

Risk and Risk Management in the Public Sector : A Theoretical Contribution



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ABSTRACT: All public and private sector organizations are vulnerable to internal and external integrity risks, such as fraud and corruption and others. In the absence of mechanisms to identify, analyze and manage these risks, they can have negative consequences such as economic losses, security applications and reputational applications. In turn, these impacts can erode citizens' trust in public services and trust in government.

In order to preserve the integrity of public sector organizations, effective risk management systems are essential, especially in high-risk areas, such as financial management, information technology, fraud and corruption among others. In a context characterized by an uncertain organizational environment. By adopting a risk-based approach, public sector organizations can apply laudable controls that strengthen oversight, without unduly burdening the organization or impairing efficiency. At the same time, it can reduce the perception of excessive control burden among staff and thus reinforce their full commitment to integrity.

The objective of our article is to define new concepts relating to the study of risk and risk management in the public sector.

KEYWORDS: Risk, public sector, risk management

I. INTRODUCTION

All public administrations, particularly those managing public funds and sensitive information, are, by nature, highly exposed to risks. This exposure can, of course, vary according to the size, the diversity of the missions or the level of deconcentration of responsibilities. It nevertheless remains omnipresent and protean and constitutes a challenge to be met on a daily basis. In an increasingly demanding external environment, it is therefore necessary to reduce this risk exposure and define an activity control policy while ensuring the overall performance of the mission. To this end, our administrations must be able to demonstrate that their activities are under control and that they are carried out under satisfactory and secure conditions.

Yet, for a long time, risk management has been an often overlooked secondary function on the big stage of governments and public companies. Only recently - particularly in the past three years - has it come to the forefront of public debate, due to risk management failures that have had shocking and widespread repercussions, such as the scandal of the Bernard Madoff fraud, the Deepwater Horizon oil spill and the housing crisis. Such failures often lead to costly government interventions and increased risks to the state. For example, the housing crisis has resulted in capital injections of more than \$150 billion for state-sponsored companies and insurance risks of around \$1 trillion for the Federal Housing Administration (McKinsey & Company, 2011).

Theoretically, the notion of risk can be described as follows: "Risk is the possibility that an event will occur and have an adverse impact on the pursuit and/or achievement of objectives and/or on company assets. The event must be potential and its potential for occurrence must be assessed. (Bernard, Gayraud, Rousseau, 2010, 63).

We must distinguish between risk and uncertainty, the notion of risk refers to the consideration of a harmful event on the basis of objective probabilities and the notion of uncertainty refers to a study of harmful phenomena that are difficult to establish historically of which it is not possible to establish a history (Knight, 1921).

Nevertheless, the question of risks in the public sector is often subject to a difficulty of definition, it supposes expertise at the same time as instrumental rationality but is a source of ambiguity, of controversy. With this in mind, faced with challenges and an uncertain environment, risk management in the public sector must discriminate between risks according to their origin: risks can be classified into financial, operational, environmental, compliance, corporate image, brand, technical, technological and political. Political risk is gaining greater relevance in the public sector. Some threats from these may be inconsequential to a

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private sector organization, but should be considered in a public sector body. Nevertheless, risk management in the public sector hides obstacles that must be particularly taken into account.

Furthermore, risk management makes public sector organizations more likely to achieve objectives, create greater management focus on the issues that really matter, fewer surprises and crises, be able to estimate reserves for contingencies, to increase the possibility of success of the initiated changes so that they can be realized, to give the capacity to take more risks for greater rewards.

Despite the above, our article seeks a theoretical conceptual framework for risk management in the public sector. To do this, it consists first of all in defining the concept of risk, particularly in the public sphere. Then, it will present the theoretical foundations relating to the reasons for the establishment of risk management in the public sector. Finally, it will address the definition, evolution and development, its equivalences and differences with the private sector as well as the challenges and issues of the latter in the public sector.

II. THEORETICAL FRAMEWORK OF RISK IN THE PUBLIC SECTOR

A. Definition and different applications of the notion of risk

There are many definitions of risk as a concept and most authors also agree that risk is a difficult concept to define. In other words, most authors try to offer definitions for a concept that is just different in different organizations and contexts. What is high for one may be perceived as low for another; what is a threat to one manager is an opportunity for another. Simply put, risk is an individual perception and reaction to the unknown. In general, incorporating industry-specific characteristics into the organization profile can result in a more precise and case-specific definition.

1 Definition of the notion of risk as probability, threat and opportunity:

The word "risk" is part of our everyday language, it refers to a meaning relating to forecasting. In this sense, we assess the possibilities and chances of events occurring in probabilistic terms. If we define risk in this way, then it is easy to see that we are all risk managers (Wilkinson, 2009). Theoretically, the notion of risk can be described as follows: "Risk is the possibility that an event will occur and have an adverse impact on the pursuit and/or achievement of objectives and/or company assets. The event must be potential and its potential for occurrence must be assessed". (Bernard, Gayraud, Rousseau, 2010, p. 63). The word "risk" can be illustrated in three distinct contexts – either as probability, or as threat or as opportunity. This triple understanding of risk also exists within our organizations. Risks must be foreseen in order to be able to exploit all the opportunities that may exist and, more commonly, to prevent and prepare for negative effects (Drennan and McConnell, 2007, 3). Without an understanding of risk in these three dimensions, social and technological, logical progress would be blocked either by too much precaution, which reduces innovation, or too much ignorance, which exposes us to threats. To find a balance between these two aspects, the political decisions to be put in place must consider what is and what is not a "tolerable" risk.

Althaus provides several context-based definitions of risk. Its work on the definition of risk is presented in the table below:

Table 1: The Disciplines, Risks And Knowledge Applied To The Unknown That Determine Disciplinary Epistemological Definitions

Discipline	How he perceives the risks	Knowledge applied to the unknown
Logic and mathematics	Risk as a calculable phenomenon	Calculations
science and medicine Social Sciences Anthropology	Risk as a real objective Risk as a cultural phenomenon	Principles, assumptions and calculations Culture
Sociology	Risk as a social phenomenon	Social constructions or frameworks
Economy	Risk is a decision-making phenomenon, a means of ensuring wealth to avoid loss	Decision-making principles and assumptions
law	Risk as wrongful conduct and judicial phenomenon Risk as a behavioral and cognitive	

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psychology	phenomenon	Rules
linguistics History and humanities	Risk as a concept	Cognition
story	Risk as history	Terminology and meaning
the arts (literature, music, poetry, theatre, art, etc.)religion	Risk as an emotional phenomenon	Narration
philosophie	Risk as an act of faith	Emotion
	Risk as a problematic phenomenon	revelation
		wisdom

Source: Althaus C., 2005, p. 569

Nevertheless, we can mention some common characteristics of the risk as shown in the following table:

Table 2 : Common Characteristics Of Rique

	Definition	Source
Risk	The risk is equal to the expected loss;	Willis, 2007
	The risk equal to the expected disutility;	Campbell, 2005
	Risk is the probability of an unfavorable outcome;	Graham et Weiner, 1995
	Risk is a measure of the likelihood and severity of adverse effects;	Lowrance, 1976
	The risk is the fact that a decision is taken under conditions of knowing probabilities;	Knight, 1921
	Risk is the combination of the probability of an event and its consequences;	International Organization for Standardization ISO, 2002
	Risk is defined as a set of scenarios, each with a probability and a consequence;	Kaplan et Garrick, 1981; Kaplan, 1991
	Risk is equal to the two-dimensional combination of events/consequences and associated uncertainties (will the events happen? will be the consequences);	Aven, 2007
	Risk refers to the uncertainty of results, actions and events;	Cabinet Office 2002
	Risk is an uncertain consequence of an event or activity with respect to human value;	The International Risk Governance Council IRGC, 2005

Source: Spikin, 2013

2 Different applications of the notion of risk

In economics, the theory of risk was developed by Frank Knight in 1921 in his book "Risk, Uncertainty and Profit". According to him, there are two types of risk: The insurable risk, the occurrence of which is probable and for which one can insure oneself, and the business risk or uncertainty, where the company must make several successive choices (what to produce, in what quantity, at what price) and where the possibility of error is important (Knight 1921 in Sandron, 2013, p.14). If the entrepreneur makes a mistake in one or more choices, there will be a deadweight loss. No insurance can compensate for this loss, because errors come from company policy and not from independent hazards. In the field of management, among the old definitions is that of Keynes which makes a distinction between risk and uncertainty. According to him, risk is a scenario where the probability is known and uncertainty is the event where the probability is not known exactly (Keynes in Hopkin & Nightingale, 2006, p. 358). In finance, for example, risky options involve monetary outcomes with explicit probabilities and they are valued based on their expected value and riskiness (Olson & Wu Desheng, 2008, p. 33). Thus, the traditional approach to risk in the financial literature is based on an average variance framework of portfolio theory either by measuring risk by the variance of return of portfolios

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(Markowitz 1952 in Brihanne, Merli and Roger, 2006, p . 298). Much of the finance risk literature also discusses several techniques to measure the risk of the firm's investment portfolio like standard deviation, beta, var, etc. (Babcock, 1972). Furthermore, the sociological perspective of risk arose from the psychological and anthropological view of the discipline. Therefore, we could mention that for sociology, risk would be dominated by two central issues: the relationship between risk and culture and development involving risk and society (Douglas & Wildavsky, 1982, p. 29-48) . In this sense the negative consequences of undesirable events would be the main concerns of sociological organizations. Thus, in sociology, the term "risk" would be socially constructed and is therefore considered a social problem. From a sociological point of view then, entrepreneurs remain responsible for the risk of society and responsible for sharing it in proportion to their respective contributions (Olson and Desheng, 2008, 34).

Thus, through the foregoing, several categories of risks have been identified, including the one retained by Darsa and Dufour:

Table 3 : The Main Classes Of Risks

risk category	Quality issues	Examples	type of risk
- geopolitical risks;	Geostrategic watch	Terrorism, countries at war,	Policy
- economic risks;	Dispersion of information	"Arab Spring"	Economic
- strategic risks;	Clarity of business models	Volatility of commodity prices, control issue to build a margin model	Policy
- financial risks;	Relationship with financing third parties (quality of the relationship with	Unanticipated technological breakthrough: General Motors,	Economic
- operational risks;	investors), longevity of the relationship	Kodak	Legal
- industrial risks;	Data traceability	Case of LG, about 60,000 bankrupt companies per year (thin capitalization, unstructured cash)	Technological
- legal risks (a family of specific operational risks);	Human factor (error)	Societe Generale case,	Legal
- IT risks (a family of specific operational risks);	Mastery of expertise in the face of inflation	"Kerviel fraud"	Technological
- social and psychosocial risks (family called "HR" for convenience);	Normative, data privacy	Crises at British Petroleum, Total	Social
- image and reputation risk;	Infrastructure quality (vulnerability, detection of obsolescence and	Goldman Sachs cases (fine for conflict of interest), Enron	Social
- knowledge management risk (or "knowledge management");	intrusion	Sony, about 200 million dollars in losses	Technological
- other risks (family with extended scope: environmental risk, excess quality, control and management failure, etc.);	Sustainability of	Orange-France Telecom case; Case Renault	Environmental
- integrity risk (the ultimate individual risk).	practices and	Total, Marionnaud, ARC, Servier	Social

Source: Darsa Et Dufour, 2013

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These works mentioned above, although very significant with regard to the study of risks, constitute an essential passage towards the study of risks in the public sector which requires more research to be developed given its particularity and the scarcity of publications. in the matter.

B. Risk in the public sector

1 The place of risk in public services

The definitions quoted above have largely influenced the risk framework in public risk. The broadest definition used in the public sector is that inspired by the ISO 31000 standard: "risk is the effect of uncertainty on the achievement of an organization's objectives" (ISO, p. 1). This uncertainty can be probabilistic or epistemic (Howell, Windahl and Seidel, 2010, 258), and it is mainly the latter that characterizes decision-making in a public context (Lochte, 2012, 5). This definition takes into account both the element of chance (probability or likelihood) and the potential advantages or disadvantages of the event (consequences or magnitude), in terms of the impact of the risk on the organization's ability to achieve its goals.

As risk generator, regulator and communicator, the public sector has responsibilities, as well as an obligation, to respond to major catastrophic incidents (Cooper, 2010, 20). The managers of a private company must mainly ensure a financial return for their shareholders. On the other hand, one of the challenges for public administrations is to deal with multiple interests, while taking certain risks that would be abandoned by the private sector, while expectations for continuity of essential services provided in an efficient manner are present (Bock and Truck, 2011, 2). Public entities therefore deal with several types of risk, including strategic, operational, legal, political or economic (Benz and Sterchi, 2001, 45).

It is important to distinguish between social risk management, which focuses on so-called public risks, and organizational risk management, which focuses on strategic, operational, financial and compliance risks, the latter being more common. in the private sector (Fone and Young, 2000). As Fone and Young note, "Risks enter the public domain when there is a high level of uncertainty and when the risk is either produced by the externality, or not appropriable, and/or the risk cannot be distributed privately to responsible parties capable of bearing the risk. ". Although there are overlaps between these two concepts, the former represents the domain of politicians, while the latter represents management practices.

Risk is at the heart of public services, however we define those services. The types of risks that are unique to utilities depend on how we define utilities, as shown in the table below.

Table 4 : Examples Of Utility Risks According To Hood And Miller

	Definition of " public service "	Example	key risks
Collective consumption and systemic risk	Services whose consumption is inherently collective in some way	Water supply	Systemic risk (of collective failure)
State Power and the Risks of Sovereign Failure: Deciding Who Runs What Risks	Services that involve the use of state coercive powers beyond tort or contract	Protection of children from parental abuse	Risks of sovereign failure
Politically chosen services and political credit risks	Services in which politics trump markets.	Public banks	Political credit risks (of damage to political position)

Source: Hood and Miller, 2009, p. 2

2 Classifications of risks in the public sector

The only certainty that risk managers have in complex societies is that risks are constantly changing (Drennan, McConnell and Starkal, 2014, 5). The frequency of our exposure to risk seems to be increasing, the nature of risks themselves seem to be changing to reflect modern lifestyles, and the ways we expose ourselves to risk as a result are also changing. However, what has not changed is the importance of understanding risks through a basic dichotomy, which separates those that arise for consideration at the strategic level from those that are more relevant to day-to-day business operations. 'an organization.

Fone and Young classified public risk into two categories which are "social risk" and "organizational risk" (Fone and Young, 2005). As mentioned earlier, social risks are those that affect society as a whole (epidemics, disasters and other disasters), while organizational risks are risks that can affect the organization itself (liabilities, lawsuits, fire, financial risk, etc.).

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Despite what has been presented, risks in the public sector are classified into two main categories, strategic risks and operational risks (Drennan, McConnell and Starkal, 2014):

Strategic risks tend to be long term and fundamental in nature. These can come in three broad categories (Drennan, McConnell, and Starkal, 2014, 6). First, those that are integrated into “typical strategic decisions”. All strategic leaders must, of course, consider how their organization can achieve its goals effectively and efficiently, think through large-scale change initiatives, and ensure that public statements will enhance their reputation. Risks can therefore arise internally from these strategic efforts if they are poorly managed. Second, there are recognized risks that arise at non-strategic levels of the organization. This does not mean that strategic leaders have a personal responsibility to manage all organizational risks, but it does mean that they are ultimately responsible for ensuring that the appropriate policies, procedures and delegations are put in place and that risks are managed. appropriately across the organization. Third, there are risks that come directly from the external organizational environment. The following are examples of the types of strategic risks a civil service could and are based on an article published by the UK Audit Commission (National Audit Office NAO, 2001): political risks, those associated with a political failure of a local or central government, or to meet overt local government commitments, such as housing, education or crime reduction. Economic risks are those that affect the ability of the PSO public sector body to meet its financial commitments. These include internal budgetary pressures or the consequences of investment decisions, including whether or not to enter into public-private partnership, concession agreements for major construction projects. Social risks are those related to the effects of changing demographics, residential or socio-economic, economic trends on the ability of the PSO to achieve its objectives. Examples include the demands of supporting an increasingly aging population or dealing with an influx of refugees or immigrant workers. Technology risks are associated with the OSP's ability to cope with the pace/magnitude of technological change or the ability to use technology for changing demands. The growing demand for online services and moves towards e-government are examples. Technology risks can also include the consequences of internal IT failures on the organization's ability to deliver its objectives. Legislative risks: associated with actual or potential changes in national or, in the case of the UK and other countries, European law. The example may include human rights, data protection or freedom of information legislation. Environmental risks are those relating to the environmental consequences of progress on OSP's strategic objectives, for example in terms of energy efficiency, recycling, landfill requirements, emissions, etc. the impact of external environmental changes, such as those thought to occur due to global warming. Competitive risks are those that affect the competitiveness of the service (in terms of cost or quality) and/or its ability to deliver best value. Decisions about whether to keep key services in-house or outsource them to a private company bring with them risks and rewards for the organization. Finally, Customer/Citizen risks are those associated with non-compliance with current needs and changing needs and expectations of customers and citizens.

When it comes to operational risk, in public sector organizations it is the people who face the public – civil servants, agents, police officers and doctors, for example. So at the operational level, the risk is present in the daily functions and services of the public body (Drennan, McConnell and Starkal, 2014, 7). These risks can arise from the people, assets or processes involved in the quality of service expected of the organization. They take many forms, namely: firstly, occupational risks being those associated with the particular nature of each profession. These may include Social Work Services concerns about at-risk children, Housing Services concerns about tenant welfare, or Education Services concerns about student success. Second, financial risks, which are those associated with financial planning and control, revenue generation through local taxation or government subsidy, and the adequacy of insurance or other financial cover in the event of a claim. Then, the legal risks that are linked to possible violations of the legislation, the problems of various national laws such as those on human rights, discrimination based on sex, race or disability. In addition, physical risks that are related to fire, safety, accident prevention and health and safety, including hazards/risks associated with employees, visitors, buildings, vehicles, facilities and equipment. There are also contractual risks associated with sub-contracting of key services and the potential failure of contractors to deliver at agreed cost and specifications. Examples can be found in school meals, transport and even in aspects of risk management. treatment such as complaint handling. Finally, they include technological risks that relate to a reliance on systems or equipment and other machinery (this is a growing problem as countries move towards e-government and increasing levels of public services are provided online) and environmental risks that are related to pollution, waste recycling and disposal, noise or the energy efficiency of ongoing service operations.

Reading these risks just discussed is the dynamic environment in which public sector organizations operate today. However, there are other classifications, for example, the HM Treasury UK report classifying public risks into two categories: internal and external risks.

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3 Phenomenon of corruption and fraud

Corruption hampers the efficiency of public services, undermines trust in public institutions and increases the cost of public spending (OECD, 2019, 11). In terms of public management, corruption jeopardizes democratic public institutions by allowing illegitimate interests to influence the use of public resources and authority, and by undermining the confidence of citizens in the legitimate activities of the state. Today, organizations of all kinds are exposed to various risks. The risk of corruption is one of the most important risks. This risk, which is one of the scenarios of fraud, is a major challenge for public and private organizations. According to the OECD, corruption is "the main source of concern mentioned by citizens, before globalization or migration", i.e. 69%, it is intensifying in particular in the public sphere and it thus leads to a waste of resources. public institutions, widens economic and social inequalities, fuels discontent and political polarization and reduces trust in institutions (OECD, 2018, 1).

More generally, where corruption is widespread in society, it can encourage tax evasion. A recent International Finance Corporation IFC business survey found that 13.3% of businesses worldwide say that "businesses are expected to give gifts at meetings with tax officials," the frequency of this phenomenon ranging from zero to 62.6% in countries (OECD, 2018, 14). Also, at the beginning of the 2000s, corruption represented on a global scale approximately 1000 billion USD, or more than 2% of world GDP and largely concerned transnational transactions (Kaufmann, 2005). For example, corruption in public procurement diverts funds that should be used for the public good. The value of public expenditure in the area of public procurement is considerable, representing an estimated 13 to 20% of GDP and an annual average of 9.5 trillion USD. It is further estimated that between 20-25% of the public procurement budget, or around USD 2 trillion, is swallowed up in corruption cases (OECD, 2017, 15). According to the same report, given its damaging effects, "public procurement is a fundamental pillar of strategic governance and service delivery for public authorities", and "good management [of public procurement] can and must contribute in an essential way enhancing public sector efficiency and building citizens' trust (OECD, 2017). It should be noted that corruption occurs at all stages of public procurement – from the provisional program, through the tender and evaluation procedure, to the award of the contract, thus exposing to a set of forms of corruption, namely the manipulation of eligibility conditions, collusion, extortion, threats, issuing false invoices or fraud (OECD, 2017, 15). In this context, the risk of corruption has become greater when the weight of markets in gross domestic product is important which, according to the OECD National Accounts Statistics and with the COVID-19 pandemic, expenditure on public procurement as a percentage of GDP jumped in 2020. Across the 22 OECD-EU countries for which data are available, procurement increased from 13.7% of GDP in 2019 to 14.9% of GDP in 2020 (OECD, 2021).

It should also be noted that the risk of corruption is greater when the operation involves large contracts or large-scale projects, when the decision-making procedure leaves room for arbitrariness, when there is a lack of transparency, and that it is difficult for the uninitiated to assess value for money in public sector procurement of goods and services. These are situations frequently encountered in public procurement for large infrastructure projects and acquisitions in the defense and extractive industries sectors.

Despite these figures, it must be said that they do not make it possible to measure the real extent of the phenomena of fraud and corruption described and also do not make it possible to quantify the embezzlement. Nevertheless, they are the result, in fact, of factors, apparently independent, which have come to facilitate the fraudulent maneuvers of unscrupulous individuals ready, in order to maintain their power or to get rich quickly, to deny the principles which still prevailed there is about 30 years old in the political class as a whole (OECD, 2006). Among all these factors, we note, in particular: An increasingly complex regulation, a reinforcement, in fact, of the power of the elected officials make it possible to satisfy the needs which increase which appear even at certain agents of the State.

It is for this reason that public internal control and risk management are now an integral part of modern governance systems, they are an essential tool for the prevention, detection and repression of corruption. The MENA governments involved in this study (Egypt, Jordan, Lebanon, Morocco, Oman, Palestinian Authority, Tunisia, etc.) should therefore benefit from the strengthening of their internal control systems, in particular the internal audit functions and the risk management (OECD, 2019, 11).

III. THE DEVELOPMENT OF RISK MANAGEMENT IN THE PUBLIC SECTOR

It is of course wise to describe the impact of standards on risk management, to distinguish risk management between the two private and public sectors and to show their importance as well as their challenges in the public sector..

A. Evolution and impact of standards on risk management in the public sector

Since the 1980s, the concept of risk management has grown from manufacturing to commercial organizations, and has been embraced by the public and not-for-profit sectors. It has also moved away from an initial focus on pure, tangible, insurable risks

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to encompass broader threats to the organization. This involved taking a more holistic, enterprise-wide approach to risk management at the strategic and operational levels (Hopkin, 2013, 4).

De nombreux modèles existent pour décrire le processus de la gestion des risques. Dans sa forme la plus simple, la gestion des risques includes means of identifying, assessing, addressing and monitoring risks. One can quote for example and in particular the definition established by ISO, COSO II, the British professional orders of the management of the risks, the AIRMIC, the ALARM, the IRM and the FERMA aiming at improving the comprehension and the communication on the risk management process in European countries. However, this framework would be more of a guidance document than a standard (Drennan & McConnell, 2007). According to the COSO, "risk management is a process implemented by the board of directors, the general management, the management and all the employees of the organization. It is taken into account in the development of the strategy as well as in all the activities of the organization. It is designed to identify potential events that could affect the organization and to manage risks within its risk appetite. It aims to provide reasonable assurance as to the achievement of the organization's objectives" (Cordel, 2013, 25).

We must also declare that these aforementioned codes and standards use and adopt the definitions and terms relating to risks approved by the ISO which up to the year 2007 was adopted by the governments in forty-one countries, from Japan to the United States. States, and it represents the standard for sector risk management (Drennan & McConnell, 2007, 11). The spread of the Standard around the world is quite remarkable. The number of countries that had already adopted The Risk Management Standard of New Zealand AS/NZS 4360 has a commitment to G8 and G20 countries that had pre-existing standardization commitments.

Thus, these standards also characterize the risk management process in five stages (see the following diagram):

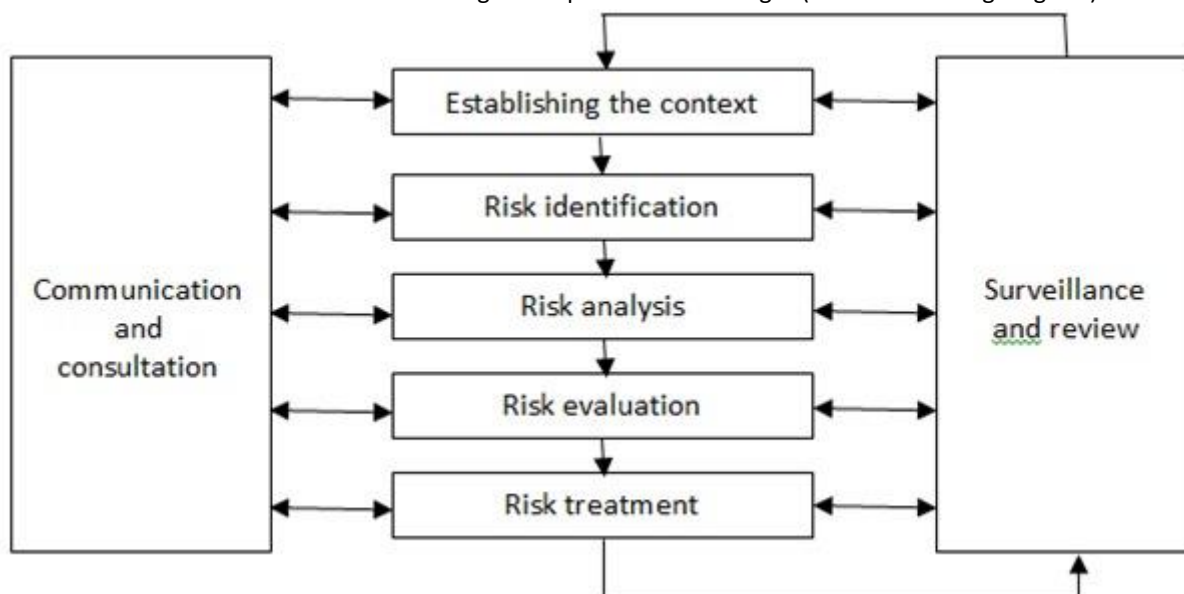


Figure 1: The risk analysis and assessment process (ISO 31000, Risk Management, 2009)

Based on this diagram, ISO 31000 emphasizes the critical importance of context (organizational culture and environmental location) and feedback mechanisms (experiential learning patterns and communication) alongside risk assessment and treatment. Therefore, risk managers must not only pay attention to the traditional risk management process, but also to the broader organizational, cultural and environmental dynamics in which their operations are housed either identifying an organization's exposure to uncertainty. This step would require an intimate knowledge of the organization, the market in which it operates, the legal, social, political and cultural environment in which it exists, as well as the development of a good understanding of its strategy and operational objectives, including the critical factors of its success and the threats and opportunities related to the achievement of these objectives. Next, we quote the definition of the process of risk management by Fone and Young, who have made efforts to translate these concepts into the public sector (Fone & Young, 2005). Indeed, these researchers consider the first step of the risk management process as a face of mission identification, where the entity sets a goal for its risk management program. The second step of the risk management process from this perspective, would help with the identification, analysis and measurement of risks. Additionally and for the third stage, there would be a risk control stage, where the entity would have to decide whether to eliminate, avoid, reduce or prevent the identified and measured risks. The next step in the risk management process would be the financial assessment phase, where the entity should measure the

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financial consequences of the identified risks. Finally in this perspective, the risk management process would consist of a scheduled administration stage, where the organization should implement the risk management program and decisions related to monitoring and including activities.

Finally, we could say that the capacity that the organization should develop in terms of risk management is to identify all the forms of risk to which it is exposed and to understand, for each of them, the optimal risk management strategy. Therefore, decisions on risk strategy must be based on a solid risk identification and assessment process and on the prioritization of threats and opportunities. In the following table we present a review of the strategies examined in the literature.

Table 5 : Summary Of Risk Management Strategies Found In The Literature

	Strategies	Descriptions
Risk control	Risk avoidance	The Organization refuses to accept any exposure to loss arising from a particular activity
	Termination of risks	Completely eliminate the risk (see by some researchers as risk avoidance)
	Risk prevention	Limit the possibility of an undesirable outcome
	Risk reduction	achieved (see also by some researchers risk reduction)
	Risk Directive	Limit the probability of occurrence of a loss and
	Risk detective	impact severity
	Risk fix	Ensure that a particular outcome is achieved
Risk financing	Risk retention	Risk Detective Identify undesirable outcomes after the event
	Risk tolerance	Fix unwanted results occurred, provide route to recover
	Risk sharing	Maintain risks within the organization
	Transfer of risk	Accept and keep the risk or opportunity

Source: Spikin, 2013, p. 112

B. Equivalences and differences in risk management between the private and public sectors

As Drennan and McConnell mention, public organizations would share much in common with private and non-profit organizations (Drennan & McConnell, 2007, 38). They face the same types of threats, to people, assets and processes. Therefore, according to these authors, the differences would lie in: on the one hand, the range of stakeholders to which the organizations are responsible, and on the other hand to what extent and impact the decision taken on social dimensions. Nevertheless, making distinctions between the public and private sectors is not straightforward as Fone and Young argue. The distinctions could then be rooted in cultural and social factors meaning that "public" would be whatever a society says it is.

We note a report by the British Prime Minister's Strategy Unit which recognizes three distinctions of the role of government in taking account of risk which also corresponds to the perspective presented by Fone and Young (Prime Minister's Strategy Unit, 2002, 9-13). First of all, it is about regulation when individuals or companies impose risks on others, the role of government is mainly that of regulator, setting the rules. Next, Stewardship Where risks cannot be attributed to any particular person or organization, governments can take on a stewardship role to provide protection or mitigate the consequences. Finally, Managing in relation to their own business, including the provision of services to citizens, governments are responsible for identifying and managing risks.

Certainly, the majority of authors note that the boundaries that separate the public, private and not-for-profit sectors are increasingly blurred. However, there are some profound differences that need to be highlighted in terms of risk management versus the public-private distinction. The following table summarizes the main resident differences:

Table 6 : Differences In Terms Of Risk Management Compared To The Public-Private Distinction

	Private sector	Public sector
The fundamental objective	Profit seeking: The fiduciary obligation to realize profits and dividends	Service delivery

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Stakeholder networks	Restricted group of shareholders and partners	Citizens and users
The importance of the social and political environment	Private companies generally need not worry too much about the reform agendas of a new government. They are not subject to the kind of public debate that surrounds the provision of public services. The private company can turn to technological or competitive environments to define, assess and manage its major risks, Risk-based measures and values (such as risk-adjusted return on capital)	Public sector bodies never have to worry about bankruptcy and liquidation. The change of a government reflects the attitude on the financing of public services; Public organizations need to look more to the social and political environments. Government institutions have both financial goals and mission goals

Source: Auteur

The most significant difference between public and private sector approaches to risk management was in how risk management programs operated in the organization. Many private companies tried to understand and manage their risks on a holistic, enterprise-wide basis, while many public agencies managed risks in an uncoordinated and ad hoc manner (Office of Risk Management and Analysis Risk Management ORMA, 2010, 7). Then there is the lack of connection between risk management and the ability of a public body to achieve its objectives could be linked to why the public sector has lagged behind the private sector in adoption of enterprise risk management. This is because risk management in the private sector gets continuous support from executive leadership that aims to manage uncertainty and achieve their goals and improve their resilience something that is not in the public sector (ORMA, 2010, 7).

In addition, risk factors and the effects of volatility have been thoroughly analyzed in the private sector. Although the public sector does not have complete information, it has been found that policy changes can have incisive effects and elections and appointments can introduce relatively high fluctuation in management (Jurisch, 2013, 7).

Also, it is generally true that the higher the risk, the higher the reward - usually in the form of profits. But in the public sector, this trade-off does not necessarily apply. Thus, the strategic objectives of the public sector are different – for example, councils generally have to balance their duties to protect citizens, welfare and prosperity with the imperative to deliver services very differently. Citizens are taxpayers and public bodies have legal obligations for many services, adding further complexity to the balance of risk management in the public sector. Decisions about existing risks (ignore them, treat them, move them or remove them) and take new risks must be made in a complex and changing context. All the more reason for a robust management process to back them up (Jo, 2017, 2).

Finally, risk management is essential for any organization, but in the private sector, risk management is an accepted practice designed to control risks that can lead to business failure if not properly managed. Therefore, profit maximization is the intended outcome. However, the application of risk management is not so straightforward in the public sector. Public managers must manage risks in a complex environment taking into account the various missions and multiple objectives of public organizations (Hardy, 2014, 32). Rather than seeking the greatest profit, public managers should strive to manage risk in such a way as to increase an organization's likelihood of achieving its core mission and strategic objectives.

C. Issues and importance of risk management in the public sector

Despite few studies devoted to the impact of risk management on the public sector, some authors such as Drennan and McConnell (2007), Kline (2019), Hardy and Runnels (2014), Hood and Miller (2009), Fone and Young (2000,2005), Cooper (2010), etc., confirm the undeniable role of risk management within public organizations. We can summarize its importance on three levels: reduction of uncertainty; Instrument contribution to the achievement of objectives; Instrument from an organizational perspective.

1 Uncertainty Reduction Instrument

Operating in a climate of high uncertainty, with limited resources, public managers must put in place policies that moderate the risks of today, anticipate the risks of tomorrow and respond in some way to the inconceivable risks that engender crises (Drennan and McConnell, 2007). Risk management has therefore become a must for various public administrations in order to minimize the impact of these uncertainties (Ladouceur & Charbonneau, 2016, p. 29). However, despite this, few studies

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empirically paint a portrait of a risk management approach and its characteristics, and many do not dispute the way risk management is applied or use simplistic variables to represent it (Mikes & Kaplan, 2014, 9).

As seen above, the public sector environment is characterized by uncertainty. Faced with this, risk management has become a must for various public administrations in order to minimize the impact of these uncertainties (Ladouceur & Charbonneau, 2016, 29). Thus, it can be argued that one of the goals of risk management, and of system development and operation in general, is to reduce uncertainty as much as possible and to ensure that the remaining uncertainty is identified and understood. (Marais, 2005, 18). However, despite this, few studies empirically paint a portrait of a risk management approach and its characteristics, and many do not dispute the way in which risk management is applied or use simplistic variables to represent it (Mikes & Kaplan, 2014, 9).

2 Instrument contributing to the achievement of objectives

In addition, risk management would also increase an organization's chances of achieving its objectives, improving its results, perfecting its governance and improving its effectiveness and efficiency. It promotes a citizen-based approach by strengthening decision-making in the public interest and placing more emphasis on consultation and communication (Cooper, 2010, 19).

Risk management would increase an organization's chances of achieving its objectives, improving its results, perfecting its governance and improving its effectiveness and efficiency. It promotes a citizen-based approach by strengthening decision-making in the public interest and placing more emphasis on consultation and communication (Cooper, 2010, 19). Also, risk management is important for the successful delivery of public services. An effective risk management system identifies and assesses risks, decides on appropriate responses and then provides assurance that the responses chosen are effective (Office for Public Management & CIPFA, 2004, 15).

In recent years there has been a growing awareness of the risks associated with not seizing opportunities to deliver better and more cost-effective public services and that some risk-taking is inevitable if an organization is to achieve its objectives. and improve its performance. For example, the 2012 US GAO Government Accounting Office report maintains a program drawing attention to government operations that it identifies as high risk due to their greater vulnerability to fraud, waste, abuse and mismanagement or the need for transformation to address economy, efficiency or effectiveness challenges. Solutions to high-risk problems, such as those listed in this section, offer the potential to save billions of dollars, improve service to the public, and strengthen US government performance and accountability (GAO, 2013).

However, if risk management is seen as another mode of management, or as the responsibility of a person named risk manager for example or of a specific department, it is likely to fail. Risk management must be accepted as an integral part of everyone's job, from the CEO to the organization's youngest employee. It must therefore be an integral part of all functions, processes and initiatives within public sector organizations (OPM, 2004, 34). This will help to effectively achieve the goals of the organization.

3 Organizational perspective of risk management

En plus de ce qui été précédé, les auteurs voient en la gestion des risques comme catalyseur fondamental de changement organization and an instrument of good governance.

Indeed, risk management is a key element of corporate governance in public sector organizations, in terms of their structures, processes, corporate values, culture and behavior. It is a cornerstone of an organization's architecture for strategic and operational success and must fit seamlessly into a management process as part of governance (Jo, 2017). A typical risk management process in a public sector organization includes the following elements: identifying future events or events that threaten success, assessing the level of risk in terms of likelihood and extent of impact, considering tolerate, address, transfer or terminate a risk, updates of the reporting process to management and others charged with governance.

Nevertheless, a number of aspects have contributed to changing this application of risk management discipline in the public sector. First, implementing the broader ERM approach would require risk management to move from a narrow technical function to one that manages all of the organization's risks integrated. This last feature of the integrated perspective of risk management would be highly appreciated by public authorities, as it would contribute to the decision-making process of public organizations. In addition, and normally requested by the authorities, the implementation of corporate governance principles in public entities has forced the integration of risk management practices into the organizational culture as well.

Thus, ERM is not about creating a new team to do risk management. It's about getting a process that feeds into the main trades to add value and create homage to the bottom line. Furthermore, ERM is an initiative supported by the highest level of management and driven from there in the organization. ERM promulgates that "if risk is factored into the equation when defining strategy for the entire business, risk management can become a holistic process that starts at the top and filters its way through the business (Hardy & Runnels, 2014, 28).

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Along the same lines, a key element in the successful implementation of the ERM approach is that of integration (Lam, 2003): First, the organization needs to be integrated. Second, risk transfer strategies must be incorporated. And third, risk management must be integrated into the company's operational processes.

In response to public sector demand for change, public managers as well as those in the private sector are looking for ways to weave a risk management strategy into their day-to-day operations and strategic decisions at the highest level (Hardy & Runnels, 2014, 28). Public sector organizations (eg USA, CANADA, NZ) are now beginning to recognize the need to weigh the likelihood of what could go wrong before it does, the benefit of doing a cost-benefit analysis to mitigate or accept risk, and the benefits of discussing, assessing and integrating risk into an agency's strategic plan and budget, regardless of mission. ERM is quickly becoming an important activity for many public organizations and is taken as a solution to bring together various risk activities.

ERM is in its infancy in the US government. Other governments, such as Canada, have long established a national MRE policy; in the case of Canada, almost a decade ago. Canada's integrated risk management framework aims to protect the public interest and maintain public trust (Hardy & Runnels, 2014, 29). The Canadian framework is part of its broader goal of modernizing management practices in order to make government more citizen-focused and able to respond to the changing needs and priorities of its community.

4 Challenges of risk management in the public sector

In theory, governments that have adopted systematic approaches to risk management (for risks of any kind) have done so to enable their stakeholders to exploit the opportunities and minimize the risks, presented by changing contextual conditions (report The International Risk Governance Council IRGC, 2013, 12). In practice, government risk management has focused on downside risks and the need to devote resources in the short to medium term to mitigate risks and their impacts proportionately. Nevertheless, the same report indicates some reasons for this “precautionary” approach to risk management. It includes the inability to anticipate or foresee new risks and disasters, and a loss of confidence in predictions and threat assessments, even where risks and crises have been predicted, the failure to anticipate their full outcome in terms of impact on society and the economy, and the need to understand the possible impacts of future events. It then indicates concern that the accelerating pace of change in science and technology, and the world's greater connectivity (its economy, communications and infrastructure), will make further failures and their consequences more likely. more serious. It also raises concern that a political climate increasingly marked by intolerance of the failure to foresee crises and declining trust in all institutions, especially government, will magnify any government failure to manage emerging risks, and finally a need - particularly acute since the 2008 financial crisis - to use risk management for its traditional purpose: to allocate scarce resources in an optimal way.

In principle, one could argue for a more generic approach involving the integration of business risk management techniques into public sector management control and organizational strategy. Many environmental and technological changes that make risk management take on greater importance in business strategy (such as increased litigation risk, IT failure risk, financial risk arising from global markets) affect governments as well than companies (Hood & Rothstein, 2000, 1). There is evidence that the Turnbull ICAEW report on internal control has influenced developments in both the public and private sectors. Surveys of government decision-making often provide examples of risk being taken with public funds or the quality of public services without adequate senior-level strategic consideration or careful contingency planning. Yet public servants are almost equally often chastised for being risk averse and entrepreneurial. A business risk management approach offers the opportunity to find a judicious balance and the fullness of the arguments between risk and opportunity in the form of the conflicting pressures for greater entrepreneurship on the one hand and the limitation of downside risks on the other hand.

In summary, there are a number of barriers to effective risk management. They include the following (Hood & Rothstein, 2001, 1-2): a lack of integration, where risk management is applied as a complement rather than integrated with other management processes, or where there is a “silo” rather than a strategic approach at the departmental level. Second, a lack of a systematic approach, often due to a mistaken belief that risk management is automatically integrated into day-to-day decisions; a lack of clear reporting to general management and the audit committee tends to accompany this weakness. Also, a poor understanding of risk management, its purpose and its relevance to the organization, with some viewing it as a simple compliance exercise; poor risk connectivity between upper and lower levels of an organization is another problem. Finally, an abdication of responsibility, which often results from the lack of interest or awareness of the risk of individuals; this can be the result of poorly written job descriptions and management process.

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IV. CONCLUSION

In this article devoted entirely to the theoretical framework of risk management in the public sector, the academic contribution of our research therefore consists not only in listing the still emerging studies on risk but also in formalizing the contributions of scattered research on risk management. risks in the public sphere.

Thus, throughout this article, we have tried to theoretically frame the fundamental notions of our research, namely: risk and risk management in the public sector. Several theories and foundations have been mobilized given their importance with our subject but also and in particular from a perspective of the public sphere, taking into account new public management.

Nevertheless, the results of the study of the theories and reading grids used show that risk management in the public sector is of particular importance in order to take into account three important elements, namely: risk, the uncertain organizational environment and the phenomenon of corruption and fraud.

Moreover, the public sector, in which new public management NPM has gained more and more space in recent years, remains a totally different sector compared to the private sector in terms of goals, conditions and environment. This has impacted risk management in terms of pragmatic decision-making in the face of risk taking in the public sector as well as challenges relating to the implementation of internal control.

It should be noted that the public sector has done fewer studies in our theme, particularly in the Moroccan context, which constitutes a field of research to be developed. As a result, the theme of risk management in the sector requires more theoretical and empirical studies as the latter goes through crucial upheavals within the framework of NPM.

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