RISK MANAGEMENT IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

Gheorghe Mirela
The Bucharest University of Economic Studies,
Faculty Accounting and Management Information Systems

The objective of the present paper is to present the singularities of risk management in the context of the new requirements and strategies adopted by the European Union in order to ensure sustainable development at organizational level. The paper wishes to approach the complex problem of risk management, given the premise that risk needs to be tackled as a conscious and calculated assumption of reality. The motivation for this research originates from the necessity of having a holistic approach for the risk management process, which will allow risk analysis and evaluation at a strategic, operational, financial, environmental and social level. This integrating approach, the continuous and systematic analysis and evaluation of all risks will constitute a real fundament for the sustainable development of all organizations, generating an efficient management system for all possible risks and opportunities resulting from these risks.
The present research is based on the analysis of specialized literature, identifying the characteristics of the risk management process at conceptual level, in order to ensure the organization's sustainable development, the managers' perception regarding the importance of this process and the necessity for integration in the leading structures of the organization. The adopted research methodology is based on activities specific for descriptive research.
Modern management needs to be risk-sensitive, to follow the implementation and utilization of reliable and efficient systems, to elaborate action plans and security schemes which include ranking the objectives on operational levels, adaptable to the permanent changes. An efficient management system does not limit itself to a ‚short time horizon', also but considers further perspectives. In these situations, proactive management turns into prospective management, its purpose being to identify the risks that might arise as a consequence of strategy or environment modifications. Today's organizations need to fully absorb the concept of sustainable development and risk management into their strategy, not only to minimize potential losses but also to exploit new business opportunities which result from the principles of sustainable economic development.

Keywords: risk management, sustenability, strategic risk, social risk, environmental risk.
JEL classification: M21, M15

INTRODUCTION

Organizations today need to fully integrate the concept of sustainable development and risk management into their strategy, not only to minimize potential losses, but to also fructify the new business opportunities which derive from the principles of sustainable development. These can include new products and services that can favor sustainable development, new technologies that can support and improve an organization's sustainability and financial performance, or new business models in order to develop emerging markets and support the creation of sustainable communities.

The bankruptcies recorded in the past years (Long-Term Capital Management (1998), Enron (2002), Societe Generale (2008), etc), the present world economical crisis brought profound mutations at manager mentality level, regarding the importance which the risk management system must have within the organizations' strategic preoccupations, regardless of their nature. The integration of this process needs to be an objective necessity, dictated by the complexity of the business environment and the multitude of interdependent risk factors.

The research conducted for the present paper attempts to deliver an answer for the following questions: What is sustainable development and what are the dimensions of this concept? What is

the role of risk management in ensuring the sustainable development of the ‚new economy'? What is the content of the risk management process within the frame of sustainable development? In an attempt to answer these questions, the structure of this paper is the following: chapter 1 – analyzes the specialized literature concerning the concept of sustainable development, chapter 2 – offers a description of the risk management process for ensuring a sustainable development. The final section, conclusions, presents a few general observations regarding the research.

1. CONSIDERATIONS REGARDING SUSTAINABLE DEVELOPMENT

The relationship between humans and the natural environment is a problem that now concerns the internation community, starting from the first UNO environment Conference (Stockholm, 1972) and was materialized in the works of the World Comussion for the Environment and Development, established in 1985. This Comission's report, presented in 1987 by G. H. Bruntdland and named *Our common future* offered the first definition of the concept of **sustainable development** as being a type of ‚development which satisfies the actual generation's needs without compromising the future generation's chances to satisfy their own needs'. Although, initially, sustainable development was meant to be a solution for the ecological crisis determined by the intense exploitation of resources and continuous degradation of the environment, the concept was extended to the economical and social fields (figure 1).

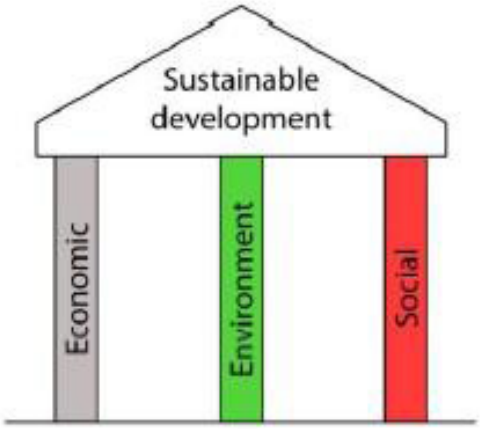

Figure nr.1 The three pillars of sustainability development
(source: Zetterlund (2011)

Sustainable development has become a political objective of the European Union, starting 1997, through its inclusion in the Maastricht Treaty. In 2001, The European Council in Goteborg has adopted the European Union's Strategy for Sustainable Development, to which an external dimension was added in Barcelona, 2002.

In 2005, the European Commission has initiated the process of revising the Strategy, by publishing a critical evaluation of the progress registered after 2001. The document also highlighted a number of unsustainable tendencies, with negative effects on the environment, which could affect the future development of the European Union, the climatic changes, threats towards public health, poverty and social exclusion, the exhaustion the natural resources and the erosion of the biodiversity.

In 2006, the EU council adopted the renewed Sustainable Development Strategy for an extended Europe. In this strategy's vision, the object of sustainable development is represented by ‚continuously improving the quality of life for present and future generations by creating sustainable communities, able to efficiently manage and use resources and fructify the ecological and social innovation potential of the economy, in order to ensure prosperity, protection of the

environment and social cohesion.' In order to accomplish this, four **key dimensions** are identified within the strategy:

- ***Environment protection***, by measures that allow the dissociation of the economical growth from the negative impact on the environment;
- ***Social equity and cohesion***, by respecting fundamental rights, the cultural diversity, the equality of chances and fighting discrimination in all its forms;
- ***Economical prosperity***, by promoting knowledge, innovation and competitivity in order to ensure elevated living standards;
- ***Fulfilling international responsibilities*** of the EU by employing democratic institutions in the fight for peace, security and freedom, of the principles and practices of sustainable development worldwide.

In conclusion, the concept of sustainable development represents an attempt to fuse environment protection and economical development, while respecting social responsibility. This is not a doctrine, nor a theory, or a synergy between economy and ecology; it is an actual necessity to employ economical instruments for the responsible management of this planet's resources, its purpose being the continuous improvement of the quality of life, for present as well as future generations.

In the last years, the authorities' efforts to regulate the field of sustainable development have intensified, and the result can be seen in the number of methodologies and standards associated with this field (ISO published a brochure *"Rio+20. Forging action from agreement – How ISO standards translate good intentions about sustainability into concrete results"* that specifies the standards which allow a sustainable development):

The environment

- The family of standards **ISO 14000** certify that the organization's environment management system is aligned with the good practice standard.

Economical

- The standard ISO 9001 refers to the quality management system, its purpose being to ensure customer satisfaction and to obtain compliant services and products.
- The family of standards ISO 22000 concerns a food safety management system.
- The standard ISO 27001 concerning information security.
- The standard ISO 50001 concerning energy management.
- The standard ISO 28000 specifies the requirements that concern the supply chain security management systems.
- The standard ISO 31000 concerning risk management, although it is not considered as a standard management system, is considered to be an important instrument for ensuring a sustainable economy.

Social

- The standard ISO 26000 concerning social responsibility.

2. RISK MANAGEMENT – the basis of a sustainable development for organizations

Today's organizations need to completely absorb the concept of sustainable development and risk management into their strategy, not only to minimize potential losses but also to exploit new business opportunities which result from the principles of a sustainable economical development. These can include new products and services that favor sustainable development, new technologies that will sustain and improve the risk management process' sustainability and performance, or new business models for developing emergent markets and supporting the creation of a durable community.

Figure 2 illustrates how risk management, in the context of sustainable development, includes social and environmental factors and extends economical problems that are broader than in the case of the traditional risk management.

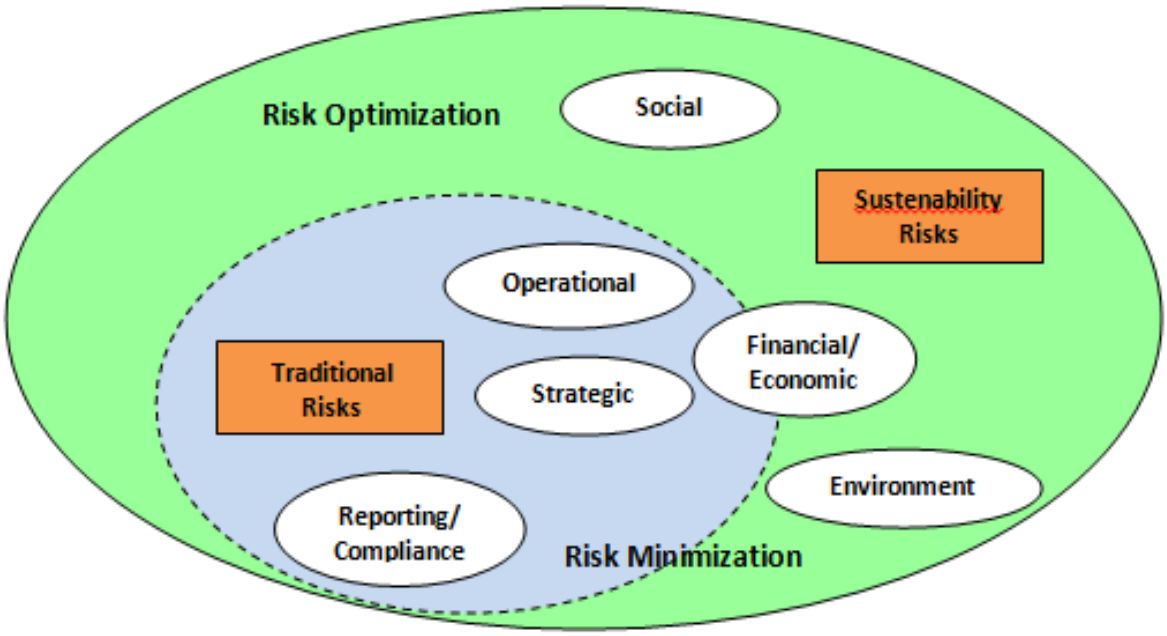

Figure nr.2 Risk management in the context of sustainable development
(source: AON (2007)

In the vision of the work frame elaborated by COSO (eng."Committee of Sponsoring Organizations of the Treadway Commission"), the objectives of the risk management process at organizational level are centered on the following fields: strategic, operational, financier reporting and conformity to standards, the law in force. In the context of sustainable development, the risk management process will analyze and evaluate risks at organizational level from the following points of view: strategic, operational, financial, environmental and social (figure 3).

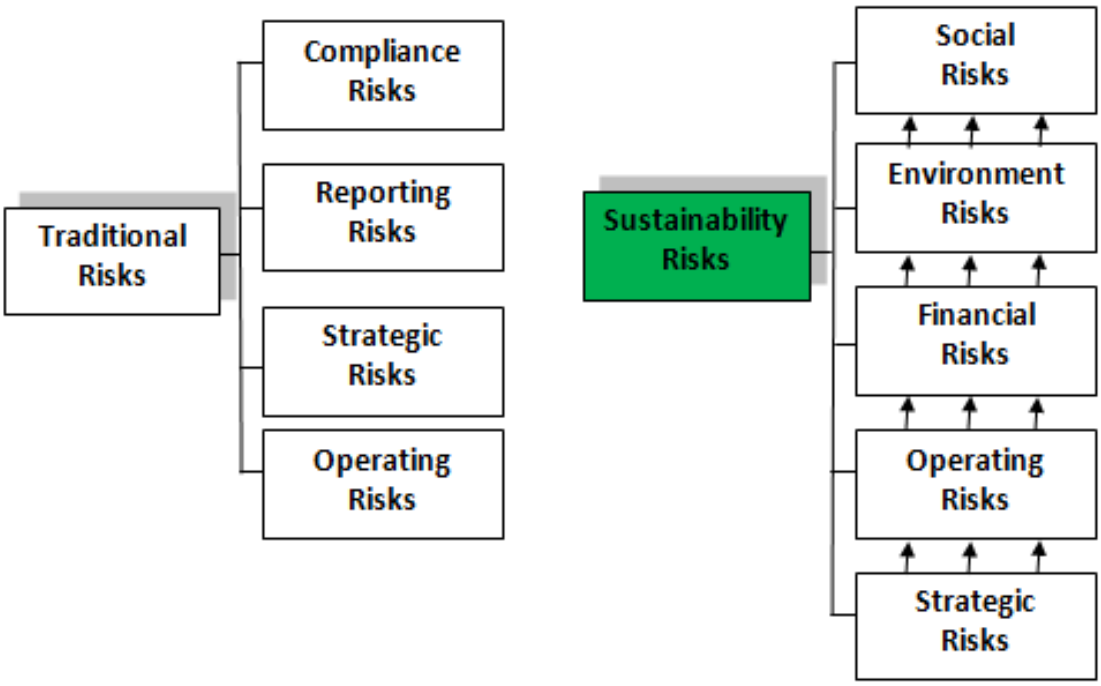

Figure nr. 3 Traditional risks versus risks in the context of sustainable development
(Source: AON (2007)

Total risk= Σ Rstrategic+ Σ Rfinancial + Σ Roperational+ Σ Rsocial + Σ Renvironment

The risk management is considered to be an integrating part of the management of any organization, whose objective is represented by the identification, the analysis and the evaluation of the risks in an organization, having the goal of implementing additional measures of control which will lead to their decrease. Otherwise said, risk management has the goal of reducing the vulnerabilities of an organization confronting the adverse changes in its environment, and intends to reach the pre-targeted goals with maximum efficiency.

Risk management is a cyclic process and implies going through five stages, which in reality blend harmoniously in order to create a whole (ISO 31000, 2009):

1. Organizational environment and risk factors analysis;
2. Risk identification;
3. Risk hierarchy and assessment;
4. Establishing risk response strategies;
5. Risk monitoring and control.

The risk management process starts with the internal and external **organizational environment analysis** of the relationships established between the organization and its existence environment, of the opportunities and threats specific to its environment. This analysis will allow the identification of the risk factors (political, social, economic, financial, technical, operational, and legislative) at which the organization is exposed.

Risk identification starts with the preceding stage's results (knowing the organization, the market in which it operates, the legal, social, political, economic and cultural environment in which its activities take place, as well as its organizational objectives) and it will identify the threats and vulnerabilities that affect the activity or reaching the organization's goals, the consequences associated with these possible events.

Risk hierarchy and assessment. After the risks have been identified we go on to evaluating them, or otherwise said, to the estimation of the probability of achieving the risk and its impact. In practice, the specialists use different methods: quantitative, qualitative, or semi quantitative.

Starting from the $Risk = Probability * Impact$ equation, the evaluation of all the risks is made using the same method (quantitative, qualitative) to assess the probability and the impact.

Establishing risk response strategies. Not all risks will be treated, only those that exceed the risk margin taken on by the organization. For each critical risk a response strategy will be chosen:

- *Risk avoiding* – eliminating the uncertainty by not initiating the activity considered as being hazardous;
- *Risk transfer* (risk externalization) – consists of giving property over the risk to a 3rd party (through bonds, insurances, contractual clauses);
- *Risk decrease* – through reduction of the probability of appearance of the risk or the impact. Otherwise said, through the implementing of additional control measures;
- *Risk acceptance* – this type of risk response consists in not taking any measures of risk control and it is adequate for inherent risks whose exposure is smaller than the risk margin. This strategy can be adopted in the situation in which no other response strategy can be put into action.

Risk monitoring and control. Monitoring and controlling the risks represents the final stage of the risk management process and certifies the efficiency of the management system and of the technicians, of the instruments used during the whole process. The stage will allow the revision and continuous enhancement of the risk management process, by identifying new risks or observing possible threats.

In conclusion, there is a significant recognition of the increasing number of risks, their variety and interactions with the organization. The progress of technology, the dynamics specific to new business models, globalization, the deeper complexity of the business world contributes to an increase in the number and complexity of the risks. The new requirements of sustainable development, the strategies adopted by the European Union in this direction require that the organizations use a holistic approach of the risk management process, which will allow risk analysis and evaluation at strategic, operational, financial, environmental and social level. This integrating approach, the continuous and systematic analysis and evaluation of all risks shall represent a real fundament for the sustainable development of the management of any organization, thus generating an efficient management of all possible risks as well as the opportunities that may result.

CONCLUSIONS

Risk management grows more and more important as the decision factors realize its multiple applications with supporting the organization's sustainable development in an increasingly pressing competitive environment. The specter of the advantages which result from this process extend to concrete financial aspects, which consist of the elevated degree of predictability of cash-in and payment flows, the reduced costs in case of unpredicted events, disasters, up to the construction of a favorable image among all actors who interact with the organization in its environment (shareholders, employees, clients, authorities, society in a broad sense).
At large corporation level, risk management has become a process integrated within all other processes inside the organization, which allow the identification and evaluation of all the risks which result from its activity, including the ones determined by the outside, political, social and cultural environments. Compared to the traditional risk management, according to which specific instruments and techniques are developed for each and every identified risk, the actual risk management accomplishes a continuous and systematic risk analysis and evaluation. Given its continuous character, this process consists in identifying, analyzing and evaluating risks, as well as elaborating and implementing control measures which address to individual risks and risks caused by the interactions and interdependencies between themselves, thus creating a systemic perspective for the organization's management. In this context, risk management must not be regarded as a panacea, but only as an elaborated process for reducing the uncertainties and occurrence probabilities of certain events which affect the organization's financial performance.

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