



THE IMPACT OF INSURANCE ON ECONOMIC GROWTH

Shennaev Khojayor Musurmanovich

Tashkent Financial Institute, Uzbekistan

khshennayev@gmail.com

Abstract

This article is devoted to the analysis of insurance and its impact on economic growth. Despite the fact that insurance is one of the least developed sectors of the financial sector in the Commonwealth of Independent States, including Uzbekistan, the experience of developed countries shows that insurance has a positive impact on economic growth. Insurance, on the one hand, serves to ensure the stability of the economy by compensating for losses incurred as a result of insurance events, and on the other hand, is an important factor influencing economic growth by investing large amounts of money in various sectors of the economy. In the article, the author analyzes the experience of a number of developed countries, in particular, the United States, Great Britain, Germany, Japan, to study the level of impact of insurance on the economy. Based on the results of the analysis, proposals and recommendations have been developed to enhance the status of insurance in the Commonwealth of Independent States, in particular in Uzbekistan, and increase its investment potential.

Keywords: insurance, insurance company, insurance market, insurance sector, insurance premium

INTRODUCTION

Independence of the Republic of Uzbekistan in 1991 led to the abolition of the long-standing state monopoly in the field of insurance and the emergence of insurance companies based on various forms of ownership. A competitive environment has been formed to attract customers among insurance companies, which in turn has been an important step towards the free and dynamic development of the insurance market. It should be noted that during 1991-2020, the Government of Uzbekistan took a number of measures to support the development of the insurance sector.



According to the Decree of the President of the Republic of Uzbekistan dated January 31, 2002 No. PF-3022 "On measures to further liberalize and develop the insurance market", from February 1, 2002, insurance companies, regardless of ownership, are exempt from income tax for 3 years (2002). Also, by the Resolution of the President of the Republic of Uzbekistan dated May 21, 2008 No PP-872 "On additional measures for further reform and development of the insurance services market" (2008) on the shares of insurers of legal entities and individuals for three years from June 1, 2008 income received in the form of dividends is exempt from corporate income tax and personal income tax. The income of insurers in the form of dividends and interest is exempt from corporate income tax, and the tax-exempt funds will be directed to the establishment of territorial divisions in the country, primarily in rural areas, a wide network of agencies, as well as the development of their material and technical base.

However, despite the government's provision of such tax incentives for the development of the insurance market, no significant changes have been observed in the insurance sector of Uzbekistan. One of the main indicators determining the level of development of the insurance sector at the international level is the share of insurance premiums in GDP for the reporting year. Over the past 19 years, the share of insurance premiums in the country's GDP has been less than 0.5%. For example, in 2010 this figure was 0.24%, in 2015 it was 0.26% and in 2019 it was 0.45%. However, in 2019, the volume of insurance premiums collected in the global insurance sector amounted to 6,292.6 billion US dollars, which is an average of 7.23% of world GDP (Sigma, 2020). In 2019, the amount of insurance premiums collected by insurance companies operating in Taiwan accounted for 19.97% of this GDP, and in the US - 11.43% of GDP (Sigma, 2020). The figures show how important the insurance sector is in the economies of developed and some developing countries.

In our opinion, the development of the economy and the subsequent increase in the welfare of the population will lay the foundation for the development of the insurance sector. After all, in such conditions, enterprises and organizations, as well as the population, a fund is formed for the purchase of surplus funds, ie insurance policies. However, today in Uzbekistan a large part of the population's income is spent on consumption. In Moboda, even if they keep a certain amount of excess money, they place it in banks for interest. The study of the impact of insurance on economic growth and vice versa on the development of insurance is an interrelated correlation problem.

The purpose of the study is to assess the impact of the insurance sector on economic growth, to develop recommendations for strengthening its impact on economic growth through the development of the insurance sector in Uzbekistan based on the experience of developed and developing countries.

LITERATURE REVIEW

Research on the impact of insurance on economic growth has been conducted by many scientists and experts. In particular, according to Milijana Novović Burić and others (2017), the insurance business has a positive impact on economic development. Because the developed insurance market stimulates the economic growth of the country. These authors conducted a study on the role of life insurance in economic growth and concluded: "The stability, security and responsibility of the business of insurance companies affect the confidence of the population in the insurance system through life insurance products." In our opinion, the awareness and knowledge of citizens about life insurance products will lead to the development of the insurance market.

The economic situation of each country at the same time reflects the state of the insurance sector. Afzalur Rashidn (2017) dwells on this and believes that economic growth increases the ability of the population to pay. The results of a study by Wong Hong Chau et al. (2013) have highlighted the issue of the interrelationship between insurance activity and economic development in recent years, while empirical studies have confirmed that there is a long-term correlation between the insurance sector and economic development. Peter Haiss, Kjell Sümegi (2006) argues that the availability of insurance services for the population is important for economic stability, and that this situation may force business participants to take higher risks. Insurance companies should form reserve funds commensurate with the amount of risks accepted. Insurers promote economic growth by increasing domestic cash flows and a large amount of assets placed in the capital market at a guaranteed level.

Annalise Vucetich, Roger Perry and Richard Dean (2014) conducted research to analyze the impact of the insurance sector on economic growth on the example of New Zealand. The results of scientific research have made a significant contribution to the economic development and prosperity of New Zealand through the transformation of the insurance sector risks. The authors note that the insurance sector supports investment and innovation, and therefore it is necessary to maintain a stable and well-functioning insurance market. The research of Idrissa Ouedraogo, Samuel Guerineau, Relwende Sawadogo (2016) is significant in that it focuses on studying the correlation between life insurance development and economic growth based on the experience of developing countries. These researchers have scientifically confirmed that the development of life insurance activities is an important factor in economic growth by studying the experience of 86 developing countries from 1996 to 2011 on a selective basis.

However, most studies have studied the impact of economic growth on insurance or, conversely, the impact of insurance on the economy. Only a handful of scientific studies have focused on the cause-and-effect relationship between insurance activity and economic growth.

For example, a study by Chien-Chiang Lee a, Chi-Chuan Lee b, Yi-Bin Chiu (2013) found that a high rate of economic growth leads to a higher increase in insurance premiums, while a lower rate of economic growth results in a lower rate of insurance premium income. Testifying to the existence of a long-term, on the one hand, and a short-term, two-way causal link between the life insurance market and economic growth. The direction of the cause-and-effect relationship between the insurance sector and economic growth changes throughout economic development. We believe that with the onset of economic growth, the insurance market can stimulate real investment in an innovative way and lead to economic growth.

In her research, Sunita Mall tried to scientifically substantiate the fact that the share of insurance in the financial sectors of almost all developed and developing countries is growing sharply, which in turn indicates that insurance is an important institution. In his view, insurance companies are major institutional investors in the stock, bond and real estate markets, along with investment and pension funds.

Insurance companies stabilize the financial situation of legal entities and individuals by guaranteeing the payment of insurance coverage to victims. With this in mind, research by David Okelue Ugwunta and Uche Boniface Ugwuanyi (2019) shows that businesses and organizations tend to buy goods and services, especially expensive goods and services. Therefore, insurance stimulates production and employment and stabilizes demand and consumption of goods and services. Without insurance companies, most of the economic losses would not be covered and overall economic well-being would not be achieved. In other words, by providing a high level of security, insurance promotes economic growth and serves to improve the investment climate.

According to Athenia Bongani Sibindi, Ntwanano Jethro Godi (2014), the debate about the interdependence of the financial and real sectors has not stopped. These debates focused mainly on the banking sector or the stock market, and little research has been done to determine the relationship between the insurance sector and the real sector. It should be noted that the insurance sector, by its very nature, plays a crucial role for any economy due to the recovery of losses and the stimulation of savings.

An analysis of the literature suggests that several empirical studies have attempted to explain the interrelationship between insurance and economic growth using the level of insurance penetration and coverage of individuals and businesses. For example, Hadhek Zouhaier (2014) analyzed a data set of 23 member countries of the Organization for Economic Co-operation and Development (OECD) from 1990 to 2011 using a static panel model of data to determine the relationship between insurance and economic growth. The results of an empirical study conducted by the author have shown that in addition to life insurance, other insurance has

a positive impact on economic growth in terms of penetration into the population and businesses. In terms of insurance density, it has been concluded that general insurance other than life insurance has a negative impact on economic growth.

Zuzana Richterová and Petr Korab (2013) studied the impact of the insurance sector on economic growth using a meta-analysis model based on random efficiency. The results of the study confirmed that the overall amount of efficiency determined by meta-analysis is positive and therefore the insurance sector has a positive impact on economic growth. Therefore, it should be noted that insurance as a risk mitigation mechanism plays an important role in the development of the modern economy. Denis Kessler, Amélie de Montchalin, and Christian Thimann (2016), experts at AXA Group, a global insurance company, note that much of human activity is associated with uncertainty. Economic growth, on the other hand, is based on making decisions about financial and other risks. Insurance allows us to manage these common uncertainties.

According to Satyajit Hotta (2014), insurance companies play an important role among financial intermediaries. They are the mainstay of risk management for companies and individuals. Through the sale of insurance policies, insurance companies raise large sums of money and direct these funds to finance real investments. Consequently, the insurance sector will become one of the factors influencing economic growth.

In support of Satyajit Hotta, Teresa H. Bednarczyk (2013) concluded in her research that insurance increases the financial stability of families and businesses and helps to develop trade and commerce, increase competitiveness by expanding their creditworthiness and reducing overall risks. He also noted that insurance activities contribute to reducing the cost of financing public sector security programs and funding medical research, fire safety-related programs as well.

Sajid Mohy Ul Din, Arpah Abu Bakar & Angappan Regupathi (2017) in their study found that insurance from other financial institutions, including banking and stock market, is also necessary for sustainable economic growth of any state. Based on the results of the study, the authors concluded that life insurance in developed countries has a positive impact on economic growth and, most importantly, insurance other than life insurance has a positive impact on economic growth in developing countries.

Macroeconomic factors are the main driver of growth in gross insurance premiums in the life insurance sector. Bc. Lenka Cepelakova (2015) found its proof. According to the study conducted by this author, GDP growth, unemployment rate and the efficiency of the country's government are important drivers of life insurance development. Bc. According to Lenka Cepelakova, the life insurance sector is relatively dependent on the macroeconomic environment. However, the insurance sector other than life insurance is more sensitive to economic factors.

In research on the impact of insurance on economic growth, scientists and experts have based on different views and approaches in this regard, and most research results have positively assessed the impact of insurance on economic growth.

RESEARCH METHODOLOGY

The study analyzes the relationship between the insurance sector and economic growth in developed and developing countries. At the same time, the impact of the insurance sector of the Republic of Uzbekistan on economic growth was studied based on the observed trends in the world insurance market. The share of insurance premiums in the GDP of Uzbekistan in 2005-2019 was studied taking into account economic factors. The study was conducted by the World Bank, the Swiss Re Institute, the Organization for Economic Co-operation and Development, the International Association of Insurance Supervisors, and the Commonwealth of Independent States. Official data of the Ministries of Finance, Central (National) Banks and state bodies regulating and regulating the financial market were used. Data on the insurance sector of the Russian Federation, Ukraine and the Republic of Kazakhstan were obtained from the World Bank, Swiss Re Institute Research Center. Information on insurance activities of other member states of the Commonwealth of Independent States was obtained from the official web resources of the relevant state bodies.

ANALYSIS AND RESULTS

It is arguable that in a country with a strong economy and high per capita GDP, the insurance sector is highly developed. According to the World Bank (World Bank, 2019), in 2019 the world's gross domestic product amounted to 87 698 billion US dollars, of which 67199.7 billion US dollars or 76.6% took the highest place in the ranking on this indicato (Table 1).

Table 1. The main indicators of insurance affecting economic growth (2019)

Countries	GDP, billion US dollars	The amount of GDP per capita, US dollars	The share of insurance premiums in GDP, percent	An insurance premium per person, US dollars	Global insurance market share, percent
United States	21427,7	65,118.4	11,43	7 495	39,1
China	14342,9	10,261.7	4,30	430	9,81
Japan	5081,8	40,246.9	9,00	3 621	7,30
Germany	3845,6	46,258.9	6,33	2 934	3,88
India	2875,1	2,104.1	3,76	78	1,69
United Kingdom	2827,1	42,300.3	10,30	4 362	5,82
France	2715,5	40,493.9	9,21	3 586	4,17

Italy	2001,2	33,189.6	8,3	2 764	2,67
Brazil	1839,8	8,717.2	4,03	351	1,18
Canada	1736,4	46,194.7	7,67	3 548	2,1
Russian Federation	1699,9	11,585.0	1,35	157	0,36
Republic of Korea	1642,4	31,762.0	10,78	3 366	2,77
Spain	1394,1	29,613.7	5,10	1 508	1,13
Australia	1392,7	54,907.1	4,95	2 702	1,09
Mexico	1258,3	9,863.1	2,42	239	0,48
Indonesia	1119,2	4,135.6	1,99	82	0,35

Sources: the official websites of the World Bank and the Swiss Re Institute Research Center

The results of the analysis of the table data show that in 2019, the United States ranked first among the countries listed in the table in terms of GDP per capita. This state also leads in the share of insurance premiums in GDP and the amount of insurance premiums per capita. According to statistics published by the International Research Center of the Swiss Institute (2020), in 2019 the US sector has accumulated insurance premiums in the amount of 2 460.1 billion US dollars. It accounts for 39.1% of the global insurance market. From this it can be concluded that in the United States, the insurance sector has covered all sectors of the economy and penetrated into the population. That is, insurance serves the development of the economy.

According to the American Insurance Association (2020), an insurance company that specializes in accident insurance alone has invested \$ 1.4 trillion in economic development. These funds support economic development projects across the country through the purchase of stocks, corporate and government bonds, as well as investment in real estate, construction financing.

In recent years, the Chinese economy has been showing steady development trends. At the end of 2019, the economy of this country ranked second after the United States. This can also be seen from the table data above. According to the Swiss re institute International Research Center (2020), in 2019, Chinese insurance companies collected insurance premiums in the amount of 617.4 billion US dollars. According to this indicator, China is second only to the United States. According to data released by the China Banking and Insurance Regulatory Commission (2020), in the first seven months of 2020, the country's insurance market accumulated a total of 3 trillion yuan (\$ 437.3 billion) in insurance premiums.

It is known that the impact of insurance on economic growth can be assessed by the following two indicators. The first is an indicator of the share of insurance in the country's GDP, and the second is the insurance premium per capita in the country. The higher the share of

insurance premiums in a country's gross domestic product, the higher the impact of insurance on economic growth.

In addition to the United States, the Republic of Korea (10.78), the United Kingdom (10.30), France (9.21), Japan (9), Italy (8.3), Canada (7.67), and Germany (6) are excluded from the table above. , 33) shows that the share of insurance in GDP is high. However, in some of the world's top countries in terms of GDP, the role of insurance in the economy is not good. For example, India ranks fifth in the world in terms of gross domestic product. However, the share of insurance premiums in GDP was 3.76%. Of course, this figure is also affected by demographic factors. In the Russian Federation, the share of insurance in GDP was 1.35%. This indicates that the impact of insurance on economic development in this country is not high. In Mexico and Indonesia, too, the role of insurance in economic development is insignificant.

The AKRA Analytical-Rating Agency (2020) noted that there is a high correlation between the country's welfare level (GDP per capita) and the share of non-life insurance premium in GDP. The agency estimated that in 2007-2018, the Pearson correlation coefficient between the two indicators was 0.89. The conclusion of the Accra Agency is also confirmed by the data in the table above. For example, in 2019, the GDP per capita in the United States was \$ 65,118.4. During the same period, the share of non-life and life insurance premiums in GDP was 11.43%. Another example: In 2019, the share of insurance premiums in GDP in the UK was 10.30%, with a per capita GDP of \$ 42,300.3. Examples include the Republic of Korea, Japan, France, Canada, and Italy.

In our view, there is an uneven correlation between the insurance premium per capita nationwide and the country's share of the global insurance market. In particular, in 2019, the insurance premium per capita in the United States amounted to 7495 US dollars, with a market share of 39.1%. Similarly, in Japan, the per capita insurance premium was \$ 3,621 and the country's share of the global insurance market was 7.30 percent. However, in 2019, 9.81% of the global insurance market fell to China. According to this indicator, China is second only to the United States. However, in China, the per capita insurance premium was \$ 430. China lags behind the United States by 17.4 times. Here, of course, the Chinese population must also be taken into account.

The results of the study showed that insurance plays an important role in economic growth. Lian Han et al (2010) argued that insurance activity should have a positive impact on economic growth, based on the analysis of many research studies on the impact of insurance on the economy. However, they believe that this impact may vary depending on the economic situation of the countries and the direction of the insurance business. According to Denis Kessler et al (2016), low levels of economic development are usually associated with low levels

of insurance penetrating the economy and the population. The rate of penetration of insurance between the economy and the population will grow faster than the growth of GDP at a rate of \$ 3,000 to \$ 5,000 per capita.

Steven Weisbart (2018) rightly points out that insurance, which performs many important functions, including reinsurance, is an integral part of the economy. In his view, insurers not only ensure the financial security and peace of mind of businesses and households, but financial markets are a vital source of long-term capital that ensures the stability of the economy as a whole.

It should be noted that the impact of insurance on economic growth varies from country to country. We have analyzed the impact of insurance on economic growth in the 16 leading countries in the world in terms of gross domestic product. These countries include Canada, France, Germany, Italy, Japan, the United Kingdom and the United States, which are members of the Group of Seven (G7).

Now, we will continue our research on the impact of the insurance sector on the economy on the example of the Commonwealth of Independent States (CIS), which belongs to the category of developing countries. Currently, the CIS has 11 member states.

They were all formed as an independent state after the dissolution of the former USSR. The table above shows the indicators of the development of the economy and the insurance sector of the member countries of this community.

Table 2. Indicators reflecting the state of development of the economic and insurance sectors of the CIS member states (2019)

Countries	GDP, million US dollars	The amount of GDP per capita, US dollars	The share of insurance premiums in GDP, percent	An insurance premium per person, US dollars	Global insurance market share, percent
Russian Federation	1,699,877	11,585,0	1,35	157	0,36
Kazakhstan	180,162	9,731,1	0,69	53	0,02
Ukraine	153,781	3,659,0	1,52	66	0,04
Belarus	63,08	6,663,3	1,06	71,3	0,01
Uzbekistan	57,921	1,724,8	0,4	7,9	0,004
Azerbaijan	48,048	4,793,6	1,2	39,8	0,01
Turkmenistan	40,761	6,966,6			
Armenia	13,673	4,622,7	0,7	34,7	0,002
Moldova	11,955	4,498,5	0,8	34,8	0,001
Kyrgyzstan	8,455	1,309,4	0,2	2,9	0,0003
Tajikistan	8,117	870,8	0,3	2,6	0,0004

Sources: the official websites of the World Bank; the Swiss Re Institute; the Ministries of Finance, Central (National) Banks and financial market regulators of the respective countries

The table shows that none of the CIS countries has a share of more than 0.5% in the global insurance market. However, as we saw in the previous table, in 2019 the Russian Federation ranked 11th in the world in terms of GDP. True, Russia ranks high among the CIS countries in all respects. However, in terms of the share of insurance premiums in GDP, Ukraine was, however, higher than Russia.

In 8 CIS countries, or 72.7%, the GDP per capita is above \$ 4,000. For comparison: in the countries of the G7 group (except Italy), the GDP per capita exceeds \$ 40,000. That is 10 times higher than in the CIS countries. When we analyzed the data in the previous table, we expressed the view that the higher the GDP per capita, the higher the share of insurance in GDP, and therefore the stronger the impact of insurance on economic growth.

The development of insurance in the Republic of Uzbekistan is not at the level of demand. In 2019, the share of insurance premiums in GDP in this country was 0.4%. However, this figure is 11.43% in the United States and 10.78% in the Republic of Korea. In 2019, the insurance premium per capita in Uzbekistan amounted to 7.9 US dollars. This is a very low figure. It is true that in this country the government attaches great importance to the development of the insurance sector. For example, in accordance with Annex 1 to the Resolution of the President of the Republic of Uzbekistan dated August 2, 2019 "On measures to reform the insurance market of the Republic of Uzbekistan and ensure its rapid development" No. PP-4412 map "approved. According to him, the current Law "On Insurance Activity" will be developed in a new edition in accordance with international requirements and standards, electronic insurance policies will be introduced and the solvency of insurers in general insurance and life insurance will be taken into account, taking into account the basic insurance principles and standards separate regulations will be developed on

The results of the analysis of the table data show that in 2019, the share of insurance in GDP in Tajikistan was 0.3%. Sadly, the country's GDP per capita was \$ 870.8. According to the World Bank, Tajikistan ranks 189th out of 211 countries in the world. The per capita insurance premium in this country was \$ 2.6.

Unfortunately, it was not possible to find information on the development of insurance in Turkmenistan, a member of the CIS. Only information on the gross domestic product of this country and its share per capita can be found on the electronic resource on the official website of the World Bank. In the annual collection of statistics on the development of the global insurance market, published annually by the International Research Center of the Swiss Institute of Switzerland, we see only the data on the Russian Federation, Ukraine and the Republic of Kazakhstan. Information on the state of the insurance sector in other CIS countries is not available in the database of the International Research Center of the Swiss Institute. The

information provided in the table above on the insurance sector in other CIS countries is taken from the author's official web resources from various sources, in particular, the Ministries of Finance, Central (National) Banks and state bodies regulating financial markets.

It is obvious that the underdevelopment of the economy in the CIS member states has also had a negative impact on the overall state of the insurance sector. The level of penetration of insurance between the economy and the population, ie the share of insurance premiums in GDP is very low. Similarly, the per capita insurance premium, excluding Russia, will not exceed \$ 100 in 2019. Hence, insurance and economic growth are deeply intertwined. If economic growth is high, spontaneously, the development of the insurance sector will also be high, or vice versa. This is confirmed by the indicators of the CIS member states.

It can be concluded that for the development of insurance in the CIS countries, first of all, the economy must be developed. Admittedly, in recent years, all measures are being taken to achieve sustainable economic growth in the CIS countries. Large state-owned monopolies are being privatized, conditions are being created for free enterprise, and there are positive developments in attracting foreign investment and modern technologies. Of course, such efforts will ensure the development of the economy in the future.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the study, it can be concluded that insurance plays an important role in the economic growth of any state. Insurance has a positive impact on economic growth, especially in economically developed and well-off countries. The experience of the United States, Great Britain, Japan, Germany, France and South Korea clearly shows this. In countries with high per capita GDP, the penetration of insurance between the economy and the population is high. However, in countries with low per capita GDP, the penetration of insurance between the economy and the population is low. We have witnessed this as a result of studying the experience of the member states of the Commonwealth of Independent States, which is part of developing countries.

The results of the study showed that the impact of gross domestic product on the development of insurance varies. For example, the United States ranks first in the world in terms of GDP, which has had a positive impact on the development of the insurance sector. However, despite the fact that India ranks fifth in the world in terms of GDP, the share of insurance premiums in GDP was 3.76% and the amount of insurance premiums per capita was \$ 78. Of course, the influence of the demographic factor should not be overlooked here.

In the countries of the Commonwealth of Independent States, the impact of insurance on economic development is insignificant. In all these countries, including Uzbekistan, the share of insurance premiums in GDP is less than 2%.

In order to develop the insurance sector in the member states of the Commonwealth of Independent States, in particular in the Republic of Uzbekistan, and to strengthen its impact on economic growth, the following recommendations have been developed. First, governments need to take proactive measures to increase the efficiency of the insurance sector. Second, it is advisable to introduce a system of benefits that encourages entrepreneurs and the population to have insurance policies as an effective mechanism for diversifying financial and operational risks. Third, it is necessary to increase the level of insurance coverage of the population through the introduction of tax benefits for accident insurance, health insurance.

The above conclusions and recommendations will undoubtedly serve to strengthen the development of the insurance sector in the member states of the Commonwealth of Independent States and, consequently, the impact of insurance on economic development. To conclude, the article enriches the existing scientific literature on the impact of insurance on economic growth and encourages researchers to conduct further research on this topic. This article is considered to be expedient to use in the work of empirical analysis of the relationship between insurance and economic growth. Hopefully, this topic will be in the constant focus of researchers in the future.

REFERENCES

- Decree of the President of the Republic of Uzbekistan dated January 31, 2002 No. PF-3022 "On measures to further liberalize and develop the insurance market", (2002). <https://www.lex.uz/docs/150015>.
- Resolution of the President of the Republic of Uzbekistan dated May 21, 2008 No PP-872 "On additional measures for further reform and development of the insurance services market" (2008). <https://www.lex.uz/docs/1356676>.
- World insurance: riding out the 2020 pandemic storm, Sigma No 4/2020, Swiss Re Institute <https://www.swissre.com/dam/jcr:d50acbcd-ce5c-4ee9-bc60-a3c1e55f8762/sigma-4-2020-en.pdf>.
- Milijana Novović Burić and other (2017). Impact of economic factors on life insurance development in Western Balkan Countries, Zbornik Radova Ekonomskog Fakultet au Rijeci 35(2):331-352, DOI:10.18045/zbefri.2017.2.331, https://www.researchgate.net/publication/322399714_Impact_of_economic_factors_on_life_insurance_development_in_Western_Balkan_Countries.
- Afzalur Rashidn (2017). Board independence and firm performance: Evidence from Bangladesh, Future Business Journal 4 (2018) 34–49, <https://www.sciencedirect.com/science/article/pii/S2314721016300238>.
- Wong Hong and other (2013). Economic Development Cointegration and Malaysian Life and General Insurance Consumption. Australian Journal of Basic and Applied Sciences, 7(10): 538-546, 2013 ISSN 1991-8178. https://www.researchgate.net/publication/282787957_Economic_Development_Cointegration_and_Malaysian_Life_and_General_Insurance_Consumption.
- Peter Haiss, Kjell Sümegi (2006). The Relationship of Insurance and Economic Growth – A Theoretical and Empirical Analysis, Paper for presentation at the 2006 EcoMod Conference, Hongkong, June 28-30, 2006, <https://ecomod.net/sites/default/files/document-conference/ecomod2006/1454.pdf>.

Annalise Vucetich, Roger Perry and Richard Dean (2014). The insurance sector and economic stability, Reserve Bank of New Zealand Te Pūtea Matua Bulletin Volume 77, No. 3, September 2014, https://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/2014/2014_sep77-3.pdf.

Idrissa Ouedraogo, Samuel Guerineau, Relwende Sawadogo (2016). Life Insurance Development and Economic Growth: Evidence from Developing Countries, CERDI - Centre d'Études et de Recherches sur le Développement International. <https://halshs.archives-ouvertes.fr/halshs-01385002/document>.

Chien-Chiang Lee a, Chi-Chuan Lee b, Yi-Bin Chiu (2013). The link between life insurance activities and economic growth: Some new evidence, *Journal of International Money and Finance* 32 (2013) 405–427.

Dr. Sunita Mall (2016). Contribution of Insurance on economic growth in India: An Econometric Approach, <https://www.gtap.agecon.purdue.edu/resources/download/8576.pdf>.

David Okelue Ugwunta & Uche Boniface Ugwuanyi (2019). Insurance Development and Economic Growth: An Examination of the Non-Bank Financial Institutions in Nigeria, *International Journal of Financial Research*, Vol. 10, No. 2; 2019.

Athenia Bongani Sibindi, Ntwanano Jethro Godi (2014). Insurance Sector Development and Economic Growth: Evidence from South Africa, *June 2014 Corporate Ownership and Control* 11 (4):530-538, DOI: 10.22495/cocv11i4c6p3, <https://core.ac.uk/download/pdf/43178084.pdf>.

Hadhek Zouhaier (2014). Insurance and economic growth, *Journal of Economics and Sustainable Development*, ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online), Vol.5, No.12, 2014, <https://core.ac.uk/download/pdf/234646443.pdf>.

Zuzana Richterková, Petr Koráb (2013). Impact of Insurance Sector Activity on Economic Growth – a Meta-analysis, *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, Volume LXI 300 Number 7, 2013, <http://dx.doi.org/10.11118/actaun201361072677> https://acta.mendelu.cz/media/pdf/actaun_2013061072677.pdf.

Denis Kessler, Amelie de Montchalin and Christian Thimann (2016), Insurance is Invisible Yet Everywhere, AXA Groupe. https://www-axa-com.cdn.axa-contento-118412.eu/www-axa-com%2Ffeec4f313-4fa7-42a0-a9e8-ed8119968ff9_axa_brochure_insurance-everywhere.pdf.

Satyajit Hotta (2014), Insurance Sector Development and Economic Growth. <http://www.aims-international.org/aims13/aims13cd/pdf/B342-Final.pdf>.

Teresa H. Bednarczyk (2013). Insurance development as a factor in long-term economic growth, *Insurance Review* 4/2013 / *Wiadomości Ubezpieczeniowe* 4/2013. https://piu.org.pl/public/upload/ibrowser/WU/WU4_2013/bednarczyk.pdf.

Sajid Mohy Ul Din, Arpah Abu-Bakar & Angappan Regupathi (2017). Does insurance promote economic growth: A comparative study of developed and emerging/developing economies, *Cogent Economics & Finance*, 5:1, 1390029, DOI: 10.1080/23322039.2017.1390029 ISSN: (Print) 2332-2039 (Online) Journal homepage: <https://www.tandfonline.com/loi/oaef20>.

Bc. Lenka Cepelakova (2015). The Impact of the Macroeconomic Environment on Insurance Companies, Master's Thesis, Charles University in Prague, Faculty of Social Sciences Institute of Economic Studies. <http://www.is.cuni.cz › zpp › download/>

Gross domestic product 2019. <https://databank.worldbank.org/data/download/GDP.pdf>

GDP (current US\$) World Bank national accounts data, and OECD National Accounts data files. <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

GDP per capita (current US\$) <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?end=2018&start=1960&view=chart>.

World insurance: riding out the 2020 pandemic storm (2020). Swiss Re sigma No 4 /2020, https://www.swissre.com/dam/jcr:05ba8605-48d3-40b6-bb79-b891cbd11c36/sigma4_2020_en.pdf.

How the insurance industry helps stimulate the economy (2020). Iowa Insurance Institute, <https://iowains.org/how-the-insurance-industry-helps-stimulate-the-economy/>

China's insurance sector reports premium income growth (2020). http://www.xinhuanet.com/english/2020-08/31/c_139331930.htm.

Развитие страхового сектора отражает уровень благосостояния страны (2020). Анализ международной статистики рынков страхования, 20 февраля 2020, <https://www.acra-ratings.ru/research/1671>.

Liyan Han and other (2010). Insurance Development and Economic Growth, The Geneva Papers, 2010, 35, (183–199), 2010 The International Association for the Study of Insurance Economics 1018-5895/10. www.palgrave-journals.com/gpp/

Denis Kessler, Amelie de Montchalin and Christian Thimann (2016). Insurance and Economic Development: Growth, Stabilization and Distribution, International Labor Office Geneva: ILO, 2016, 37 p. (Paper; no.46), ISBN: 978-92-2-126328-9 (Web PDF).

Steven Weisbart (2018). How Insurance Drives Economic Growth, Insurance Information Institute, June 2018. <https://www.iii.org/sites/default/files/docs/pdf/insurance-driver-econ-growth-053018.pdf>.