1. Introduction

The global financial crisis, which began in 2008, significantly strengthened the requirements for the financial stability of insurance companies. The insurance sector had a role as a stabilizing factor during significant tensions in the global financial system, and its stability strengthened the overall financial economy of the state. Therefore, not only insurance companies, but also other participants in insurance relations, both individuals and legal entities, working in conditions of risk, are interested in strengthening its reliability.

Many scientists and specialists in insurance activities paid attention to the issues of classification of insurance risks and the effectiveness of risk management in the insurance industry of Ukraine. Namely L. Klapkiv, J. Klapkiv and V. Svirskiy conducted research within the theory of risk and their classification just in insurance [6], Yermoshenko A., Tsibulevsky M. and Zhitar M. studied the risks of insurance companies in the process of risk-management [4, 5, 11], Zhabinets O. and Richard W. Kopcke explored the problems of classification of risks of insurance companies under conditions of European integration [8, 12], Yinghui Wanga, Bin Li, Guowen Lia and etc. focused on the risk factors, faced by insurance companies totally [3]. However, as Ukraine has to implement European Solvency Standards for Insurance Companies under the Agreement with the European Union, a number of issues remain unresolved regarding the compliance of national risk classifications of insurance companies with international requirements.

The purpose of the research is to analyze the differences between national and European standards for risk identification of Ukrainian insurance companies, as well as to provide suggestions for improving the mechanism of insurance risk management.

2. Methods

The following scientific methods were used in the study: the method of comparative analysis and the method of content analysis in order to identify different characteristics of national and European approaches to identifying the risks of insurance companies; method of generalization and deduction for proposals and conclusions.

### FEATURES OF INSURANCE RISKS’ CLASSIFICATION AS THE BASIS OF RISK MANAGEMENT OF INSURANCE COMPANIES IN THE FINANCIAL CRISIS

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**Abstract:** Since the global financial crisis had impacted on all aspects of insurance companies’ activities, it became necessary to focus on the activities of insurers and further improve the integrated risk and capital management of global and regional insurers. The purpose of the research is to analyze differences between national and European standards for risk identification in insurance companies, and to provide suggestions for improving the mechanism of risk insurance management. Using the method of comparative analysis and the method of content analysis of national and international solvency standards for insurance companies, national characteristics of the types of insurance risks and the organization of the implementation of European legislation in domestic practice were determined. By the method of generalization and deduction, the key challenges for improving the effectiveness of insurance risk management in Ukrainian practice were identified. The results of the study shows the necessity to implement a unified system of insurance risk management in Ukrainian practice, which contains national and global characteristics of the functioning of insurance markets. The results of the research have significant practical implications for insurance companies and state government insurance market and can serve as a basis for improvement of theoretical principles concerning the identification of insurance risks and implementing European experience of insurance companies in national practice.

**Keywords:** insurance risk, risk management, financial crisis, financial stability, insurer, international standards.

### 3. Results

The National Commission for Financial Services Markets defines the risk of the insurer as a probable event that could lead to unforeseen losses or otherwise adversely affect the activities of the insurer and his/her ability to meet obligations [1]. Risk classification, when done well, bolsters the economic efficiency of the insurance systems by creating incentives and optimal pricing [2].

In the traditional risk management of insurance industry, companies mainly focus on business risks, related to insurance products in their daily operation [3]. The classification of insurance risks, created on the base of peculiarities of insurance activities, can be represented as follows [4, 5]:

- individual, systematic, systemic;
- related and unrelated to insurance activities.

In turn, the risks, associated with insurance activities, are divided into [6, p. 16–19]:

- risks, associated with the activities of insurance companies (insurance and reinsurance risks, investment risks and management risks);
- risks, accepted under insurance contracts (according to the scope of the insurer’s liability: individual and universal; depending on the specialization – based on the object of insurance);
- risks, associated with servicing contracts (risks of underwriting, inefficient reinsurance, portfolio management, correct calculation of insurance rates, formation and investment of insurance reserves, etc.).

Also in accordance with the Ukrainian legislation (Requirements for the organization and operation of the insurer’s risk management system) and the Solvency II Directive (European solvency standards for insurance companies) a classification of risks of insurance companies is presented in **Table 1**.

| The National Commission for Financial Services Markets (Ukraine) | European solvency standards for insurance companies (the Solvency II Directive) |
|---------------------------------------------------------------|--------------------------------------------------------------------------------|
| For risk insurance                                             | For life insurance                                                                 |
| 1. Underwriting risk (insurance)                               |                                                                               |
| – risk of insufficient premiums and reserves                   | – risk of increased mortality;                                                  |
| – catastrophic risk                                            | – risk of increased life expectancy;                                            |
|                                                               | – risk of disability and damage to health;                                     |
|                                                               | – risk of increased costs of conducting the case;                              |
|                                                               | – risk of changing the size of annuities;                                      |
|                                                               | – risk of termination of contracts;                                             |
|                                                               | – catastrophic risk                                                            |

*Table 1: Classification of insurance companies’ risks*
Continuation of Table 1

| 2. Market risk |
|----------------|
| – equity investment risk (capital risk) |
| – interest rate risk |
| – currency risk |
| – risk of spreads |
| – property risk (real estate risk) |
| – risk of market concentration |

| 3. Credit risk |
|----------------|
| legal risks, risks of strategic decisions and reputational risks |

| 4. Operational risk |
|---------------------|
| the risk of financial losses of the insurer, which appears due to |
| deficiencies in management, information processing, controllability, |
| continuity, reliability of technology, as well as errors and unau-
| thorized actions of staff |

| 5. The risk of a member of the financial group |
| 5. Liquidity risk |
| Source: [1, 7] |

4. Discussions

The study shows that there are a large number of approaches to the classification of risks of insurance companies, which take into account both national and global characteristics of the insurance market, and each of them can be applied depending on the circumstances and situational purposes of classification. Because of the significant number of classifications it is difficult to develop and implement a sole system of risk management in conditions of globalization and European integration [8, p. 44].

Taking into account the real economic situation in the world with multiple financial crises, insurance companies in order to control their financial stability, avoid bankruptcy or, achieve higher profits along with the implementation of legislation on solvency and amount of capital, should introduce a risk management system, which would combine both national characteristics of the insurance market and international standards.

Vast majority of the insurance companies understand that the insurance sector should consider risk control as an essential component to their business, moreover that risk control should be a part of the strategic goals of the insurance sector [9].

Therefore, such a system must, first, take into account the national statutory requirements for insurance companies to meet the conditions for ensuring solvency, among them:

– availability of paid-up statutory fund for resident insurers or guarantee deposit for branches of non-resident insurers and availability of guarantee fund for the insurer;
– creation of insurance reserves sufficient for future payments of insurance sums and insurance indemnities;
– excess of the actual solvency margin of the insurer over the estimated regulatory solvency margin [10]

And compliance with regulations is the main driving force for integral risk management, together with the risk identification, measurement, follow-up and control [9].

Secondly, as in terms of European integration Ukraine is gradually preparing for the transition to international standards SOLVENCY II, enshrined in Directive 2009/138/EU of the European Parliament and of the Council of 25 November 2009 “On the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II)”, special attention should also be given to capital adequacy assessment (quantitative assessment, qualitative assessment, creation of external reporting) [11] and to the development of its own risk management system.

Compliance with the capital requirements, associated with the risks, borne by each company can assure policyholders of the integrity of their investments in their companies. In addition, the establishment of capital requirements, based on risk assessment, can best identify the specific risks, to which insurance companies are exposed, and, where necessary, may link their capital needs directly to those risks [12, p. 27].

5. Conclusion

Therefore, as insurance companies are important for the stability of financial systems, they themselves must pay close attention to risk management of their own risks to prevent situations of reducing their own financial stability and solvency. Each of the risks, to which the insurance company is exposed, must be identified and assessed with appropriate identification of what exactly is at risk (a particular department of the insurer or a particular line of business) and under what conditions. The risk management system implemented in the insurance company must adhere to certain principles and perform the stipulated functions within the management procedures, developed by the insurer and with the involvement of qualified management personnel. The overall effectiveness of the insurer’s internal risk management system should be subject to constant monitoring and control not only by the management of insurance companies, but also by regulatory authorities.

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