# Tortious risk in the system of insurance relations in the Russian Federation

Maksim Dendiberya1\* and Olga Tishutina1

<sup>1</sup>Khabarovsk State University of Economics and Law, 134, Tikhookeanskaya Str., office 324, Khabarovsk, Russia, 680042

**Abstract.** The paper deals with the problem of the realisation of tort risks in the system of insurance relations. At the same time, the object of consideration is a part of the tort risk of the underwriter, which is a consequence of the implementation of unfair economic and insurance practises. The purpose of the conducted research is to prove the necessity of managing tort risk in insurance to achieve the balance of economic (insurance) relations system between the insurant and the underwriter, which stipulates the performance of the risk and compensation insurance function. To achieve the purpose of the study, two key methods of scientific research are used, namely the method of analysis, which is used to study the impact of tort risk on the system of insurance relations, and the method of synthesis, which will assess key problems of managing its manifestations. The study has resulted in the substantiation of the need to accept tort risk as a risk that is an integral part of the risk management system of the insurance organisation; development of basic proposals in the direction of improving the current tort risk management system, both at the stage of its identification and at the stage of settlement of losses (the stage of realisation of the economic nature of tort risk in insurance). The study conducted has established the fact that the management of tort risk in insurance harmonizes the system of insurance relations, ensuring the implementation of the key principle of equivalence of obligations of the parties, making it possible to achieve a balanced insurance fund. Thus, the integration of tort risk into the general risk management system of the insurance organization allows us to increase both the profitability of insurance operations and the attractiveness of a non-material insurance product for the insured. Key words: Tort risk in insurance, insurance fraud, money laundering, underwriting, claims handling

#### 1 Introduction

The system of insurance relations is based on the key principle of the organisation of insurance activity, namely the principle of compensation for the damage caused to the personal and property interests of natural and legal persons. (Pu-zanova, Z., & Trifonova, M. (2021)), who transfer risks in favour of the insurer through the transfer of a separate part of their funds. (Ling, T., Fan, L., & Ying-fang, X. (2012)). Consequently, we can conclude that

<sup>\*</sup>Corresponding author: tishutina.olga@yandex.ru

insurance has only a compensatory function, without the possibility of enrichment (illicit enrichment) of both the subjects of insurance relations and any third parties. However, like any other system of economic relations, insurance is subject to antagonistic persons who seek to realise their unlawful interests and intentions by means of insurance. The realization of these intentions in the system of insurance relations is represented by the tort risk in insurance, which should be understood as the probability of adverse events in the form of material damage to the insurance company, its customers, as well as the state as a result of wrongful acts or omissions of insurers, policyholders and other actors involved in the insurance system (Spurr, S. J. (2021), Gomez, F., & Penalva, J. (2015)).

## 2 Main part

In order to describe the structure of tort risk of an insurance organisation, it is first of all necessary to understand that insurance activity is of a multi-planning nature, which is explained by the following reasons:

- 1) The sectoral approach to the organisation of insurance relations, which is expressed in the fact that an insurance company can carry out both personal insurance and property insurance (including liability insurance), combining their various types as much as possible, which forms a very different structure of the risk load from tort exposure;
- 2) The necessity of investment activity, as a way to achieve a balance between the formed insurance fund and obligations of insurance payments, on the one hand, and as a separate type of economic activity related to the implementation of endowment or investment insurance, on the other hand;
- 3) The objective necessity of participation of the insurer as a financial institution in measures related to organization of counteraction to manifestations of tort risks as part of the system of economic (financial) national security implemented by control and supervisory authorities, for example, the Central Bank of the Russian Federation and Rosfinmonitoring.

The general classification system of tort risk implementation in insurance in terms of the nature of risk impact on the established system of economic relations can be represented as follows:

- (1) Fraud related to the business activities of the insurer;
- (2) Insurance fraud (Aslam, F., Hunjra, A. I., Ftiti, Z., Louhichi, W., & Shams, T. (2022));
- (3) Taxation offences;
- (4) Malfeasance by employees of an insurance organisation;
- 5) Money laundering (including the use of information technology to sell electronic insurance policies) (Nizotsev Y.Y., Parfylo O.A., Barabash O.O., Kyrenko S.G. and Smetanina N.V. (2021)).

The lack of tort risks management in insurance, as well as ignoring the mentioned risk, as part of the risk of insurance management system, entails the violation of two basic economic principles in insurance: the principle of equivalence, which is realized by achieving economic equality between the incoming financial flows, generated by net insurance premium, paid by policyholders and directed to the formation of the insurance fund and outgoing flows of the insurers associated with the execution, accepted by the insurer. This fact is due to the fact that an effective system of risk management can be established only if it is fully diversified, taking into account all possible manifestations of risk events. (Ostrowska, M., & Mazur, S. (2015))

A violation of the equivalence principle as a result of realisation of the tort risk is primarily caused by the fact of destabilisation of the tariff rate structure, which in the framework of modern calculation methods does not take into account the possible loss deviations arising as a result of unlawful acts. On the back of this there is a violation of the normal distribution law describing the occurrence of insured events and the loss ratio value

ceases to be stable, as a result of which the actual loss ratio value dominates over the calculated one. As a result, there is an imbalance in the insurance fund and the need to supplement it from the insurer's own funds.

At the same time, violation of the principle of the highest confidence of the parties (the "uberimae fidei" principle) in case of failure to manage the tort risk in insurance allows on the one hand to abuse the right to receive the insurance payment (insurance fraud), to use the insurance contract and the insurance company for illegal operations (money laundering), while on the other hand allows the insurer to abuse the right to assess the insurance risk, and not to ensure the preservation of the insurance fund from its own resources.

Ignoring these principles disturbs the balance of financial and economic system of insurance relations, creating prerequisites for bankruptcy and liquidation of the insurance company, which adversely affects the risk-protection of its clients. Thus, ignoring tort risk as a part of risk inherent in activity of insurance organization led to increase of total amount of illegal operations in economy during the period from 2015 to 2022 (Table 1).

According to the data of Table 1, it can be seen that the volume of tort load on the insurance organization for the specified period is characterized by positive dynamics of decrease of negative characteristic of exposure of antagonistic elements. However, at the same time, the estimated value of the indicator remains at a sufficiently high level (including the increase in the indicator of tort risk in insurance in 2021), which in turn indicates the activation of these elements.

Year	Quantification of detected illegal operations
2015	1 101
2016	721
2017	422
2018	249
2019	162
2020	131
2021	162

**Table 1.** Statistics on the quantification of tort risk realisation in insurance, RUB bn.

Confirmation of the attractiveness of the national insurance market for delinquent actions is also confirmed by an increase in the quantitative assessment of the underwriter's investment potential (Table 2).

Year	Number of insurance companies, units	Estimated value of investment potential, RUB bn.
2017	226	1 028
2018	231	1 190.48
2019	198	1 189.04
2020	177	1 239.04
2021	170	1 455 76

 Table 2. Statistics to quantify the investment potential of Russian underwriters.

Table 2 shows that there has been a significant decline in the total number of insurers over the period from 2017 to 2021, against the background of an increase in their investment potential. In this connection, we can conclude that the tort tortfeasors are characterised by:

- 1) narrowing of the field of choice of the subject of tort exposure (implementation of tort risk), explained by a decrease in the number of insurance companies;
- 2) increase of attention to insurance segment, which shows considerable growth of investment potential (first of all, due to increase of insurance rates);

3) formation of a stable tendency of acceptance of tort risk in insurance, as one of the factors negatively affecting the insurer's investment potential, and consequently, the risk-protection of insured.

In view of the present trend to restore the growth of indicators of quantitative assessment of illegal transactions, which indirectly represent the realization of tort risk in the system of insurance relations, on the background of the concentration of attention of tortfeasors on insurers (in conditions of increasing volumes of resources available to them) tort risk should certainly be part of the elements of risk management. In this case, particular attention should be paid to its identification process at the stage of insurance contract, and also loss adjustment, which in turn makes it possible to determine the propensity of the insurer for this or that type of risk (Luciano, E., & Rochet, J. C. (2022)).

When considering the stage of insurance contracting, the first thing that must be mentioned is the need to carry out underwriting of tort risk in insurance. By its nature, the underwriting process is a process of assessing the risks associated with the object of insurance in order to determine the amount of the insurance rate.

In tort risk management, the completeness and reliability of current underwriting procedures should be evaluated, and the possibility of using methods and techniques of risk assessment that do not meet the current requirements of supervisory authorities should be excluded, the use of which, on the one hand, may generate an unbalanced insurance fund that does not provide all the previously assumed insurance obligations, while on the other hand, will not allow for adequate assessment of the sum insured, which may lead to an overstatement of the actual insurance premium.

It should be noted that achieving the key objective of underwriting of tort risk in insurance, it is possible to achieve only in the conditions of pre-contractual analysis procedure implementation, based on an integrated accounting system as the facts of economic life of the insured, and the facts of quantitative assessment of the associated financial (cash) flows functioning in the local systems, associated with these persons, which actually reduces the underwriter activity to profiling the personal parameters of the person interested in insuring.

In the conditions of profiling, as a key element of the process of underwriting tort underwriting risk in insurance, the organization of information deserves special attention, allowing timely and accurately make up a profile of the insurance tortfeasor. However, at the same time, the significant problem of information profiling organization in the process of underwriting, is the problem of limited access to resources that contain the information necessary to conduct qualitative and quantitative assessment of the risk of tort at the stage of the insurance contract.

This fact is due to the fact that the exchange of information databases of insurance companies is virtually non-existent (which on the one hand is associated with restrictions on the secrecy of insurance, while on the other hand is an instrument of competition, when the information may be used by insurance company competitors to expand the existing insurance field).

Thus, we can conclude that underwriting of tort risk is one of the key areas of risk assessment in the insurance business. It is the efficiency and quality of the analysis (the quality of profiling of the possible tortfeasor) that determines the likelihood of tort exposure to the insurer and its potential involvement in the implementation (concealment) of illegal activities. It should be noted that the best result from the profiling procedure can be achieved only when using special algorithms used by information complexes for predicting the probability of committing fraudulent activities, for example, by a subject (Severino, M. K., & Peng, Y. (2021)).

Along with the process of underwriting the tort risk, the key place among the processes that are closely connected with the system of risk-management of the insurer is the process

of loss adjustment. Determining the significance of the presented process in order to influence the tort risk, the following aspects should be highlighted:

- 1) the process of loss adjustment provides the formation of a positive financial result;
- 2) the process of loss adjustment is a factor that ensures the competitiveness of an insurance organization;
- 3) the process of loss adjustment is one of the main processes aimed at prevention of realization of tort risk in insurance.

Proceeding from the main aspects of the theory of insurance, the process of loss adjustment should be understood as a set of procedures aimed at assessment of circumstances of occurrence of insured event, determination of its compliance to the terms of insurance contract, with the subsequent determination of damages in order to perform the previously assumed insurance obligations. Based on the definition of the concept of loss adjustment process, as well as the importance of this stage in the activities of the insurer, we can conclude that the content of the loss adjustment process in the system of tort risk analysis in insurance is primarily the following:

- 1) Analysis of the impact of the tortfeasor's actions on the financial performance of the insurance company (changes in loss ratio, financial stability, solvency and income (profit) of the insurer);
- 2) Analysis of circumstances affecting competitiveness of the insurance company (for development of recommendations on exclusion of the wrongdoer from the system of insurance relations);
- 3) Analysis of correspondence of parameters of the insured event to parameters of the insurance contract (with regard to correspondence of essential terms of the insurance contract to the real facts (events) and their characteristics which are an integral part of the insured event);
- 4) Analysis of compliance with the parameters of fulfilment of previously assumed insurance obligations in order to minimise the tort impact and reduce the amount of overhead and legal expenses resulting from an overly conservative policy of tort risk management in insurance.

In the context of minimising the tort component, the main focus of the loss adjustment process should be:

- 1) Analysis of the subject composition of the insurance contract (in these conditions, it is necessary to determine the appropriateness of the property interests to be secured and protected, as well as to carry out a personal analysis of the person who appeared as the claimant under the insurance contract);
- 2) Analysis of the party of insurance indemnity recipient (as part of it is being analyzed information on the insurance indemnity recipient in order to determine: compliance of the claimed party to the terms of the insurance contract; determination of the person as related (presence of signs of affiliation or status compliance beneficiary), that may be a sign of possible tort action, connected with falsification of insurance case, made for legalization (laundering) of illegally gained income);
- 3) Analysis of the circumstances of the insured event in order to determine the following: temporal characteristics (terms of the insurance contract); risk characteristics (nature of the insured event, reason for occurrence of the risk event, as well as existence of a causal connection between the actions of the subject of the insurance contract and occurrence of the insured event (assessment of the possible status of the wrongdoer); assessment of the compliance of the damaged property (the event occurred) with the characteristics established by the insurance contract.

In the conditions of implementation of a complex policy of reduction of the level of noncontractual risk at the stage of settlement of losses the insurer is obliged to accept the application on occurrence of the insured event in due time and in due time to assess compliance of circumstances presented in it, to formulate its own conclusions based on the expert evaluation of all the facts of occurrence of the insured event (and if there are strong reasons in validity of presented arguments, to involve the third parties into the process of settlement of losses).

### 3 Conclusion

The final loss adjustment procedure should be a post-event analysis process. In the context of tort risk management in insurance, as well as in the analysis of the consequences of its manifestation, a special place, similarly to the underwriting process, should be given to information support in the system presented. Thus, due to the underwriting procedures performed earlier, as well as due to the post-event analysis procedure, the insurance company can obtain the following information:

- 1) The subjects of the insurance contract involved in the implementation of the risk of tort, as well as potential tortfeasors (whose actions had the characteristics of wrongdoing);
- 2) The nature and specificity of tort impact in the system of insurance relations and peculiarities of its implementation in relation to particular types of insurance;
- 3) Methods, methods and tools of their identification and suppression of tortious actions against a particular insurer;
- 4) The impact of tort risk in insurance on the efficiency of the insurance company (its financial and economic efficiency indicators);
- 5) The effectiveness of the implemented underwriting, risk management and loss adjustment policies;
- 6) The efficiency of the organisation of the insurer's tort risk compliance system (in particular, the efficiency of the internal control service of the insurance company);
- 7) Concentration of tort risk in certain areas of insurance activities (which in turn may require adjustment of the current strategy of tort risk management in insurance, application of other management concepts, as well as methods, methods of identification and suppression of the actions of tortfeasors (potential tortfeasors).

In accordance with the conducted analysis, we can conclude about the importance of underwriting and loss adjustment processes in minimizing the impact of tort risk in insurance. In this case, the efficiency of these processes depends directly on the structure and quality of the procedures that are their basic structural elements. In turn, implementation of these procedures is impossible without organisation of high-quality information support that allows timely and reliable assessment of all facts concerning both characteristics of the subject of the insurance contract (insurant, underwriter, or beneficiary), his property (property interests) and the circumstances of the insurance event, which undoubtedly affects the effectiveness of identification and prevention of tortious activities.

## References

- 1. Z. Puzanova, M. Trifonova, The role of insurance in the social-economic system (2021) https://doi.org/10.22363/2313-2272-2020-20-4-877-888
- 2. T. Ling, L. Fan, X. Yingfang, Systems Engineering Procedia 4, 46-53 (2012)
- 3. S.J. Spurr, International Review of Law and Economics **67**, 106002 (2021) https://doi.org/10.1016/j.irle.2021.106002
- 4. F. Gomez, J. Penalva, International Review of Law and Economics 43, 83-97 (2015) https://doi.org/10.1016/j.irle.2015.04.005

- 5. F. Aslam, A.I. Hunjra, Z. Ftiti et al, Research in International Business and Finance **62**, 101744 (2022) https://doi.org/10.1016/j.ribaf.2022.101744
- 6. Y.Y. Nizovtsev, O.A. Parfylo, O.O. Barabash et al, Journal of Money Laundering Control (2021) https://doi.org/10.1108/JMLC-02-2021-0015
- 7. M. Ostrowska, S. Mazur, Procedia economics and finance **23**, 615-621 (2015) https://doi.org/10.1016/S2212-5671(15)00370-6
- 8. E. Luciano, J.C. Rochet, Journal of Economic Dynamics and Control **144**, 104543 (2022) https://doi.org/10.1016/j.jedc.2022.104543
- 9. F. Vandervorst, W. Verbeke, T. Verdonck, Decision Support Systems **159**, 113798 (2022) https://doi.org/10.1016/j.dss.2022.113798
- 10. M.K. Severino, Y. Peng, Machine Learning with Applications **5**, 100074 (2021) https://doi.org/10.1016/j.mlwa.2021.100074