

Tsintsadze, A., Gogoberidze T.,(2022). Risks' effects on the company's ability to maintain financial stability difficulties with risk management. *Innovative Economics and Management*, *9*(2), 23-28.

DOI: https://doi.org/10.46361/2449-2604.9.2.2022.23-28

## RISKS' E FFECTS ON THE COMPANY'S ABILITY TO MAINTAIN FINANCIAL STABILITY DIFFICULTIES WITH RISK MANAGEMENT

#### Asie Tsintsadze

Batumi Shota Rustaveli State University, Professor Georgia, Batumi E-mail: asie.tsintsadze@bsu.edu.ge ORCID ID: 0000-0002-4493-8872

#### Tamar Gogoberidze

Batumi Shota Rustaveli State University, assistant professor Georgia, Batumi E-mail: tamar.gogoberidze@bsu.edu.ge ORCID ID: 0000-0001-5052-7829

As a result of human growth, both scientists and businesspeople are paying more attention to the techniques that might be used to prevent or minimize the projected loss from risk. Mathematicians (Pascal, Fermat, Bernoulli, etc.) came first, followed by the proponents of economic theory A. The concept of a risk charge in the generation of profits was first introduced by Smith, who connected it to the wage level of the hired employee by stating that "High-risk occupations are assured higher compensation than Low-risk ones." Smith's conclusion: The study of the issue of risk management was built around the relationship between risk and return. Risk and uncertainty have been distinguished by subsequent investigations (by John Clarke, John Stuart Mill, I. von Theunen, and others). In keeping with the meaning of F. According to Knight, "Risk is a measurable uncertainty. An enterprise operating on the principles of a market economy faces risks caused by internal and external factors in parallel with organizational problems. Depending on the level of risk culture in the country, it is difficult or impossible for an enterprise to manage risks effectively.

DOI:10.46361/2449-2604.9.2.2022.23-28

JEL Classification: G22, G32, J24

**Keywords**: people behavior, operational risk, insurance fund solvency.

## Introduction and goal of the study

The task of science is to analyze the nature of various risks, to accurately classify them, and to develop management mechanisms. In nature, risks exist by themselves, are constantly changing, and are difficult to define. Civilization of society, scientific and technological progress, effective use of finite natural resources, and the growth of man as an important capital in it are the basis for generating new risks and raising the quality of existing risks.

The purpose of the paper is to assess the operational risk generating sources and their effects on the financial stability of the insurance company using historical operational risk analysis, conducted scientific investigations, and analysis of the present environment.

#### Literature evaluation

Human capital researchers include John Mayner Clark, I. F. Theunen, A. Marshall, S. Fisher, and William Petty, a representative of classical political economy in the history of economic thought, who defined it as the "living active power of a person" in his work "Political Arithmetic" (William m........ 1681) and noted that it is a part of national wealth.

According to philosophical science, "uncertainty is the state of the decision-making brain, or its level of knowledge about a specific situation". In this definition, the activation of the decision made in the human

subconscious as a risk-generating factor is clearly visible. In the theory of risk management, a person as a decision-maker is considered as a subject generating operational risks.

Operational risk management in non-financial institutions: Case study in Brazilian Companies (Parera, L.C.J.....2010) is a study that explains how to manage operational risk in non-financial institutions.

In the article "Operational risk management in non-financial institutions: Case study in Brazilian Companies" (Parera, L.C.J....2010), Parrera and others point out that managers pay less attention to operational risk management because quantifying the damage is challenging. In actual production, it can be caused by various risks arising in the production process and operational risk, as the accumulation of these risks can be detrimental.

In order to fulfill its obligations, the company creates a reserve capital according to the risks taken and is somewhat prepared to pay the loss; however, as for the risks caused by the personnel or the organization of the company, it is difficult to determine the probability of their occurrence and the amount of the expected loss, therefore the foregoing is true for operational risks as well as losses caused by insurance cases based on accepted contracts.

Low staff qualifications can lead to pre-contractual opportunism because, for instance, if an employer pays at the level of an average productive worker, then workers with higher experience will decline the contract and the company will be staffed with specialists of medium and low level, who are unable to recognize the asymmetric information provided by the client in order to realize preconceived opportunistic intentions

Attribution of rights and obligations in selection minimizes operational risks but raises monitoring expenses. Seeking information about it when recruiting, and signing standard contracts with agents and brokers are two ways to shield the employees from the dangers of carelessness.

It is impossible to properly record information about all the requirements in the contract, and it is also challenging to fully explain to the client all the regulations prescribed by the regulatory legislation, which is the source of operational risk.

It should be noted that the actions of contractors are no less a reason for the emergence of operational risks, and this is especially felt in the cooperation of insurance companies and pharmaceutical companies, as well as in the relationship between insurance companies and medical institutions. In both cases, there is a potential for fraud on the part of the agent or broker to indicate false information in the insurance contract, misappropriation of part of the premium, etc.

Figure No. 1 Analysis of the types and contents of insurance used to classify referrals to the mediation service

	2017	2018	2019	2020	2021
Total dispute/disagreement	177	310	284	161	91
health insurance	138	217	212	133	82
Agro insurance	25	78	56	14	4
other	14	15	16	14	5

Source: Insurance Mediation Report from the Association of Insurance Companies of Georgia. http://www.insurance.org.ge/index.php?a=main&pid=348&lang=geo

According to the mediation report, frequent referrals according to typology refer to: receiving/funding hospital services, receiving/funding outpatient services, receiving/funding medical services in provider and

non-provider clinics, funding medicine. As can be seen from the data in the table, the problems of relations with the insurance company are most apparent in health insurance.

The operational risk that arises in the cases under consideration can be split into two categories: first, the operational risk resulting from the insurance agent or broker's or staff's failure to provide complete information on the insured; and second, the operational risk resulting from the contractor company's or employee's failure to timely or properly fulfill its obligations (liquidity, profitability, sustainability, market).

Solvency II proposes a standard formula based on the volumes of premiums received and claims paid and the determination of the level of solvency in relation to the supervisory capital in order to measure operational risk as a cumulative effect by calculating the solvency margin of the insurance company.

In Georgia, the prerequisite for determining solvency in accordance with the Solvency II standard was the increase of supervisory capital, which was implemented step by step and currently amounts to 4,800,000 GEL for non-life insurance, and 7,200,000 GEL for life insurance.

This requirement demonstrates that maintaining solvency at all times is the most crucial requirement for insurance companies. Therefore, Georgia faces a significant difficulty as a result of the European legislation. Although each nation has its unique technique for determining the solvency margin, which is devised by the supervisory agency, the company will receive a high-quality assessment of its financial status within the framework of conformity with European standards. The current solvency regulation in Georgia is governed by the order of the head of the State Insurance Supervision Service of Georgia N15 (September 16, 2016, Tbilisi) on the calculation of the solvency margin by the insurer when performing insurance activities. This regulation fully complies with the solvency II regulations defined by the European Parliament. A model based on premiums or losses can be employed with a common formula. It is permitted by the norm that companies with a history of less than three years utilize the model based on the volume of premiums. We used the following formula to determine the solvency margin of the insurance provider Aldagi for the years 2019–2021:

$$SR_C = B \times \max\{\frac{NIC_1 + NIC_2 + NIC_3}{GIC_1 + GIC_2 + GIC_3}, 0.5\}[1]$$

$$L = \frac{GIC_1 + GIC_2 + GIC_3}{3} [2]$$

$$B = L_1 \times 0.26 + L_2 \times 0.23$$
 [3]

where,  $NIC_1$ ,  $NIC_2$ ,  $NIC_3$  the total net losses experienced within a specific year;  $GIC_1$ ,  $GIC_2$ ,  $GIC_3$  the total gross losses incurred during a particular year.

$$L = \frac{GIC_1 + GIC_2 + GIC_3}{3} = \frac{27383000 + 41540000 + 29990000}{3} = 32\ 971\ 000$$

$$B = L_1 \times 0.26 = 32\,971\,000 \times 0.26 = 8\,572\,460$$

Solvency ratio 
$$(SR_C)$$
  
 $SR_C = B \times \max \{ \frac{NIC_1 + NIC_2 + NIC_3}{GIC_1 + GIC_2 + GIC_3}, 0.5 \}$ 

The following is an assumption based on the results of the calculation using the provided formula: the retention coefficient is 0.5 if the ratio of the total of the net losses over the last three years to the sum of the gross losses is less than 0.5; otherwise, the coefficient is equal to 0.7

$$SR_C = 8572460 \times 0.7 = 6000722 lari$$

The solvency margin indicates how high the insurance company's minimum capital need should be in order to ensure its financial stability and safeguard it against anticipated or unforeseen dangers. For insurance companies doing business in Georgia, the margin is 18% of this amount for premiums raised up to 100 million GEL, and 18 million GEL + 16% of the amount over 100 million GEL for premiums raised beyond 100 million GEL. According to the rule, the normative value of the solvency margin is equal to 18 000 000 + 80 692 000 0.16 = 30 910 720. The insurance premium collected by the "Aldagi" company over the course of three years was 180 692 000 GEL. This data indicates that the solvency margin in the normative level (L = 32 971 000) is high. The financial status of the "Aldagi" company is within the standard based on the number of premiums collected by the company and compensated losses: the premiums collected are nearly 40–45 percent greater than the losses. The fiscal years 2019–2021 concluded with a profit. The results show that the company is in good financial shape, but we believe that the standard solvency ratio formula is flawed because it fails to account for operational risk losses, which are the most readily identifiable risks in the insurance industry among those listed in the Solvency II document. For this reason, we think that the company's underwriting should detail every circumstance that gave rise to operational risk and track the total amount of losses incurred as a result. In particular, it is advised that 3% of the premium raised during the year and 3% of the technical reserves be devoted to the management of operational risks, thereby maintaining solvency by a maximum of 30%. We also believe that the amount of risk capital for operational risks is insufficient. Uncertainty surrounds the assets available in insurance reserves to compensate losses brought on by operational risks. The analysis of the audit conclusions of insurance companies reveals that the risk management block examines market, liquidity, and currency risk management issues, but that operational risk management is not given any consideration in any of the results. The existence of court costs, which reflect challenges initiated against the company and in which the court costs are paid, is the sole data that partially proves the existence of operational hazards.

#### **Results and conclusion**

The following suggestions were made in light of the examination, analysis, and computations of the materials under consideration:

The company's risk management should research the annual losses generated by human capital and make reference to the management standards defined by the Solvency II standard in order to detect operational risks and ensure the solvency of insurance firms.

Financial statements should include information on the cost of losses brought on by operational risk.

The management of the business should put its attention on mitigating operational risk factors rather than using reserves to offset losses. Prevention includes staff training, prompt discovery of indifference, fraud, and reckless attitudes, and their replacement. Such a strategy will lessen the danger of operational risks developing "ex ante" at the contract signing, "ex ante" during the contract's term, and "ex post" following the occurrence of the covered event.

ცინცამე ა., ღოღობერიმე თ.,(2022). ინოვაციური ეკონომიკა და მართვა 9(2), 23-28.

DOI: https://doi.org/10.46361/2449-2604.9.2.2022.23-28

### ასიე ცინცამე,

გათუმის შოთა რუსთაველის სახელმწიფო უნვერსიტეტი, პროფესორი გათუმი, საქართველო E-mail: asie.tsintsadze@bsu.edu.ge ORCID ID: 0000-0002-4493-8872

### თამარ ღოღობერიძე,

გათუმის შოთა რუსთაველის სახელმწიფო უნვერსიტეტი, ასისტენტ-პროფესორი გათუმი, საქართველო E-mail: tamar.gogoberidze@bsu.edu.ge ORCID ID: 0000-0001-5052-7829

DOI: 10.46361/2449-2604.9.2.2022.23-28

JEL Classification: G22, G32, J24

# რისკების გავლენა კომპანიის ფინანსურ მდგრადობაზე და რისკ-მენეჯემნტის პრობლემები

აბსტრაქტი. კაცობრიობის განვითარების კვალდაკვალ: "რისკის', როგორც საფრთხის აღქმა და მისგან მოსალოდნელი ზარალის თავიდან აცილების ან შემცირების მექანიზმებისადმი ყურადღება როგორც მეცნიერების, ისე მეწარმეთა მხრიდან იზრდება. ჯერ მათემატიკოსების (პასკალი, ფერმა, ბერნული....) ხოლო შემდეგ ეკონომიკური თეორიის კლასიკოსმა ა. სმიტმა პირველმა ახსნა მოგების ფორმირებაში რისკის გადასახადის არსებობა და დაუკავშირა დაქირავებულის შემოსავლიანობის დონეს; "მაღალი რისკის შემცველი პროფესიეზი არის უფრო მაღალი ხელფასია მიღების გარანტი, ვიდრე დაბალი რისკების შემცველი პროფესიები". ა. სმიტის მიგნება: კავშირი რისკსა და შემოსავლიანობას შორის დაედო საფუძვლად რისკის მართვის პრობლემის კვლევას. თანმიმდევრულად ჩატარებულმა კვლევებმა (ჯონ კლარკი, ჯონ სტიუარტ მილი, ი.ფონ ტიუნენი და სხვები) მოახდინეს რისკის განცალკევება განუსაზღვრელობისაგან. ფ.ნაიტის განსაზღვრებით "რისკი არის გაზომვადი განუსაზღვრელობა. ეკონომიკური საქმიანობის გაფართოებამ გაზარდა კონკურენციის მასშტაბები და მოსალოდნელი შედეგის მიღების რისკების ხარისხის ამაღლდა. დღის წესრიგში დადგა რისკების მართვის მეთოდების სრულყოფა. საბაზრო ეკონომიკის პრინციპებზე მოქმედი საწარმო, ორგანიზაციული პრობლემების პარალელურად აწყდება შიდა და გარე ფაქტორებით გამოწვეულ რისკებს. იმისდა მიხედვით თუ როგორია ქვეყანაში რისკის კულტურის დონე, შესაბამისად რთული ან მარტივია რისკ მენეჯმენტის ეფექტიანობის მიღწევა. მრავალრიცხოვან რისკებს შორის, რომლებიც სხვადასხვა ფაქტორებით არის გამოწვეული, ერთერთი მნიშვნელოვანი არის ოპერაციული რისკი. ოპერაციული რისკი უშუალოდ პერსონალის ქცევასთან დაკავშირებული რისკია და მისი კომპეტენტურობითა და პიროვნული თვისებებით განისაზღვრება. სადაზღვევო კომპანიები, რომლებიც ფიზიკური და იურიდიული პირების რისკებს ღებულობენ დაზღვევაში, თვითონ განიცდიან მაღალი ხარისხის რისკების ზემოქმედებას. რისკებისაგან დაცვა დაზღვევის ფონდის ფორმირებაზეა დამოკიდებული, შესაბამისად პოტენციურ დამზღვევთა რაოდენობაზე. სადაზღვევო საქმიანობაში სხვა ინსტიტუტებთან შედრებით ადამიანური კაპიტალის როლი მაღალია. ამის საფუძველი საქმიანობის სპეციფიკურობაა. სტატიაში განიხილება სადაზღვევო კომპანიების რისკების მართვის პრობლემა, რომელიც ფოკუსირებული იქნება ოპერაციული რისკზე, როგორც კომპანიის ფინანსური მდგრადობის შენარჩუნების ერთერთ პარამეტრზე.

**საკვანძო სიტყვები:** ოპერაციული რისკი, დაზღვევის ფონდი, გადაზდისუნარიანობა, პერსონალის ქცევა.

#### References/ლიტერატურა

- [1] Revaz Geradze, Financial indicators of the insurance market", 09.03.2016;
- https://forbes.ge/blog/172/sadazRvevo-bazris-finansuri-maCveneblebi;
- [2] Asie Tsintsadze, Tamar Gogoberidze, Risk Analysis in Professional Terms and Insurance Tariff Algorithm, European Journal of Sustainable Development, Doi:10.14207/ejsd. 2019.v8n2p139
- https://www.ecsdev.org/ojs/index.php/ejsd/issue/view/34/showToc
- [3] Tsintsadze A. E, Ivanishvilli M. CAUSE-EFFECT RELATIONSHIP BETWEEN PROFESSIONAL LIABILITY AND OPERATIONAL RISKS ON THE EXAMPLE OF AN INSURANCE COMPANY, European journal of economics and management sciences, DOI: 10.29013/EJEMS-21-1-29-34, №1,2021, p.29-34.
- https://elibrary.ru/item.asp?id=45622145
- [4] Dr. Kathleen Ehrlich; European Commission; "Positions of European Insurers on Solvency II"; June 2011; https://www.munichre.com/site/corporate/get/documents\_E628327154/mr/assetpool.shared/Documents/5\_Tou ch/ Publications/302-07052 en.pdf
- [5] Drummond, Helga. The Dynamics of Organizational Collapse: The Case of Barings Bank. London : Routledge, 2007
- [6] D.V. Bryzgalov; "Influence of Solvency II requirements on the insurance market of the Russian Federation", 2015; Moscow;
- file:///C:/Documents%20and%20Settings/vvv/My%20Documents/Downloads/vliyanie-trebovaniy-solvency-2-na-strahovoy-rynok-rossiyskoy-federatsii.pdf;
- [7] Leeson, Nick. How I Bankrupted the Barings. Confessions of a Fraud Trader. M.: Case LLC, 2011
- [8] Oliver I. Williamson BEHAVIORAL BACKGROUND TO MODERN ECONOMIC ANALYSIS, Translated by A.V. Belyanin, 1985. https://igiti.hse.ru/data/001/314/1234/3\_1\_3Willi.pdf\
- [9] Parera, L.C.J, Herbert Kimura, Roberto Borges Kerr, Fabiano Guasti Lima, Operational risk management in non-financial institutions: Case study in Brazilian Companies, 2010. https://www.researchgate.net/publication/260189132\_OPERATIONAL\_RISK\_MANAGEMENT\_IN\_NONFINANCIAL\_INSTITUTIONS\_CASE\_STUDIES\_IN\_BRAZILIAN\_COMPANIES
- [10] Richard L. Williams\*, J. Anzsar, R. Bulmer, J. Buntine, M. Byrne, B. Gedalla, P. Goswamy, J. Grant, W. Heah, S. Keshani and J. Shah, Application of the Solvency II Actuarial Function to general insurance firms, British Actuarial Journal, Vol. 21, part 3, pp. 476–530, 2015. https://www.cambridge.org/core/services/aopcambridgecore/content/view/E15F4CE4F11FD34A8920FC7CF1 C6DBFF/S1357321716000052a.pdf/application-of-the-solvency-II-actuarial-function-to-general-insurance-firms.pdf
- [11] W illia m Petty, Political Arithmetic, The Economic Writ ings of Sir Willia m Petty, vol. 1681 11.Corg Magnum, Operational Risks are a global Focus, 2019 https://riskmanagementguru.com/operational-risks-are-a-global-focus-in-2019.html/
- [12] Tsintsadze A, Meloyan L, Solvency of Insurance Company And Financial Sustainability Analysis In Georgian Insurance Companies, Innovations In Science the Challenges of our Time, Monograph, Accent Graphics Communications and Publishing, (2018);
- [13] Tsintsadze A, Meloyan L, Sustainability Analysis of the Insurance Market, Second International Conference Economic, Legal and Social Problems of Modern Development-Conference Proceedings, EISSN 2346-8203, (2018):
- [14] Association of Mutual Insurers and Insurance Cooperatives in Europe; "Solvency II"; 2019, https://www.amice-eu.org/solvency.aspx;
- [15] Insurance State Supervision Service of the State Insurance Agency of Georgia; 25/05/2019; Statistical data; http://insurance.gov.ge/getattachment/Statistics
- [16] Georgia's State Insurance Supervision Service's Head's Order No. 15 of September 16, 2016, St. Tbilisi, approving the insurer's method for determining its solvency margin when engaging in insurance operations
- http://insurance.gov.ge/getattachment/Legislation/Normative-Acts/brdzaneba\_marja.pdf.aspx
- [17] Regarding the approval of the threshold ratio between the supervisory capital and the net liabilities assumed by the insurer, Order No. 33 from the Georgia State Insurance Supervision Service's Head dated August 6, 2019 https://www.matsne.gov.ge/ka/document/view/4628571?publication=0
- [18] Insurance Mediation Report, Association of Insurance Companies of Georgia http://www.insurance.org.ge/index.php?a=main&pid=348&lang=geo