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OPERATIONAL RISKS IN NON-GOVERNMENTAL PENSION FUNDS: THEIR ORIGIN AND IMPACT MINIMIZATION

The article investigates such a specific type of risk as operational, as well as its influence on non-governmental pension funds. The methods of reducing the negative impact of operational risks are analyzed, effective operational risk management system is presented along with the key steps in lowering the impact of operational risks.

Keywords: *operational risk; non-governmental pension fund; banking industry.*
JEL code: J320.

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ОПЕРАЦІЙНІ РИЗИКИ У НЕДЕРЖАВНИХ ПЕНСІЙНИХ ФОНДАХ: ПОХОДЖЕННЯ ТА МІНІМІЗАЦІЯ ЇХ ВПЛИВУ

У статті досліджено специфічний вид ризиків — операційний, а також його вплив на діяльність недержавних пенсійних фондів. Розглянуто методи подолання негативного впливу операційних ризиків, проаналізовано та запропоновано ефективну систему ризик-менеджменту та ключові шляхи щодо зниження негативного впливу операційних ризиків на діяльність фондів.

Ключові слова: *операційний ризик; недержавний пенсійний фонд; система ризик-менеджменту.*
Рис. 1. Табл. 2. Літ. 15.

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ОПЕРАЦИОННЫЕ РИСКИ В НЕГОСУДАРСТВЕННЫХ ПЕНСИОННЫХ ФОНДАХ: ПРОИСХОЖДЕНИЕ И МИНИМИЗАЦИЯ ИХ ВЛИЯНИЯ

В статье исследован специфический вид рисков — операционный, а также его влияние на деятельность негосударственных пенсионных фондов. Рассмотрены методы преодоления негативного влияния операционных рисков, проанализированы и предложены эффективная система риск-менеджмента и ключевые пути снижения негативного влияния операционных рисков на деятельность фондов.

Ключевые слова: *операционный риск; негосударственный пенсионный фонд; система рискового менеджмента.*

Introduction. The essence of key success of any company is hidden in its operational process and managerial system. But often there are negative influences on these key factors which reduce company's revenues or growth potential, in other words, these factors could be named risks. The more complex the key factors are, the more risks they are involving. Every company or business unit faces risks, the major question is what are the power of these risks' influence and how can a company target and manage them?

In its early manifestations, operational risk was simply a residual category for "other risks" not covered by market risk and credit risk. This conceptual approach underestimated the significance of its role in risk management, a role later made more visible with the rediagnosis of large losses and operational failures. From the mid 1990s, various projects on defining and determining "operational risk" became

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popular, thus establishing new boundaries of knowledge and practice for financial organizations (Power, 2005).

The object of the research is the negative impact of operational risks.

The goal of the article is in determining specific steps in reducing the influence of operational risks and in describing effective operational risk management system.

Identification of "risk" and "operational risk" categories. First of all, we need to have some clear definition of risks. So, risk is objectively subjective category related to overcoming vagueness and conflict in situations of inevitable choice. It should be noted that category "risk" can be examine in the followings key aspects:

- probability of certain event happening;
- degree of deviation from a desired result;
- measure of failure.

The category of "risk" is such a type of negative influence, which arises up at any types of entrepreneurial activity, which are directed on the receipt of income and connected to goods production, commodities sale, services provision, performing work etc.; financial operations; commerce and also realization of scientific and technical projects (Donets, 2006). Another definition commonly used is that risk is the realized possibility of losses of an expected income, property, money in connection with changes in the terms of economic activity or due to unfavorable circumstances (Bakayev, 2000). Also, operational risk results from inadequate or failed internal processes (Wei, 2007). By simply looking at the definition of operational risks, it is clear that its cause is more likely to be internal than external (Rempfler, 2011).

At this stage the basic issue is the solid definition of the so-called "operational negative factor". So, Basel Committee which sets rules for banks offers the following definition: "the Committee has adopted a common industry definition of operational risk, namely: the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events" (Basel Committee on Banking Supervision, Operational Risk Management, 1998: 2).

Some scientists define (or better to say divide) operational risk into the categories: nominal operational risk, ordinary and exceptional (Pezier, 2002), thus grading their influence on financial institutions. Let's explain what this means:

1. Nominal operational risk refers to losses taken into consideration at optimization.

2. Ordinary operational risk is less frequent, although accompanied by larger losses (both losses and risks are important).

3. Exceptional operational risks – may be a threat to financial institutions (are more important than expected losses).

Operational risk, by contrast, is a necessary element of doing business. More often operational risks are "inherent", not "chosen", a company is thus taking a challenge to manage operational risks on its own (Alexander, 2003). From this point of view, operational risk is a part of a broader shift in awareness on the importance of completeness of risks identification for any risk management system (Power, 2005).

Operational risk management principles. Non-governmental pension funds somehow have less operational risks in their processes. This could be explained by the fact that banks inherit a complicated risk analysis system from before, while non-governmental pension funds in most cases work with various financial suppliers such as:

administrators of pension funds, asset management companies, banks and other, all of which include operational risks on their own activity and thus partially secure non-governmental pension funds from this load.

Operational risk management, as it is presented in "Operational risk management" by J. Copeland (2006), has its 6 basic principles as follows:

1. Hazard identification – preliminary hazard analysis, scenarios, logic diagrams, change analysis, cause-effect identification.
2. Risk evaluation – is carried out in order to determine the fundamental causes and to establish the risk levels, to use the risk evaluation matrix, prioritize risks.
3. The analysis of risk control measures – is carried out in order to develop the management of each type of risk.
4. Control decisions.
5. Risk control implementation – the implementation of developed strategies. These strategies define individual responsibilities, accountancy and involvement of each person.
6. Surveillance (Copeland, 2006).

Steps on minimization of possible operational risks. Operational risks by the type of consequences and frequency of display can be divided into 4 groups:

A. The first is characterized by the events which have low frequency and lead to small losses.

B. The second includes the events which arise up often and also lead to draw losses.

C. The third group is characterized by substantial losses, but their happening has low probability.

D. Events which happen often, and result in large losses, are not examined by us because they, obviously, result in a bankruptcy.

Losses from the events of the first and the second groups must be included into the costs of business, and that is why basic operational risks are those which are characterized by substantial losses with low probability. This type is mentioned below in Table 1. They can be often prevented but not always. For example, the first one, decreasing the assets' value due to criminal acts – this could not be prevented because one doesn't know all colleagues surrounding and it's hard to say for sure that this type of risk could be detected at early stages. The second – resources losses means loss due to human error or system error, this type is tightly connected with unpredictable circumstances which can occur due to specific company's operations (Jednak and Jednak, 2013) which relates this type of risk to internal ones.

Table 1. **Types of operational risks,** *developed of the author*

Types of operational risks	Characteristics
Decreasing assets' value	Direct decrease of assets value due to fraud, theft or market losses
Resources loss	Payments and write-off of funds to incorrect contragents, not paid back
Compensations	Interests or payments to customers as compensation due to in proper relations from company's side
Legal obligations	All legal loses and payments which occurred due to lost legal cases.
Losses or assets damage	Direct decrease of assets value due to some specific circumstances
Regulatory and compliance restrictions	Payments or fines due to violation of current legislative restrictions (tax and other)

A company needs to estimate potential both qualitative and quantitative operational risks and the factors of each defined risk. Table 2 presents the information on general qualitative types, so every company could add its own types in various ranges depending on its operational surrounding.

Table 2. **Types of operational risk (qualitative side),** *developed of the author*

Qualitative types of operational risks	Characteristics
Decline of services quality	Loss of services quality and subsequent loss of clients
Receiving less profit	Receiving less than planned profits
Loss of quality	Loss in quality of internal processes, which result in future additional charges
Loss of reputation	Loss of reputation and subsequent loss of clients
Halt of activity	Halt of activity as a result of unfavorable circumstances, for example, technological failure, legal or tax errors. Divided into short-term, long-term and terminal

Among the types of risk the most common is perhaps the "decline of services quality". For non-governmental pension funds this means: lower at the quality of personnel work, not adequate information which a fund gives at the market concerning its services, work of fund with semi-legal companies etc. This type of risk is naturally bounded and could be retrieved to a source of risk arising from both processes and people (Gewald and Hinz, 2004). There could be plenty of others but this one is a specific risk of private pension funds. Concerning the second type "receiving less profit" — this could be a matter of previous risk influences or poor financial planning, or some extraordinary facts that could reduce income like ruining information from media concerning financial partners of the fund etc.

Interesting type is "loss of quality" which could put some misunderstanding with the first one. This one means loss of the overall quality, not only actions related to services but quality and pureness of funds' work, for example, quality of management decisions or quality of financial data, strategy etc. All these types are put in Table 2 in a downgrade way, so the last one would be crucial to a fund. There is no need of explaining the rest like "loss of reputation" and "halt of activity" because they are quite obvious.

In scientific literature there is no unanimous position as for classification of operational risks, but most scientists divide operational risk into the following 4 categories:

- risk of personnel;
- risk of systems and technologies;
- risk of business processes;
- risk of external environment — functionality of non-governmental pension fund (Gewald and Hinz, 2004).

Often operational risk are linked with the risk of reputation — damage of reputation and loss of current and future business as a result of an operating incident after the information on this incident comes to external interested persons (for example, to press, analysts, clients). Reputation risk is the risk of second order, as it arises from an operating incident but it is not an incident in it self; in addition, its presence depends on whether information goes outside the fund (Dmitrov et al., 2010).

At present it is most expedient to classify operational risks by such kinds:

1. Risk of personnel refers to the risk of losses, related to possible errors of employees, swindle, insufficient qualification of personnel. This source of risk covers all people and organizational related matters (Gewald and Hinz, 2004). With the purpose of this risk minimization in a pension fund it is necessary to create the system of high-quality selection, preparation and retraining of specialists, and also to develop ways minimization of work abuse.

Training of employees must be conducted at least once a year. It must include:

a) measures on organization of studies depending on position requirements;

b) acquaintance of employees with the notion of operational risks and country's legislation;

c) acquaintance of employees with normative documents on non-governmental pension fund reporting, elucidation for fund's employees (Akkizidis and Bouchereau, 2006).

Consequently, it is necessary for minimization of personnel risk:

- to promote constantly the standards of service and carry out regular monitoring of service quality;
- to develop the support system for a front-office through a call-center;
- to inculcate the system of counteraction swindles;
- to assign certain rights of access to information systems and adhere to the rules of informative safety;
- to inculcate the effective system of personnel motivation;
- to analyze the timing of services' provision (comparing of normative values with actual ones);
- to analyze constantly the personnel management (personnel turnover, quantity of retrouned employees etc.).

2. Risk of process is the risk of losses, related to errors in processes and operations and damages after them, their rice. They can arise at any stage in a value chain (Akkizidis and Bouchereau, 2006).

Consequently, with the purpose of diminishing the risk level it is necessary:

- to implement the process approach (structuring of business by processes, description of processes, determination of processes owners, neutralization of "areas of irresponsibility", timely actualization of internal normative documents etc.);
- to form the electronic base of business processes;
- to introduce the system of monitoring for performance indicators on a daily basis;
- to analyze the organizational structure of the fund;
- to apply the system of priority determination in the automation of processes (taking into account risks);
- to create the unique depository of information and form on his basis the ERP-systems, systems of business analysis (Business Intelligence, BI);
- to strengthen internal control over business processes.

3. Technological risk is the risk of losses, which is conditioned by imperfection of technologies used. The risk of technologies can be minimized by permanent monitoring and subsequent introduction of new, more effective and high-quality pension

funds technologies. In some cases it also includes losses occurred from piracy or theft of data (Power, 2005).

With the purpose of diminishing the risk of technologies the non-governmental pension funds should carry out the following:

- to conduct operational accounting of all information assets (information systems, equipment);
- to form plans of work for IT department;
- to inculcate the systems of operative replacement of equipment;
- fairly distribute functions between the departments engaged in software development and maintenance of information systems.

4. Environmental risks are the risks of losses, related to non-financial changes in a non-governmental pension fund's environment in which could arise such risks: changes in legislation, political changes, changes of taxation etc. In other words, environmental risks mean the probability of environmental event with a certain cost of remediation (Bowden, Lane and Martin, 2001).

The basic measures on diminishing the environment (external) risk in non-governmental pension funds are the following:

- complex insurance of business;
- introduction of the system providing continuity of activities;
- increase of physical safety of fund's objects;
- increase of information security of the fund;
- increase of organizational security of the fund.

To prove the abovementioned it is reasonable to describe how management of a fund should build its processes of governing operational risks. Effective operational risk management improves company's ability to achieve its business objectives. As such, management focuses its efforts on revenue-generating activities, managing one crisis after another (Francis, 2011). This process should be managed and planned individually, due to specific conditions of every fund. Let's try to depict all these processes, from identification to decision-making in relation to operational risks (Figure 1).

The abovementioned description of processes is depicting only the basic scenario on solving the case with operational risks. The conclusion of this process means the adoption of the system of operational risk indication which could positively manage current risks. Arguing with the research of M. Power (2005), operational risk management is far from being a simple technocratic process involving risk identification and data collection. Operational risk management as a basic process should be always dynamic, looking for new improvements in measures and control. Data collection is a constitutive process, which identifies organizational errors and anomalies, and locates them as risks in decision-making purposes (Power, 2005).

Conclusion. The risk influence is often hidden in conditions and factors that are moving and circulating in the financial sector. The answer to the question, why is it so, doesn't give direct information which can be used to solve the problem, the well-known saying "the more profit, the more risk" brings us to the idea why financial sector is so risky.

The defined areas of operational risks gives us a general understanding what can happen in an operational cycle of a fund. Many companies do not focus on specific loss factors of operational risk. They eventually do not know the key operational risks that could be met. This overview can help them identify the possible operational risks and the steps for preventing them in future. It should be also noted that operational risks are closely connected with fund's internal and external conditions which could be more dangerous than some financial risks.

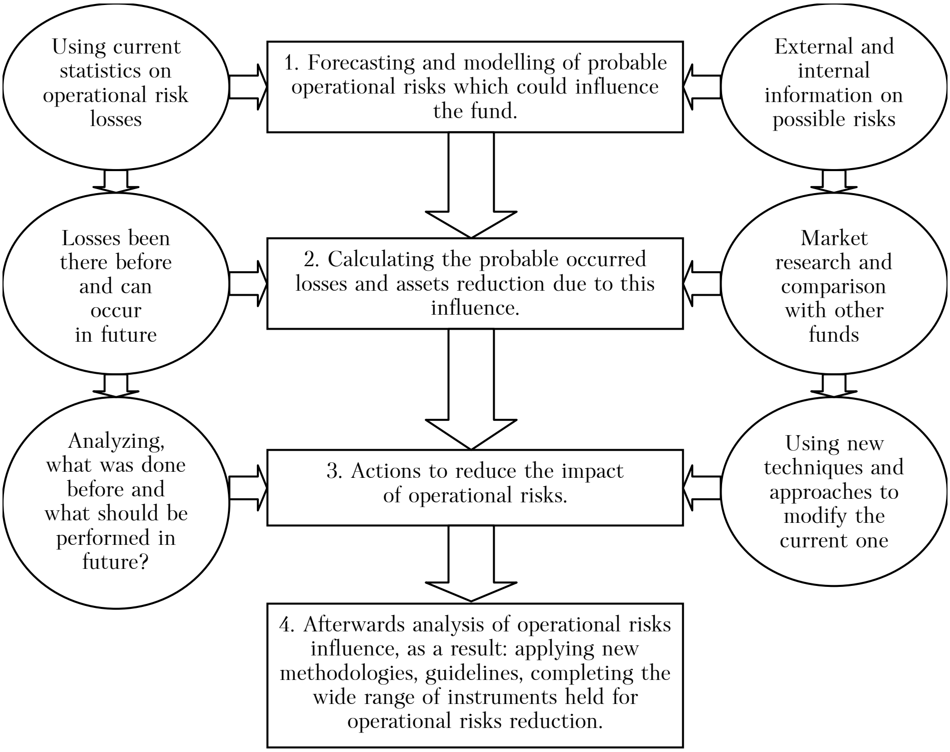

Figure 1. **Process management of operational risks,** *developed by the author*

Effective process of operational risk management could prevent the basic types of operational risks (risk of personnel – which could be met anywhere and nobody are "insured" from it, risk of process – which can spread on all business processes, technological risk – which should be highly controlled in the time of rapid automatisation, environmental risks – which are closely connected to market regulators, competitors and business environment and physical interference risk which could not be either calculated, or forecasted). All these risks should be treated carefully because they could lead to great damages in every business sector.

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