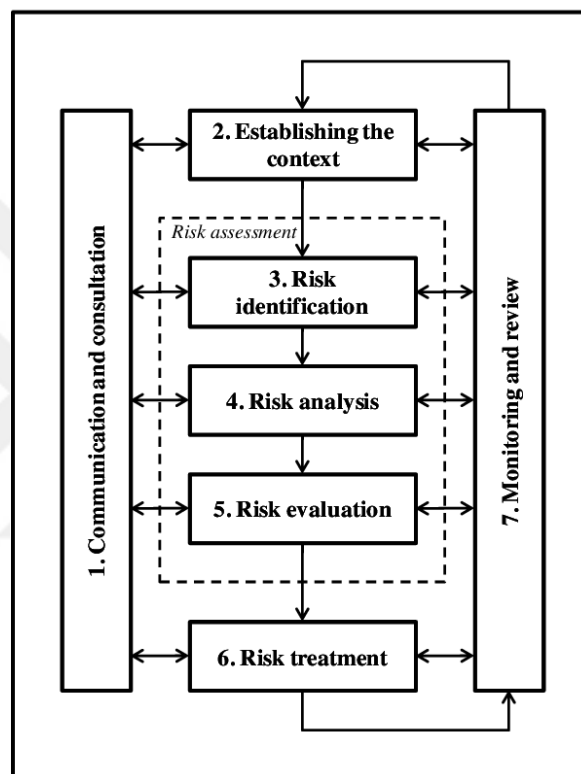


Figure 2 RISK-MANAGEMENT-PROCESS-FOLLOWING -ISO-31000

Source: Duong, L. (2013). *Effective risk management strategies for small-medium enterprises and micro companies: A case study for Viope Solutions Ltd.*

#### 4.2. Enterprise Risk Management:

As businesses expand regularly, so do risks, and a new discipline called risk management emerges. The notion of enterprise risk management (ERM) took place in business in the middle of 1990 with a management concentration to meet the needs of growth risk management. (David L, Dash Wu, 2008) . Traditional risk management perceives risks as individual hazards; ERM considers risks in the overall scheme of business strategy before developing a risk development portfolio. ERM provides a foundation for risk reduction and effective management. The

likelihood of economic collapse and associated costs, poor revenue performance, growth opportunities, and independence of boards (Khan 2016) are all motivating factors for companies to adopt an ERM strategy. Furthermore, a proper risk management strategy can become a competitive advantage, assisting firms in growth (Blanco-Mesa et al. 2019).

*Table 1 Differences between Traditional risk management and ERM*

| <b>Traditional Risk Management</b> | <b>ERM</b>                                  |
|------------------------------------|---------------------------------------------|
| Risk as individual hazards         | Risk viewed in context of business strategy |
| Risk identification & assessment   | Risk portfolio development                  |
| Focus on discrete risks            | Focus on critical risks                     |
| Risk mitigation                    | Risk optimization                           |
| Risk limits                        | Risk strategy                               |
| Risks with no owners               | Defined risk responsibilities               |
| Haphazard risk quantification      | Monitoring & measurement of risks           |
| "Risk is not my responsibility"    | "Risk is everyone's responsibility"         |

*Source : Blanco-Mesa, F., Merigó, J. M., & Gil-Lafuente, A. M. (2019). Enterprise risk management: A literature review. Economic Research-Ekonomska Istraživanja, 32(1), 1-24. <https://doi.org/10.1080/1331677X.2019.1639819>*

## 5. Small and Medium Enterprises:

The definition of small and medium enterprises differs from one country to another. However, generally, they define companies with fewer than ten hired staff members for micro-organizations, as many as 50 employees for small businesses, and roughly 250 employees for medium-sized enterprises. Accordingly, to be considered an SME, first, the business must be considered a legal entity, and then the enterprise will be assessed and leveled by three main criteria: staff headcount, annual turnover, and annual balance sheet.

*Table 2 Ceilings that apply to determine SMEs according to the European Union (Created by the Author)*

| <b>Company Category</b> | <b>Staff Headcount</b> | <b>Annual Turnover</b> | <b>Annual Balance sheet</b> |
|-------------------------|------------------------|------------------------|-----------------------------|
| Medium                  | <250                   | ≤ € 50 m               | ≤ € 43 m                    |
| Small                   | <50                    | ≤ € 10 m               | ≤ € 10 m                    |
| Micro                   | <10                    | ≤ € 2 m                | ≤ € 2 m                     |

However, determining the size of a company only based on the number of workers can lead to uncertainty. The distinction between micro-businesses, small and medium-sized enterprises (SMEs), and more prominent companies is based on several factors, including:

**Decision-making Process:** Due to administrative levels in more giant corporations, decision-making takes longer. SMEs, on the other hand, can make choices faster and more effectively.

**Embracing risk:** SMEs, particularly start-ups and small businesses in the early stages of development, frequently see themselves as risk-takers. As part of their growth strategy, they actively confront risks. On the other hand, giant corporations tend to approach risks more defensively, concentrating on protecting their current activities.

**Allocation of resources:** Small businesses have limited funds and recognize the importance of all funds. While larger corporations sometimes lack some advantages from time to time, they do have more freedom and ability to distribute assets compared to smaller businesses.

According to the World Bank, SMEs play a considerable role in most Economies. They account for roughly 90% of businesses and more than 50% of global employment. In developing nations, formal SMEs contribute more than 40% of the country's gross domestic product (GDP).

## **6. SMEs In Morocco**

The Ministry of Industry and Trade uses size criteria to determine SMEs in Morocco based on the number of employees. According to the selection, any company with less than 200 permanent employees is classified as an SME with an annual turnover excluding taxes of no more than 75 million dirhams and a total balance sheet of not more than fifty million dirhams. However, a new definition has been developed by the ANPME or MarocPME, which distinguishes three types of companies:

Micro-enterprises are defined by a turnover of fewer than 3 million dirhams and not more than nine permanent employees. Small Enterprises are defined by a turnover between 3 and 10 million dirhams and have between 10 and 49 permanent workers. Medium Enterprises are businesses with a turnover between 10 and 175 million dirhams and have between 50 and 200 permanent employees.

## **7. Importance of SMEs in the Moroccan Economy**

Today, no one can deny the importance of SMEs in developed economies or the development process, and in Morocco, the case is no different. The SMEs represent more than 95% of the companies in Morocco, according to the Federation of SMEs in Morocco – CGEM.

Furthermore, it employs 50% of the workforce, generates 51% of domestic investment, and serves as the economic hub, accounting for 40% of production and 31% of exports as per the latest reports from the Moroccan government. A study by the Ministry of Economy and Finance displays the importance of SMEs at the national level. According to this study and Inforisk data (Tilfani, 2011), the weight of the SME represents 98% of the entire national productive fabric. SMEs account for more than 90% of all activity sectors except electricity production and distribution, gas, and water, where participation is only 50%.

In terms of exports, SMEs in the textile and leather industries rank first (46%), followed by the agri-food industries (39%), chemical and para-chemical industries (10%), mechanical and metallurgical industries (4%), and electrical and electronic industries (1%).

Table 3 SME's Exportation (Created by the Author)

| ACTIVITY                                | TIME |
|-----------------------------------------|------|
| Textile and leather industries          | 46%  |
| Chemical and para-chemical industries   | 10%  |
| Electrical and electronic industries    | 1%   |
| Mechanical and metallurgical industries | 4%   |
| Agri-food industries                    | 39%  |

Based on these statistics, we can conclude that SMEs in Morocco are an essential component of the entire national economy, thanks to their dominance in all sectors of activity, significant contributions to exports and national investments, and absorption of unemployment (50% of employees). However, their contribution to GDP remains limited, which can be explained by the significant amount of declared defaults at the level of Moroccan companies each year.

#### 8. Difficulties that face the SMEs in Morocco

Business failures in Morocco and elsewhere continue to rise. According to the most recent statistics from Allianz Trade, global failures are expected to rise by 19% in 2023.

The situation is concerning. According to Maxime Lemerle, the head of sector studies and failures at the firm Euler Hermes, despite the Moroccan market is a "market of creation of very dynamic companies," the mortality rate of companies remains high. Moreover, In a new study, Allianz Trade predicts 13,000 cases of SME failures in Morocco in 2023, a record level up 5% from 2022.

Forecasts for an ongoing rise in the collapse of these companies are clarified in this insurer's report by the country's challenging economic situation, a longer duration of payments, the increasing restriction of bank credit, a decrease in government spending, and rising costs of commodities.

Many variables in the literature clarify the collapse of SMEs; however, according to the managerial and strategic approach, the company's failure is due to internal and external limitations (Keasey & Watson, 1987).



Every business requires a robust risk management strategy, and SMEs and micro businesses require an even more robust risk management system. Small businesses face additional risks due to size and capability limitations, in addition to those mentioned in the first section of this paper.

### **8.1.Financial Risks**

The primary barrier to development and SME growth is the difficulty of obtaining financing. In Morocco, the context of a lack of liquidity and intense competition pushes banks to be overly demanding in granting loans to SMEs, particularly those in the creation or expansion phase, in addition to entrepreneurs and SME managers' lack of knowledge of the range of financial products available in our country, and the lack of adaptation of these financial products to the needs of a large population of SMEs. Furthermore, the slight increase in expenditures puts pressure on small businesses with limited resources. However, budget margins for the company can be reduced by expenses such as wages, transportation expenses, marketing campaigns for competitions, and others. Financial limitations, which result from a significant reliance on internal money and restricted access to credit, are a major problem, according to (Fatoki 2014). As mentioned by (Benhaddad and Akesbi, 2017), strict banking rules and a lack of collateral make it difficult for SMEs in Morocco to get finance. Their ability to grow and survive may be hampered by this financial uncertainty.

Many SMEs and microbusinesses in Morocco lack the necessary cash flow to operate as planned. They mainly rely on ongoing operations to raise money for the ongoing activities. Furthermore, in an economic downturn where the funds are needed, most of these SMEs are running low on budget and probably will limit the work on some projects, and in some cases, might even face a dead end.

### **8.2.Operational risk**

SMEs or micro businesses are frequently formed by partnerships or sole proprietorships, which holds the fact that this type of legal structure has a more significant operational risk rate because of the absence of expertise and the fact that only one or two crucial people are in charge of the business and making decisions. The most frequent obstacles cited by Moroccan business owners in the process of creating and managing a business are a Lack of transparency in the

business creation process, administrative complexity, a lack of coordination between the involved departments, and the challenge of locating the person with authority to grant permission for the realization or expansion of an SME project.

Therefore, many efforts still need to be made to close these gaps, particularly in the area of welcoming and assisting business entrepreneurs

### **8.3.Human risk**

Multiple studies prove that the human factor is one of the most significant risks in SMEs in Morocco.

The High turnover rates among workers and a lack of knowledge of experts lead to unused labor and higher training expenses. Long-term, human factors will reduce productivity and impact how small businesses in Morocco are perceived as employers.

### **8.4.Competition and market share**

Despite being crucial to economic development, Moroccan SMEs and microbusinesses continue to operate on a small scale due to the nature of their corporate structures. Therefore, they must compete fiercely with larger businesses to capture a sizable and lucrative market share.

### **8.5.Legislative Risks**

In this category of risk, there are several components:

- **Company Law:** Criminal penalties are set forth by company law concerning the procedures that must be followed for a company's formation, operation, and dissolution. Although it should be noted that the LLC is the most appropriate legal form for SMEs due to its advantage relating to the limitation of the partners' liability to their capital contributions, the SME is not given any special treatment when it comes to the legislation regulating company law and the rules that organize working relationships within the company.
- **Export and Imports Law:** Despite the upgrades made in customs formalities for the benefit of imports. and export, some imported goods encounter assessment, product classification, and form preparation issues by customs services to Moroccan SMEs.

- **Labor Law:** The labor law's finalized provisions, such as those regarding employee social security coverage, employee representation within the company, and the procedure for resolving collective disputes, do not adequately address the material needs of small and medium-sized businesses

Too many undesirable occurrences have a detrimental effect on business operations to list them all, and not all risks fall into a single category.

In Morocco, Risks posed by customers, suppliers, employees, and other third parties are among the risks that can be applied to SMEs and micro businesses. Recognizing and managing risks to reduce or eliminate any threats to losses is crucial.

### **8.6 Environmental Risks:**

Even though they are not as often publicized, environmental concerns are becoming more significant, particularly in light of global climate change. Natural catastrophes and other environmental hazards can cause operations and supply chains to be disrupted for small and medium-sized enterprises (SMEs) in Morocco (El Khalfi, 2019). Changes in environmental protection regulations may also result in additional expenditures for these businesses to comply with.

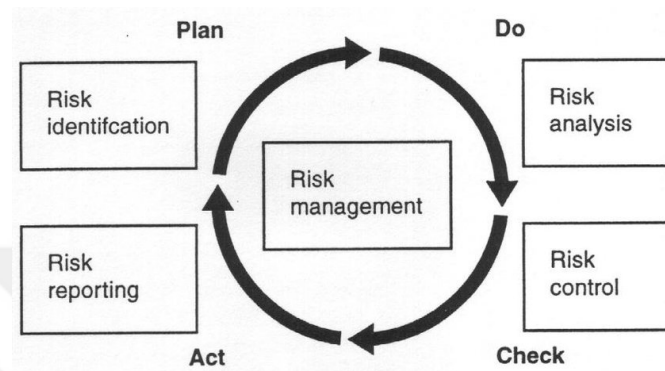
## **9. Risk Management in SMEs:**

The management of one problem ought to exist and be closely related to all other issues in a small work environment in which each task is entirely involved, impacts the other activities, and directly affects the company as a whole.

When it comes to small businesses, the preparation of business strategies, managing human resources, controlling finances, and maintaining customer relationships are all examples of management procedures integrated into risk management.

The business scale of SMEs and micro companies is microscopic, and the operation is usually done within a few departments, so the organization's owner will be accountable for the risk choices. The scope of the business operations and the company's size determine how much effort is needed for risk management. A non-employing business with one or two owners who are also collaborators and staff members will not be exposed to the same level of human resources risk as a microbusiness with more than five employees.

SMEs and micro businesses have various options for processing risk management and lowering loss exposures. The four-step process Kliem et al. (1997) recommended includes risk identification, analysis, mitigation, and follow-up.



*Figure 3 Cyclical-risk-management-process-Kliem-and-Ludin-1997*

*Source: Cerić, A. (2003). A framework for process-driven risk management in construction projects (Doctoral dissertation). University of Salford, Salford, UK.*

# ***METHODOLOGY***

This chapter will highlight this study's purpose, importance, objective, and research question. The author of this study will present in a paper the research model and the results from the survey conducted to analyze the effect of risk management on the performance of SMEs in Morocco.

## **1. Purpose of the study**

This study's main objective is to examine the complex forces at work in risk management in Moroccan SMEs, a vital sector of the nation's economy. The study seeks to achieve several important goals:

- **Identification of serious Risks:** The goal of the study is to systematically recognize and classify the risks that Moroccan SMEs face that are serious. This covers hazards related to operations, strategy, compliance, the environment, and finances as well. It is essential to comprehend these risks to create effective management plans.
- **Influence on Risk Management Practices:** Examining the variables influencing SMEs' choices about risk management strategies is another crucial goal. This entails assessing both external and internal elements, such as market volatility, legislative changes, and prevailing economic conditions, as well as business culture, leadership, and resources.
- **Influence on Financial Performance:** An additional goal of the study is to evaluate how various risk management techniques might affect SMEs' financial performance. This stresses examining how these companies' general financial health, profitability, and sustainability can all be boosted by efficient risk management.
- **Comparative Analysis:** In addition, a comparative analysis will be carried out to determine how Moroccan SMEs' risk management procedures compare to international norms and guidelines. This will offer insightful information on the particular difficulties and opportunities these businesses face.
- **Policy Recommendations:** Regulating agencies, SMEs, and other players in the Moroccan business ecosystem are anticipated to benefit from the study's findings in developing their

policies. The objective is to improve risk management methods' comprehension and use, which can result in improved business outcomes.

## **2. Importance of the study**

This study is a significant addition to the subject of business risk management, especially in the Moroccan environment, for several reasons.

- **Improving Knowledge of Risk Management in SMEs:** This research sheds light on how risk management techniques are seen and applied in a significant sector of the Moroccan economy by concentrating on Moroccan SMEs. This knowledge is essential for business management theorists and practitioners alike.
- **Advice for Companies in Morocco:** The study's conclusions provide Moroccan SMEs with useful advice. Through the identification of critical risks and efficient risk management strategies, the study offers firms a road map for improving their resilience and performance.
- **Filling up a Research Gap:** There is a significant lack of studies that particularly address risk management in Moroccan SMEs. By filling this knowledge vacuum, our work advances our understanding of risk management across many cultural and economic contexts.
- **Affecting Practice and Policy:** This research has consequences that go beyond the realm of academics. This study can impact business practices and policy decisions by offering empirical information on the impact of risk management on financial performance. This could result in more resilient and long-lasting corporate environments in Morocco.
- **Global Relevance:** Although this study's focus is Morocco, its conclusions have ramifications for SMEs in related emerging markets. This study is useful on an international level because of the comparison analysis with worldwide practices that improve the global discourse on SME risk management.

### **3. Research method**

An empirical study requires following a specific methodology to achieve the desired objectives. It is essential to clearly define the survey's methodology to ensure its success.

- Development of the questionnaire
- The method of formulating questions
- The mode of administration of the questionnaire
- The content of the questionnaire
- The choice of the sample

#### **3.1. Development of the questionnaire**

The development of our questionnaire followed established guidelines and was done in two phases. First, we conducted a preliminary qualitative phase to refine the questionnaire, and then we administered it in a quantitative phase. This ensured that our questionnaire was compliant with the relevant rules and regulations. This consisted of testing the questionnaire with a group of ten individuals to identify any issues with the questions' wording and ensure they aligned with our research goals. The results of this testing allowed us to evaluate the validity of the questionnaire by checking for comprehension, response options, and the logical flow of the questions. In a second step and following this pre-survey, we might opt for changes in the wording of specific questions and the deletion of certain others, which are unnecessary.

#### **3.2. The method of formulating questions**

Conducting a survey requires choosing the type of questions to use. Whether the questions are closed-ended, open-ended, or a mixture of both, they should be easily understandable, engaging, and precise. To gather the information required for our research, we have selected clear, straightforward, easy-to-understand, and coherent questions. This will help ensure that the respondents provide us with the necessary information to address our research topic.

In our survey, the participants were asked to express their level of agreement using the Likert scale, which determines the respondents' degree of accordance with the statement asked. In this form, 1 (strongly disagree), 2 (disagree), 3 (agree or disagree), 4 (agree), 5 (strongly agree). In order to structure the survey and make it easier for the respondents to answer. This also helped to keep the survey focused and within the scope of our research.

### **3.3.The mode of administration of the questionnaire**

The administration of the questionnaire consists of transmitting the questions to the people part of the sample we wish to question and then collect the answers. In terms of surveys, there are three main methods of administering a questionnaire:

By direct interviewer-respondent contact or face-to-face, by telephone, and by self-administration. Since we cannot be physically present in Morocco, we opted for self-administration.

### **3.4.Sample selection**

The selection of a sample, a critical factor in the study's outcome, is based on two primary types of surveying or sampling techniques. Random or probabilistic methods, in which the sample is drawn according to the laws of chance, i.e., each person has an equal chance (different from zero) of being a sample member. Non-probabilistic or random methods, also known as empirical methods, are the ones in which the sample's composition is decided upon in a "reasoned" manner to have the sample look like the population into which it is drawn. Our sample falls under the category of non-probability samples due to the challenges in using probabilistic methods (impossibility of having a sufficient sampling base of employees in SMEs, the dominance of informal industries)

## **4. Data analysis and findings:**

This section presents the analysis results conducted in the research study to empirically investigate the effect and impact of Risk management practices in small and medium enterprises in Morocco on their performance, using a structured questionnaire instrument. The questions placed in this survey have been reformulated based on two scientific articles by Mohamed Chemlal, Asmae Mrabet .and Lotfi Benazzou (2017), Abdulaziz Alrashidi, Omar Baakeel (2012) that address the same subject differently using different parameters but with the same objective of analyzing the effect of Risk Management on the performance of SME in Morocco. This research study adopts the qualitative comparison of respondents and quantitative analysis methods. The returned question was collected, prepared, and analyzed electronically using SPSS version 23, and results were obtainable using descriptive and inferential statistics.



#### 4.1.Validity and Reliability Analysis Results:

| Scale               | Number of Items | Cronbach's alpha |
|---------------------|-----------------|------------------|
| <i>Likert scale</i> | <b>11</b>       | <b>.915</b>      |
| <b>Total</b>        | <b>11</b>       | <b>&gt;.700</b>  |

Table 4 Validity and Reliability Cronbach's alpha results.

#### 4.2.Descriptive and univariate variables

##### 4.2.1. Age Distribution:

An important proportion of the respondents (64%) are under 30 years old, with the largest group being between 26 and 30 years old (35%). This shows that a younger workforce is present in Moroccan SMEs, which may indicate a more innovative approach towards company operations, especially risk management.

Table 5 Age Distribution of respondent

| Age Range | Frequency | Percentage of Age |
|-----------|-----------|-------------------|
| 18-25     | 29        | 29%               |
| 26-30     | 35        | 35%               |
| 31-40     | 25        | 25%               |
| 41-50     | 11        | 11%               |

##### 4.2.2. Multiple Positions Included

The data reveals that a variety of positions were involved in the survey, with a strong presence from general managers (25%) and sales managers (32%) in particular. It is clear from the inclusion of a range of positions—including CEOs, HR specialists, data analysts, and employees in the operations sector—that risk management is an issue for firms at all levels and for a variety of objectives.

*Table 6 Distribution of Respondent Position*

| <b>Position</b>            | <b>Frequency</b> | <b>Percentage Position</b> |
|----------------------------|------------------|----------------------------|
| Sales Managers             | 32               | 32%                        |
| CEO                        | 5                | 5%                         |
| HR                         | 6                | 6%                         |
| General Managers           | 25               | 25%                        |
| Data Analysts              | 6                | 6%                         |
| Operation Sector Employees | 26               | 26%                        |

#### **4.2.3. Risks Faced by SMEs:**

Financial and accounting risks are the most commonly stated hazards (25 percent of replies), closely followed by general risks and risks pertaining to personnel and international activities (16 percent of responses each). This demonstrates that two major areas of worry for Moroccan SMEs are foreign operations and financial stability. There are substantial risks associated with personnel and operational activities, which suggests difficulties in sustaining successful operations and human resource management.

*Table 7 Distribution of Risk faced*

| <b>Risk</b>                               | <b>Frequency</b> | <b>Percentage of Risk</b> |
|-------------------------------------------|------------------|---------------------------|
| Financial and accounting risk             | 25               | 25%                       |
| General risk                              | 21               | 21%                       |
| Risks related to personnel                | 16               | 16%                       |
| Risks related to international activities | 16               | 16%                       |
| Risks related to operational activity     | 13               | 13%                       |
| Tax Risk                                  | 4                | 4%                        |
| Other                                     | 5                | 5%                        |

#### 4.2.4. Logistic and Probit Regression Analysis

Regression analysis is a powerful statistical method used to examine the relationship between a dependent variable and one or more independent variables. In this part, we examine how various risk management strategies affect the probability that hazards have an impact on an SME's performance using logistic (logit) and probit regression models. and highlight interdependencies. (Anodot 2021).

#### 4.2.5. Logistic Regression Analysis:

The logistic regression model examined the link between the binary dependent variable (performance affected) and several independent factors (risk management techniques). The following is a representation of the logistic regression equation:

$$\text{logit}(p) = \log\left(\frac{1}{1-p}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

Where  $p$  is the probability that the performance was affected by risks, and  $X_1, X_2, \dots, X_n$  are the independent variables representing different risk management practices.

Table 8 Logistic Regression Analysis

| Variable                     | Coefficient | Standard Error | z-Value | p-Value | Confidence Interval (Lower, Upper) |
|------------------------------|-------------|----------------|---------|---------|------------------------------------|
| Constant (Performance)       | 2.3311      | 1.090          | 2.139   | 0.032   | (0.195, 4.467)                     |
| Internal/External Events     | 0.5557      | 0.302          | 1.841   | 0.066   | (-0.036, 1.147)                    |
| Risk Management Defined      | -0.2348     | 0.313          | -0.751  | 0.453   | (-0.847, 0.378)                    |
| Risk Management Communicated | -0.5098     | 0.306          | -1.664  | 0.096   | (-1.110, 0.091)                    |

|                           |         |       |        |       |                 |
|---------------------------|---------|-------|--------|-------|-----------------|
| Corrective Actions        | -0.4576 | 0.372 | -1.229 | 0.219 | (-1.188, 0.272) |
| Excessive Risk Procedures | -0.0726 | 0.314 | -0.231 | 0.817 | (-0.688, 0.543) |
| Resource Allocation       | 0.2912  | 0.308 | 0.945  | 0.345 | (-0.313, 0.895) |

This table provides a detailed summary of the logistic regression study and shows the relationship between each risk management method and perceived performance. To support the statistical analysis that was done, the following data are provided: coefficients, standard errors, z-values, p-values, and confidence intervals.

Constant (Performance): The constant term has a statistically significant coefficient of 2.3311 and a p-value of 0.032. This positive and significant constant implies that there is an underlying probability that the company's performance could be impacted by external factors or essential vulnerabilities not covered by the identified risk management practices, even in the absence of any specific risk management practices.

Internal/External Events: With a p-value of 0.066, the coefficient for Internal/External Events is 0.5557. This result, which is only marginally significant, specifies that SMEs are more likely to experience performance impacts from risks if they have procedures in place for identifying internal and external events that impact their goals. This positive correlation suggests that while anticipating risks is important, doing so may expose the business to realizing those risks, which could have an impact on performance.

Risk Management Defined: Risk Management Defined has a non-significant p-value of 0.453 and a coefficient of -0.2348. This negative coefficient implies that the possibility of performance being adversely affected by risks may be decreased by explicitly outlining risk management duties. However, the absence of statistical significance suggests that, even while assigning tasks is crucial, performance protection may not depend primarily on it.

Risk Management Communicated: With a p-value of 0.096 and a coefficient of -0.5098, the Risk Management Communicated variable is considered moderately significant. Better

communication of risk management duties may lessen the possibility that performance may be impacted, according to the negative association. This shows that while it may not be enough on its own to completely prevent performance disruptions, good communication can play a significant role in reducing the impact of risks.

Remedial Measures: Corrective Actions are adversely correlated with performance being impacted, with a coefficient of -0.4576 and a p-value of 0.219; however, this correlation is not statistically significant. This suggests that mitigating risks by corrective action may assist lessen their impact on performance, but the effect is not significant enough to be regarded as statistically significant. This could be the case since remedial measures are usually taken reactively, resolving problems after they have already started to affect performance.

Procedures with Excessive Risk: The coefficient for Excessive Risk Procedures is -0.0726 with a p-value of 0.817, which is very non-significant. This implies that putting policies in place to handle risks that go beyond reasonable bounds has little bearing on whether or not the performance of the business is impacted. It might mean that even while certain protocols are required, they are not enough to ensure performance on their own. This could be because they are not fully implemented or are only sometimes activated.

Allocation of Resources: The Resource Allocation variable shows a positive but non-significant correlation with performance being impacted by hazards, with a positive coefficient of 0.2912 and a p-value of 0.345. This implies that setting aside funds expressly for risk management may raise the possibility that risks will be managed successfully, which could have an impact on performance. However, the absence of statistical significance raises the possibility that performance protection could need more than just resource allocation, calling for a more all-encompassing strategy.

#### 4.2.6. Probit Regression Analysis:

To complement the logistic regression, a probit regression model was also applied. The probit model assumes that the latent variables are normally distributed, providing an alternative perspective on the data. The probit regression equation is represented as:

$$probit(p) = \Phi^{-1}(p) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

Where  $\Phi$  represents the inverse of the standard normal cumulative distribution function.

Table 9 Probit Regression Analysis

| Variable                     | Coefficient | Standard Error | z-Value | p-Value | Confidence Interval (Lower, Upper) |
|------------------------------|-------------|----------------|---------|---------|------------------------------------|
| Constant (Performance)       | 1.4501      | 0.661          | 2.139   | 0.028   | (0.154, 2.746)                     |
| Internal/External Events     | 0.3396      | 0.180          | 1.883   | 0.060   | (-0.014, 0.693)                    |
| Risk Management Defined      | -0.1439     | 0.185          | -0.776  | 0.437   | (-0.507, 0.219)                    |
| Risk Management Communicated | -0.3193     | 0.181          | -1.760  | 0.078   | (-0.675, 0.036)                    |
| Corrective Actions           | -0.2631     | 0.214          | -1.230  | 0.219   | (-0.682, 0.156)                    |
| Excessive Risk Procedures    | -0.0528     | 0.182          | -0.289  | 0.772   | (-0.410, 0.305)                    |
| Resource Allocation          | 0.1699      | 0.186          | 0.916   | 0.360   | (-0.194, 0.534)                    |

This table provides a thorough summary of the probit regression analysis and shows the relationship between each risk management method and perceived performance. To support the statistical analysis that was done, the following data are provided: coefficients, standard errors, z-values, p-values, and confidence intervals.

Constant (Performance): With a statistically significant p-value of 0.028, the constant term, which denotes the baseline level of perceived financial performance when all other predictors are zero, has a coefficient of 1.4501. This positive and substantial constant indicates that there is an intrinsic possibility that performance will be impacted by risks in the absence of other factors. This probability may be caused by underlying vulnerabilities or external factors that the risk management procedures are not capturing.

Internal/External Events: This variable and the chance that performance would be impacted have a positive and marginally significant association, as indicated by the coefficient for Internal/External Events, which is 0.3396 with a p-value of 0.060. This implies that SMEs are more likely to see performance impacts if they actively recognize internal and external events that are influencing their goals. This might be seen as a two-edged sword: while recognizing these occurrences is essential for risk awareness, it might also highlight weaknesses that could impair performance in the event that hazards materialize.

Risk Management Defined: With a non-significant p-value of 0.437, the Risk Management Defined variable has a coefficient of -0.1439. Although there is no statistically significant association between the two, this negative coefficient shows that clearly outlining risk management roles can lessen the possibility that performance will be impacted. This suggests that while having clearly defined roles is crucial, they might not be enough to safeguard performance on their own unless they are combined with efficient execution and communication.

Risk Management Communicated: This variable is marginally significant and adversely correlated with performance being impacted by risks, with a coefficient of -0.3193 and a p-value of 0.078. This suggests that the possibility of negative performance impacts may be reduced with improved communication of risk management duties. The fact that this association is only marginally significant, however, indicates that communication is a crucial component of the entire risk management approach and may not be sufficient to completely mitigate risk on its own.

Corrective Actions: The p-value for Corrective Actions is 0.219, and the coefficient is -0.2631, suggesting a non-significant but negative correlation with the performance being impacted. This shows that although reducing risks by corrective action may lessen the chance that performance would be harmed, the benefit is not great enough to be statistically significant. This might be as a result of corrective activities' reactive character, which may deal with dangers after they have already had an effect rather than completely preventing them.

Procedures with Excessive Risk: With a relatively non-significant p-value of 0.772 and a coefficient of -0.0528, Excessive Risk Procedures appear to have little to no effect on performance. This implies that whether or not an SME's performance is impacted by having procedures in place to handle risks that exceed allowable limits is not greatly affected. It can suggest that although these protocols are required, they are hardly used or that they might not be enough to stop performance interruptions on their own.

Resource Allocation: There is a positive but non-significant correlation between the Resource Allocation variable and performance being impacted, as designated by its positive coefficient of 0.1699 and p-value of 0.360. This implies that setting aside funds expressly for risk management may make it more likely that hazards will be recognized and controlled, which may have a greater apparent effect on performance. Nevertheless, the absence of statistical significance suggests that the association is weak and that performance problems may not be avoided by resource allocation alone.



#### 4.2.7. Discussion

Hypotheses:

H: Performance is influenced by risk management.

H1: Risk management has a positive impact on the performance of SMEs.

H2: Risk management harms the performance of SMEs.

#### Synopsis of Results:

Logit and Probit Regression Analysis: Internal/External Events: Both logit and probit models show a marginally significant positive association between the identification of internal and external events and the likelihood of performance being affected. This suggests that SMEs focusing on identifying these events may have increased sensitivity to risks, which could impact performance.

Negative Coefficients: The variables Risk Management Defined and Risk Management Communicated exhibited negative coefficients in both models, indicating that these practices might reduce the likelihood of performance being affected, although these effects were not statistically significant

Corrective Actions and Excessive Risk Procedures: Both practices showed non-significant negative coefficients, suggesting that these reactive measures might not effectively protect performance or may only do so under certain conditions.

Resource Allocation: The positive but non-significant coefficient for Resource Allocation indicates that dedicating resources to risk management might not be sufficient on its own to prevent performance disruptions

Testing Hypotheses:

- H: Performance is influenced by risk management.

Outcome: The R-squared values in both models are modest, indicating that while risk management practices do explain some variance in performance, the overall impact is limited. The statistical tests show that the models are marginally significant, particularly with the inclusion of Internal/External Events, which suggests a relationship but not a strong one.

Conclusion: There is some evidence supporting the hypothesis that risk management practices influence performance, but the effect is not robust enough to definitively confirm this hypothesis.

- H1: Risk management has a positive impact on the performance of SMEs.

Finding: The positive association between Internal/External Events and performance suggests some support for this hypothesis, but the effect is only marginally significant. Other practices, such as Resource Allocation, showed positive but non-significant coefficients.

Conclusion: This hypothesis is partially supported by the data, particularly with respect to proactive risk identification. However, the overall evidence is weak, suggesting that risk management practices do not consistently improve performance.

- H2: Risk management harms the performance of SMEs.

Findings: Negative coefficients for Risk Management Defined, Risk Management Communicated, Corrective Actions, and Excessive Risk Procedures provide some support for this hypothesis. These results suggest that, under certain conditions, these practices might be associated with a reduction in performance, possibly due to their reactive nature or the way they are perceived within the organization.

Conclusion: The data offer some support for the hypothesis that certain risk management practices can negatively impact performance. This is particularly relevant for practices that are reactive or poorly communicated. ]

This study investigates the impact of various risk management practices on the performance of Moroccan SMEs using logit and probit regression analyses. The results indicate that while some practices, such as identifying internal and external events, may have a positive impact on performance, this effect is not strong enough to be conclusive. The negative coefficients for other practices suggest that these could be seen as detrimental to performance, potentially due to their reactive nature or poor implementation.

Overall, the findings highlight the complex role of risk management in SMEs. While certain practices appear beneficial, others might be viewed negatively, possibly due to their association with problem-solving rather than proactive performance enhancement. Future research should expand on these findings by exploring additional factors and contexts to gain a deeper

understanding of the overall impact of risk management practices on SME performance in Morocco. To truly improve financial performance, this study underscores the importance of a balanced approach to risk management, where practices are not only effectively implemented but also positively perceived by stakeholders. Further research and refinement of risk management practices could provide more definitive guidance on how best to apply them in the SME sector.



## CONCLUSION

A company's long-term survival and success depend heavily on its capacity to manage risk, especially in the SME market. These strategies include identifying potential risks that could arise from both internal and external sources, defining and disclosing roles associated with risk management, effectively responding to hazards, putting regulations in place to control excessive risks, and allocating enough resources to supervise risk management processes. Effective risk management not only aids in the reduction of possible hazards but also promotes long-term financial stability and strategic decision-making.

The aim of this study was to examine the effects of various risk management measures on the financial success views of small and medium-sized firms (SMEs) in Morocco. This study evaluated ideas on the positive and negative effects of risk management on performance using logit and probit regression models based on a questionnaire given to employees in different SMEs. Probit and logit analysis shed light on the connections between specific risk management strategies and anticipated financial results.

The findings indicate that risk management strategies have a slight but noticeable impact on how people view their level of financial success. The models show that the selected risk management strategies only account for a small percentage of the variance in perceived financial success, indicating that other, as yet unexplored factors may be more important in determining financial results.

The logit and probit analysis revealed some important findings. The association between perceived financial performance and internal and external risk identification was shown to be marginally significant, indicating that improved risk identification could lead to more positive perceptions of financial performance. Although the evidence is insufficient to draw firm conclusions, this supports the hypothesis that efficient risk management improves business outcomes.

On the other hand, there was a negative correlation found between clearly stated and articulated risk management responsibilities and perceived performance. This implies that although it is

important to formalize risk management tasks, doing so could also draw attention to internal problems and inefficiencies, which could have a negative effect on how well people perceive performance. The negative coefficients for excessive risk processes and corrective activities lend further credence to this viewpoint, suggesting that these reactive measures—often put in place in reaction to unfavorable circumstances—may be connected to unfavorable opinions of financial performance.

Perceived performance was not significantly impacted by risk management strategies or the resources allotted to risk control. These results suggest that, despite being crucial to risk management, these processes may have little effect on financial performance because of how routinely they occur inside the corporate framework.

There were certain restrictions on the study, mostly in relation to sample size and variety. The study's conclusions may not be as broadly applicable as they may be because it is based solely on the replies of 100 workers from different Moroccan SMEs. Even while the sample offers insightful information, it might not accurately reflect Morocco's SME sector, especially when it comes to SMEs in various industries or geographical areas that face diverse risk management obstacles and practices.

The study also concentrated on particular risk management strategies. Since risk management is a broad topic, financial performance may also be greatly impacted by other techniques that were not included in this study. Subsequent investigations may examine an expanded array of risk mitigation strategies. Future studies should include a bigger and more varied sample of Moroccan SMEs from different sectors and areas. This would improve the findings' generalizability and offer a more thorough grasp of risk management techniques and their impacts.

A broader range of risk management strategies, such as technological risk management, market risk management, and strategic risk management, should be the subject of future research. This would provide a more comprehensive view of the ways in which various risk management techniques affect performance.

It would also be beneficial to investigate how organizational context—such as size, industry, and management structure—affects risk management methods' effectiveness. Comprehending these contextual aspects would enable risk management techniques to be tailored to particular business requirements.

Future research and practice can offer deeper insights and more practical techniques for risk management in SMEs by addressing these constraints and putting these ideas into practice. In the end, this will improve these businesses' sustainability and financial success.

The study's findings highlight how intricately risk management affects Moroccan SMEs' financial success. Although some approaches are seen favorably, others might be seen as a sign of deeper problems, indicating a complex link between performance outcomes and risk management.

In conclusion, risk management techniques are important for SMEs to survive and thrive, but there are a number of variables that affect how much of an impact they are thought to have on financial performance. Small and medium-sized businesses (SMEs) can enhance their risk management procedures and boost their financial performance by locating and putting into practice best practices.

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## Appendix 1:

We lead this research with a goal of identifying the significant risks impacting SMEs and emphasizing the factors that influence the use of an operating risk management system and the potential impact on the performance of Moroccan SMEs in the context of an economic downturn. The questionnaire should take 5-10 minutes of your time and your answers will be anonymous. We appreciate your contribution.

The Likert scale is used in this questionnaire to measure respondents' level of agreement with the statement. This study uses a 1-5 Likert scale, which is: 1 (strongly disagree), 2 (disagree), 3 (agree or disagree), 4 (agree), and 5 (strongly agree).

|                                                                                                                               | <b>Strongly Disagree</b> | <b>Disagree</b> | Neither Agree or Disagree | <b>Agree</b> | <b>Strongly Agree</b> |
|-------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------|---------------------------|--------------|-----------------------|
| <b>There is a process for identifying potential internal or external events that influence the organization's objectives.</b> | <b>(1)</b>               | <b>(2)</b>      | <b>(3)</b>                | <b>(4)</b>   | <b>(5)</b>            |
| <b>The responsibilities for risk management are well-defined within the company.</b>                                          | <b>(1)</b>               | <b>(2)</b>      | <b>(3)</b>                | <b>(4)</b>   | <b>(5)</b>            |
| <b>The responsibilities for risk management are properly communicated to the persons concerned.</b>                           | <b>(1)</b>               | <b>(2)</b>      | <b>(3)</b>                | <b>(4)</b>   | <b>(5)</b>            |
| <b>The management sets a level of tolerance for risk.</b>                                                                     | <b>(1)</b>               | <b>(2)</b>      | <b>(3)</b>                | <b>(4)</b>   | <b>(5)</b>            |
| <b>If risks go beyond the acceptable boundaries set by</b>                                                                    | <b>(1)</b>               | <b>(2)</b>      | <b>(3)</b>                | <b>(4)</b>   | <b>(5)</b>            |

|                                                                                                                                                  |            |            |            |            |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------|------------|------------|
| <b>the company, specific procedures are taken into action.</b>                                                                                   |            |            |            |            |            |
| <b>There is a particular focus on allocating resources to oversee the management of risks procedures</b>                                         | <b>(1)</b> | <b>(2)</b> | <b>(3)</b> | <b>(4)</b> | <b>(5)</b> |
| <b>The company takes corrective and preventive actions against risks.</b>                                                                        | <b>(1)</b> | <b>(2)</b> | <b>(3)</b> | <b>(4)</b> | <b>(5)</b> |
| <b>The management defines the likelihood and the impact of the risks encountered.</b>                                                            | <b>(1)</b> | <b>(2)</b> | <b>(3)</b> | <b>(4)</b> | <b>(5)</b> |
| <b>Risk consultation is done both in an internal and external way.</b>                                                                           | <b>(1)</b> | <b>(2)</b> | <b>(3)</b> | <b>(4)</b> | <b>(5)</b> |
| <b>Risk consultation is done mostly internally.</b>                                                                                              | <b>(1)</b> | <b>(2)</b> | <b>(3)</b> | <b>(4)</b> | <b>(5)</b> |
| <b>There is a mechanism in place that enables the adjustment of risk management procedures in response to any changes in the level of risks.</b> | <b>(1)</b> | <b>(2)</b> | <b>(3)</b> | <b>(4)</b> | <b>(5)</b> |
| <b>Do you think that your company will have to further develop its process of risk management?</b>                                               | <b>(1)</b> | <b>(2)</b> | <b>(3)</b> | <b>(4)</b> | <b>(5)</b> |

- Did your company face any risks in the past years?

- Yes
- No

- If yes, what kind of risk did your company face?

- General risk
- Financial and accounting risk
- Risks related to operational activity
- Risks related to personnel
- Risks related to international activities
- Tax risk
- Other

#### DEMOGRAPHIC INFORMATION FORM:

What is your age?

- 18 – 25
- 26 – 30
- 31 – 40
- 41 – 50
- 51+

What is your position within your company?