## Ministry of Education and Science of Ukraine

Sumy State University
Academic and Research Institute of Business,
Economics and Management
Lovely Professional University

# Financial Markets, Institutions and Risks

Proceedings
of the International Scientific and Practical
Online-Conference

(Sumy, November 20-22, 2021)



Sumy Sumy State University 2021 330.3:005(063) S62

#### Editor-in-Chief

Prof., Dr. Vasilyeva Tetyana, Director of Academic and Research Institute of Business, Economics and Management, Sumy State University

#### **Editorial Board:**

As. Prof., Dr. Tiutiunyk Inna, Sumy State University, Ukraine;

Ph.D. Mayboroda Tetyana, Sumy State University, Ukraine;

PhD student Us Yana, Sumy State University, Ukraine;

Prof., Dr. Hrytsenko Larysa, Sumy State University, Ukraine;

As. Prof., Dr. Karintseva Oleksandra, Sumy State University, Ukraine;

Prof., Dr. Kuzmenko Olga, Sumy State University, Ukraine;;

Prof., Dr. Lyulyov Oleksiy, Sumy State University, Ukraine;

Prof., Dr. Petrushenko Yuriy, Sumy State University, Ukraine;

Prof., Dr. Rekunenko Ihor, Sumy State University, Ukraine; As. Prof., Ph.D. Serpeninova Yulia, Sumy State University, Ukraine; Prof., Ph.D. Babli Dhiman, Lovely Professional University, India;

As. Prof., Ph.D. **Lalit Bhalla**, Lovely Professional University, India;

Prof., Ph.D. Nitin Gupta, Lovely Professional University, India;

As. Prof., Ph.D. Sukhpreet, Lovely Professional University, India;

Prof., Ph.D. **Suresh Kashyap**, Lovely Professional University, India.

Approved by the Academic Council of Sumy State University (protocol № 4, 16 December 2021)

Financial Markets, Institutions and Risks: Proceedings of the International S62S Scientific and Practical Online-Conference, Sumy, November 20-22, 2021 / edited by Prof., Dr. Vasilyeva Tetyana. – Sumy: Sumy State University, 2021. – 76 p.

The Proceedings contain the abstracts of the International Scientific and Practical Online-Conference "Financial Markets, Institutions and Risks" (Sumy, November 20-22, 2021).

For scientists, scientists, students, graduate students, representatives of business and public organizations and higher education institutions and a wide range of readers.

330.3:005(063)

### TABLE OF CONTENTS

v p ·	SOYBEAN FUTURES MARKETS-	
Kumar Ravi, Dhiman Babli	EXPLORING LINKAGES BETWEEN INDIA	5
	AND CHINA	
Sharma Swaty, Dhiman Babli Chorna Svitlana	IDENTIFICATION OF CO-INTEGRATION	
	BETWEEN INDIAN AND US ENERGY AND	8
	AGRICULTURE COMMODITIES	
	FINANCIAL SOLVENCY OF INSURERS AS	
	A BASIS FOR INSURANCE	
	DEVELOPMENTFINANCIAL SOLVENCY	11
	OF INSURERS AS A BASIS FOR	
	INSURANCE DEVELOPMENT	
Sharma Parmod K,	NEED FOR PRIVATE SECTOR BANKS'	16
Dhiman Babli	CONSOLIDATION IN INDIA	10
Mynenko Serhii, Chevguz Karina	REVIEW OF METHODS OF ECONOMIC	
	AND MATHEMATICAL MODELING OF	21
	BANKING RISKS	
Tverezovska	GREEN BANKING IN THE SYSTEM OF	
Oleksandra,	EFFECTIVE FINANCING OF	26
Hrytsenko Larysa	INVESTMENTS PROJECTS	
Gagandeep Singh, Rahul Sharma, Sukhpreet Kaur	SHAREHOLDER ACTIVISM AND	
	CORPORATE PERFORMANCE DURING	31
	COVID-19: EVIDENCE FROM THE INDIAN	31
	BANKING SECTOR	
Jasneet Kaur	CONCEPT OF CREATIVE ACCOUNTING	34
Ajay Chandel		5 1
Shkarupa Olena, Kalchenko Ihor	ANALYSIS OF THE IMPACT OF ONLINE	20
	PAYMENTS ON THE SECURITY OF	39
	BUSINESS DIGITALIZATION	
Lavryk Yevheniia	BASIC APPROACHES TO MANAGING THE	44
	ECONOMIC STABILITY OF ENTERPRISES	
Ponyrko Ivan,		
Us Yana,	DIGITAL MARKETING FOR SMALL AND	40
Pimonenko Tetyana,	MEDIUM BUSINESS	49
Lyulyov Olexii, Kwilinski Aleksv		
IN VULLITINKT ATEKNY		

Vynogradov Vladislav, Troian Maria	THE GLOBAL FINANCIAL CRISIS AND ITS IMPACT ON UKRAINE'S ECONOMY	55
Ziabina Yevheniia	THE IMPACT OF LABOR RESOURCES ON GREEN COMPETITIVENESS AND FINANCIAL STABILITY OF ENTERPRISES	59
Bozhenko Victoria, Lysenko Oksana Kravchenko Olena Shapoval Oleksii Semenog Andrii	SHADOW ECONOMY AS A THREAT TO NATIONAL SECURITY BLOCKCHAIN TECHNOLOGY: CURRENT STATUS AND PROSPECTS DEVELOPMENT OF DIGITAL BANKING	63 68
Ostrivnnyi Vadym Mazurenko Oleksiy	INSTITUTIONAL DETERMINANTS OF THE INTERNATIONAL TAX COMPETITIVENESS	70 73

# FINANCIAL SOLVENCY OF INSURERS AS A BASIS FOR INSURANCE DEVELOPMENT

**Svitlana Chorna,** PhD student, Sumy State University, Ukraine

In Ukraine, insurance covers less than 15% of the insurance field, while in most EU countries, the United States and Japan, insurance covers almost all businesses and more than 90% of citizens.

If we talk about insurers, solvency is one of the indicators that characterize its financial reliability because insurance is a system of insurance protection against the likelihood of various types of risks. Solvency is a means of compensating the insured for losses to the insured victims (Oliynyk, 2008). Solvency also means the ability of an insurance company to pay its obligations.

The uniqueness of the transformations in Ukraine does not allow the direct use of foreign approaches to assessing solvency. However, studying the experience of countries where the insurance market has been developing for a long time and successfully, it turns out that it is very appropriate (Ziabina et al., 2020; Chukwu and Kasztelnik, 2021; Medani and Bhandari, 2019; Samoilikova, 2020; Yarovenko et al., 2020; Mazurenko and Tiutiunyk, 2021).

The activities of the insurance company in market conditions require additional financial guarantees. Many years of insurance practice in market economies have shown the need and importance of such a guarantee in the form of a certain amount of capital of insurance companies. The most powerful insurance markets are the markets of the United States of America (USA) and EU countries such as Germany, France and the United Kingdom, which have the largest volumes of insurance transactions. Thus, the European market occupies the leading position with a share of 33%. Also includes the insurance market of Russia and Ukraine and in general, it is 1%, which indicates a lag behind the dynamic countries of Europe. This followed by North America and Asia (with world market shares of 30% and 29%) (Shirinyan, 2014; Mazurenko et al., 2021; Bozhenko, 2021; Starchenko et al., 2021; Dudchenko, 2020; Yelnikova and Barhaq, 2020; Goncharenko and Lopa, 2020; Eddassi, 2020; Pimonenko et al., 2021; Kryvych and Goncharenko, 2020; Matsenko et al., 2021; Lazorenko et al., 2021; Oleksich et al., 2021; Mamay et al., 2021; Taraniuk et al., 2020).

The importance of the problem of ensuring the reliability of insurance companies prompted the Council of the European Communities already in the First Directive 73/239 / EEC of 24.07.1973 (with further additions and changes) to define the concept of the solvency of insurance companies (Shirinyan, 2014). According to the Directives, every insurance company must have:

1. Technical reserves by the obligations under the contracts. The participating

country itself determines the amount of these reserves and the rules for their allocation.

- 2. Solvency reserve as an additional financial guarantee. The reserve must be free of any obligations. Directive 73/239 / EEC emphasizes that it is necessary to provide that this reserve corresponds to the total volume of operations of the enterprise and is determined according to two reliability indices based, in one case, on premiums received, in another on insurance payments.
- 3. Minimum guarantee fund, consisting of property free from obligations in the amount of up to 1/3 of the solvency reserve. This fund is created so that the solvency reserve can not fall below the threshold, which is dangerous for the insurance company's financial stability (Plysa, 2002).

The calculation of solvency according to the EU methodology is similar to the domestic one. Assessment of the solvency of insurance companies is carried out in three stages.

- Stage 1. The required solvency margin is calculated according to a special formula.
- **Stage 2.** The actual solvency margin is determined as the difference between assets and liabilities.
- **Stage 3.** The estimated solvency margin is compared with the actual value of the solvency margin, which makes it possible to assess the insurance company's financial condition (Kulina, 2015).

According to the EU methodology, the calculation of the required solvency margin is calculated separately for risky types of insurance and life insurance due to the different nature of the risk distribution and the different structure of assets and liabilities.

According to SwissRe, Europe and the United States are leaders in the global insurance market. The European market occupies the leading position with a share of 33 % as shown on the map. Also includes the insurance market of Russia and Ukraine and in general, it is 1%, which indicates that the markets of these two countries lag behind the dynamic countries of Europe. Next are North America and Asia (with 30% and 29%) world market shares). Other regions account for less than 10% - South America and the Caribbean - 4%, and Australia and Oceania - also 4%.

Such significant gaps are explained primarily by the structure of insurance industries (Shkarlet et al., 2019; Vasilieva et al., 2017; Bublyk et al., 2017; Fila et al., 2020; Gallo et al., 2019). For example, in Asian countries, life insurance shares are very high (77% of the total amount of collected insurance premiums). In Europe, this figure is 47%, and in North America - 42%. Property insurance predominates in these markets. These differences are because life insurance is developing most intensively in countries with a low level of state social protection, where people have to decide on their pensions. And in poor Asian countries, the population has less property that needs insurance.

The Ukrainian system of solvency indicators is based on the European model - the First Solvency Directive, which is reflected in the provisions of the Law of Ukraine "On Insurance". However, the requirements for the solvency of domestic insurers are significantly lower than European norms and standards due to the development of the economy and the gradual development of the insurance business.

According to Ukrainian legislation, the method of determining the solvency of risk insurance companies is to determine and compare two indicators - the actual stock and the normative indicator of solvency. To ensure the appropriate level of solvency as required by law, the actual solvency margin must exceed its regulatory margin on any date.

Should bear in mind that the insurer's insolvency depends on the statutory approaches to calculating its regulatory value. Given the imperfections of Ukrainian legislation in this area, the high solvency of domestic insurers is imaginary, and its value is significantly inflated. This can be seen at least from the fact that the requirements for determining regulatory solvency, for example, in the United States, are much more stringent than in Ukraine.

There are various approaches to assessing the solvency of insurance activities in developed economies. Given this, the question arises as to which approach is most appropriate for Ukraine. To Ukraine's desire to integrate into the global insurance community and create a domestic insurance market that can compete in the international arena.

#### References

- Bozhenko, V. (2021). Enhancing Business Integrity as a Mechanism for Combating Corruption and Shadow Schemes in the Country. Business Ethics and Leadership, 5(3), 97-101. https://doi.org/10.21272/bel.5(3).97-101.2021
- Bublyk, M., Koval, V., Redkva, O. (2017). Analysis impact of the structural competition preconditions for ensuring economic security of the machine building complex. Marketing and Management of Innovations, 4, 229-240, http://doi.org/10.21272/mmi.2017.4-20
- Chukwu, A.O., Kasztelnik, K. (2021). Innovative Strategies For Social-Economic Development Financial Strategies In The Development Country. SocioEconomic Challenges, 5(1), 44-65. https://doi.org/10.21272/sec.5(1).44-65.2021
- Dudchenko, V.Yu. (2020). Interaction of Central Bank Independence and Transparency: Bibliometric Analysis. Business Ethics and Leadership, 4(2), 109-115. https://doi.org/10.21272/bel.4(2).109-115.2020.
- Eddassi, H. (2020). Fiscal Regime and Tax Policy in Resource-Rich Countries In The Process Of Globalization: Literature Review. SocioEconomic Challenges, 4(2), 67-77. https://doi.org/10.21272/sec.4(2).67-77.2020.
- Fila, M., Levicky, M., Mura, L., Maros, M., & Korenkova, M. (2020). Innovations

- for Business Management: Motivation and Barriers. Marketing and Management of Innovations, 4, 266-278. http://doi.org/10.21272/mmi.2020.4-22
- Gallo, P., Mihalcova, B., Vegsoova, O., Dzurov-Vargova, T & Busova, N. (2019). Innovative Trends in Human Resources Management: Evidence for the Health Care System. Marketing and Management of Innovations, 2, 11-20. http://doi.org/10.21272/mmi.2019.2-01
- Goncharenko, T., Lopa L. (2020). Balance Between Risk And Profit In The Context Of Strategic Management: The Case Of Ukrainian Banks. SocioEconomic Challenges, 4(1), 111-121. http://doi.org/10.21272/sec.4(1).111-121.2020.
- Kryvych, Y., Goncharenko, T. (2020). Banking strategic management and business model: bibliometric analysis. Financial Markets, Institutions and Risks, 4(1), 76-85. http://doi.org/10.21272/fmir.4(1).76-85.2020.
- Kulina, G. M. (2015). Theoretical and methodological principles of assessing the solvency of insurance companies. Retrieved from <a href="http://library.tneu.edu.ua/images/stories/praci\_vukladachiv.pdf">http://library.tneu.edu.ua/images/stories/praci\_vukladachiv.pdf</a>
- Lazorenko, V., Saher, L., & Jasnikowski, J. (2021). Web management as a marketing management determinant: case for pharmaceutical enterprises. Health Economics and Management Review, 2(2), 105-114. https://doi.org/10.21272/hem.2021.2-10
- Mamay, A., Myroshnychenko, Iu., & Dzwigol. H. (2021). Motivation management model and practical realization within the health care institutions. Health Economics and Management Review, 2(2), 23-30. https://doi.org/10.21272/hem.2021.2-03
- Matsenko, O., Kubatko, O., Bardachenko, V., & Demchuk, K. (2021). Transformation of the Restaurant Business as a Result of the COVID-19 Pandemic: Improving the Security of Service and Maintaining the Health of Human Capital. Health Economics and Management Review, 2(3), 27-38. https://doi.org/10.21272/hem.2021.3-03
- Mazurenko, O., Tiutiunyk, I. (2021). The International Tax Competitiveness: Bibliometric Analysis. Financial Markets, Institutions and Risks, 5(1), 126-138. https://doi.org/10.21272/fmir.5(1).126-138.2021
- Mazurenko, O., Tiutiunyk, I., Derkach, L. (2021). The Impact of Tax Morality on Tax Evasion: Evidence of EU Countries. Business Ethics and Leadership, 5(3), 108-112. https://doi.org/10.21272/bel.5(3).108-112.2021
- Medani P. Bhandari (2019). Sustainable Development: Is This Paradigm The Remedy of All Challenges? Does Its Goals Capture The Essence of Real Development and Sustainability? With Reference to Discourses, Creativeness, Boundaries and Institutional Architecture. SocioEconomic Challenges, 3(4), 97-128. http://doi.org/10.21272/sec.3(4).97-128.2019.
- Oleksich, Zh., Polcyn, J., & Shtorgin, O. (2021). Adaptation of the best European practices in administering local health care institutions. Health Economics and

- Management Review, 2(2), 15-22. https://doi.org/10.21272/hem.2021.2-02
- Oliynyk, I. (2010). Solvency of the insurance company: essence and significance. *Bulletin of Khmelnytsky National University*. (Vol., № 4, pp. 18-21).
- Pimonenko, T., Us, Ya., Myroshnychenko, Yu., Dubyna, O., Vasylyna, T. (2021). Green Financing for Carbon-Free Growth: Role of Banks Marketing Strategy. Financial Markets, Institutions and Risks, 5(3), 71-78. https://doi.org/10.21272/fmir.5(3).71-78.2021
- Plysa, V. (2002). Integration of the insurance market of Ukraine in the world insurance space. *Finance of Ukraine*. (№ 7., pp. 94-103)
- Samoilikova, A. (2020). Financial Policy of Innovation Development Providing: The Impact Formalization. Financial Markets, Institutions and Risks, 4(2), 5-15. https://doi.org/10.21272/fmir.4(2).5-15.2020.
- Shirinyan, L. V. (2014). *Insurance Management: synopsis of lectures for students majoring in 7.03050801, 8.03050801 "Finance and Credit" full-time and part-time education.* Retrieved from http://library.nuft.edu.ua/ebook/file/48.36.pdf.
- Shkarlet, S., Kholiavko, N., Dubyna, M. (2019). Information Economy: Management of Educational, Innovation, and Research Determinants. Marketing and Management of Innovations, 3, 126-141. http://doi.org/10.21272/mmi.2019.3-10
- Starchenko, L.V., Samusevych, Ya., Demchuk, K. (2021). Social and Eco-Friendly Enterpreneurship: The Keys to Sustainability. Business Ethics and Leadership, 5(1), 118-126. https://doi.org/10.21272/bel.5(1).118-126.2021
- Taraniuk, L., D'yakonova, I., Taraniuk, K., & Qiu, H. (2020). Basic financing principles of anti-covid measures: the case of the bank for international settlements. Health Economics and Management Review, 1(2), 43-50. https://doi.org/10.21272/hem.2020.2-05
- Vasilieva, T., Lieonov, S., Makarenko, I., Sirkovska, N. (2017). Sustainability information disclosure as an instrument of marketing communication with stakeholders: markets, social and economic aspects. Marketing and Management of Innovations, 4, 350 357. http://doi.org/10.21272/mmi.2017.4-31
- Yarovenko, H., Kuzmenko, O., Stumpo, M. (2020). Strategy for Determining Country Ranking by Level of Cybersecurity. Financial Markets, Institutions and Risks, 4(3), 124-137. https://doi.org/10.21272/fmir.4(3).124-137.2020
- Yelnikova, Ju., Barhaq, A.R. (2020). Transparency of Responsible Investment Environment. Business Ethics and Leadership, 4(4), 68-75. https://doi.org/10.21272/bel.4(4).68-75.2020
- Ziabina, Ye., Pimonenko, T., Starchenko, L. (2020). Energy Efficiency Of National Economy: Social, Economic And Ecological Indicators. SocioEconomic Challenges, 4(4), 160-174. <a href="https://doi.org/10.21272/sec.4(4).160-174.2020">https://doi.org/10.21272/sec.4(4).160-174.2020</a>