Use of Conflict-Compromise Methodology in the Process of Insurance Engineering

Lyudmila K. VASYUKOVA
Far Eastern Federal University, Vladivostok, Russia, vasyukova_ludmila@mail.ru
Natalya N. MASYUK
Vladivostok State University of Economics and Service, Vladivostok, Russia, masyukn@gmail.com
Marina A. BUSHUEVA
Russian University of Economics by Plekhanov (Ivanovo branch), Ivanovo, Russia,
bush.mar@yandex.ru
Oleg N. VASYUKOV
Far Eastern Federal University, Vladivostok, Russia, vasyukov_oleg@mail.ru
Nina A. MOSOLOVA
Far Eastern Federal University, Vladivostok, Russia, smirnova.na@dvfu.ru

Abstract. Insurance is not only one of the most important segment of the global economy, but also the most popular and effective risk management mechanism. The transition from the strategy of protecting physical assets to the strategy of creating a cost of capital determined the priority position of insurance in a series of risk management systems. The convergence processes in the regional insurance markets eliminate the differences in approaches to the regulation of insurance economic relations, financial control of insurance business entities, and the organization of business processes. The article considers the phenomenon of convergence as a factor in the development of the Russian insurance market, the pace of development of which lags behind the pace of development of the world insurance market. The purpose of this article is to identify the possibility of using innovative technology for leveling managerial dysfunctions in the development of the Russian insurance market based on a conflict-compromise methodology. The innovative nature of the research is determined by applying the author's approach to making management decisions in the paradigm of conflict-compromise methodology.

Keywords: conflict-compromise methodology, managerial dysfunction, managerial decisions, local compromise.

INTRODUCTION

The influence of the insurance market on the world economy is increasing every year, as evidenced by the increase in the share of collected insurance premiums in world GDP to 6.13% in 2017. At the same time, the share of the Russian insurance market in world insurance in 2017 is still extremely small - 0.45% [Swiss Re]. Meanwhile, as noted in the report of experts at the WEF in Davos, the world has entered a period of heightened risk: extreme weather events, natural disasters, followed by environmental disasters, cybercrime and large-scale forced migration (WEF Davos, 2018). Active risk management through insurance allows us to ensure the sustainable development of the economy, mitigate the consequences of disasters, cyber incidents, both for companies and for citizens.

Analysis of the modern development of the Russian insurance market, as one of the most important sectors of the financial market, indicates the aggravation of contradictions that have arisen between the main participants of insurance relations: insurers, insured, the state. Contradictions in the insurance market have escalated into a conflict requiring resolution. Management decisions aimed at the development of both individual segments and the market as a whole, taken by both the state and the market regulator - by the Bank of Russia, are ineffective and cannot fundamentally change the market situation. The development of an effective strategy for the development of the Russian insurance market is the primary task of all participants in insurance relations, which can only be solved through the formation of trade-offs that are mutually acceptable for all market participants and allow harmonizing insurance economic relations.

The development of insurance as a risk management method was considered in their writings by J. Dickinson (Dickinson,1998), H. Kunreuter (Kunreuther, 2015), M. Ferranna (Ferranna, 2017), S. Tennyson (Tennyson, 2011), R. Yuldashev (Yuldashev, 2018), L. Vasyukova, V. Ostanin (Vasyukova, Ostanin, 2012), Yu. Spletukhov (Spletukhov, 2017), issues of convergence were discussed in the writings of J.R.Commons (Commons, 2012). S. Belozerov (Belozerov, 2014), the provisions of the conflict-compromise methodology were covered in the writings of N. Masyuk et al (Masyuk, Bushueva, Vasyukova, & Mosolova, 2018), and others.

MATERIALS AND METHODS

Unresolved external and internal contradictions in the system give rise to conflicts, which are the main cause of managerial dysfunctions. Among the most effective ways of resolving such conflicts and leveling managerial dysfunctions, a local compromise between conflicting entities proposes as the only possible method of making management decisions to achieve a balance of interests of the conflicting parties. The technology of leveling managerial dysfunctions through a series of successive local trade-offs is part of the conflict-compromise methodology for resolving the contradictions of participants in the insurance market.

Express analysis of statistics of the insurance market of Russia for 2013-2017 shows that the main aggregate indicators of the activities of insurance companies (the amount of premiums collected and the number of insurance contracts concluded) is characterized by growth dynamics. The growth rate of total insurance premiums for voluntary and compulsory insurance (excluding compulsory medical insurance) in 2017, compared to 2013, amounted to 41.3%, that is, in five years, the insurance market volume almost doubled. However, the growth of this indicator in the period under consideration was provided to a greater extent by income from personal insurance and compulsory types of insurance (excluding CHI), the non-life insurance segment was in a stage of stagnation.

According to RAEX estimates, in 2018, the rate of the non-life market growth for the year will be 2-3% (Forecast of the development of the insurance market in 2018, 2018). Regulatory pressure on insurance activity is increasing and, as a result, the concentration of the insurance market increases, only in 2016, according to the Bank of Russia, the regulator revoked licenses from more than 80 insurance companies, in

2017 - more than 30 (On withdrawing insurance and reinsurance licenses, 2018). The monopolization of the insurance market is increasing: The Herfindahl-Hirschman index of market concentration in 2017 in the Russian regional markets was at the level of 1196 (Primorsky Krai) and higher, indicating an oligopolization of the Russian insurance market. There are not enough good strategies in the Russian insurance market aimed at strengthening the processes of territorial convergence, which is currently the determining factor in the development of regional insurance markets (Belozerov, 2014).

RESULTS

The number of insurance contracts per capita as an indicator of the scale of insurance activity has increased significantly over the past two years of the fixed period (see Figure 1). If we interpret this figure literally, it turns out that every citizen of Russia has at least one insurance contract. To assess the biased financial result of insurance companies in 2016-2017s we introduce an additive model (1). Evaluation of the financial result (FR) for this model is offset, since the model does not include other expenditure and income items used in the calculation of profit or loss.

The additive model (1) has the following form:

$$\mathbf{FR = PB,} \qquad (1)$$

where P - insurance premiums under contracts of voluntary and compulsory insurance (excluding CHI);
B - payments under similar insurance contracts;
FR is the difference between the two previous indicators.

Table 1 - Assessment of the Impact of the Main Factors on the Financial Result of Insurance Companies in 2016-2017

Indicator	Baseline values (thousand rubles)	Substitution 1	Substitution 2	Quantitative assessment (thousand rubles)
P	1 278 841 595	1 180 631 588	1 180 631 588	-98 210 007
B	509 722 126	509 722 126	505 790 110	+3 932 016
FR	769 119 469	670 909 462	674 841 478	-94 277 991

Source: calculated according to Statistical indicators and information on individual subjects of the insurance business. Retrieved from: www.cbr.ru.

The analysis of the table 1 shows that the biased financial result of insurance companies has deteriorated in 2017 compared to 2016. The value of the resulting indicator in 2017 was influenced by the following factors: a decrease in the volume of collected insurance premiums, a decrease in the volume of paid insurance claims. At the same time, a quantitative assessment of the indicator P indicates a strong dependence of the financial result of the insurer on the amount of premiums, measures to work with risk prevention in order to reduce insurance payments are either not carried out at all or are carried out at a rather weak level.

In the Russian insurance market, there is the conflict of interests between its main participants takes place on two levels: behavioral and strategic.

The conflict at the strategic level is the inconsistency of the proposed insurance products with the demands and needs of the consumers of these products. It turns out that insurance in Russia only partially meets the challenges that the consumer of insurance services has to face. For example, in the framework of marine insurance, Russian shipping companies, whose activities deployed in different jurisdictions and in different territories, cannot insure such risks as freight, demurrage and legal costs (Freight, Demurrage, and Defense - FDD); war risks (War Risk Insurance); Terrorism Insurance; delivery disruption (Trade Disruption Insurance); strikes (Strike Insurance). Moreover, the list of existing and potential threats is constantly expanding, and the realization that they can manifest themselves both in the short and in the medium and long term, affecting the lives of future generations, should give a signal for immediate action (Yuldashev, 2018; Krawczyk, 2017; Sokolovska, 2017).

The second factor characterizing the conflict at the strategic level relates to the lack of a coherent, feasible strategy for the development of domestic insurance, the weakness and ineffectiveness of regulating the insurance market as a whole. Insurance companies, usurping the goals of policyholders who are associated with obtaining high-quality insurance protection, implement strategies aimed solely at making a profit from business activities. The adoption of ineffective management decisions that ensure the current needs of insurers in a stagnating market leads to managerial dysfunctions. An example of the implementation of the strategy of "administrative bargaining where arbitrariness is covered by market demagogy" is the situation prevailing in the Russian OSAGO market.

In the conditions of the development of real market relations, the insurer can form various functional strategies: create new insurance products to protect the interests of various groups of policyholders, expand their presence in the market, implement an economically sound tariff policy. Under these conditions, the contradictions arising between market agents become drivers of market development.

At the behavioral level, a conflict of interest arises due to the fact that the insurer and insurer have different ideas about the purpose of insurance. The insurer for the most part forms its profit from the collected insurance premiums and thereby places the priority of the local insurance goal, putting the realization of the mission (protecting the interests of the insured against dangerous random events) to the background. The reason for such a straight-line behavior of the insurer is the inability to effectively manage the accumulated financial resources, the presence of unprofitable types of insurance, increased regulatory pressure on the industry. It is important to note that the local goal of the insurer is not obligatory for the insured, moreover, it contradicts his economic interests, since it increases the cost of insurance protection. The insurer, due to his lack of a high level of insurance culture, denies the need to obtain insurance protection and shows an unwillingness to spend money on insurance purposes because of the immunity of the following assumptions of insurance activity:

1. Insurance cover does not allow returning the insurance object to its original condition;
2. The effectiveness of insurance protection is more pronounced on long periods.

In studies of Russian economists, the possibilities of using conflict-compromise methodology to resolve the contradictions of the insurance market participants were investigated (Masyuk, Bushueva, Vasyukova, 2017). The authors of the methodology proceed from the fact that the resolution of contradictions in the system is possible through a local compromise to level out the resulting managerial dysfunctions, i.e. by mutual concessions of the parties to the relationship, which means the emergence between stakeholders of new types of relations.

To achieve a balance of interests, the insurer and the policyholder must come to a local compromise. The policyholder must take into account the basic assumptions of insurance and change his attitude towards insurance as a mechanism for protecting against a significant part of the losses arising from the realization of the risks of dangerous, accidental events. According to the research of foreign and Russian authors, there are such factors as financial, including insurance, literacy [Jing Jian Xiao, Tennyson] and the insurer's risk-to-risk ratio (Kunreuther, 2015; Ferranna, 2017; Surminski, 2017).

.

Insurers with competences in the field of risk management are more inclined to acquire insurance protection, to choose the insurance protection most suitable for protecting their property interests [Jing Jian Xiao]. The risk-taking tendency of policyholders directly depends on the level of competence and skills of the policyholder in the field of financial management in general and risk in particular [Ferranna]. The ratio of policyholders to risk determines their behavioral strategy in the insurance market. More risk-averse insurers use a wider line of insurance products to organize insurance to protect their economic interests, while they are willing to pay a larger amount of insurance premium for this insurance protection (Surminski, 2017). At the same time, insurance market experts note that the insured subject seeks to avoid less risk than the uninsured, thereby contributing to the deepening of the contradictions between the participants of the insurance economic relations (Ferranna, 2017).

For the insurer, the protection of property interests of policyholders - the general purpose of insurance should become prevalent in its activities. Realization of the general insurance objective can manifest itself through the implementation by the insurer of compensations for losses from the occurrence of insured events; however, this option for implementing a behavioral strategy has a strong influence on the profits formed by the insurer. In conditions when the insurer can influence the formation of the policyholder's behavioral strategy only by increasing or decreasing the price of insurance protection, the insurer will a priori set a price on the insurance product that maximizes its profit.

Local compromise might be proposed in the plane of preventive measures. At the same time, the existing orientation towards the general insurance goal and the reduction of insurance payments can occur through a reduction in the severity of damage from insurance claims. Measures that prevent the occurrence of an insured

event and limit the amount of damage are a form of realization of the preventive function of insurance. Financing by the insurer of preventive measures will reduce the likelihood of insured events; provide the insurer with an intangible (the obligation to compensate for damages when an insured event occurs) and the material (risk prevention) side of the insurance product (Masyuk, Vasyukova, Bushueva, Mosolova and Kozminykh, 2016).

Another local compromise concerns the issue of forming an insurance premium as the main source of profit for an insurance company. The balance of interests in relation to the price of the insurance product would be achieved if the cost of this product were cleared from the commercial surcharge. The insurer in the formation of profits should focus on diversifying business activities; the insured is not obliged to satisfy the economic interests of the insurer by an advance payment of its profits (Masyuk, Bushueva, Vasyukova, & Mosolova, 2018).

The possibility and interest of participants in insurance relations in achieving insurance objectives are determined by the procedure for forming the net rate of the insurance tariff and its premiums (risk and commercial) (Vasyukova, Ostanin, 2012)]. The insurance contract can be concluded only under the condition that the contradictions between the local and general insurance objectives will be overcome, and this is possible if the utility functions of the participants in the insurance relationship reach an optimum given the parameters of the insurance contract. The expected value of the target function of the insured is of the form (Vasyukova, Ostanin, 2012):

$$\mathbf{Ef = D\text{-}c\text{-}v\text{-}r + p\,[(1 + \xi)\,h\text{-}Q],} \qquad (2)$$

where D is the income of the insured;
c - costs of carrying out income-generating activities;
v - the cost of preventive measures;
r - insurance premium under the contract;
h is the expected insurance indemnity;
p - the probability of occurrence of the insured event;
 - coefficient reflecting the risk attitude of the policyholder;
Q - losses in case of an insured event.

The expected value of the target function of the insurer [Burkov]:

$$\mathbf{Ef = r\text{-}ph} \qquad (3)$$

Insurance rate (Burkov):

$$\mathbf{r = (p + \xi\_0)\,h,} \qquad (4)$$

where ξ_0 is the load on the net rate, which includes a risk premium, a commercial surcharge and a precautionary surcharge.

In accordance with the model of T. Barrois (Mack, 2005), the terms of insurance benefit for the insured, in terms of the cost and utility of the insurance product, are as follows:

$$\mathbf{r \leq p\,(1 + \xi)\,h} \qquad (5)$$

For the insurer, these conditions in terms of achieving its economic goal are as follows:

$$\mathbf{r \geq ph} \qquad (6)$$

The size of the insurer's profit from insurance limits by the policyholder's attitude to risk. The higher the probability of occurrence of the insured event and the more insured is inclined to take risks, he is more ready to conclude an insurance contract even if his insurance costs are higher than the insurance indemnity received, the more profitable the insurance is for the insurer, since the insurance premium increases with the likelihood of occurrence insured event and amount of damage.

The size of insurance claims increases as the amount of possible damages increases. Reasonable and economically viable investment of the reserve of preventive measures in preventing an insured event will reduce the likelihood of an insured event and improve the financial performance of the insurer. At the same time, investing in the prevention of an insured event for the policyholder must be individual in nature (Vasyukova, Ostanin, 2012). The local compromise, which allows resolving the contradictions between the insurer and the insurer, is to establish flexible parameters of the insurance contract, allowing taking into account the strategy of behavior of the insured.
The formula for calculating the insurance rate, in which the rule of flexible contract parameters will be observed, will look as follows:

$$r(v, y) = (p(v, y) + \xi + \xi\_01 + \xi\_02(y) + \xi\_03(v))\,h(v, y), \quad (7)$$

Where v - the cost of the policyholder for preventive measures ($v \geq 0$);
y – policyholder behavior behavior ($y \geq 0$);
ξ– part of the tariff rate, which includes a risky and commercial surcharge to the net tariff;
ξ_01 is the part of the warning premium that has the total size for all contracts by type of insurance (based on statistics on damage Q, known to the insurer);
ξ_02 (y) ¬ - part of the warning premium, which is formed on the basis of information about the actions of the insured;
ξ_03 (v) - part of the precautionary premium, which is formed on the basis of knowledge of the costs of the insured for preventive measures.

Financing preventive measures that affect the likelihood of insured risk or reducing potential damage motivates the policyholder to choose a strategy of preventive and motivational behavior, which will lead to the establishment of a differential amount of the precautionary premium in the insurance rate. Thus, the task of forming a contract with flexible parameters and a tariff adequate to risk will be solved. An

insurance contract with flexible parameters acts as a form of local compromise between the insurer and the insured.
Achievement of local compromises should occur in parallel with the strengthening of trust between the insurer and the insured. The development of insurance activities and improving the functioning of the insurance market will be promoted by the following measures (Splekhov, 2017):
- increasing the level of financial, including insurance, literacy of insurance services consumers - the insured;
- raising the level of informing consumers of insurance services about insurers and insurance intermediaries about the conditions of their services;
- the formation of special mechanisms for resolving disputes between insurers and consumers of insurance services (in particular, the insurance ombudsman and insurance arbitration courts) and ensuring their effective use;
- development of a system of guaranteeing insurance payments in cases where it is impossible for insurance companies to carry them out for reasons of revoking their license or applying bankruptcy procedures to them;
- building a model for predicting a violation of the financial stability of insurance companies in order to be able to pre-identify and support the most vulnerable insurance companies (Larionov, 2018).

DISCUSSION

Local compromises may contribute to the formation of insurance products in the field of corporate insurance, where in the past few decades there has been a decline. The situation is such that traditional compensatory products offered by insurers in the market are associated with significant premium payments and transaction costs [Doherty]. In addition, the reimbursement of losses incurred by the insured does not always meet the financial needs of the company (Pelsser, 2016). For example, financing is unreasonable if the restoration of a damaged or destroyed asset acts as a financial infusion with a negative NPV (net present value). The key question in this case will be: what capital is needed in the event of a certain event to cover losses?

Suppose that as a result of some unforeseen circumstance, the company was in a situation of technical default, temporarily lost solvency, but the possibility of restoring its condition remained. In this situation, the top management of the company may be more profitable to refuse to invest in projects to restore a positive net present value. The disadvantage of the opposite is that these investments will be used to pay off debts that would otherwise remain unpaid. It follows that top management may not be able to recover the value of their investments, and some new projects due to lack of resources will not sustain budgetary criteria, thus losing all their value. The solution to the problem may be to protect the company's cash flow from sudden drops.

Cash flow hedging will provide investment programs with continuous sufficient funding. However, the uninterrupted supply of insurance protection will only make sense if there are adequate pricing mechanisms. In order for the insurer to assess the basic distribution of losses, the policyholder must make concessions — abandon opportunistic behavior and provide the insurer with full information about the likelihood or severity of the damage (Dickinson, 1998).

In the above case, insurance will take the form of reserve capital, while allowing companies not to increase working capital or increase the volume of credit lines in order to absorb fluctuations in cash flows. Since insurance companies have large liquid capital and a more diversified risk portfolio than insurance companies, insurance for the latter will be cheaper than raising additional working capital.
To implement these mechanisms, the insurer must make concessions - it needs to choose a customer-oriented approach to doing business, abandon standardized procedures for forming an insurance product, move from a compensation insurance model to a model aimed at generating mutually beneficial value, expand insurance tools (for example, start actively using derivative contracts).
Thus, in order to provide the Russian insurance market with drivers of growth, it is necessary to make fundamental changes in the system of managing insurance relationships, while the corporate insurer must be able, at least indirectly, to influence the quality of the offered insurance products. The most fruitful form of such influence can be a systematic approach to managing the quality of insurance products.
The scientific literature describes many concepts of the quality of the insurance product and the insurance mechanism, one of which includes the following aspects (Korezin, 2009):
- The economic factor (determines the safety of the original benefits of the insured in monetary terms);
- regulatory factor (determines the receipt of a guarantee that the terms of the insurance contract upon the occurrence of the insured event will provide the policyholder with the implementation of the mechanism for receiving the insurance payment);
- service factor (determines the receipt of quality service at all stages of the implementation of the insurance product).

Based on the statistics of complaints filed against participants in the Russian insurance market at the Central Bank On withdrawing insurance and reinsurance licenses , we listed the main signs that may indicate the acquisition of a low-quality insurance product: insufficient insurance (the insured amount is much less than the insured value); excessive insurance (the insured amount under the contract exceeds the expected damage from the insured event, the insured overpays the insurance premium); unreasonable size of the franchise; the presence of hidden opportunities for the insurer to delay the claims settlement procedure; poor quality service and sales channel; high degree of product standardization.

CONCLUSION

In conclusion, it can be noted that the harmonization of the goals of the participants of the insurance market, their revision of their behavioral strategies will lead to a change in the model of functioning of the insurance market. The leveling of managerial dysfunctions through the achievement of local compromises will allow the insurance market of Russia to be removed from the pre-crisis state. A compromise based on the use of a risk prevention mechanism will create a transformation of the forms of relations between the insured and the insurer. The exclusion from the tariff value of the commercial allowance sent to finance the insurer's profit will reduce contradictions regarding the price for insurance protection. Overcoming the contradictions between the main and local goals of

insurance means that the utility functions of the participants of the insurance relations have reached the optimal value for the given parameters of the insurance contract. In the international insurance market, there was a transition from a compensation model to a value-generating model. The introduction of Russian insurers and policyholders to global trends will make it possible to identify new drivers for the growth of the domestic market. The use of conflict-compromise methodology should contribute to the formation of a new system for monitoring the quality of the insurance product, in which the qualitative characteristics of the latter would be the result of conscious mutual efforts.

REFERENCES

Arkhipov, A. P., Kolomin, E. V. (2018). On the demand for insurance in society. *Insurance business,* 2, 32-37.

Belozerov, S.A. (2014). Testing the Russian insurance market for the presence of convergence. *Economy of Region*, *3*, 198-208.

Bostian, A., Heinzel, C. (2018). Comparative precautionary saving and recursive utility. *Geneva Risk Insurance Review,43*, 95–114.

Burkov, V.N., Zalozhnev, A.Yu., Kulik, O.S., and Novikov, D.A. (2011). Insurance Mechanisms in Socio-economic Systems, Moscow: IPU RAS.

Bushueva, M.A., Masyuk, N.N., and Vasyukova L.K. (2017). Conflict-compromise methodology as an organizational innovation in strategic and financial management, *Azimuth of Scientific Research: Economics and Administration*, 6, 3(20), 254-258.

Commons, J. R. (2012). Institutional Economics, TERRA ECONOMICUS, 3, 69–76.

Dickinson, G. M. (1998). The economic role of the insurance sector in the risk transfer-capital market nexus. *The Geneva Papers on Risk and Insurance – Issues and Practice*, 23-4, 519–529.

Doherty, N. A. (2000). Integrated Risk Management. New York: McGraw-Hill.

Ferranna, M. (2017). Does Inefficient Risk Sharing Increase Public Self-Protection?. *The Geneva Risk and Insurance Review,42-1*, 59–85.

Forecast of the development of the insurance market in 2018: the lack of drivers. Retrieved 09 July 2018 from: www.raexpert.ru/researches/insurance.

Kanreuther, H & A. (2015). The Geneva Papers on Risk and Insurance. *Issues and Practice, 40-4*, 741-762.

Korezin, A.S. (2009). The problem of forming the quality criteria for an insurance product (service) in the context of the characteristics of the marine insurance market. *Journal of the University of Water Communications, 3*, 96–111.

Krawczyk, M. W., Trautmann, S. T., Kuilen, G. W. (2017). Catastrophic risk: social influences on insurance decisions. *Theory and Decision*, 82-3, 309–326.

Larionov, A.V. (2018). The Role of the Bank of Russia in the Risk Management of Insurance Companies. *Finance and Credit*, 3, 679-690.

Mack, T. (2005). *Mathematics of risk insurance*. Moscow:Olimp-Business.

Masyuk, N.N., Vasyukova, L.K., Bushueva, M.A., Mosolova N.A. and Kozminykh, O.V. (2016), Conflict-Compromise Methodology for Resolution of Conflict in Insurance Relations, *The Social Sciences*, 11: 6928-6932. DOI: 10.3923/sscience.2016.6928.6932.

Masyuk, N.N., Bushueva, M.A., Vasyukova, L.K., Mosolova N.A. (2018). Innovative Managerial Decisions: Towards a Conflict-Compromise Approach. 32nd IBIMA Conference: 15-16 November, Seville, Spain.

On withdrawing insurance and reinsurance licenses: press release. Retrieved from: www.cbr.ru/press.

Overview of key performance indicators of insurers for the III quarter of 2017. Retrieved from: www.cbr.ru/finmarket.

Pelsser, A., Schweizer, J. (2016). The difference between LSMC and replicating portfolio on insurance liability modeling. *European Actuarial Journal*, 6, - 2, 441–494.

Review of key performance indicators of insurers in 2016. Retrieved 04 January 2018 from: www.cbr.ru/finmarket.

Sokolovska O. (2017). Trade credit insurance and asymmetric information problem. *Scientific Annals of Economics and Business*, 64-1, 123-137.

Spletukhov, Yu. A. (2017). Insurance markets of the EAEU member states: current status and efficiency. *Financial Journal*, 2, 105–114.

Statistical indicators and information on individual subjects of the insurance business. Retrieved from: www.cbr.ru.

Surminski, S., Hudson, P. (2017). Investigating the Risk Reduction Potential of Disaster Insurance Across Europe. *The Geneva Papers on Risk and Insurance - Issues and Practice*,*42-2*, 247–274.

Tennyson, S. (2011). Consumers' Insurance Literacy: Evidence from Survey Data. *Financial Services Review, 20 (3),* 165–179.

The number of complaints against non-credit financial institutions decreased slightly in the third quarter: press release. Retrieved from: www.cbr.ru/press/event/?id=793.

The number and composition of the population of the Russian Federation. Retrieved from: www.gks.ru.

Vasyukova, L. K., Ostanin, V. A. (2012). *Investments as a form of realization of the insurance preventive function,* Novosibirsk: LLC Agency SIBPRINT.

WEF Davos 2018: Creating a shared future in a fractured world. How tech-driven insurance can help speed up resilience (2019). Swiss Re. Sigma URL: https://www.swissre.com/our-business/public-sector-solutions/contributing-to-the-global-debate/wef-2018-tech-driven-insurance.html

World insurance in 2017: solid, but mature life markets weigh on growth. *Swiss Re Institute*. *Sigma*,3. 2018.

Xiao, J.J. & Porto, N. (2018). Financial education and insurance. *The Geneva Papers on Risk and Insurance – Issues and Practice.* Retrieved from https://doi.org/10.1057/s41288-018-0108-1.

Yuldashev, R. T., Nebolsina, E. V. (2018). Global risks in 2018 and perspectives of their management. *Insurance business*, *2*, 3-12.