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## OPERATIONAL RISK - MODEL OF ANALYSIS AND CONTROL

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### Abstract

*Operational risk is important to know because, in its actual work, a bank needs to study the way in which operations are carried out, the monetary-financial system in which it operates and the system in which companies operate. Operational risk is one that can produce negative effects and, as a consequence, diminish the profitability of managers in banking. From this point of view, studying this risk is important to agree a rigorous banking strategy. In foreign trade, by using L / C (letter of credit) as a guarantee and payment method, elements that depend on one or the other partner may occur, especially when letters of credit are not guaranteed by a first-rank bank. Operational risk is important to be considered by any manager when hiring the bank he runs, managing it in operations, or when the client operates with a bank that he / she has not known enough or which can ultimately enter in the perimeter of risk, with effects that affect the client.*

**Keywords:** *operational risk, IT security, risk management, internal / external fraud, reputational risk*

**JEL Classification:** *G21, G32*

### Introduction

This article is based on the notion of insolvency, two elements that are generating risks for banking. The notions of operational banking are precisely defined, with all the elements that can lead to their emergence. Here are the specific elements of the mentioned risk with the necessary clarifications. Also, the way in which operational risk needs to be identified and analyzed by bank management is clearly expressed. This risk is specific not only to the banking environment but also to the internal and international business system. Operational risk can be identified in its own management strategy of the economic-financial-banking operations, but also in the possibility of

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occurrence at the other terminal, of the business partner. Once the aspects of operational risk are presented in detail, the authors highlight other collateral aspects that may enter into confluence and cause the emergence or evolution of this risk.

### **Literature review**

Anghel (2015) studied the causes and effects of bank risks as well as the main methods and models for their management. Anghelache, Anghel et al. highlighted the role of using econometric models to mitigate risks, including operational ones. (2016). Anghelache and Anghelache (2009) analyzed a range of models used for risk analysis in futures markets. Anghelache and Anghel (2007) addressed fundamental issues regarding simple interest and its calculation methods. Anghelache (2006) is a reference work in the field of banking risk measurement and management. Chaudhury (2010) presented the practical problems faced by a bank in designing and implementing an operational risk capital model. Cope proposed combining scenario analysis with loss data in operational risk quantification (2012). Claeysa and Vander Vennetb (2008) investigated the determinants of bank interest margins in Central and Eastern European countries. Norden and van Kampen (2015) conducted a study on the dynamics of commercial credit and bank debt in SME financing. Gasha et al. (2009) presented the advantages of credit risk modeling. Savic (2008) presents concepts related to IT operational risk management. Peters et al. (2009) modeled dependence on operational risks, allowing risk profiles to evolve stochastic over time and to be dependent. Sfetcu (2008) addressed issues related to the loan risk and the quality of the bank credit portfolio.

### **Research methodology, data, results and discussions**

For the definition of operational risk, there is no unanimously accepted definition. The first definitions related to any type of non-quantifiable risk or all other risks besides those related to the core business of the bank - credit risk, and market risk.

A more precise definition has been proposed by the Basel Committee on Banking Supervision which refers to the risk of loss resulting from inadequate management of internal processes, people and systems, or due to external events.

Other approaches mainly address certain important components of risk, which refer to the malfunctioning of systems (technical or human), work processes, staffing, internal regulatory framework, leadership-management, technology-induced, etc.

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The National Bank of Romania, as the national banking supervisor, was aware of the importance and the need to monitor the operational risk of banking companies, a natural attitude in the context of alignment with Basel II and later Basel III.

At present, all banking companies active in Romania must have specific procedures for managing operational risk, including assessment procedures, monitoring procedures and risk reduction procedures,

These procedures deal with internal measures, collecting data, and correcting errors that have been found. In addition, the introduction of monitoring systems and adequate technologies for processing and ensuring the security of information is envisaged.

In managing bank operational risk, in accordance with national laws in force, banking companies operating in Romania must have operational risk management policies that have to consider at least the following types of operational risk generating events (the list varies depending on the approach of each bank):

- Internal fraud refers to the bank's fault in working procedures, inaccurate operations, or disclosure of confidential information;
- External fraud is associated with the provision of incorrect information by customers (counterparty), as well as the premeditated action of third parties to take unfair advantage of the relationship with the bank;
- Inappropriate customer, product and activity practices refer to inappropriate use of customer information, money laundering, unauthorized products sale, misuse by customers of related products and services, failure to identify money laundering operations, failure to apply procedures Known Customers (KYC);
- Threat of tangible assets includes the risks associated with asset theft, acts of terrorism or vandalism, war, fires, earthquakes, natural disasters affecting the bank's operational infrastructure;
- Suspension of work and malfunction of systems is a risk associated with hardware and software failure, telecommunication problems, poorly designed, implemented, and maintenance of systems that have not been scheduled (or anticipated);
- Information systems security can have both external causes (cyber attacks) and internal (unauthorized access to systems, data leakage);
- Technological risk is associated with the level of technological evolution that, with new IT & C systems and solutions, puts increasing pressure on technological innovation and new distribution products or channels, and the inability to keep pace with technology can create a disadvantage;

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- Staffing and job security conditions, bank staff representing an important source of operational risk for at least three reasons: staff fluctuation and recruitment process; inappropriate professional skills and lack of adequate training; the market situation and the shortage of specialists in certain areas. This includes issues related to staff / trade union compensation claims, non-compliance with occupational safety standards, promotion of discriminatory practices, etc. ;
  - Personal risks (associated with the individual are caused by causes that are associated with family needs, changes in social status, changes in working conditions, etc.) of individuals operating in the business;
  - The process risk is closely related to internal control, as the latter must be regarded as a process. It differs from internal control when a process is seen as a continuous activity, such as risk management, but internal control within the risk management process is presented as a „control point”;
  - Reputational risk is the risk of unexpected asset price loss due to the impact of the institution’s reputation. Loss of reputation may arise from the sale of new financial products;
  - The risk of taking over is the possibility of changing the structure of the institution’s capital following successive acquisitions through stock exchanges;
  - The legal risk can also be divided into the risk of claiming legal claims as a result of the action or activity of the staff or the risk that an internal legal opinion proves to be wrong in court. The latter risk also applies to new financial products or compensation.

At the strategic level, the objectives of operational risk management should take into account the following aspects: creating an „internal operational risk culture”; increasing the efficiency of the early identification process of operational risk events; strengthening internal control within each organizational unit; maintaining the risk within reasonable limits defined by the internal procedure and anticipating the operational risks related to the new lines of activity (products / services) carried out by the bank.

In addition to these structuring measures, from the point of view of operational risk, banks need to develop business continuity plans (BCPs), including alternative operational processes when necessary and during the emergency (operational interruption), and after completion of the crisis situation, provide for measures to return to normal operation of the processes.

The information collected by the bank on losses from operational risk is complemented by a set of indicators to anticipate its occurrence, acting

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as an early warning system to identify the risk-creating malfunctions. The approach based on Early Warning Indicators is an indirect method of assessing operational risk, focusing primarily on sources of risk and their potential impact, while attention to losses is marginal.

The inclusion of operational risk under Basel III proves the undeniable importance of this risk category. As a result, operational risk management has become a discipline itself that has its own tools, structures and management processes, along with the other specific (business) business risks

The experience of the banking industry shows that the materialization of operational risk can be so severe that if not properly treated, it leads shortly to insolvency. Given that the possibilities of anticipating operational risk are relatively limited, which requires a prudent attitude from credit institutions on operational vulnerabilities and a pro-active approach to them. According to best practice in the field (recommendations of the Basel Banking Supervisory Committee), an effective operational risk management must comply with four major principles, structured on ten fundamental requirements.

### **Conclusion**

From the authors' study, it follows, first of all, that the operational risk is of particular importance to the profitability of the bank or financial-banking agent concerned.

The definition in general terms of this risk is distinguished by the fact that it has a precise space identification, but also the strategy of the considered financial agent.

The second conclusion is that the risk can be identified, known and equally quantified. A prospective study on the likelihood of this risk is theoretical when the business is concluded. But it becomes consistent when these elements materialize and determine the entry into the sphere of operational risk effects.

Another conclusion is that identifying this risk is mandatory in the strategy promoted by a bank.

As a conclusion, we can identify two ways to avoid that risk when it can occur. From the point of view of the bank, the first condition is that any credit or participation of the bank in financial activities is accompanied by solid and well-defined guarantees. On the other hand, another conclusion is that the bank can avoid this risk through a consistent concern to monitor the conditions under which the underlying economic operator operates or where the operational risk defining elements can act.

We can also conclude that we must never consider, regardless of the banking operation, that operational risk does not exist. It exists and must be

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covered by the Bank's strategy to make provisions that may be used to cover the effect of the risk that has occurred without affecting the financial efficiency of the bank in question.

And one final conclusion is that the risk I mentioned must always be treated and analyzed in a wider context, the system of risks that may appear on the financial-banking market and may affect the interests of the bank considered.

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