Benefits of ERM

Cristian Dîrvă[1]

Abstract

Every organization is faced with uncertainty and risk. The challenge for management is to determine how much uncertainty to accept as it strives to improve stakeholder value. Risk identification is a process designed to identify first both the strategic objectives and goals and then the potential internal and external events that can adversely affect the enterprise's ability to achieve those objectives and goals.

Enterprise risk management (ERM) has been recognized as being one of the most important issues in business management in the last decade. ERM includes the methods and processes used by organizations to minimize surprises and seize opportunities related to the achievement of their objectives. ERM is an approach to aligning strategy, process, and knowledge in order to curtail surprises and losses as well as to capitalize on business opportunities. In order to provide the materials and the technical support, we presented the role of the ERM.

The paper has a theoretical value thus presenting the main concepts and notions related to ERM. The contributions presented in this paper consist mainly in the identification of the elements of ERM which although is a relatively new concept has aroused particular interest and research in the field is very consistent, however the manner of approach may be different (what we tried to do and presented in the following two chapters considered some unusual elements on ERM).

Keywords: ERM, corporate culture, risk exposure, benefits of ERM

JEL Classification: L21, L22, M10

Introduction

Living and working in today's environment involves many risks. The processes used to make decisions in this environment should consider the need both to keep people gainfully employed (through increased economic activity) and to protect humanity from threats arising from human activity. Risk management can be defined as the process of identification, analysis and either acceptance or

[1] The Bucharest University of Economic Studies, PhD Student, cristian.dirva@gmail.com

mitigation of uncertainty in investment decision-making. Once risk has been processed in this manner, risk management seeks coordinated and economical application of resources to control the probability and/ or impact of adverse events, and to monitor the effectiveness of actions taken. Risks can be viewed as threats, but business exists to cope with risks. No one should expect compensation or profit without taking on some risk. The key to successful risk management is to select those risks that one is competent to deal with, and to find some way to avoid, reduce, or insure against those risks not in this category. Consideration of risk has always been part of business, manifesting itself in the growth of coffee houses such as Llody's of London in the 17th century, spreading risk related to cargoes on the high seas. The field of insurance developed to cover a wide variety of risks, related to external and internal risks covering natural catastrophes, accidents, human error, and even fraud. Enterprise risk management (ERM) is a systematic, integrated approach to managing all risks facing an organization. It focuses on board supervision, aiming to identify, evaluate, and manage all major corporate risks in an integrated framework. The board is responsible for providing strategic input, identifying performance objectives, making key personnel appointments, and providing management oversight. Enterprise risks are inherently (Olson and Wu, 2015).

Conceptual framework

Risk management is about managing uncertainty related to a threat. ERM has been recognized as being one of the most important issues in business management in the last decade. There are systematic variations in ERM practices in the financial services industry. There is a need to monitor and address all risks inherent in organizational operations as necessary to avoid economic catastrophe.

There is a need to consider all corporate risks within a single ERM framework in order to gain long-run competitive advantage. Risk management by the firm can facilitate risk management by the firm's equity holders. Financial theory distinguishes between *systematic* (market or beta) risk, and *total* risk. Investors can reduce the amount of total risk they bear by diversifying their holdings. Systematic risk is the risk that remains after such diversification is fully utilized. If such diversification opportunities are widely available to investors, systematic risk is the only risk for which investors must be compensated with a risk premium.

In order for risk management to be effective however, we must first be clear about what is meant by the word 'risk', so that we know precisely what risk management is supposed to manage.

This is not a trivial task: the word 'risk' has varying interpretations in different settings, and it has changed its meaning over time. The definition debate has been rehearsed by many authors in recent years, Hulett et al. (2002) provides a

useful summary. An interesting illustration of the various ways in which the word 'risk' and the term 'risk management' are used in different risk disciplines is presented by Hillson (2002), with perspectives from a wide range of approaches including the management of strategic, financial, operational, legal, contract, project, technical, reputation, environmental and fraud risk, as well as corporate governance, business continuity and counter-terrorism.

Across all of these different application areas, there are a number of common themes which reveal important characteristics about risk. Understanding these factors is essential if risk management is to be effective, especially within complex enterprises.

The first universal element of risk about which all are agreed is that it is something to do with *uncertainty*. All risks are uncertain, because they are future events or conditions or sets of circumstances whose occurrence is not guaranteed. A risk may or may not happen. This characteristic is vital to the effective management of risk, because risk management seeks to identify risks before they happen and to create management space and time during which an appropriate response can be developed and implemented. There are many causes of uncertainty (including ambiguity, variability, complexity etc.), but the key point here is that risk is a type of uncertainty. If it is not uncertain then it is not a risk.

Secondly, although all risks are uncertain, not all uncertainties are risks.

When considering what should go in a risk register or what needs to be identified and managed proactively, some filter is required otherwise risk registers would be infinitely large. We need to know which uncertainties matter, which ones we need to know about, record and tackle. Clearly not all uncertainties qualify for our attention or action. The filter used to distinguish risks from uncertainties is to determine whether a particular uncertainty has the potential to affect achievement of one or more of our *objectives*. In every area of human endeavor there are objectives to be met, and we need to be concerned about anything that might have an influence on them. The task of risk management is to find and address those uncertainties that could influence objectives. If it does not matter then it is not a risk.

Combining these two characteristics allows us to produce a proto-definition of risk as '*uncertainty that matters*'. This simple phrase captures the essence of risk as something future which may or may not occur, but which if it does occur would influence achievement of one or more objectives.

Box 1

Living and working in today's environment involves many risks. The processes used to make decisions in this environment should consider the need both to keep people gainfully employed (through increased economic activity) and to protect humanity from threats arising from human activity. Terrorism led to the gas attack on the Japanese subway system in 1995, to 9/11 in 2001, and to the bombings of the Spanish and British transportation systems in 2004 and 2005 respectively. But nature has been far more deadly, with hurricanes in Florida, tsunamis in Japan, earthquakes in China, and volcanoes in Iceland (*Wu* and *Olson*, 2015).

In a very dramatic illustration, in 1992, when the Westray mine in Nova Scotia, Canada, exploded, killing twenty-six miners. Just a few weeks earlier, it had been awarded an award for being the safest mine in Canada. This award is based on the frequency of accidents in mines. The Westray's frequency was the lowest in the country, with fewer workers were injured per hours worked than at any other mine. But the mine was very badly managed, as the subsequent inquiry showed. The terrified workers knew that it was very likely to explode: The methanometers that measure methane concentrations at the mine face were frequently inoperable at a time when methane was "gassing out" of the coal face and mining equipment was causing sparks.

Bringing these thoughts together allows us to produce a generic definition of risk: 'Any uncertainty that, if it occurs, has a positive or negative effect on achievement of one or more objectives.'

The approach to risk management is centered to a large degree on the standards promulgated by the Committee on Sponsoring Organizations of the Treadway Commission (COSO), generated by the Treadway Commission beginning in 1992. The Sarbanes–Oxley Act of 2002 outlines regulatory requirements for publicly traded firms to establish, evaluate, and assess the effectiveness of internal accounting controls. SOC has had a synergistic impact with COSO.

COSO was found to be used to a large extent by only 11% of the organizations surveyed, and only 15% of the respondents believed that their internal auditors used the COSO 1992 framework in full. Chief executive officers and chief financial officers are required to certify effective internal controls. These controls can be assessed against COSO. This benefits stakeholders. Risk management is now understood to be a strategic activity, and risk standards can ensure uniform risk assessment across the organization. Resources are more likely to be devoted to the most important risk, and better responsiveness to change is obtained.

The COSO framework

In 2004, COSO published an *Enterprise Risk Management – Integrated Framework*. COSO provides a framework to manage enterprise uncertainty, expressed in their ERM Cube. The cube considers dimension of objective categories, activities, and organizational levels, as shown in Table 1.

Table 1

COSO ERM cube

Categories	Activities	Levels
Strategic	Internal environment	Entity level
Operations	Objective setting	Division
Reporting	Event identification	Business unit
Compliance	Risk assessment	Subsidiary
	Risk response	
	Control activities	
	Information & communication	
	Monitoring	

Note: COSO (2004). Enterprise Risk Management – Integrated Framework: Executive Summary. September.

As risk can be seen as a strategic combination of vulnerability and opportunity, ERM represents a tool for managing risk in a way that enables the corporation to take advantage of value-enhancing opportunities. A missed strategic opportunity can result in a greater loss of (potential) value than an unfortunate incident or adverse change in prices or markets.

Many companies retooled their business processes, management procedures and information systems in order to comply with emerging regulations and standards of practice. Nevertheless, there is much to be done in developing both the theory and practice of ERM.

The concept of ERM can be found under other names: Enterprise-wide risk management, Holistic risk management, Integrated risk management, Strategic risk management or Global risk management. No matter the name, its goal is to unify risk management across an entire company. It is the application of the basic risk management principles to all risks facing an organization. The risks are managed in aggregate, rather than independently. Risk is also viewed as a potential profit opportunity, rather than something to be minimized or eliminated.

Casualty Actuarial Society – a professional organization involved in ERM research – defines enterprise risk management as: "*The process by which organizations in all industries assess, control, exploit, finance and monitor risks from all sources for the purpose of increasing the organization's short and long term value to its shareholders*".

According to James Lam[2], an author and consultant in risk management, "*ERM is the integrated measurement and management of credit risk, market risk, and operational risk, involving all of the company's internal control and risk functions, such as credit, asset and-liability management, audit, compliance, and insurance. ERM focuses on enhancing shareholder value through better business strategies, relationship management, product pricing, capital management, and risk transfer*".

Risks should not be separated into components and managed independently. Such an approach is rarely effective or successful. A holistic view of risk should be taken, including the contemplation of interdependencies.

Box 2

RECENT OUTSTANDING OPERATIONAL LOSSES

BARINGS PLC – 1995, USD 1.3 Bln – unauthorized trading by Nick Leighson**.**

Mizuho Securities – Dec 2005 (USD 250 Mio) – trader error (sold 620 K shares for 1 yen, instead of 1 share for Yen 620K) – shares sold over 4 times the outstanding shares in the company; failures at Mizuho, incl. —fat finger‖ syndrome, and TSE clearing failures.

SG – Jan-2008 Euro 4.9 bio net (or 6.3 bio gross of unauthorized profile of Euro 1.4 bio) – unauthorized:

- trades, false hedges, risk measured on net basis,
- password management, knowledge of controls, weak
- controls; —culture of tolerance, ignoring warning
- signs, incentive structure of traders….etc**.**

UBS – credit write-downs related to sub-prime exposure of over $ 38 bio. S&P downgraded rating one notch to AA- and may lower further due to —risk management lapses‖. Tier 1 ratio would fall to 7% without capital increase and rights issue (an ELEMENT OF OPERATIONAL RISK within this credit risk loss).

US Mortgage Crisis – non-registration of mortgage loans – instead of registering security interest with local authority, banks did it with a parallel MERS (owned by them) – 64 Mio mortgages under question.

[2] James Lam is considered to be the first-ever chief risk officer and is one of the world's leading authorities on managing enterprise risk. He is a contributing author of numerous books, including "Modern Risk Management: A History" (with Nobel prize winners Markowitz, Modigliani, Samuelson, and others) and "Derivatives Handbook" (with Alan Greenspan, Merton Miller, and others).

In this context, less than a decade ago, ERM was not a major focus for most organizations. Today, it is quickly ascending to the top of the agendas of senior executives and shareholders alike as corporate scandals and globalization challenge the status quo and regulators publish new or updated requirements.

ERM is a structured approach to aligning strategy, processes, **people**, technology, and knowledge to identify and manage uncertainties and change risk.

Providing a comprehensive, integrated framework that enables organizations to *proactively manage* business risk, ERM aids in the achievement of balance between business needs and risk thresholds to increase competitive advantage and shareholder value.

In his book "*ENTERPRISE RISK MANAGEMENT – From Incentives to Controls*", Lam appreciates that "*enterprise risk management is a complex, yet critical issue that all companies must deal with as they head into the 21st century"*. Every business decision involves an element of risk and individual business decisions and risks collectively build up into a company's overall risk portfolio, which will have a unique risk profile. The risk profile will determine the company's earnings – and earnings volatility over the business cycle. Some risks will offset each other, some risks will be unrelated to each other, and some will compound each other. In order to manage risk effectively, a business unit must address not only its underlying risks, but also the interrelationships between them.

In other words, it is a complex process involving broad-based and in-depth knowledge and understanding, requiring an appropriate corporate culture, and creativity, born of a variety of experience and a lot of curiosity.

Traditional risk management approaches are focused on protecting the tangible assets reported on a company's balance sheet and related contractual rights and obligations. The emphasis of ERM, however, is on enhancing business strategy. The scope and application of ERM is much broader than protecting physical and financial assets. Using ERM, the scope of risk management is enterprise wide and the application of risk management is targeted to embracing as well as protecting the unique combination of tangible and intangible assets comprising the organization's business model. Risk management is no longer strictly a credit administration or corporate insurance function. It is widely recognized, by bankers and regulators alike, as a core competency that deserves the highest level of management attention.

Conclusions

Most experts agree that ERM represents a fundamental change in the way organizations approach managing different types of risk in a global context. Risk management is no longer a question of having the appropriate liability insurance,

currency hedges, or safeguards against catastrophic losses. Managing risk is a strategic business issue and every business decision involves an element of risk.

As companies have strategies for other business issues, such as growth strategy or customer strategy, there is a gap in their strategic thinking in how they assume and manage risk. The progressive firms are trying to fill the gap by using ERM.

ERM means to take some point of view toward the various activities of the firm as a whole by thinking about the firm's various lines of business and various functions, such as investment and underwriting, as different activities that generate returns and risks. But there are also detractors to the new approach. Some risk managers doubt about the value in lumping many of their biggest risks together in one package. They cannot see how they are performing individually and therefore cannot know if they are paying the right price to carriers to transfer them. But the good results of the companies embracing enterprise risk management quash their skeptical opinion.

References

G. Ailon (2012) 'The discursive management of financial risk scandals: the case of Wall Street Journal commentaries on LTCM and Enron', *Qualitative Sociology*, 35: 251–270.

G.A. Akerlof, R. J. Shiller (2009) *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism*. Princeton University Press.

The Association of Risk Managers (2010) *A Structured Approach to Enterprise Risk Management (ERM) and the Requirements of ISO 31000*. COSO.

B. Ballou, D. L. Heitger (2005) 'A building-block approach for implementing COSO's enterprise risk management-integrated framework', *Management Accounting Quarterly,* 6(2): 1–10.

E. G. Baranoff (2004) 'Risk management: a focus on a more holistic approach three years after September 11', *Journal of Insurance Regulation,* 22(4): 71–81.

K. Buehler, A. Freeman, R. Hulme (2008) 'The new arsenal of risk management,' *Harvard Business Review,* 86(9): 93–100.

D. A Hillson (1997) *Towards a Risk Maturity Model*, Int J Project & Business Risk Mgt, Vol 1 Issue 1, pages 35-45.

D. A Hillson. (2000a) *The Risk Breakdown Structure (RBS) as an aid to effective risk management*, Proceedings of the 5th European Project Management Conference (PMI Europe 2002), presented in Cannes France, 19-20 June 2002.

D. A Hillson (2000) *Using the Risk Breakdown Structure (RBS) to understand risks*, Proceedings of the 33rd Annual Project Management Institute Seminars & Symposium (PMI 2002), presented in San Antonio USA, 7-8 October 2002.

D. A Hillson (2003a) *Using a Risk Breakdown Structure in project management*, Journal of Facilities Management, Volume 2 Number 1, June 2003, pages 85-97.

D. A Hillson (2003b) *Effective Opportunity Management for Projects*, New York, Dekker, 2003.

D. W. Hubbard (2009) *The Failure of Risk Management: Why It's Broken and How to Fix It,* John Wiley & Sons.

J. Lam (2004) *Enterprise risk management – From Incentives to Controls,* 2nd edition, Wiley.

W. Panning (2009) *The Why and How of Risk-Based Planning*, www.bestreview.com

D. Olson; Wu, D. (2015), *Enterprise Risk Management in Finance*, Palgrave, Macmillan References.

L. Rittenberg, F. Martens (2012) *Enterprise Risk Management: Understanding and Communicating Risk Appetite,* COSO.

D. Williamson (2007) 'The COSO ERM framework: a critique from systems theory of management control,' *International Journal of Risk Assessment and Management,* 7(8): 1089–1119.