



Operational risk management and governance within companies: a literature review

La gestion du risque opérationnel et la gouvernance au sein des entreprises : une revue de littérature

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Abstract: Over the last decade, the issue of corporate governance has attracted the interest of researchers. Its aim is to protect the interests of the company's stakeholders, who play an important role in job creation and the development of the Moroccan economy. Risk management is an integral part of so-called "steering" structures, which provide a guarantee of institutional governance. In this sense, risk management provides a cross-cutting and comprehensive view of the major risks to which any structure is exposed and ensures that the level of risk taken is consistent with the guidelines and objectives defined by the company's governance bodies. However, despite the efforts made by the public authorities, these companies are unable to achieve sustainable performance. The governance code and its relationship with risk management, particularly operational risk, is intended to help them develop. In our article, we will outline the main concepts of risk management, operational risk and governance in order to determine the relationship between operational risk management and corporate governance in Moroccan companies.

Keywords: Governance, risk management, operational risk, Moroccan companies.

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1 Introduction

Today's business environment is constantly changing, forcing management to integrate economic and technological changes into the organization of its systems and decision-making strategy. Companies are facing increased competition, which forces them to take risks to position themselves or stand out from their competitors by investing in new projects with which their staff are not always familiar. These may involve innovations, entering new markets or revising production strategies. For this reason, the complexity of processes and determining factors in its environment, in the absence of a defined risk management policy, causes operational risks in particular, which are an unavoidable part of business life. Operational risk management can be seen as a real resource that can generate benefits for companies, enabling them to strengthen their capacity to better control operational risk and achieve their objectives.

Operational risk management is a process by which companies identify and assess the risks impacting their activities. It is developed through company practices and needs on the one hand, and scientific research into risk management methods on the other. These modern management methods are based on the use of mathematical and statistical models. Mastery and practice of these methods are now necessary for good business management.

Governance arises from complexity, as it no longer pretends that the world is placid and simple, but accepts the challenge of seeking to put in place mechanisms for prospecting and collaboration that ensure coordination and can lead to sustainability of action and, therefore, maintenance of team performance. Governance cannot therefore be content with developing certain practices that are useful for improving corporate governance; it must also embark on a new process of innovation in decision-making. Governance is therefore the place where the organization, its environment, its mission and its projects are mapped out. In Morocco's rapidly expanding economy, the various models of governance give rise to a wide range of considerations, given that the sole objective of any organization is to maintain the sustainable performance of its teams. Furthermore, the practice of governance combined with good risk management, particularly operational risk, has an impact on strategic decisions in companies. It is in this context that our research question arises, which requires us to study the relationship between operational risk management and governance within Moroccan companies.

In order to address this issue, we propose to first outline the main concepts related to operational risk management and governance within companies, and then to establish the relationship between operational risk and governance.

2 Operational risks related to the company's activity

Risk is inherent to business. It has always existed and, according to economists, is its very essence. Starting a business is already a risk. Its survival is never guaranteed. Even large companies have no guarantee of longevity. Enron, Arthur Andersen, Alstom and Parmalat are examples of multinationals that have disappeared or had to fight for their survival.

2.1 History of operational risk management

The study of risk management began after the Second World War (Dionne, 2013)¹. It dates back to the period 1955–1964. Engineers developed technological risk management models, which include the operational risk that is currently managed by financial institutions. For a long time, risk management was associated with the use of market insurance to protect individuals and businesses against various losses associated with accidents (Harrington and Niehaus, 2003)². However, many business risks were uninsurable or very expensive to insure. It was also during the 1980s that companies began to consider financial risk management, which became complementary to pure risk management for many companies.

¹Bari.I, (2016) "Operational risk and profitability: what is the link in Moroccan SMEs?" Journal of Entrepreneurship and Innovation. P: 1-8.

²Bari.I, (2016) "Operational risk and profitability: what is the link in Moroccan SMEs?" Journal of Entrepreneurship and Innovation. P: 1-8.

The acceleration³ of change over the past twenty years, and more particularly since the beginning of the 21st century, linked to the growing complexity of interrelationships between economic actors, accompanied by interdependencies that too often exceed human capacity to comprehend them, necessitates the use of complexity theory. In a regularly updated document, the authors note that⁴: "The environment in which organizations operate today is more complex and demanding than ever before, and changing jungle that can strike without warning. To top it all off, the costs of controlling these risks tend to be out of control. In short, in many organizations, the status quo is neither sustainable nor acceptable." The explosion in the scope of risk management⁵, as well as its extension to all strategic and operational managers, requires the development of a set of tools that are available to everyone. Risk management has undergone considerable evolution since its emergence as a technical function six decades ago in certain American companies whose insurance budgets justified having an in-house specialist. This evolution is the result of both the frustration of practitioners who felt the limitations of the exercise and the reflections of academics from different backgrounds who tried to develop a scientific basis for designing specific instruments. International risk regulation began in the 1990s⁶ and financial companies developed internal risk management models and capital calculation formulas to protect themselves against unforeseen risks. Similarly, risk management governance became essential, integrated risk management was introduced, and the first risk manager positions were created. Indeed⁷, in order to obtain insurance, companies had to meet the standards set by insurers, which required new skills within companies. Companies and insurers thus collaborated to build an effective risk management policy. Finance also had an impact on the development of risk management within companies. As the economy became more financialised, financial risk management models emerged to assess the quality of investments and their risks. Risk management practices in the 1990s and 2000s⁸ have changed and now require consultation with all employees within the organization (COSO II, 2005). The contribution of the internal auditor to Enterprise Risk Management (ERM), which is not well understood empirically, is considered an innovation since it cannot be regarded as a traditional practice⁹.

2.2 Concept of risk management

According to Gautier.S and Louisot.J. P (2014)¹⁰: "Risk management is an iterative matrix process of decision-making and implementation of instruments that reduce the impact of internal or external disruptive events on any organization. The decision-making process involves three stages: analysis (diagnosis), treatment and audit."

According to Darsa.J.D (2014)¹¹ : "Risk management can also be defined as 'the set of policies, strategies, control, monitoring and follow-up mechanisms, as well as the human, financial and material resources implemented by an organization to identify, detect, limit and control the risks directly or indirectly related to its activities.'" Jean David Darsa also determines that the issue of risk management in companies is linked to the management of crisis situations within organizations, which appears to be fundamentally complex.

³ Darsa.J.D, and Dufour.N, (2016). "Different perspectives on risk management in business: Experts discuss risk management practices. Ed. 1." Published by GERESO. P: 286.

⁴ Darsa.J.D, and Dufour.N, (2016). "Different perspectives on risk management in companies: Experts talk about risk management practices. Ed. 1". GERESO Publishing. P:286.

⁵ Darsa.J.D, and Dufour.N, (2016). "Different perspectives on corporate risk management: Experts discuss risk management practices. Ed. 1". Published by GERESO.P:286.

⁶ Bari.I, (2016) "Operational risk and profitability: what is the link in Moroccan SMEs?" Journal of Entrepreneurship and Innovation. P: 1-8.

⁷ Hassid.O, (2008). Risk management, 2nd edition Paris, Dunod. P: 10-160.

⁸ Sourour.H.A, (2018) "The contribution of the internal auditor to corporate risk management: results of an exploratory study," n.d., 27. 2018/4 No. 127, pp. 107-133.

⁹ Sophie Gaultier-Gaillard and Jean Paul Louisot Afnor Edition., 2014.

¹⁰ Sophie Gaultier-Gaillard and Jean Paul Louisot Afnor Edition.,2014.

¹¹ Jean David.D & Nicolas.D (2014): The cost of risk, a major challenge for businesses, 2nd edition, p. 15. 2014.

Laurent.P (2019)¹² adds another definition: "Risk management is the discipline that focuses on identifying and methodically addressing the risks to which a company is exposed, regardless of the nature or origin of those risks. This management is carried out across the organization, integrating risk factors that may affect decisions into the company's strategy, assessing and covering these risks as part of rigorous financial management, and deploying active monitoring targeting each type of risk (political, legal, commercial, industrial, social, environmental, etc.) through prevention. According to the Treasury Board of Canada Secretariat (2010), risk management is "a systematic approach to determining the best course of action in uncertain circumstances by identifying, assessing, understanding, addressing and communicating risk issues. This organization has also defined integrated risk management as: "a systematic, continuous and proactive approach to understanding, managing and communicating risks from an enterprise- wide perspective. Integrated risk management promotes strategic decision-making that contributes to the achievement of the organization's overall objectives."

2.3 Operational risk within companies

According to the commonly accepted definition, which is also used in the European Directive¹³, "operational risk" refers to the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.

According to Darsa.J.D (2015)¹⁴: the concept of operational risk is extremely broad: it encompasses all risks that may cause damage, loss or cost, created or suffered in the course of the company's day-to-day activities: infrastructure, production and distribution cycles, logistics processes, document management, etc.

According to Nouy.D. (2006)¹⁵, operational risk takes into account legal, administrative, technical and technological risks, such as those associated with information, management and procedural systems, as well as environmental risks, such as economic, political, social, systemic and climatic risks. However, operational risk excludes strategic risk and reputational risk. This is not easy, because this aggregation of heterogeneous risks makes it difficult to identify operational risk precisely, especially since these manifestations are often difficult to isolate.

According to Pierandrei.L (2019)¹⁶: "Operational risk can be defined as the risk that does not depend on how a company is financed, but rather on how it operates its business. It has three sources: internal risk (e.g. fraud), external risk (any uncontrollable external event, such as a geopolitical event) and strategic risk (such as a price war triggered by competition). Other definitions present operational risk as the risk of loss resulting from malfunctions in information systems, internal control, or human or technical errors. Before the implementation of Basel II, operational risk was defined by what it was not: neither market risk nor credit risk. This marginal position was reinforced by the low visibility of the risk, particularly in financial statements. The costs inherent in operational risk were not automatically identified as such. Defining operational risk is not easy (Goodhart, 2001) due to its ambiguous and diffuse nature. "Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk but excludes strategic and reputational risk" (paragraph 644 of the Basel II Accord).

¹² Laurent.P (2019) "Risk Management Ed. 2 - Management" Dunod Edition 2019.

¹³ Daniel.A, (2006) "Essential elements for good operational risk management", Revue d'économie financière 84, no 3 (2006): 93-103.

¹⁴ Jean David Darsa "Strategic and financial risks for businesses: Major challenges for businesses Edition No. 2 Gereso 2015

¹⁵ Daniel.A, (2006) "Essential elements for effective operational risk management", Revue d'économie financière 84, no 3 (2006): 93-103.

¹⁶ Laurent.P (2019) "Risk Management Ed. 2 - Management" Edition Dunod 2019.

¹⁷In short, operational risks materialize all the direct or indirect impacts generated by the company in its daily activities and operating cycle. Within the risk pyramid, they come immediately after financial risks, resulting from the "operational core" of the company. They are analyzed by major process families. Therefore, operational risk is the risk of losses arising from inadequate or failed internal processes, people and systems, or external events.

Operational risk is a significant risk, and its perception is heightened by several factors:

- Changes in the functioning of markets: the globalisation of markets and products has directly contributed to increased competition between companies and their areas of activity, leading to the emergence of risks.
- Sophistication of financial techniques: new business activities are increasingly complex to manage in the face of a changing environment, making certain risks more prevalent.
- Changes in internal processes: the dematerialisation of companies' internal operations increases technical risks.
- External events: these risks are by no means new, but they are now perceived much more strongly than before. Exceptional risks (low occurrence but high intensity).¹⁸

These various factors¹⁹ explain the increasing materialization of operational risk.²⁰ The work carried out by the Basel Committee in the design and development of the Basel II framework. Operational risk is the risk resulting from inadequate or failed internal processes, people and systems or from external events, including events with a low probability of occurrence but a high risk of loss.

In summary, the Basel II Accord enables financial institutions to better understand and enrich their risk culture, especially if they have taken into account operational risk, which is a diffuse risk, it can be found in all departments of a company, and operational risks will materialize all the direct or indirect impacts generated by the company in its daily activities,²¹ while Basel III has imposed a strengthening of capital requirements (ordinary shares and retained earnings), measures to take significant risks into account (in particular those related to securities trading activities and counterparty risk for derivatives activities), while Basel III aims to strengthen the stability of the company or bank system through measures that have been in place since 2013, while Basel IV is considered a new wave of regulatory for the financial industry. Operational risk comes directly after financial risk and represents the operational core of every company. It must be analysed by major families of operational processes.

2.4 The principles and objectives of operational risk management

The principles and objectives of operational risk management generally consist of reducing the losses incurred by the company in order to ensure its effectiveness and efficiency and thus achieve all its objectives and deliver performance.

¹⁷ Bank for International Settlements, International Convergence of Capital Measurement and Capital Standards - A Revised Framework, June 2004, n.d., 251.

¹⁸ Danièle.N (2006), "The scope of operational risk in Basel II and beyond", *Revue d'économie financière* 84, no: 3 (2006): 11-24.

¹⁹ Danièle.N (2006), "The field of operational risk in Basel II and beyond", *Revue d'économie financière* 84, n° 3 (2006): 11-24.

²⁰ Marie.A.N(2019): Governance and key risk, compliance and control functions in financial institutions. 3rd edition RB 2019.

²¹ Nicolas Dufour, Contribution to the critical analysis of control standards. The case of operational risks in the financial sector: from normativity to effectiveness. Doctoral thesis 2015.

2.4.1 The principles of operational risk management

All operational risk management is based on the following two basic principles:

- It is always beneficial to adopt a proactive approach rather than reacting to events as they occur, recognising risk factors, identifying potential risks and developing an action plan to maintain control.
- For an identified risk, priority is given to the prevention action plan, rather than to a detailed assessment of the consequences and a plan to remedy potential problems; preventive actions are always less costly than remedial actions implemented following the identification of deviations, which can also undermine the basic functionality of the project.

2.4.2. The objectives of good operational risk management

At the very heart of all risk management is the achievement of the company's objectives and the optimisation of performance. The objectives of operational risk management are therefore based on the objectives of the senior management teams it must assist in "weathering the storm".

This involves planning the resources, of all kinds, that will enable the company to achieve its ongoing objectives in all circumstances and, above all, regardless of the severity of the damaging event that affects it.

Every company faces the problem of managing operational risks in accordance with the regulations imposed on it. In order to improve their risk management profile, the objective of good risk management is to:

- Reducing losses
- Optimising consumption
- Address economic challenges
- Identifying and controlling
- Guarantee against all threats that may impact the company's situation
- Economic efficiency
- Citizenship and ethics objectives

The operational risk management objectives defined by the AMF in the reference framework are:

- Value protection: creating and preserving the company's value, assets and reputation;
- Security of process execution: securing the company's decision-making and processes to promote the achievement of objectives;
- Consistency: promoting consistency between actions and the company's values;

In summary, operational risk management within companies aims to anticipate and manage uncertainties proactively, enabling the organization to navigate successfully in a constantly changing environment while maximising growth opportunities and minimising potential losses. Generally, operational risk management within companies is a competitive advantage in achieving performance.

3 Governance within companies

Governance is a fundamental concept that has a significant impact on the performance of organizations, whether public or private. As a system of management and control, governance defines the rules, standards and processes that guide the decisions and actions of leaders and stakeholders in an organization; it aims to ensure transparency, accountability, ethics and informed decision-making in order to achieve the organization's strategic objectives. Defining corporate governance remains a difficult task given the existence of several definitions and, consequently, the absence of a universal one.

3.1 Concept of governance

Governance as Hufty (2007) pointed out, quoting Björk and Johansson²²: "There is no single definition of governance that is the subject of consensus: 'There are almost as many ideas of governance as there are researchers in the field'." Almost every study on governance attempts to provide its own definition. Here are the definitions provided first by Foerster and Huen (2003), second by Baron (2003) and third and last by Charreaux (1997 and 2011).

Foerster and Huen (2003)²³ propose this definition from the outset: "Corporate governance refers to the process by which capital providers (shareholders) attempt to ensure that the managers of the firm in which they invest provide a sufficient return. Corporate governance concerns the agency problem in which shareholders (principals) are the ultimate owners of the firm and want to ensure that managers (agents), who are distinct from shareholders, act in the best interests of shareholders rather than in their own interests."

In 2003, Baron wrote²⁴ that the term corporate governance implied an important notion of contracts, of the links that exist around the company. These links, she mentions, are shareholders and managers, of course, but also employees and institutional investors, creditors, customers, suppliers and public authorities (which will be defined as the company's stakeholders in theory). In her definition of corporate governance, she adds that it is "synonymous with the establishment of rules and procedures to control the actions of managers in order to protect shareholders." It is therefore understood that the interests of shareholders are the priority of a board of directors, but that it must nevertheless take into account the interests of other stakeholders in its mandate.

Charreaux (2011)²⁵, meanwhile, proposes different definitions of governance according to the theoretical currents that inspire them. Thus, according to the financial model, which stems from agency theory, as well as the theory that derives from it, namely agency cost theory, and is a vision of the managerial firm: "The governance system consists, on the one hand, of mechanisms that are 'internal' to the firm, either intentionally put in place by the parties or imposed by the legislator, and, on the other hand, of 'external' mechanisms representing the discipline exercised by the markets. " Thus, as an internal mechanism, the board of directors acts as a "guardian of the rules" by ensuring that the agency costs incurred by the separation of the roles of manager and owner are reduced.

The contractual partnership model, which, as its name suggests, considers that it is not only managers and shareholders who are parties to the functioning of the company, in the firm's "contract nodes". Indeed, this theory involves other stakeholders.

For this definition of governance, Charreaux cites Zingales (1998)²⁶: "For Zingales (1998), governance only influences rent creation through distribution. In other words, the governance system is merely a set of constraints governing the ex post negotiation between the various parties to share the rent. Finally, Charreaux provides a definition that he himself developed in 1997: "The governance system constitutes the set of mechanisms (organizational or institutional) that governs the decisions of leaders and determines their latitude."

²² Maripier.D, Coulmont.M, Berthelot.S, RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND RISK: THE CASE OF CANADIAN COMPANIES

²³ Maripier.D, Coulmont.M, Berthelot.S, RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND RISK: THE CASE OF CANADIAN COMPANIES

²⁴ Maripier.D, Coulmont.M, Berthelot.S, RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND RISK: THE CASE OF CANADIAN COMPANIES

²⁵ Maripier.D, Coulmont.M, Berthelot.S, RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND RISK: THE CASE OF CANADIAN COMPANIES

²⁶ Maripier.D, Coulmont.M, Berthelot.S, RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND RISK: THE CASE OF CANADIAN COMPANIES

Since this research is based on the financial model, the approach that ties in with this concept has been adopted in the definition of governance. Governance will therefore be defined as a set of mechanisms (internal or external, organizational or institutional, created by the company or required by law) that frame the decision-making processes of company managers. Obviously, one of the important mechanisms is the board of directors. It is precisely this mechanism that is studied in greater depth here.

3.2 Principles of corporate governance

According to the Organisation for Economic Co-operation and Development (OECD), there are six principles of corporate governance (OECD, 2015), which are²⁷:

- Establishing the foundations for an effective corporate governance regime: To establish an effective corporate governance system, an appropriate and effective legal, regulatory and institutional framework must be put in place. These regulations must be flexible, taking into account the characteristics of each company and based on the "comply or explain" principle (Fasterling and Duhamel, 2009)
- Shareholder rights and fair treatment, and main functions of capital holders: a corporate governance regime must protect the interests of all shareholders, especially minority and foreign shareholders. Shareholders have the right to influence the management of the company through the exercise of fundamental shareholder rights, such as the right to influence the composition of the board of directors, to participate in the amendment of the company's articles of association, and to be sufficiently informed about the company's situation.
- Institutional investors, stock markets and other intermediaries: under this principle, a corporate governance regime must establish sound incentives (OECD, 2015) that ensure the proper functioning of markets and thus contribute to good governance.
- Role of different stakeholders in corporate governance: a company's stakeholders are all those who have contributed resources to the company. These individuals may be capital providers, creditors, employees, suppliers or others. They have played a role in the survival of the company in one way or another and are entitled to a say in the life of the company as defined by applicable law or mutual agreements.
- Transparency and dissemination of information: information is a very important element. Those who hold reliable information have power and an advantage over others. In this sense, this principle highlights the importance of disseminating information to the various parties concerned. This information should be reliable and timely and should cover the company's financial situation, its governance, future developments or any information that may influence decision-making. This information must be reliable and established in accordance with international standards.
- Responsibilities of the board of directors. According to the OECD, "A corporate governance regime must ensure the strategic direction of the company and the effective supervision of management by the board of directors, as well as the accountability of the board of directors to the company and its shareholders" (OECD, 2015).

3.3 Governance models

A brief review of the literature on corporate governance reveals two distinct models of governance: shareholder governance, the shareholders model, and partnership governance, or the stakeholder's model (see table below)²⁸.

²⁷ Toumi S., Kabbaj S. (2019) "Corporate governance and Moroccan small and medium-sized enterprises: Food for thought", Review of Control, Accounting and Auditing "Issue 9: December 2019 / Volume 4: Issue 3" pp: 146 - 170

²⁸ Toumi S., Kabbaj S. (2019) "Corporate governance and Moroccan small and medium-sized enterprises: Food for thought", Review of Control, Accounting and Auditing "Issue 9: December 2019 / Volume 4: Issue 3" pp: 146-170

Table 1. Corporate governance models

Model	Nature of the economy	Role of shareholders	Decision-making criteria
Anglo-Saxon model (shareholder model)	The financial market plays a central role in financing the economy	Essential	Satisfy shareholders in terms of value creation or dividend policy
Southern European model (stakeholder model)	The state plays a greater role as a redistributor and regulator (welfare state)	Negligible quantity	Allegiance to the state and the administration
The German and Japanese models	Social model: - Capitalists and employees in Germany - National unity in Japan	-Co-management - System of business protection and financing	A strong national culture and a mix of solidarity and social power relations

Source: Table compiled by us based on the book "La dynamique de gouvernement d'entreprise" (The dynamics of corporate governance), Richard B. and MIELLET D., Éditions d'Organisation, 2003, pp. 36-37

In March 2008, Morocco launched its code of good corporate governance practices, inspired by the OECD's good governance practices. This code is aimed at companies listed on the Casablanca Stock Exchange and is accompanied by recommendations for other categories of companies such as SMEs, family businesses, institutions and public enterprises. The corporate governance model in Morocco is based on a public-private partnership approach. Indeed, "the Code recommends that companies constantly strive to adopt a proactive and participatory approach towards public authorities" (Specific Code of Good Governance Practices for SMEs and Family Businesses, 2008).

3.4 Operational risk governance according to the Basel framework

Basel II²⁹ provides a set of tools enabling institutions to structure and formalise their approach to operational risks, but these tools are insufficient on their own without a genuine organizational framework for operational risk management processes. Such measures exist in the vast majority of companies: no one waited for regulatory reform to take all necessary steps to reduce their exposure to risk and limit its consequences when it cannot be avoided. However, the Basel reform has introduced a change. The aim today is to give these measures greater visibility and present them as a coherent and effective set of measures, in particular by focusing on the most sensitive areas of risk. It is therefore, above all, a change of perspective in operational risk management: adopting a more "proactive" than "reactive" approach and keeping in mind, in every decision, the need for greater internal and external transparency.

The approach adopted must avoid the pitfall of mechanistic application of established methodologies, which may appear to replace existing tools with a uniform and comprehensive but cumbersome system. Indeed, common standards must be defined and implemented, and a centralized process for collecting and analyzing data for the institution's management, the governing body and the supervisory authorities is necessary.

²⁹ Amadiou.D (2006) "Essential elements for good operational risk management", Journal of Financial Economics 84, No. 3 pp. 93-103.

In this respect, rather than a revolution, Basel II appears above all to be an evolution, responding to the need, under the aegis of risk management, to better organize and globalize an existing but often fragmented function that lacks homogeneity and for which it is currently difficult to have an overall view.

To achieve this, it is essential to create an operational risk department, to which certain key functions must be attached (such as the coordination of business continuity plans, information system security, for example), which has at least strong functional authority over those responsible for operational risks in both business lines and functional departments and which is responsible, in addition to producing the summary reports mentioned above, for coordinating the definition and implementation of the company's operational risk policy in all its aspects (risk appetite, associated investment policy, etc.).

4. Governance and operational risk management Corporate

Defining the roles and responsibilities of each person within the company, which we call "governance", is a very complex subject in operational risk management. Governance is an abstract concept that is so important to those who use it that one might wonder if it is not one of those esoteric words that certain insiders like to bandy about. Corporate governance³⁰ is the set of decision-making, information, transparency and oversight bodies and rules that enable an institution's stakeholders and partners to have their interests respected and their voices heard in the institution's operations.

Governance and risk management are becoming very important issues, which must be addressed, particularly in light of the financial crisis on the one hand and economic and social change on the other. Businesses were the first organizations to invest in the field of risk management, equipping themselves with the appropriate means to combat it³¹ are therefore obliged to invest heavily in risk management. The first step is to identify risks and understand the vulnerabilities to which they are exposed. The next step is to define how the involvement of these organizations, which are new to risk management, requires and will increasingly require close cooperation between them and businesses.

Governance is a set of measures that enable better management of the company. Governing a risk means controlling the risk and the conditions under which it occurs, as well as its impact on the objectives set.³² Corporate governance has been a very important area of management research, particularly among large companies and publicly traded companies (Abor & Adjasi, 2007). Limited studies (e.g., Abor & Biekpe, 2007; Kyereboah-Coleman & Amidu, 2008; Al-Najjar, 2009; Hamad & Karoui, 2011; Gill, Mand & Mathur, 2012) conducted to date in the SME sector have been based on agency theory and have therefore relied heavily on indices applicable to large, resource-rich companies.

It is essential to examine corporate governance in the SME sector in the context of a developing economy in order to highlight the relevance of risk management and other sectoral indicators as an important measure of effective corporate governance.

Clarke (2006) recommends the need for specific and simple SME governance arrangements that reflect their particular form and architecture. These forms include the predominance of family businesses with a high degree of overlap between managers and owners. According to the author, this provision should also recognize the largely fictitious notion of separation in SMEs, which is, in fact, more appropriate for large and publicly listed companies. Among other variables, Garg and Weele (2012) postulated that risk management was an important measure of corporate governance in studies of SMEs. Governance and risk management are always interrelated and interdependent.

According to Jean David Darsa³³, risk governance depends on five areas:

- The company's objectives (sustainable development and value creation)

³⁰ Bernard.F and Dufour.N (2019) "Piloting risk management and internal control". Maxima Paris. P: 428.

³¹ Hassid.O, (2008). Risk Management, 2nd edition Paris, Dunod. pp. 10–160.

³² Ansong.A (2013), "Risk Management as a Conduit of Effective Corporate Governance and Financial Performance of Small and Medium Scale Enterprises," No. 6. P: 1-6.

³³ Darsa.J.D, and Dufour.N, (2016). "Different perspectives on corporate risk management: Experts discuss risk management practices. Ed. 1". Published by GERESO. P:286.

- The values we believe in (the place of people and living conditions, social responsibility),
- The rules of good coexistence (regulations, rules and best practices),
- Models for representing complex realities (designed, controlled and appropriate),
- Useful information (accessible, readable and secure data).

It is important to distinguish between corporate risk governance and corporate governance. Risk governance involves several internal and external actors working together to address threats and achieve the organization's objectives. Corporate governance consists of executives and risk management officers. In terms of good corporate governance practices, it mainly consists of a board of directors, which defines the company's strategic direction, and senior management, which ensures the implementation of the company's strategic direction.

Risk governance thus becomes strategic and is shared by all stakeholders in the company in order to achieve all the objectives set and generate performance. Good governance therefore depends on good risk management within the company.

Jean David Darsa has proposed an analysis grid for risk governance in order to better manage risks within the company.

Figure 1. Operational risk governance analysis grid

Method efficiency criteria	Performance criteria	Criteria for the effectiveness of models and tools
<ul style="list-style-type: none"> • Harmoniously integrate qualitative and quantitative aspects (statistical calculations, etc.) • Enabling awareness of realities 	<ul style="list-style-type: none"> • Risk management implementation must be innovative, forward-looking, cross-functional and environmentally conscious. 	<ul style="list-style-type: none"> • Models and tools must be: educational, stable over time, and integrable.

Source: work carried out by the researcher

Generally, governance and risk management go hand in hand. Effective corporate governance and operational risk management ensure the sustainability and performance of the company.

Governance and operational risk management must be established to ensure that systems are in place to guide the management of operational risks to which companies are subject in order to limit the risk of financial collapse. Corporate governance and operational risk management are linked and interdependent. The sustainability of a company's performance depends heavily on the effective role of these two concepts. Control is one of the roles of corporate governance, while a controlled environment is developed from the risk management process (Knight, 2006). Thus, Knight (2006) defined corporate governance in relation to risk management as the means by which an organization is governed and controlled in order to achieve its objectives.

5. The relationship between operational risk management and corporate governance

Improving corporate governance requires all stakeholders to specify and identify the risk factors that companies face. Increased disclosure and improved operational risk management practices can improve corporate

governance.

While the Canadian Institute of Chartered Accountants (CICA, 2001) report³⁴, on corporate governance in Canada highlights the role that boards of directors should play in corporate governance and proposes amendments to the disclosure requirements and guidelines issued by the Toronto Stock Exchange (sections 473 to 475), The most recent COSO report (AICPA, 2004) suggests a comprehensive framework for enterprise risk management to facilitate information sharing and communication between senior management, managers and employees. In addition to the primary relationship between operational risk management and corporate governance, there is also the relationship between information and oversight, whereby managers are required to provide up-to-date information to those responsible (the board of directors and the financial controller) on the most significant risks facing the company.³⁵ Risk management, as well as the availability of information and coordination mechanisms between the board of directors and management, and the quality of disclosure, are all relevant factors when assessing the effectiveness and value of a good corporate governance structure.

The function and objective of corporate governance and risk management is to maximise shareholder value (Sobel & Reding, 2004; Busco, Frigo, Giovannoni, Riccaboni, & Scapens, 2005). They are interrelated to help organizations better understand risks, improve and achieve their objectives, and mitigate, assess and manage risks appropriately (Manab, Kassim & Hussin, 2010).

Recent reports of corporate bankruptcies, corporate scandals, and fraud are among the reasons why companies are implementing effective risk management programmes. The failures of these companies have been attributed to poor risk management and corporate governance. For example, during the 1997 financial crisis in East Asia, weak corporate governance and poor risk management were found to be the main factors in corporate failures (Mitton, 2002). Risk management is determined by corporate governance mechanisms through different perspectives. Regulators and regulations, such as external corporate governance, control management behavior in making decisions relevant to improving operational risk management. Corporate governance also provides fair incentives, remuneration and career plans for executives that reduce managerial expropriation behavior. Therefore, it can be said that better corporate governance will lead to better risk management. A negative relationship between corporate governance and risk management indicates that good corporate governance can reduce operational risk.

The governance and organization of operational risk management are defined according to the same basic principles for all risks throughout the Bank. The main responsibilities for risk management are summarised here³⁶:

- The Board of Directors decides on the fundamentals of risk management and the operational risk-taking strategy within the company.
- The Audit and Risk Committee (ARC) ensures that risk management is implemented and operates in accordance with the framework defined by the Board of Directors.
- Senior management is responsible for implementing and operating risk management and monitoring the company's risk profile.
- Division managers are responsible for conducting and controlling their activities.
- The Chief Risk Officer, who is responsible for the Risk Management Department, defines the principles and methods of risk management, monitors the company's overall exposure to the four categories of risk, and ensures that the company's risks are reported.

³⁴ Lajili.K, and Zéghal.D, (2005) "Managing risk at the corporate level: The other side of corporate governance." Management P: 104.

³⁵ Lajili.K, and Zéghal.D, (2005) "Managing risk at the company level: The other side of corporate governance." Gestion P: 104.

³⁶ Barkat.S, (2017) "The Relationship Between Financial Risk Management and Bank Governance: The Case of Société Générale Algeria", P: 543.

³⁷ Lajili.K, and Zéghal.D, (2005) "Managing risk at the company level: The other side of corporate governance." Management P: 104.

- For all credit risk exposure of financial companies, the Credit Management Division of the Chief Credit Officer (CCO) is responsible for risk analysis and, within the limits of its competence, for granting and monitoring counterparty exposure.

There is another possible relationship between corporate governance and risk management, which is operational³⁷: the relationship between information and incentives, where the board of directors offers senior executives incentive-based remuneration to motivate them to pursue goals and actions that are in the best interests of shareholders (the governance mandate approach).

6 Conclusion

Companies must take into account the demands and changes in their environment. Risk lurks everywhere. However, it is not the presence of risk as such that challenges them, since it is the very essence of their activities, but rather its dynamic, protean, evolving and sometimes even elusive nature that makes them extremely vulnerable. Companies today operate in an environment that is radically different from what it was ten years ago. Risks are changing; yesterday's risks are not today's risks and will not be tomorrow's risks. The greatest risk is therefore in the future, combining risks to human life, information risks and genetic risks. It is important to prepare for and manage these risks before they become a reality. Radioactive threats, terrorism, IT security, data intrusion and hacking, as well as major technological risks, are all factors that have reshaped companies' exposure to risks, especially operational risk. Generally speaking, operational risks can be defined in many ways, depending on sector- specific or regulatory characteristics. Each sector of activity has attempted to define what operational risks are, or are not. Corporate governance is a set of practices that seek to comply with applicable regulations, ensure the life of the company and protect the interests of stakeholders (shareholders, customers, suppliers, financial institutions, etc.). The implementation of these practices will undoubtedly guarantee the interests of all those involved with the company.

Operational risk governance also requires us to consider the impact of this organizational transformation on operational risk management, as we will discuss in a moment. The governance of an organization refers to the process of making decisions and implementing the actions necessary to achieve its objectives. Effective governance ideally involves the participation of various internal and external actors or stakeholders with the aim of ensuring a better distribution of power. The implementation of sound corporate governance is essential to ensure the success and sustainability of an organization. It enables the equitable distribution of power and the effective implementation of the overall strategy, which promotes the entity's performance and the creation of maximum value. The implementation of governance practices within Moroccan companies will improve their image among stakeholders.

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