RESILIENCE AS A CRITICAL SUCCESS FACTOR OF RISK MANAGEMENT

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All the economical entities operate in a complex economic environment marked by economic crisis and stressed the growing dynamism in terms of intensifying competition. In our opinion, changing the environment and enhancing the uncertainty is due to the existence of a number of factors that act as "mutagen" that have the ability to produce mutations environment with a higher frequency of spontaneous mutations. Analysis allows outlining the main factors influencing management approach necessary to increase efficiency and competitiveness of all of this. A proposed solution is to recognize the resilience as a Critical Success Factors for improve risk management.

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1. Introduction

Mankind, therefore, and all human activities which are part of the economic activities, are developing.

The german theorist Georg Wilhelm Friedrich Hegel was convinced that history develops spiral, that the same things happen with some regularity, but at a new level. The environment in which the economic activities change constantly, because of both natural factors, technological, demographic, cultural and political, but to a greater extent is due to economic factors.

Also is attested to intensify uncertainty and risk.

In our opinion, changing the environment and enhancing the uncertainty is due to the existence of a number of factors that act as "mutagen" that have the ability to produce mutations environment with a higher frequency of spontaneous mutations.

We believe that "mutagens":

- influence the nature, frequency and intensity of risk factors;
- limit the ability of current models of risk management (including fully cover risk exposures and control the risks / exposures maintained at an acceptable level);
- increase the likelihood of new types of risks.

The situation described raises requirements for the quality of risk management.

However, the exposed serve as a basis for the following hypothesis: *there is a continuing need to anticipate changes in risk factors action and even the emergence of new types of risks to develop new risk management models known, but also perfecting processes of risk management.*

2. Literature review

Risk is a measure of the probability and consequence of not achieving a defined goals.

In ISO 31000, risk is defined as the effect of uncertainty on objectives, whether positive or negative.

Risk has three primary components (Kerzner, 1998):

- An event (an unwanted change);
- A probability of occurrence of that event;
- Impact of that event (amount at stake).

Conceptually, risk for each event can be defined as a function of uncertainty and damage; that is:

$$Risk = f(event, uncertainty, damage).$$

A source of risk is any factor that can affect project performance, and risk arises when this effect is both uncertain and significant in its impact on project performance.

Risk increases with hazard but decreases with safeguard.

A good risk management should be structured to identify hazards and to allow safeguards to be developed to overcome them.

Risk management can be defined in many ways. For example, Anderson and Terp (2006) maintain that basically, risk management can be defined as a process that should seek to eliminate, reduce and control risks, enhance benefits, and avoid detriments from speculative exposures.

The objective of risk management is to maximize the potential of success and minimize the probability of future losses. Risk that becomes problematic can negatively affect cost, time, quality and system performance. The importance of risk management cannot be overstated.

Risk management is a means of dealing with uncertainty – identifying sources of uncertainty and the risks associated with them, and then managing those risks such that negative outcomes are minimised (or avoided altogether), and positive outcomes are capitalised upon.

In ideal risk management is a prioritization process is followed whereby the risks with the greatest loss (or impact) and the greatest probability of occurring are handled first, and risks with lower probability of occurrence and lower loss are handled in descending order. In practice the process of assessing overall risk can be difficult, and balancing resources used to mitigate between risks with a high probability of occurrence but lower loss versus a risk with high loss but lower probability of occurrence can often be mishandled.

According to the Project Management Institute Body of Knowledge (PMBOK 2001), there are three definitions of risk management:

- Risk management is the formal process by which risk factors are systematically identified, assessed, and provided for
- Risk management is a formal, systematic method of managing that concentrates on identifying and controlling areas or events that have a potential for causing unwanted change
- Risk management, in the project context, is the art and science of identifying, analyzing, and responding to risk factors throughout the life of a project and in the best interest of its objectives.

Risk management is the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities.

Risk management process consists of all the project activities related to the identification, assessment, reduction, acceptance, and feedback of risks (table 1).

Table 1.

Steps in Risk Management

<table>
<tr><td rowspan="5">Risk Management</td><td rowspan="2">I. Risk Assessment</td><td rowspan="2">Risk Determination</td><td>Risk Identification</td><td>identify:
- new type og risks;
- change in risk parameters;</td></tr>
<tr><td>Risk Estimation</td><td>determine:
- probability of occurances;
- magnitiude of consequence value;</td></tr>
<tr><td rowspan="2">II. Risk Evaluation</td><td>Risk Acceptence</td><td colspan="2">establish:
- risk references;
- risk referents;</td></tr>
<tr><td>Risk Aversion</td><td colspan="2">determine:
- degree of risk reduction;
- degree of risk avoidance;</td></tr>
<tr><td>III. Risk Control</td><td colspan="3">implement:
- protection works (treat the risks);
- non-structural measures.</td></tr>
<tr><td></td><td>IV. Monitoring and review</td><td colspan="3">monitorize all this activities, for ensure that the changing environment does not alter risk priorities and to ensure the risk management process is effective both in design and in operation.</td></tr>
</table>

Source: elaborated.

The process of risk management is iterative evermore and is linked with the product life cycle so consequently aligned with and included in all design reviews.

Risk-intelligent management lead to optimized and sustained performance.

Currently, the opinions on the tasks and sequence of steps in organizing the risk management process came to be about unified.

3. Paper content

Because risk management is an important part of the financial industry, effectiveness is vital to increase its rezult.

I believe that the next step in research devoted to risk management will focus on identifying *Critical Success Factor*.

Critical success factor (CSF) is the term for an element that is necessary for an organization or project, or activity to achieve its mission.

It is a critical factor or activity required for ensuring the success of a company or an activity. The term was initially used in the world of data analysis, and business analysis.

Critical success factors should not be confused with success criteria; those are outcomes of a project or achievements of an organization that are needed to consider the project a success or to esteem the organization successful.

The concept of "success factors" was developed by D. Ronald Daniel of McKinsey & Company in 1961.

The process was refined into *critical success factors* by John F. Rochart (1979). He defines Critical Success Factors as "The limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization. They are the few key areas where things must go right for the business to flourish. If results in these areas are not adequate, the organization's efforts for the periods will be less than desired".

Boynton and Zmud (1984) discuss CSF methodology, define CSFs and review a range of uses of the CSF method in the first part of their article. They regard Critical Success Factors as one of the few things that ensures success for an organization. Critical success factors are maintaining a high performance for an organization's currently operating activities and its future.

There are a number of papers on Critical Success Factors contributing to risk management.

Grabowski and Roberts (1999) examine the problem of risk mitigation and suggest a process designed to support the high level of performance in an organization. They identify the four important factors as:

A. Organizational Structuring and Design;
B. Communication;
C. Organizational Culture;
D. Trust.

Galorath (2006) focuses on the importance of risk management, the essence of risk management and assesses the processes to implement risk management. He argues that risk management requires five activities, which are as follows:

A. Top-level management support;
B. An integral part of the entire program management structure and processes;
C. The participation of everyone involved;
D. Cultural imperative;
E. A pattern of measurement.

Na Ranong and Phuenngam (2009) propose a more comprehensive model composed of seven Critical Success Factors for effective risk management procedures in financial industries. These are:

A. Commitment and support from top management;
B. Communication;
C. Culture;
D. Organization Structure;
E. Trust;
F. Information Technology (IT);
G. Trening.

Returning to the assumption made in the introduction, in our opinion, at present in the financial field, the list of "mutagens" include the following elements:

(I) development of financial derivatives and financial innovation ,

(II) expansion of economic and financial transactions of a speculative nature,

(III) lack of regulation of the activities of the financial nature , including the use of derivatives , and certain traditional operations , such as the banking ones , which has led to the occurrence e.g. the shadow banking,

(IV) failures of supervision, e.g. for banking supervision in the EU (with the consequence of large fiscal costs of saving the banking system) ,

(V) insufficient capitalization or excessive leverage,

(VI) low risk management (Poor Risk Management).

(VII) increasing the share of interbank operations (cause of appearance of systemically important banks) and financial institutions in all banking operations, thus reducing the "de facto" fundamental role of banks - the financial intermediary in the real economy,

(VIII) flawed governance , including the use of distorted remuneration schemes that lead to excessive risk-taking,

(IX) lack of transparency etc.

Management of absolutely new processes that have occurred as a result of the action of various "mutagens" in the economic environment requires the development of new strategies and new methods of risk management.

However, there are requirements that the period of development and implementation of these strategies to be more brief.

Following the subject, we believe that in the list CSF must be included another factor: resilience.

In a broad sense, resilience is acquiring to withstand a shock, namely to return to normal operation. This actually would mean management of all risks and removal of their negative consequences in a very short time.

Resilience is a concept concerned fundamentally with how a system, community or individual can deal with disturbance, surprise and change, is framing current thinking about sustainable futures in an environment of growing risk and uncertainty (Mitchell and Harris, 2012).

The term resilience was introduced into the English language in the early 17th Century from the Latin verb resilire, meaning to rebound or recoil. There is no evidence of resilience being used in any scholarly work until Thomas Tredgold introduced the term in 1818 to describe a property of timber, and to explain why some types of wood were able to accommodate sudden and severe loads without breaking.

In 1973, Crawford (Buzz) Holling first introduced the concept of resilience to ecology and the environment. He promoted the use of systems theory and modelling, and is credited with the introduction of ecological economics, the adaptive cycle, panarchy (understanding transformations in human and natural systems) and resilience to ecology and evolution.

The Oxford English Dictionary, for example, defines resilience as "the quality or fact of being able to recover quickly or easily from, or resist being affected by, a misfortune, shock, or illness."

Increased resilience would result in longer and stronger expansions, but the latter could also result from fewer shocks.

Shorter and shallower downturns and more rapid recoveries are fully consistent with the aforementioned definition of resilience, since downturns are the result of negative shocks.

Over the past two decades, the term resilience has evolved from the disciplines of materials science, the ecology and environmental studies to become a concept used liberally and enthusiastically by policy makers, practitioners and academics.

The UK Government has rewritten its civil contingencies law, doctrine and plans around the concept of resilience. Universities have established resilience centres, institutes, research programs and offer resilience degrees.

And business schools have embraced the concept to explain why and how organisations must adapt their strategies to meet the requirements of an ever-changing business environment.

We can identify two states of resilience - static and dynamic.

Static economic resilience as the ability or capacity of a system to absorb or cushion against damage or loss.

A more general definition that incorporates dynamic considerations, including stability, is the ability of a system to recover from a severe shock.

We distinguish two types of resilience:

- *Inherent*– ability under normal circumstances (e.g., the ability to substitute other inputs for those curtailed by an external shock, or the ability of markets to reallocate resources in response to price signals).

- *Adaptive* – ability in crisis situations due to ingenuity or extra effort (e.g., increasing input substitution possibilities in individual business operations, or strengthening the market by providing information to meci suppliers without customers to customers without suppliers).

Resilience can take place at three levels:

- Microeconomic – individual behavior of people, firms, households, or organizations.
- Mesoeconomic– economic sector, individual market, or cooperative group.
- Macroeconomic – all individual units and markets combined, though the whole is not simply the sum of its parts, due to interactive effects of an economy.

Resilient organisations should have:

A. resilient managers,
B. flexible staff and
C. adaptable supply chains;
D. agile organisational structures; and
E. a range of products which satisfy a range of customers.

There are, however, two important areas of agreement in the literature regarding the resilience of individuals.

The first is the issue of adaptability. Individuals who are able and willing to adapt are more likely to reduce their risk of being exposed to similar disruptive events, or at least to reduce the impact of such exposure; resilient individuals are likely to be able and willing to adapt.

The second is the issue of transient dysfunction. Resilience does not preclude dysfunction or distress; indeed the absence of dysfunction or distress in an individual suggests resistance rather than resilience. It is now commonly accepted that some dysfunction or distress is a normal reaction to an abnormal event. However, dysfunction or distress is temporary, followed by a return to normal functioning.

A description of the qualities of a resilient manager, refers to the possession of a number of personal resiliency skills, the professionalism level, the ability to anticipate crises, the ability to identify new solutions, the level of creativity and absolutely necessarily to possess acmeological capabilities.

In psycho-akmeologicheskoj paradigm, professionalism is considered as a single structure, that integrate highly personal qualities, motivational characteristics, skills and experience.

Creativity, leadership and innovation define meaningful characteristics of a systemic phenomenon of professional elitism on sociological, socio-psychological and psychological levels of representation; they reflect quality standards and expectations of the society in relation to extra-class professionals, social and group features of the professional community and personal activity characteristics of elite specialists.

A other succes factor to increase the resilience of institutions is the corporate governance. The corporate governance should include:

- Professional diversification of managers,
- Diversification by sex, possibly even gender balance etc.

Therefore, a system that has an effective management risk is likely to become more resilient to shocks and stresses, though the exact relationship needs to be tested empirically. Managing risk in this context means reducing risk, transferring and sharing risk, preparing for impact and responding and recovering efficiently. It also involves being prepared for surprises – those events beyond the lived experience or occurring very infrequently.

All these factors can increase the effectiveness of risk management procedures from the perspective of the financial industry.

4.Conclusions and implications

This paper has presented major conceptual, operational, and policy analysis advances in evaluating of risk management process and role of resilience on improving on risk management.

We provided an operational, though relatively narrow, definition of resilience and couched it in terms of economic theory.

A particular focus in this paper is on identifying the Critical Success Factors of risk management.

After testing the assumptions made and based on the carried research we consider some necessary actions:

I. recognition of the importance of resilience as an economic term;

II . increased research devoted to resilience;

III. introduction of the Critical Success Factors resilience of risk management, performance of economic and financial institutions and economic policy in general;

IV. integrating the concept of resilience in the learning objectives of economic and financial education programs , along with the introduction of economic and financial education study programs mandatory since middle school .

On the other hand, if you go back to the idea of developing cyclic economy developed by Joseph Shumpeter on the four phases of the business cycle (expansion , peak, recession and threshold), compiled by Hegel 's theory of spiral development that provides achievement of new qualitative levels, then lifting the upper stage is exclusively due to resilience.

References

1. *Belobrov, A. et.al. (2013). Impactul remiten�elor asupra rezilien�ei sistemului financiar al Republicii Moldova. Chisinau. p.201-232. ISBN: 978-9975-51-494-1*
2. *Boynton, A.C. and Zmud, R.W. (1984). An Assessment of Critical Success Factors. Sloan Management Review, vol 25(4). Retrieved from: http://as.nida.ac.th/~waraporn/resource/704-1-50/Readings/6-Assessment%20CSF-Boynton-Zmud.pdf*

3. *Daniel, D. Ronald (1961). Management Information Crisis. Harvard Business Review, Sept.-Oct. Retrieved from: http://en.wikipedia.org/wiki/Critical_success_factor*
4. *Galorath, D. (2006). Risk Management Success Factors. PM World Today, Vol 8(11). Retrieved from http://www.pmforum.org*
5. *Grabowski, M. and Roberts, K. (1999). Risk mitigation in virtual organisations. Organisational Science. Vol. 10(6), pp. 704-722*
6. *Measuring the Un-Measurable. The Challenge of Vulnerability. United Nations University. 2006. Retrieved from http://www.ehs.unu.edu/file.php?id=212*
7. *Mishkin F. (1992). Anatomy of a Financial Crisis. Cambridge National Bureau of Economic Research, Working Paper No. 3934, 1991, Journal of Evolutionary Economics, August 1992, p.115-130*
8. *Mitchell, T., Harris, K. (2012). Resilience: A risk management approach. ODI Background Notes. Retrieved from http://www.odi.org.uk/publications/6271-resilience-risk-management-climate-change*
9. *Na Ranong, Prapawadee, Phuenngam, Wariya (2009). Critical Success Factors for effective risk management procedures in financial industries. A study from the perspectives of the financial institutions in Thailand. Retrieved from: http://umu.diva-portal.org/smash/get/diva2:233985/FULLTEXT01.pdf*
10. *Nelson, W R, Perli, R (2005). Selected indicators of financial stability. 4th Joint Central Bank Research Conference on Risk Measurement and Systemic Risk. ECB Frankfurt am Main, November. Retrieved from http://www.ecb.int/events/pdf/conferences/jcbrconf4/Perli.pdf*
11. *PMBOK- Project Management (2000). Institute, A Guide to Project Management Institute Body of Knowledge. Retrieved from: http://www.cs.bilkent.edu.tr/~cagatay/cs413/PMBOK.pdf*
12. *Resilience Institute. Resilience of the Economy. Retrieved from: http://www.torrensresilience.org*
13. *Rochart, J.F. (1979). Chief executives define their own data needs. Harvard Business Review, Vol 57 (2). Retrieved from: http://hbr.org/1979/03/chief-executives-define-their-own-data-needs/ar/1*
14. *Wreathall, J. Developing Models for Measuring Resilience. Retrieved from: http://www.resilience-engineering.org/RE3/papers/Wreathall_text.pdf*