

# “Financial risks of the stock market: opportunities and specifics of their insurance”

<b>AUTHORS</b>	Inna Shkolnyk  <a href="https://orcid.org/0000-0002-5359-0521">https://orcid.org/0000-0002-5359-0521</a>  <a href="http://www.researcherid.com/rid/I-7368-2018">http://www.researcherid.com/rid/I-7368-2018</a> Eugenia Bondarenko  <a href="https://orcid.org/0000-0003-0525-6948">https://orcid.org/0000-0003-0525-6948</a>  <a href="https://publons.com/researcher/3167105">https://publons.com/researcher/3167105</a> levgen Balatskyi  <a href="https://orcid.org/0000-0001-7039-1009">https://orcid.org/0000-0001-7039-1009</a>  <a href="https://publons.com/researcher/2455239/ievgen-balatskyi/">https://publons.com/researcher/2455239/ievgen-balatskyi/</a>
<b>ARTICLE INFO</b>	Inna Shkolnyk, Eugenia Bondarenko and levgen Balatskyi (2019). Financial risks of the stock market: opportunities and specifics of their insurance. <i>Insurance Markets and Companies</i> , 10(1), 26-35. doi: <a href="https://doi.org/10.21511/ins.10(1).2019.03">10.21511/ins.10(1).2019.03</a>
<b>DOI</b>	<a href="http://dx.doi.org/10.21511/ins.10(1).2019.03">http://dx.doi.org/10.21511/ins.10(1).2019.03</a>
<b>RELEASED ON</b>	Thursday, 07 November 2019
<b>RECEIVED ON</b>	Monday, 30 September 2019
<b>ACCEPTED ON</b>	Friday, 01 November 2019
<b>LICENSE</b>	 This work is licensed under a <a href="https://creativecommons.org/licenses/by/4.0/">Creative Commons Attribution 4.0 International License</a>
<b>JOURNAL</b>	"Insurance Markets and Companies"
<b>ISSN PRINT</b>	2616-3551
<b>ISSN ONLINE</b>	2522-9591
<b>PUBLISHER</b>	LLC “Consulting Publishing Company “Business Perspectives”
<b>FOUNDER</b>	LLC “Consulting Publishing Company “Business Perspectives”

  
NUMBER OF REFERENCES  
**14**

  
NUMBER OF FIGURES  
**0**

  
NUMBER OF TABLES  
**1**

© The author(s) 2019. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"  
Hryhorii Skovoroda lane, 10, Sumy,  
40022, Ukraine

[www.businessperspectives.org](http://www.businessperspectives.org)

**Received on:** 30<sup>th</sup> of September, 2019

**Accepted on:** 1<sup>st</sup> of November, 2019

© Inna Shkolnyk, Eugenia  
Bondarenko, Ievgen Balatskyi, 2019

Inna Shkolnyk, Doctor of Economics,  
Professor, Head of the Department  
of Finance, Banking and Insurance,  
Sumy State University, Ukraine.

Eugenia Bondarenko, Assistant of  
the Department of Finance, Banking  
and Insurance, Sumy State University,  
Ukraine.

Ievgen Balatskyi, Doctor of  
Economics, Head of the Department  
of Management and Financial and  
Economic Security, Education and  
Research Institute for Business  
Technologies «UAB» Sumy State  
University, Ukraine.



This is an Open Access article,  
distributed under the terms of the  
[Creative Commons Attribution 4.0  
International license](https://creativecommons.org/licenses/by/4.0/), which permits  
unrestricted re-use, distribution,  
and reproduction in any medium,  
provided the original work is properly  
cited.

Inna Shkolnyk (Ukraine), Eugenia Bondarenko (Ukraine), Ievgen Balatskyi (Ukraine)

# FINANCIAL RISKS OF THE STOCK MARKET: OPPORTUNITIES AND SPECIFICS OF THEIR INSURANCE

## Abstract

The Ukrainian stock market is rated as an emerging market, which is characterized by high profitability and higher risk level as compared to developed economies. Securities transactions on the Ukrainian stock market are accompanied by stable uncertainties. Moreover, insurance is the most effective way to reduce financial risks and their negative effects. Given the current economic and political instability, financial risk insurance can ensure the economic performance of business entities and stimulate their further economic development. Financial risk insurance is the liability insurance in its nature, but its terms are often included in property insurance. This insurance sector has considerable facilities, which require activation of new insurance products that will be able to protect individual and institutional investors.

Insurance and stock markets are direct competitors for limited investor resources, including strategic sources such as temporarily free institutional investor funds and household savings. In general, although there is a significant interaction between the insurance and other financial markets in Ukraine, it is hardly realized at all, unlike foreign economies, where it is used to its maximum. With the development of the insurance culture of the population and insurance in general, the relevance of insurance services in a high-risk segment like the stock market increases. The article harmonizes types of financial risks arising on the stock market with the methods of their leveling (insurance, hedging, diversification, etc.), determines the risk factors of the investor in the stock market, and specifies the professional risks of financial institutions. For the Ukrainian stock market participants, the use of two types of insurance coverage, namely, Bankers Blanket Bond and Financial Institution Professional Indemnity, is proposed.

## Keywords

insurance company, credit risk, investment risk,  
convergence, fraud risk, portfolio risk, liquidity risk

## JEL Classification

G10, G22, G28

## INTRODUCTION

The Ukrainian stock market belongs to the category of emerging markets, which are defined by high profitability and higher risk degree as compared with developed economies. Transactions in securities in the Ukrainian stock market are characterized by stable uncertainties. The ever-increasing number of financial instruments offered by the domestic stock market, as well as many factors influencing the change in their value, lead to the fact that an individual investor in most cases is not able to assess the full range of risks related to investing in specific financial instruments. All the activities in the stock market relate to any given type of risk. Any decisions and transactions in this market mean that the participant (investor, issuer, intermediary) assumes one or another amount of risk. In this regard, risk management becomes actual; this involves identifying, assessing and forecasting the value of specific risks to minimize them.

It should be noted that the risk of stock market operations is characteristic not only of emerging markets but also of developed ones. Any market has investment risk, liquidity risk, credit risk, fraud risk; in that case, insuring financial risk is the main mechanism of protecting the stock market participants.

## 1. LITERATURE REVIEW

It is worth noting that in Ukraine, there are no studies on risk insurance on the stock market. According to the authors, this is due, on the one hand, to the low level of stock market development and, on the other, to the underdevelopment of voluntary forms of insurance. At the same time, the speculative nature of the stock market development results in the formation of significant rates of risk for its participants. According to Kornieiev (2011), the insurance market still does not play a proper role in providing insurance protection. However, the results of his study determine that financial risk insurance is one of the dominant components of the positive impact of insurance on the GDP dynamics in Ukraine, with the four-year lag of the positive impact. Kosova and Slobodyanyuk (2016) focus on the contradiction between the quantitative and qualitative indicators of the investment component development in the Ukrainian insurance market. Kozmenko and Pakhnenko (2012) note that the convergence processes occurring in the global financial market and the Ukrainian market have led to new forms of interaction between the stock market, the insurance market and the banking sector. Also, the capacity of the domestic stock market as one of the main factors for insurance liabilities development is assessed. For economic entities, one of the ways to reduce financial risk is its insurance. Moreover, insurance is the most effective way to reduce financial risk and its negative effects. Given the current economic and political instability, financial risk insurance can ensure the economic performance of economic entities and stimulate their further development.

Zemliachova and Savochka (2012) systematized the types of financial risks generated by economic agents. Korvat and Plakhotia (2016) analyzed the possibility of using financial risk insurance in Ukraine compared to the EU countries and noted that under economic instability, the demand for financial risk insurance increases. However, the Ukrainian legal framework limits the possibilities

of insurance companies in this area as compared to the European legislation. Jinks, Hue, Spain, Bora, and Siew (2019) explored key approaches to measuring long-term investment risks involved in stock market transactions. The authors focused on market risk and liquidity risk, and highlighted the shortfall risk. They also noted that every investor can face a wide variety of risks. The definition of risk depends on who the investor is and on his or her attitude towards economic risk. Cummins and Weiss (2009) focus on the stock and insurance markets convergence, which is based on increase in the frequency and severity of catastrophic risk, and market inefficiencies resulting in the development of hybrid insurance/financial instruments that blend elements of financial contracts with traditional reinsurance. Kojien and Yogo (2017) noted that since the 2008 crisis, there was increased demand for variable annuities that package mutual funds with minimum return guarantees over long horizons. Ellul, Jotikasthira, Kartasheva, and Lundblad (2018) investigated the occurrence of systemic risk resulting from interconnections of the balance sheet assets of various financial institutions and suggested that insurers provide hedging services for investment products that may reduce systemic risk. Given the underdeveloped financial risk insurance in Ukraine, there is a need to systematize these risks.

## 2. PRACTICAL INSIGHTS

Financial risk insurance is inherently liability insurance, but its terms are often included in property insurance. The insurance of the economic entity's liability for defaulting toward its investors or borrowers is the most widespread type of financial risk insurance.

Despite the fact that the financial risk insurance has a significant share in the structure of other voluntary types of insurance, the real market volume is difficult to estimate because statistics do not give an adequate idea of what is happening in this market. The inconsistency of legal and theo-

retical understanding of risk and its classification is an obstacle to the development and spread of financial risk insurance in Ukraine. Given the financial risk classifications developed by modern scientists and researchers in the field, credit risk and investment risk are components of financial risk. Rather, according to the Law of Ukraine "On Insurance", the financial, credit and investment risks are separate, not related types of insurance. This distorts the statistical database on financial risk insurance and makes it difficult to interpret.

To evaluate the prospects of implementing financial risk insurance in the stock market, it is necessary to determine how the two markets – the stock market and the insurance market, which can currently be considered as two tightly interconnected systems – affect each other. The magnitude of cash flow of the average foreign insurer in the stock market is quite often comparable to the volume of its operations with direct insurance clients and exceeds the amount of reinsurance transactions.

Insurance and stock markets are direct competitors for limited investor resources, including strategic sources such as temporarily free institutional investor funds and household savings. Resources accumulated through the insurance or any other marketplace eventually flow into real value creation, with financial markets merely contributing to its efficient distribution.

Under the rapid convergence of individual components of the financial market, the insurance and stock markets have more and more crossing points. Below, the most significant aspects of their interpenetration are considered.

1. Insurance companies act as buyers of securities while carrying out their own investment activities. In Western practice, an insurance company is a financially powerful economic entity and an important institutional player in the stock market. Investments in securities are made both at the expense of insurance reserves and at the expense of the insurers' own funds.
2. The particular role of insurance companies as buyers in the stock market is that they are essentially universal in their essence; they are

able to carry out any investment transactions according to their financial situation – from short-term to long-term, from risk-free to risk-free, etc. But insurance companies most often act as moderate investors that do not expose themselves to the significant risk. This is mainly due to the fact that the insurance company temporarily holds the funds for which it is responsible. That is why, the market regulator imposes strict requirements on insurance companies, namely, sets restrictions on certain areas of investment according to an asset type and their risk rate.

3. Insurance companies issue their own securities traded on the stock exchange. Being representatives of a very capital-intensive industry, insurance companies are forced to enter the stock market as recipients of unit and debt borrowed capital. That is, they must become issuers of their own shares and bonds.
4. Today, insurance companies are not limited to the traditionally raising capital through the stock market. They may consider securities issue as a risk transfer option (for example, catastrophe bond issue). Unlike ordinary portfolio investment risks, the likelihood of catastrophes does not depend on the macroeconomic cycle dynamics. Subsequently, including a "catastrophic" bond to the portfolio allows diversifying investments and mutually repay risks.
5. But an insurance company cannot consider such an activity as purely issue-based, since it is not merely a bond trade but a redistribution of risk for a fee that is inherently close to reinsurance.
6. Insurance companies insure risks for investors who invest in stock market instruments. A very important condition for the attractiveness of securities is that the issuer has an insurance contract with a reliable insurer, since concluding the insurance contract with a reliable insurance company is a guarantee that its securities are reliable (each insurer, before entering into an investment risk insurance contract, carefully checks the investment project, which cannot be done by an ordinary investor).

7. The insurance company as the guarantor issues the guarantee obligations. Insurance companies, as well as banks and non-bank credit institutions, can act as guarantors, that is, provide guarantees for clients' obligations. At the same time, the guaranteeing insurance company assumes the obligation, in case of its client insolvency, to pay its debts to third parties. Having an insurance company guarantee is a good argument for determining the investment reliability, so issuing guarantees in Western insurance markets is very common.

In general, the capacity of interaction between the insurance and other financial markets in Ukraine is considerable and, unfortunately, hardly realized at all as compared to countries, where it is used to its maximum. With the development of the insurance culture of the population and insurance in general, the relevance of insurance services in such a high-risk segment as the stock market is increasing. But despite the prospects of this market for insurance companies, not all of them are ready to take financial risks, not only in the stock market, but also in other sectors.

8. The insurance market is a macroeconomic stabilizer and can act as a stabilizer on the stock market. The use of insurance ensures a crisis-free economic development and is, therefore, favorable to the stock market. This is particularly relevant for the stock market because it is prone to market fluctuations related to the macroeconomic cycle phases.

As insurance in Ukraine does not have such a significant history as in the West, Western insurance standards are at the heart of Ukrainian insurance products, including the stock market. Unfortunately, financial risk insurance in the Ukrainian stock market is not very popular unless their insurance is compulsory or unrelated to determining the policyholder's reliability rating. This is due to the following reasons: stock market participants' transactions are not always transparent; market participants are reluctant to disclose information about themselves and their clients, which is a necessary condition for insurance.

Insurance, as a financial mechanism for ensuring the continuity and balance of a market economy, optimizes macroeconomic proportions of social production. As a result of significant natural or man-made disasters spanning large territories and numerous businesses, the reimbursement of losses through the insurance system has a positive impact on the finances and the country as a whole.

Let's consider possible methods of eliminating financial risks in the stock market (Table 1), and the possibility of their insurance.

**Table 1.** Possible methods for neutralizing financial risks on the stock market

Source: Systematized by the authors.

Type of financial risk	Methods for neutralizing financial risk			
	Insurance	Hedging	Diversification	Other methods
<b>1. Risks related to the purchasing power of money</b>				
Inflation risk	–	–	One of the methods of counteracting the inflation and deflation risks is diversification of financial instruments by investing currencies which will reduce this type of risk.	Taking into account the inflation component in the financial contract conclusions (adjusting income by the inflation or deflation coefficient) is an effective method for leveling the inflation and deflation risks.
Deflation risk	–	–		
Currency risk	Potential risk insurance in the context of foreign economic activity insurance programs (currency clauses: direct, indirect and multicurrency).	The use of different derivative equity instruments, in which certain currency pairs act as assets, is the best way to mitigate currency risk.	Potential risk reduction when diversifying financial instruments according to different currencies.	Predicting risk and adjusting financial behavior based on currency change expectations.

**Table 1 (cont.).** Possible methods for neutralizing financial risks on the stock market

Type of financial risk	Methods for neutralizing financial risk			
	Insurance	Hedging	Diversification	Other methods
<b>2. Capital investment risks</b>				
Interest rate risk	–	The best way to negate interest rate risk is to use different derivative stock instruments where specific interest rates act as the assets.	–	Forecasting risk and adjusting financial behavior based on expectations of changes in interest rates.
Credit risk	Credit risk of banks and lending companies (including leasing companies) is subject to insurance.	Credit risk reduction on bonds and other debt securities is possible through the use of derivatives.	It is possible to reduce risk when investing in different types of debt securities.	Credit risk can be reduced through the use of a borrower selection mechanism, the involvement of guarantors under the agreement, and the use of collateral.
Liquidity risk	–	–	The most effective mechanism for reducing investment liquidity risks is their diversification (according to asset types and maturity).	When it comes to the liquidity risks of financial institutions, their reduction is possible through managing the institution's assets and liabilities.
<b>3. Investment risk</b>				
Portfolio risk	It is almost uninsured because this type of risk insurance results in a significant decrease in profits.	–	Diversification is an effective way of significantly reducing investment risks. It is advisable to form an investment portfolio of assets that do not correlate with each other. This will minimize possible losses.	It is possible to reduce investment risks by predicting the behavior of individual assets, the use of insider information, etc.
Real investment risk	It is not the investment risk itself that is insured, but the risks related to the construction of the investment object (the entire set of construction risks).	–		
Innovative investment risk	–	–		
<b>4. Other types of financial risks</b>				
Tax risk	–	–	The diversification of investment by different financial institutions and securities of different entities will significantly reduce these risks.	Reduction of tax risks borne by the entities that are exposed to stock risk with their financial instruments is possible due to simplifying tax legislation and tax reporting, explanatory and preventive work, bringing to administrative responsibility. This risk indirectly influences the investor.
Operating risk	Risk is insured, there are many insurance programs for financial institutions in the stock market with varying degrees of operational risk coverage.	–		The most effective measure to reduce this risk is to work comprehensively with staff, automate processes, conduct constant monitoring and take measures to prevent the risk realization.
Force majeure risk	–	–		The force majeure risk can only be reduced by entering into a contract the purchase of financial instruments that determine what force majeure is for that contract and what measures can be taken to deal with losses.
Fraud risk	This risk is subject to insurance. Fraudulent insurance programs are most often included in complex programs that also include operational and property loss risks.	–		The main method of reducing the fraud risk is the proper selection of staff, the introduction of security in a financial institution, limited access to important information and documents.

Liability insurance is the most common insurance product for the stock market. This type of insurance is optimal both to minimize operational and fraud risks, and to further develop a performance guarantee system. Operating risks are easily predicted and eliminated much more easily than systemic or market risks, not to mention country risks that can be reduced by the long-term effort to create a more stable country image.

In addition to the listed risks, insurance can help in managing the risks related to earning a profit, first of all, changing stock prices, the portfolio risk. However, these risks are speculative and rarely insured. In the case of such insurance, the market participant relies not on speculative profits but on the stability of its market positions. In theory, insurance programs may include insurance protection not only against falling, but also against rising stock prices. The market segment, in which this type of insurance is most in demand, is the fixed-term stock market.

Different stock market participants bear different risks, so they require different mechanisms to mitigate risk and different insurance programs. All the stock market players are divided into professional and non-professional ones. Professional stock market participants are legal entities that carry out the following activities: brokerage operations; dealer activity; securities management activities; settlement and clearing activity; depository activity; keeping a register of securities owners; securities trading activities. Non-professional participants in the stock market are individuals and legal entities that buy and sell securities and their derivatives on the market (ordinary investors).

Practice shows that the risk factors of an investor in the Ukrainian stock market include:

- change of requirements for accounting of ownership rights to a security;
- change of requirements for securities servicing;
- loss of the register or information about the investor as the security owner;
- artificial restrictions on the use of securities rights;

- increasing the cost of services of professional stock market participants;
- dishonesty of the other parties to the agreement;
- recognition of an agreement for the purchase of a security by the investor as fraudulent or invalid;
- the issuer bankruptcy;
- changes in the value of securities (in case of planned profit insurance).
- According to world experience, professional risks of financial institutions include:
  - possible loss and damage to property of the company, organization or bank, both real and transportation;
  - the probable loss of wrongful inadvertent and unlawful acts by employees (including fraud in electronic and information systems);
  - losses from illegal acts of third parties (including fraud in electronic and information systems);
  - losses related to the counterfeit documents and securities transaction;
  - probable financial liability to third parties for damage caused by the financial institution's professional activity.

Most of the above risks relate to operating risks. However, unlike credit and market risks, for which professional participants have a clear view and risk management system, views on operational risks are ambiguous.

Let's consider the possibilities and the mechanism of risk insurance for professional participants, since their risk insurance is the absolute majority of insurance contracts on the stock market.

The types of insurance products that are most in demand on the stock market can be divided into several groups, namely:

- compulsory insurance (e.g., liability insurance for the depositary and the companies managing the retirement savings funds of citizens);
- insurance as a basis for admission to the activity or as an additional advantage in determining the reliability rating;
- voluntary insurance (usually, liability insurance of management companies).

Nowadays, a comprehensive insurance policy and its additional coverage is the most successful solution to mitigate the operating risks of professional stock market participants. This comprehensive insurance policy guarantees adequate protection against all the listed risks.

Protection under a comprehensive agreement is provided by the combination of two types of insurance coverage, namely, comprehensive financial institution insurance (Bankers Blanket Bond, BBB, in international terms) and professional liability insurance (Financial Institution Professional Indemnity, FIPI).

The BBB policy is the basis of a comprehensive program of insurance against crime and the professional responsibility of financial institutions. Having such a policy is a mandatory requirement and a matter of prestige for foreign financial institutions.

BBB has been adapted to local jurisdictions for use in many countries and is widespread in the world. In the CIS countries and in Ukraine, the use of this type of insurance is very limited. First, the management of financial institutions do not see a significant need for insurance due to the low level of insurance culture in the country. Second, a limited number of insurance companies can offer BBB insurance programs; these are mostly the companies with links to Western reinsurance markets, as well as those founded by banks or affiliated with holding structures.

The standard insurance terms, developed by Lloyd's underwriters and adapted by domestic insurance companies, include the following major risks:

- losses caused by dishonesty of employees of the insured financial institution;

- loss or damage to property in the premises of the insured financial institution;
  - loss of transit, including theft or physical destruction of property during transportation;
  - losses caused by fake checks;
  - losses caused by counterfeiting of securities and similar instruments;
  - the loss suffered by the insured financial institution in the ordinary course of business related to transactions with securities and similar instruments;
  - losses related to counterfeit currency;
  - damage caused to property in the premises of an insured financial institution as a result of unlawful acts by third parties.
- The BBB advantages:
- lowering the cost of insurance, since several types of insurance in one package are cheaper than separately;
  - policies are complementary: risks covered by one type of insurance are excluded from others;
  - economic crimes are often very complex, so it is not always easy to determine whether the damage resulted from a criminal act or an employee error. By having a comprehensive policy, the policyholder can be sure that all his/her losses will be compensated;
  - the widest possible insurance coverage of a financial institution, both against fraud and errors.

BBB provides a general liability limit, which is the amount within which the insurer undertakes to make payments in the event of losses in the bank. Besides, the limits of liability for each risk (sub-limits) are set within the overall limit.

In practice, the amount of insurance coverage under BBB policies can fluctuate significantly. For the

CIS countries, insurance coverage ranges from USD 500,000 to USD 30 million. The limit is set at the request of the financial institution and usually depends on the volume of the bank activity.

Prior to entering into a BBB contract, it must be confirmed that the minimum necessary precautions are taken to prevent possible losses. To assess the risk and determine the list of measures to prevent losses, the insurer engages a highly qualified insurance specialist (surveyor). Pre-insurance expertise (survey), conducted by professionals from specialized Western companies, makes it possible to reveal weaknesses in the company's security system, its internal control and management. The expert examination is performed before the conclusion of the first insurance contract and every three years thereafter.

The information received allows determining the cost of insurance. The main factors influencing the amount of insurance premium are: the volume and directions of a financial institution's activity, its reputation; the size of the branch network; the presence of losses in the past; breadth of insurance coverage (risks, limits of liability, deductibles). The estimated cost of a policy can range from a few tens to hundreds of thousands of dollars.

The full or partial transfer of risks by national insurers to foreign reinsurers is a guarantee for payment of possible losses to the bank. At the moment, both abroad and in Ukraine, the risk of disloyalty to the financial company staff is the most serious risk in terms of the likelihood of losses and their consequences. According to statistics, 85% of crimes (14) in the financial sphere are either directly by employees of the bank or with their complicity (employees of the financial institution account for 40%, former employees – 15%, directors and managers – 30%, and third parties amount to 15%).

A program (policy) developed by International Organization for Standardizations (ISO), namely, the Financial Institution Crime Policy (FICP) is similar to BBB. This is a policy on combating crime in financial institutions. FICP includes 14 separate insurance contracts, each of which may have its own insurance amount and deductible. An insured can choose any set of risks, except in-

urance of the personnel loyalty, which is obligatory for the financial institutions.

FICP covers the risks of property loss, commercial transportation, document forgery, transit (standard for BBB) and financial institution third party liability risks, computer risks (which distinguishes this product from BBB). FICP includes many terms and conditions similar to those contained in BBB, but FICP covers a broader list of risks.

There is a special product called Financial Institution Professional Indemnity (FIPI) for liability insurance of financial institutions. It provides financial protection for a financial institution and its employees against claims by third parties and possible financial losses to third parties as a result of the financial institution's actions, omissions or errors. Insurance protection covers the responsibility of both full-time and part-time employees. In addition, it covers the parent company and subsidiaries of the insured.

Thus, FIPI covers the following risks: misconduct, errors, employee misconduct, misrepresentation, document forgery or correction, negligence, breach of the financial institution's obligations and policies.

Currently, the BBB policy and the FIPI policy as an addition, are not yet widespread in Ukraine. But they are successfully used by the largest domestic banks and stock market participants (exchanges, depositories, registrars, management companies). It is also increasingly evident that such insurance not only provides complete protection for the financiers themselves, but is also more designed to enhance the reliability of financial institutions in the opinion of their clients.

The main feature of financial risk insurance is the need for insurers to take into account the genesis of financial risks. Since most financial risks result from relationships between risk entities (creditors, borrowers), they arise largely through human factor. That is, unlike the classical risks (insurance against fire, natural disaster, illness, etc.), financial risks have no a natu-

ral stabilizer of the risk level in the form of objectively existing natural or social phenomena, whose effect on the parameters of risk does not depend on the influence of risk entities.

Thus, the distinction between classical and financial risks can be expressed as follows: the distribution of probabilities of an insurance event occurrence for classical risks is described by the normal distribution (Gauss law). That is, this distribution is one-modal; for financial risks, it is closer to uniform, so that there is a possibility of multimodality and time dependence.

The absence of natural level stabilizers gives rise to an extremely dangerous property for the insurers of financial risk, namely changeability (as a rule, increasing) of the risk level after the concluding the insurance contract.

These financial risk properties sharply reduce the value of statistics and make them virtually unsuitable for use to ensure break-even of this type of insurance. In other words, the set of financial risk insurance parameters is individual for each insurer, characterizing its specifics: the type of activity, its volume, competitive environment, the insurer qualification, reliability of partners, etc.; therefore, it cannot be used as an analogue for other insurers.

In particular, in the case of financial risk insurance, the tariff should not be considered as a measure of medium risk (and therefore be approximately the same for all insurers as in the case of classical risk insurance), but the equivalent of the market price for providing insurance protection to a specific insured, that is, it must be individual.

A big problem in the area of financial risk insurance is the high cost of their analysis. Because of this, the fundamental possibility of financial risk insurance (as opposed to insurance of other risks) does not yet prove its expediency. The high costs involved in analyzing financial risks make the cost of individual risk at which its insurance becomes economically inappropriate. This cost is usually tens of thousands of US dollars. Therefore, in the financial risk insurance, the risk of an insurance company is usually high. This explains specifics of decision-making on financial risk in-

surance, which differs significantly from the technologies of classical types of insurance.

As is known, the procedure for classical risk insurance is so formalized (standardized policies, contracts, tariffs, etc.) that there is almost never a need for intermediate participation in it by senior management of the insurer. In the financial risk insurance, on the contrary, all critical decisions on each risk are taken exclusively by the top management of the company.

The above-mentioned peculiarities of financial risks are not a fundamental obstacle to their break-even insurance. To achieve this, the insurer must:

- not to rely on any statistics as an objective basis for the tariff calculation (there is no such objective statistics for the specific financial risk);
- refrain from quantifying the tariff as an objective risk measure (this is not possible due to the lack of statistics characterizing financial risk as a whole or its components, as opposed to single man-made risks, for which there are no general statistics, but it is still possible to calculate the magnitude of the specific risk);
- use known statistics and tariffs only as reference material to form the ideas about the indicative parameters of a particular risk and the approximate level of the market value of its insurance (it will be inappropriate to use the same data for quantitative calculations of a particular risk, since it is not possible to establish the degree of correspondence between its parameters and the parameters of counterparts);
- choose the tariff as agreed with the policyholder in the range, the lower value of which is limited by the market situation, and the upper – by the optimum. This is because an excessively high tariff can become an unbearable financial burden for the insured and increase the risk;
- use a set of measures aimed at reducing the risk to a level which, in the insurer's opinion, is acceptable.

## CONCLUSION

It can be concluded that the stock market financial risk insurance is very promising for insurance companies. This sector has great potential, and to activate it, it is necessary to introduce new insurance products that will be able to provide protection to individual and institutional investors. The introduction of compulsory insurance or insurance, which is due to admission to activity or an increase in the reliability rating, is the impetus for the development of this type of insurance in the world. Also, such convergence of the stock and insurance markets will be an impetus for the stock market development, as this will increase the security of its activities and contribute to the overall development of the country's economy.

## REFERENCES

1. AIG. Official site. (n.d. a). *Bankers Blanket Bond Product description*. Retrieved from <https://www.aig.ru/en/business/products/bankasurance/bankers-blanket-bond>
2. AIG. Official site. (n.d. b). *Financial Institutions Professional Indemnity*. Retrieved from <https://www.aig.co.za/business/products-services/financial-lines/financial-institutions-professional-indemnity>
3. Choi, P. M. S., Chae, W. Y., Choi, J. H., & Han, Y. B. (2017). Does insurance hedge macro volatility? Global evidence. *Investment Management and Financial Innovations*, 14(2-2), 307-315. [http://dx.doi.org/10.21511/imfi.14\(2-2\).2017.02](http://dx.doi.org/10.21511/imfi.14(2-2).2017.02)
4. Chubb. Official site. (n.d.). Financial institutions Elite civil liability insurance. Retrieved from <https://www.chubb.com/uk-en/business/financial-institutions-elite-civil-liability-insurance.aspx>
5. Cummins, D. J., & Weiss, M. A. (2009). Convergence of Insurance and Financial Markets: Hybrid and Securitized Risk-Transfer Solutions. *The Journal of Risk and Insurance*, 76(3), 493-545. <http://dx.doi.org/10.1111/j.1539-6975.2009.01311.x>
6. Duverne, D., & Hele, J. (2016). How the Insurance Industry Manages Risk. In F. Hufeld, R. S. J. Koijen, & C. Thimann (Eds.), *The Economics, Regulation, and Systemic Risk of Insurance Markets*. Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780198788812.003.0004>
7. Ellul, A., Jotikasthira, C., Kartasheva, A., & Lundblad, T. C. (2018). *Insurers as Asset Managers and Systemic Risk* (Working Paper Series No.75). Retrieved from <https://www.esrb.europa.eu/pub/pdf/wp/esrb.wp75.en.pdf>
8. Forinsurer. (n.d.). *Insurance articles*. Retrieved from <http://forinsurer.com/public>
9. Hufeld, F., Koijen, R., & Thimann, C. (2017). *The invisible service: The economics, regulation, and systemic risk of insurance markets*. Retrieved from <http://voxeu.org/article/economics-regulation-and-systemic-risk-insurance-markets>
10. Jinks, A., Hue, B., Spain, J., Bora, M., & Siew, S. (2019). *Investment risk for long-term investors: risk measurement approaches* (64 p.). London: Institute and Faculty of Actuaries. Retrieved from <https://www.actuaries.org.uk/system/files/field/document/Investment%20risk%20for%20long%20term%20investors%20PAPER.pdf>
11. Keeley, M. (Ed.). (2016). *Financial institution bonds* (1238 p.) (4th ed.).
12. Koijen, R. S. J., & Yogo, M. (2017). *The Fragility of Market Risk Insurance* (45 p.). Retrieved from <https://pdfs.semanticscholar.org/4d0b/eebb642bebbd63ef5ad-2f83e0552881f1520.pdf>
13. Kornieiev, M. V. (2011). Rozvytok strakhuvannia finansovykh ryzykiv na rynku finansovykh posluh Ukrainy [Development of financial risk insurance in the financial services market of Ukraine]. *Visnyk Dnipropetrovskoho universytetu. Seriya Ekonomika – Bulletin of Dnipropetrovsk University. Series Economics*, 5(4), 104-109.
14. Korvat, O., & Plakhotia, A. (2016). Upravlinnia strakhuvanniam finansovykh ryzykiv v umovakh ekonomichnoi nestabilnosti [Management of financial risk insurance under economic instability]. *Skhidna Yevropa: ekonomika, biznes ta upravlinnia – Eastern Europe: Economics, Business and Governance*, 5(5), 303-310. Retrieved from <https://chmnu.edu.ua/wp-content/uploads/2019/07/Korvat-O.V.-Plakhotya-A.A..pdf>