

ASSESSING THE INVESTMENT POTENTIAL OF AN INSURANCE ORGANIZATION (AS EXEMPLIFIED BY TRANSPORT INSURANCE TYPES)

AVALIAÇÃO DO POTENCIAL DE INVESTIMENTO DE UMA ORGANIZAÇÃO DE SEGUROS: UM ESTUDO DE CASO DOS TIPOS DE SEGURO DE TRANSPORTE

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ABSTRACT

Objective: This study aims to assess the investment potential of insurance organizations, particularly those offering transport insurance, by defining investment potential and exploring its formation and distribution within the sector.

Methods: A qualitative method is employed, incorporating a subject-oriented approach to analyze the investment potential of insurance organizations. This includes reviewing existing definitions, examining regulatory impacts, and developing a method for distributing investment potential based on insurance organization data. The study primarily uses data from the Russian insurance sector.

Results: Findings reveal significant challenges in the Russian insurance market, such as poor development and management inefficiencies. Despite these issues, the study identifies strategies for optimizing the investment potential through effective management of insurance funds and reserves, which are critical for sustaining financial stability and fulfilling obligations towards policyholders.

Conclusion: The research concludes that enhancing the investment potential of insurance organizations requires a combination of strategic fund management and adherence to regulatory standards, which would facilitate more effective utilization of resources and support the overall growth and stability of the insurance sector.

Keywords: Insurance. Investment potential. Indicators for assessing investment potential. Insurance fund, Insurance reserves.

RESUMO

Objetivo: Este estudo visa avaliar o potencial de investimento das organizações de seguros, particularmente aquelas que oferecem seguros de transporte, definindo o potencial de investimento e explorando sua formação e distribuição dentro do setor.

Métodos: Um método qualitativo é empregado, incorporando uma abordagem orientada ao sujeito para analisar o potencial de investimento das organizações de seguros. Isso inclui revisar definições existentes, examinar impactos regulatórios e desenvolver um método para distribuir o potencial de investimento com base em dados da organização de seguros. O estudo utiliza principalmente dados do setor de seguros russo.

Resultados: Os resultados revelam desafios significativos no mercado de seguros russo, como desenvolvimento pobre e ineficiências de gestão. Apesar desses problemas, o estudo identifica estratégias para otimizar o potencial de investimento por meio de uma gestão estratégica de fundos e reservas, que são críticos para sustentar a estabilidade financeira e cumprir as obrigações com os segurados.

Conclusão: A pesquisa conclui que aprimorar o potencial de investimento das organizações de seguros requer uma combinação de gestão estratégica de fundos e aderência aos padrões regulatórios, o que facilitaria uma utilização mais eficaz dos recursos e apoiaria o crescimento e estabilidade geral do setor de seguros.

Palavras-chave: Seguro, Potencial de investimento, Seguro de transporte, Gestão de fundos, Impacto regulatório.

INTRODUCTION

Being an economic category, insurance is a sphere of economic relations that protects the property interests of policyholders associated with their protection from damage (Puzanova & Trifonova, 2021). The core of insurance relations includes insurance risk which is transferred to the responsibility of the insurer due to its remunerative nature (Ling et al., 2012). In the national economy, the insurer can sell more than 24 types of insurance. Transport insurance types include:

- 1) Land transport insurance (except for railway);
- 2) Air transport insurance;
- 3) Railway transport insurance;
- 4) Water transport insurance.

By forming a system of insurance relations for transport insurance types, an insurance company is aware of the fact that the cost of accepting risk for various objects of the transport system should not correspond to potential damage (loss), which can be explained by no expediency of concluding an insurance contract for the second party of the transport owner (a possible loss will be equal to the amount of payment, which makes it pointless to transfer the risk to the insurer). However, an insurance organization accepts this risk and understands that to fulfill its obligations it needs:

- 1) To exclude other persons who are not parties to the insurance contract from the formation and use of the insurance fund (the principle of closed distribution of damages) (Gomez & Penalva, 2015; Spurr, 2021);

- 2) To ensure the possibility of making an insurance payment with the participation of all policyholders in the insurer's insurance portfolio (the principle of joint and several liability);

- 3) To effectively (in terms of ensuring safety and a given level of profitability) place free internal resources, as well as insurance funds (insurance reserve), to ensure their capitalization and prevent depreciation under the influence of inflationary processes.

Due to the underdeveloped insurance system in the Russian Federation (Khoruzhy et al., 2022; Sokolova et al., 2022; Vilkov et al., 2021), there is a negative trend of economic neglect of insurance relations. This is expressed in the evasion of individuals and legal entities from concluding an insurance contract (net retained risks) (Sapfirova et al., 2022), as well as the purposeful withdrawal of financial resources to concentrate them in federal centers and finance individual investment projects and programs, given that the regional needs are neglected (Lyshchikova et al., 2020) (in the absence of detailed legislative regulation of the

insurer's investment activity in an insurance company). In the context of organizing transport insurance, it negatively affects the investment potential of the insurance organization that has received a license to issue these insurance types (Ilkevich et al., 2022; Vilkov et al., 2023).

Emphasizing the need to organize the insurer's investment activities, it is necessary to formulate the concept of the investment potential of an insurance organization. While analyzing the existing definitions of investment potential from a critical viewpoint and summarizing the existing theoretical knowledge about the main aspects of its formation, we can conclude that the investment potential of an insurance organization should be understood as the maximum valuation of the resource base of an economic entity that is available (unencumbered) to carry out investment activities under the current legislative and economic restrictions to implement investment projects to achieve social and economic results (Lednitsky et al., 2018; Vinnikova et al., 2018).

This definition expands the approach to determining the resource base as the main source of investment potential with due regard to the organizational, legal, and economic features of an economic entity, as well as the main goals of its investment activity. As noted earlier, the investment potential (its content) should be assessed based on the specifics of the organization's activities and specific types of insurance.

Thus, the investment potential of an insurance organization is a combination of the insurance organization's own and borrowed funds (which identifies the concepts of investment potential and financial potential). In our opinion, it violates the logical "part vs. whole" relationship (where investment potential is part of financial potential). Given the foregoing, we can conclude that the formation of the investment potential of an insurance organization depends on the creation of an effective risk management system, which will allow the insurer's risks to be diversified to the maximum extent (Ostrowska & Mazur, 2015).

In general insurance practice, the investment potential of an insurance organization consists of three main elements:

- 1) The insurance company's funds unencumbered with obligations to ensure the fulfillment of insurance payments in cash or in kind in accordance with the current legal requirements;
- 2) The amount of insurance reserves unencumbered by the order of movement for the fulfillment of insurance obligations in the context of current loss settlement processes;
- 3) Borrowed capital which can be recognized as a source of investment potential if the expected return exceeds the fee for using capital.

In the Russian Federation, the formation of the investment potential of an insurance organization is regulated by Bank of Russia Regulation No. 710-P of January 10, 2020 “On certain requirements for insurers’ financial stability and solvency” (Bank of Russia, 2020). Under this document, the insurer has the following areas of investment activity: shares and unit investment trusts; shares, goods, as well as shares and equity units of foreign investment funds; shares of a Russian or foreign issuer in whose authorized capital the insurance organization’s share of participation exceeds 10%; shares of a Russian or foreign issuer that is the main one in relation to a particular insurance organization; shares and other forms of participation in the authorized capital of legal entities that are not joint-stock companies (shares and other forms of participation in the authorized capital of foreign companies); investment units of interval mutual investment funds; investment units of closed-end mutual investment funds; bonds; guarantees; subordinated deposits, loans; mortgage participation certificates; bills; and other rights of claim.

When analyzing the issues of forming and using the investment potential of insurance companies in the Russian Federation, it is first necessary to consider the statistics of forming and distributing generated financial resources as investments with due regard to the regional aspect for the period from 2017 to 2021 (Table 1).

Table 1. Statistics of quantitative assessment of tort risk in insurance, billion rubles

| Year | The number of insurance companies | Estimated value of the insurance potential, billion rubles |
|------|-----------------------------------|--|
| 2017 | 226 | 1,028 |
| 2018 | 231 | 1,190.48 |
| 2019 | 198 | 1,189.04 |
| 2020 | 177 | 1,239.04 |
| 2021 | 170 | 1,455.76 |

According to Table 1, a negative downward trend has formed in the total number of insurance companies (56 insurance companies (-24.8%) left the insurance market over five years). The overall estimated value of the investment potential for the same period increased by 427.76 billion rubles (+41.6%). This can be explained by the fact that, in parallel with the reduction in the total number of insurance companies, there was an increase in the average value of the gross rate by 52% (with an increase in the load by 10.4%). Thus, Russian insurance companies have significant investment potential which, given the current conditions, has a steady tendency to increase (Mityakov et al., 2023). These conclusions are also confirmed by an increase in the total number of vehicles and the intensified use of certain types of transport (for example, railway transport insurance increases together with the development of transport systems and growth of cargo transportation volumes).

According to the subject-oriented approach, a negative factor that aggravates the uneven distribution and use of the investment potential of insurance companies is the lack of proportional distribution of available financial resources established in accordance with the law, which is explained by a legal unsettlement in the form of a legal gap that arose after the abolition of “Rules for the placement of insurance reserves” (Ministry of Finance of the Russian Federation, 2005a), as well as the Order “On approval of the requirements for covering the insurer’s own funds” (Ministry of Finance of the Russian Federation, 2005b).

A distinctive feature of the investment activities of Russian insurers is the fact that the investment potential of national insurance companies includes the following components: the insurer’s own funds, funds from insurance reserves, and borrowed funds (Kiseleva et al., 2023; Nabokikh & Ryattel, 2023). Considering the structure of insurance reserves, the following reserves are mandatory to accounting from the viewpoint of view of determining investment potential: unearned premium reserve (UPR); loss reserve (LR), including the reserve of reported but not settled losses (RBNS) and the reserve of incurred but not reported losses (IBNR).

The study aims to develop a method for assessing the investment potential of insurance organizations selling transport insurance.

METHODS

Considering the study objective, we adjusted the existing mechanism for using the investment potential of insurance companies with due regard to the introduction of a mandatory standard for securing funds in a constituent entity of the Russian Federation. For these purposes, a basic formula was introduced for calculating the investment potential of an insurance organization:

$$Inv_p = IAAL * \frac{\delta OF + \delta IR + \delta BF}{\Sigma A_{inv.} + \delta L_{inv.}} \quad (1)$$

where Inv_p is the investment potential of an insurance organization;

$IAAL$ is the sum of assets and liabilities that support insurance activities;

δOF is own funds of the insurance organization used in its investment activities;

δIR is insurance reserves of the insurance organization used in its investment activities;

δBF is borrowed funds of the insurance organization used in its investment activities;

$\Sigma A_{inv.}$ is the maximum total valuation of the assets of the insurance organization which can be used in investment activities;

$\delta L_{inv.}$ is the valuation of the organization's liabilities, providing the opportunity to invest borrowed funds of the insurance organization.

The adjustment factor determining the minimum standard amount of funds allocated for the implementation of investment projects and programs was determined based on the following considerations:

$$d_1 = \frac{\sum P_{gross}}{\sum P_{total}} \quad (2)$$

where d_1 is the first element of the correction factor (participation coefficient);
 $\sum P_{gross}$ is the gross amount of insurance premium collected in the region;
 $\sum P_{total}$ is the gross amount of insurance premium collected in all constituent entities.

$$d_2 = \frac{UPR_{reg.} + RBNS_{reg.} + IBNR_{reg.}}{UPR_{total} + RBNS_{total} + IBNR_{total}} \quad (3)$$

where d_2 is the second element of the correction factor.

Wherein:

$$1) UPR_{reg.} = BIP_{reg.} * C_{cor.} \quad (4)$$

where $UPR_{reg.}$ is the regional reserve of unearned bonuses;

$BIP_{reg.}$ is the basic insurance premium;

$C_{cor.}$ is the correction coefficient.

$$BIP_{reg.} = P_{gross} - CM_{reg.} - RPM_{reg.} - E_{oth.} \quad (5)$$

where $CM_{reg.}$ is the commission paid in the territory of the constituent entity;

$RPM_{reg.}$ is a reserve of preventive measures formed to prevent (minimize) the consequences of risks in the constituent entity;

$E_{oth.}$ is other expenses of the insurer due to the current system of legal regulation of the constituent entity.

$$2) IBNR_{reg.} = \max(0.1 * EP_i); (1.03 * BNR) \quad (6)$$

where $IBNR_{reg.}$ is the reserve for losses incurred but not reported in the territory of the constituent entity;

EP_i is the annual value of the earned insurance premium in the territory of the constituent entity;

BNR is the forecast value of losses incurred but not reported in the territory of the constituent entity.

$$3) RBNS_{reg.} = 1.03 (DL + IP_{ret.}) \quad (7)$$

where $RBNS_{reg.}$ is the reserve for reported but not settled losses;

DL is the regional losses reported in the territory of the constituent entity;

$IP_{ret.}$ is the insurance premium returned under early terminated insurance contracts previously concluded in the territory of the constituent entity.

$$d_3 = \frac{\sum BF_{reg.}}{\sum BF_{total}} \quad (8)$$

where d_3 is the third element of the correction factor;

$\sum BF_{reg.}$ is the amount of borrowed funds of the insurance company formed at the expense of the constituent entity;

$\sum BF_{total}$ is the total volume of borrowed funds generated by the insurance organization.

The correction coefficient for the distribution of the investment potential of the insurance company will take the following form:

$$C_{cor.} = \frac{d_1 + d_2 + d_3}{3} \quad (9)$$

where $C_{cor.}$ is the correction coefficient for the distribution of the investment potential of the insurance company.

The enrollment standard equivalent to the funds that make up the investment potential of the insurance organization into the economy of the constituent entity can be presented in the following manner:

$$S_{fin.} = INV_p \cdot C_{cor.} \quad (10)$$

where $S_{fin.}$ is the enrollment standard equivalent to the funds that make up the investment potential of the insurance organization.

RESULTS

To test the proposed method of territorial distribution of the investment potential of insurance organizations, we carried out an assessment based on the theoretical data presented in Table 2.

Table 2. Initial data for implementing the method of territorial distribution of investment potential

| Indicator name | Value, thousand rubles |
|---------------------|------------------------|
| IAAL | 686,853 |
| δOF | 34,964 |
| δIR | 283,254 |
| δBF | 24,772 |
| $\Sigma A_{inv.}$ | 506,541 |
| $\delta L_{inv.}$ | 42,942 |
| ΣP_{gross} | 21,298 |
| ΣP_{total} | 390,740 |
| UPR_{total} | 198,950 |
| $RBNS_{total}$ | 210,720 |
| $IBNR_{total}$ | 170,848 |
| $CM_{reg.}$ | 3,758 |
| $RPM_{reg.}$ | 478 |
| $E_{oth.}$ | 0 |
| $C_{cor.}$ | 0.75 |
| EP | 15,548 |
| BNR | 6,790 |
| DL | 6,275 |
| $IP_{ret.}$ | 976 |
| $\Sigma BF_{reg.}$ | 1,250 |
| ΣBF_{total} | 256,747 |

We assessed the volume of potential investment in the economy of the constituent entity on the part of the insurance company, subject to the use of the indicator “the enrollment standard equivalent to the funds that make up the investment potential of the insurance organization” (Table 3).

Table 3. Estimation of the volume of potential investments

| Indicator | Calculation | Value, thousand rubles |
|---------------|--|------------------------|
| Inv_p | $686,853 * \frac{34,964+283,254+24,772}{506,541+42,942}$ | 428,737 |
| d_1 | $\frac{21,298}{390,740}$ | 0.05 |
| $BIP_{reg.}$ | $21,298-3,758-478$ | 17,062 |
| $UPR_{reg.}$ | $17,062*0.75$ | 12,796.5 |
| $IBNR_{reg.}$ | $\max (1,555; 6,994)$ | 6,994 |
| $RBNS_{reg.}$ | $1.03*(6,275+976)$ | 7,469 |
| d_2 | $\frac{12,796.5 + 6,994 + 7,469}{198,950 + 210,720 + 170,848}$ | 0.05 |

| | | |
|------------|---------------------------------|--------|
| d_3 | $\frac{1,250}{256,747}$ | 0.005 |
| $C_{cor.}$ | $\frac{0.05 + 0.05 + 0.005}{3}$ | 0.035 |
| $S_{fin.}$ | $428,737 * 0.035$ | 15,005 |

As a result of testing the proposed method, it was established that the economy of a constituent entity can receive income in the amount of up to 9,305 thousand rubles as additional investments from insurance companies (whose license includes transport insurance types). Since we used an example of an average insurance organization that is not the flagship of the insurance market, it is possible to apply the proposed method of rationing the distribution of the investment potential of an insurance organization among the constituent entities of the Russian Federation. The total financial result for this region will be expressed in additional investments from national insurers with an estimated value of up to 502,470 thousand rubles annually. This result can be achieved only if the tort component represented by insurance fraud (Vandervorst et al., 2022) and negatively affecting the investment potential of the insurer is excluded, as well as quality policies related to the assessment of insurance risk (underwriting policies) (Luciano & Rochet, 2022).

CONCLUSIONS

The disproportionate development of the Russian regions is one of the pressing problems of the national economy, especially manifesting itself during crises. Today, the insurance institution in the Russian Federation is assessed as underdeveloped, and its management is regarded as extremely ineffective. Insurance companies ignore public interests in favor of generating an increased rate of net gross premium to the detriment of their clients and form irrational trends in the use of available investment resources aimed at satisfying subjective interests. The result is the outflow of financial resources from Russian regions and their excessive concentration in the federal centers, as well as the focus of activities on specific insurance types. In the case of transport insurance types, it could be a point of investment growth.

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