

CHAPTER 3

PERSPECTIVES OF FINANCIAL SERVICE SECTOR DEVELOPMENT AND ENERGY PRODUCTION

3.1 THE MAIN TRENDS OF THE INSURANCE MARKET DEVELOPMENT UNDER CONDITIONS OF ECONOMIC INSTABILITY IN KAZAKHSTAN

The problem of the insurance market regulation is one of the most relevant in the theory and practice of modern domestic insurance. The importance of its research is related to the fact that this system has not yet been completely formed as an object of state regulation: the state of the insurance market is changing; there is a constant improvement in the insurance regulatory base, and changes are occurring in the activities of state regulatory bodies.

The theoretical aspects of the insurance market functioning are the sphere of scientific interests of many scientists and practitioners. There are various approaches and views on the nature and role of the insurance market in the economy, as well as the need and possibility of state regulation of this composite financial market (Kolomina et al, 2010; Bland, 2008; Rechman & Meskon, 2010). Kazakh scientists have also made a great contribution to the study and research of the functioning of the insurance market (Zhuyrikov, 2012; Iskakov et al, 2005; Mayanlaeva, 2008).

Relations in the insurance industry is an important segment of the financial services market, and therefore require appropriate economic and administrative regulatory support for the long term. Due to its high socioeconomic significance, insurance should be the object of close attention of our state. For the implementation of these actions in the insurance industry, sufficient theoretical and practical research is needed.

Insurance, being one of the most important components of a state's financial system, cannot be excluded from the process of global economic integration. The fact that the globalization of insurance activities covers all national insurance systems, without exception, has a bearing on the relevance of insurance regulation.

As is known, the system of state regulation of the insurance market includes the following components (Yulenkova, 2012), viz. (1) insurance legislation; (2) institutional system of state regulation of the insurance market; (3) indirect economic regulators.

Analysis of direct and indirect state influence instruments on the insurance market, which are used in foreign and domestic practice, led to the conclusion that financial and legal instruments largely dominated in their composition, due to the specifics of the insurance business as a special type of financial intermediation. According to experts, the effective regulation of insurance activities requires a number of prerequisites, viz. (1) flexible and dynamic macroeconomic policy; (2) well-developed infrastructure of the insurance market; (3) highly organized company management; (4) financial transparency of insurance institutions.

The insurance market as part of the financial and credit system is subject to state regulation in all countries over the world. At the same time, the state regulates the insurance market as a whole, as a single system, and it is clear that without this, the functioning of the insurance market is not possible. The central place in the insurance

market regulation of any country is occupied by insurance supervision authorities, which have the status of state executive bodies. As world practice shows, insurance supervisors in different countries can submit to or be included in the structure of various departments. In many European countries, insurance supervisors are institutionally separate and independent, including France (insurance control commission), Germany (federal insurance supervision agency) and Sweden (insurance inspectorate). In the United States in all states there are departments for the supervision of insurance operations. In the UK, these functions are assigned to the Department of Trade and Industry, and the insurance division within it carries out practical regulatory activities. In Canada, as in Russia, the insurance market regulation is carried out by structures under the jurisdiction of the Ministry of Finance (Ekonomov, 2012).

The report of the reinsurance company SwissRe notes (2017-2018) that premiums in developed markets will grow by 2.1% in 2017 and 2018, but the main driving force will again be emerging markets, where stabilization of economic growth, population growth, urbanization and middle class growth reinforce the positive outlook. Life insurance premiums in transition countries will grow by 14.9% in 2017 and by 10.9% in 2018, supported by steady growth of savings products, especially in developing countries of Asia. Improved commodity prices and increased economic activity will stimulate an increase in demand in the insurance sector from developing regions. Developing countries in Asia are likely to show the strongest growth in premiums in the insurance segment by almost 8% in 2017 and by 9% in 2018. According to the rating agencies, the growth of premiums for risk insurance in the world will decline in real terms from 2.4% in 2016 to 2.2% in 2017, but from 2018 it will begin to grow again (+ 3%).

The following key trends in the global insurance market can be distinguished: (1) it is expected that moderate global growth will support the growth of the insurance sector over the next 2 years; (2) the steady growth of the insurance sector in 2017 in the world was based on increasing demand in emerging insurance markets; (3) there is a decrease in the cost of insurance products in the commercial segment. The demand for cyber risk insurance is gradually increasing; (4) life insurance premiums in the world will grow in real terms by 4.2% in 2018; (5) life insurance premiums in countries with transition economies will grow steadily, due to the demand for savings and investment products, especially in developing countries in Asia.

As is known, the main indicator of the insurance market development is the volume and growth rate of real insurance premiums. According to analysts in 2016, the world leaders were: the US – \$ 1.35 trillion insurance premiums per year, Japan – \$ 471 billion and China – \$ 466 billion. Data for 2017 is not available yet, but analysts believe that China is likely to take the second line in the ranking displacing Japan. It is associated with the policy of the government of China, which actively stimulates the purchase of insurance policies.

Also an important indicator of the insurance market development is the share of insurance premiums in the GDP of a country or region. This parameter is dominated by Taiwan, where insurance premiums provide 19% of GDP, Hong Kong (17-18%), South Africa (14%), South Korea (13%) and Finland (12%) (Katargin, 2017).

Among the major economies, the growth of the US economy is projected at a rate of just over 2% taking into account inflation (in real terms) annually over the next two years. Growth in the Eurozone and the UK is projected to be around 1% and 1.5% respectively, while growth in Japan should be less than 1%. China's growth is expected to be around 6.5% (Figure 3.1.1).

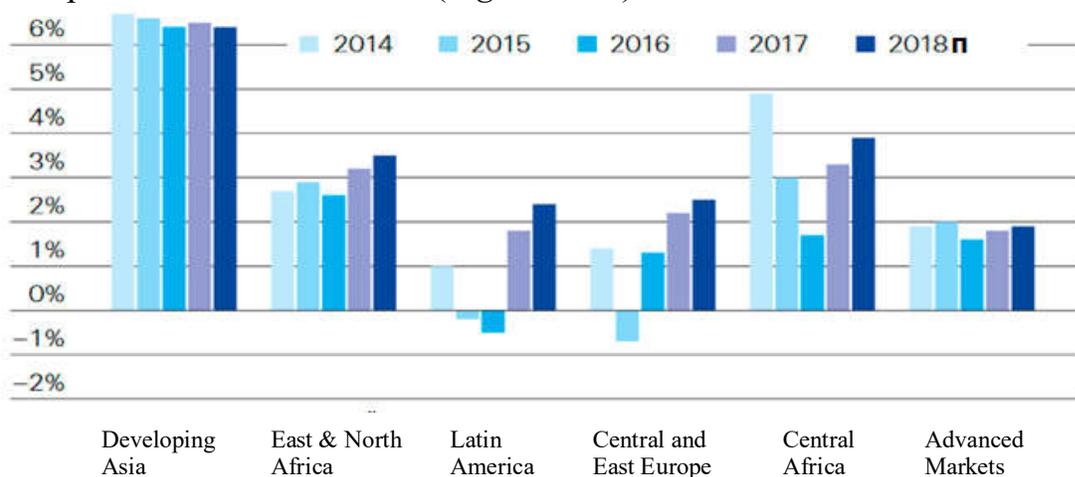


Figure 3.1.1: Dynamics of real GDP growth in the world, 2014-2018

Source: *Global insurance review 2016 and outlook for 2017/2018*

Monetary policy will remain stimulating over the next two years, even in the US, it is expected that there will be a gradual increase in interest rates. It is expected that other central banks will keep their interest rates unchanged.

With an increase in the Federal Reserve rate, the yield on 10-year US government bonds is likely to increase, slightly increasing, respectively, the yield in Europe.

“The insurance sector is facing constraints, moderate economic growth and still sufficient collateral in the markets, creating difficult conditions for the formation of tariffs,” said Kurt Karl (2017), chief economist at SwissRe. “However, premiums continue to grow in both developed and emerging markets, along with economic activity. There is also an increase in the penetration rate of insurance, especially in markets with transitional economies” (Table 3.1.1).

Table 3.1.1

Dynamics of the risk insurance market in 2014-2018, %

No	Region	2014	2015	2016	2017Π	2018Π
1	USA	3,0	3,6	2,3	1,3	1,5
2	Canada	1,9	4,1	0,8	1,7	2,6
3	Japan	1,2	1,3	-1,0	1,2	2,2
4	Australia	1,3	0,5	-0,4	0,6	1,4
5	Great Britain	-1,7	1,3	1,5	0,3	1,4
6	Germany	1,8	3,3	2,5	0,9	1,1
7	France	0,3	1,0	0,8	0,4	2,8
8	Italy	-3,0	-2,9	-1,8	0,3	2,3
9	Spain	-0,2	3,0	4,6	4,1	4,3
10	Developed markets*	1,8	2,5	1,7	1,3	1,9
11	Emerging markets	6,4	4,9	5,3	5,7	6,7
12	WORLD	2,7	3,0	2,4	2,2	3,0

Source: *Global insurance review 2016 and outlook for 2017/2018*

As for the insurance industry in emerging markets, risk insurance premiums in emerging markets will grow from 5.3% in 2016 to 5.7% in 2017 and 6.7% in 2018. Improved commodity prices and increased economic activity will stimulate an increase in demand in the insurance sector from developing regions (*Figure 3.1.2*).

Developing countries in Asia are likely to show the strongest growth in premiums in the insurance segment – by almost 8% in 2017 and by 9% in 2018. An additional factor will be the investment opportunities provided by "OneBeltOneRoad" program in China which is expected to increase the demand for commercial insurance.

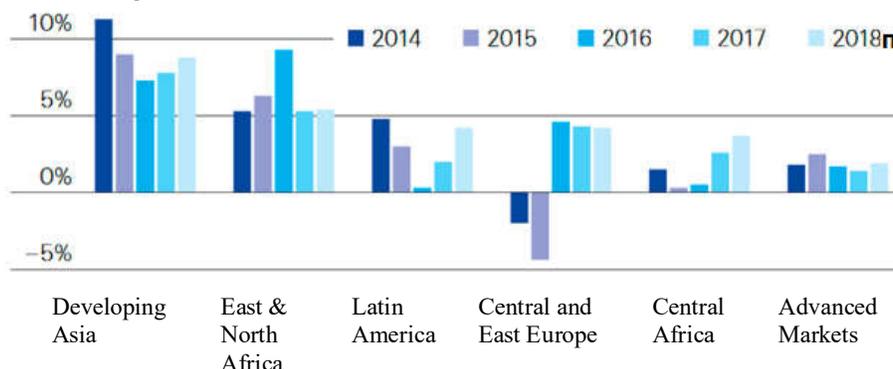


Figure 3.1.2: Dynamics of the risk insurance market by region in 2014-2018, %

Source: *Global insurance review 2016 and outlook for 2017/2018*

Tariffs on risk insurance in the world will continue to decline in 2017-2018, viz. along commercial business lines. Nevertheless, unlike many other commercial lines of insurance products, cyber-insurance tariffs continue to strengthen, however, the growth occurs at a slower pace and may become equal in the nearest future. Raising awareness of the risks associated with cyber-attacks and data vulnerability is a stimulating factor for increasing the demand for insurance of relevant risks and presents significant growth opportunities for types of insurance other than life insurance. Risk insurance retained its profitability due to low losses from natural disasters and the release of insurance reserves. If we assume the average losses from natural disasters and the reduction of reserves, then the return on equity (*ROE*) is projected to decrease from 8% in 2015 to about 6% in 2016-2018. In reinsurance of risk insurance, global premium growth is expected to be 2.7% in 2017 and 2.9% in 2018, based on an increase in cession from transition markets (*Table 3.1.2*).

Table 2

Dynamics of the reinsurance industry in 2014-2018

No	Region	2014	2015	2016	2017Π	2018Π
1	Developed markets	-1,2	0,8	1,6	1,1	1,7
2	Emerging markets	3,7	2,9	-0,7	5,3	6,3
3	WORLD	0	1,4	1,0	2,2	2,9

Source: *Global insurance review 2016 and outlook for 2017/2018*

In the reinsurance sector, global premium growth will be about 1% in 2017-2018, primarily due to the lack of growth in advanced economies, where the bulk of assignments are formed. Growth in reinsurance premiums in emerging markets is projected at 8% or higher. Growth premiums are expected to be significantly higher in the life insurance sector than in risk insurance; life insurance premiums will grow by 5.4%, 4.8% and 4.2% in 2016, 2017 and 2018 respectively (*Table 3.1.3*).

Table 3.1.3**Dynamics of the life insurance market in 2014-2018, %**

No	Region	2014	2015	2016	2017II	2018II
1	USA	-1,7	4,3	1,6	1,7	1,7
2	Canada	7,6	3,5	3,0	3,6	3,7
3	Japan	-11,9	17,6	2,2	1,5	2,0
4	Australia	6,8	1,5	2,6	2,0	1,3
5	Great Britain	26,5	-7,4	-5,7	4,1	4,1
6	Germany	8,4	1,3	1,4	1,4	2,6
7	France	2,4	-2,7	-2,3	0,9	1,3
8	Italy	29,5	-2,0	-2,1	0,2	1,1
9	Spain	-2,5	3,4	23,9	1,5	0,9
10	Netherlands	-4,6	-16,9	2,9	1,6	1,6
11	Developed markets	4,0	3,4	2,0	2,1	2,1
12	Emerging markets	6,8	13,2	20,1	14,9	10,9
13	WORLD	4,7	5,0	5,4	4,8	4,2

Source: *Global insurance review 2016 and outlook for 2017/2018*

Premiums in developed markets will grow by 2.1% in 2017-2018, but the main driving force will again be emerging markets, where stabilization of economic growth, population growth, urbanization and growth of the middle class will support a positive outlook. Life insurance premiums in transition countries will grow by 14.9% in 2017 and by 10.9% in 2018, supported by steady growth of savings products, especially in developing countries of Asia. China will make a significant contribution given that the Government of the People's Republic of China aims to increase the level of insurance penetration from 3% in 2014 to 5% by 2020 (*Table 3.1.3*).

The continuing environment with low interest rates still creates problems for life insurers. The return on equity (*ROE*) for the life sector declined from 13% at the beginning of 2015 to 10% in 2016 due to weaker investment incomes and increased competition and lower tariffs.

As for the situation in the insurance market of the CIS and Ukraine, the leading positions are occupied by the insurance markets of Russia and Ukraine. If you look at the Ukrainian insurance market in comparison with the CIS countries, then today in the post-Soviet space and the Baltic countries in terms of the volume of operations, it ranks second after Russia. Until 2016, the volume of insurance premiums collected on the Ukrainian market increased almost twice each year. In 2016, the situation has changed. But according to the State Commission for Regulation of Financial Services Markets, the volume of funds raised by insurers has sharply decreased. The gross insurance premiums collected during 2017 decreased to \$ 2.8 billion, which is 3.4% of GDP. The level of insurance in GDP in Ukraine is the largest among the CIS countries at the end of 2017 is 3.0%, but it is still lower than the level typical for developed countries (8-13%).

According to the online magazine *Atlas Insurance (2017)* in terms of insurance premiums per capita, Ukraine lags far behind Russia and European countries, but is in the leading positions among the CIS countries, if in Kazakhstan the insurance premium per capita is \$ 86.4, in Ukraine \$ 81.6, Belarus \$ 33, Azerbaijan \$ 10.9, Uzbekistan \$ 6.2.

The indicator characterizing the state of the insurance market in the Republic of Belarus is the amount of equity capital of insurance organizations. Equity includes the amount of the share capital, additional fund, reserve fund, retained earnings of previous years and the reporting year, accumulation and consumption funds less intangible assets and uncovered losses (*Figures 3.1.3-3.1.5*).

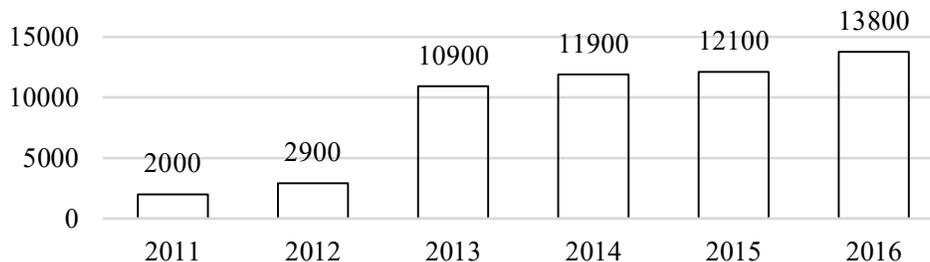


Figure 3.1.3: Dynamics of the size of own capital of insurance organizations of the Republic of Belarus, bln rubles

Source: according to the data of the Ministry of Finance of the Republic of Belarus (2017)

The indicators characterizing the state of the insurance market also include the amount of insurance premiums collected and insurance payments made.

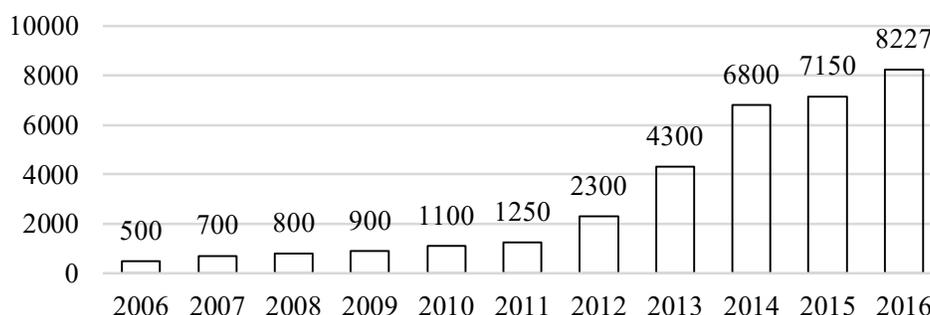


Figure 3.1.4: Dynamics of receipts of insurance contributions of the Republic of Belarus, bln rubles

Source: according to the data of the Ministry of Finance of the Republic of Belarus (2017)

In 2006-2016, the amount of insurance premiums received by insurance companies increased by 7748 billion rubles or 1717% and as of January 01, 2016, amounted to 8227 billion rubles, of which 4286 billion rubles (52%) for voluntary insurance and 3941 billion for compulsory insurance rubles (47.9%).

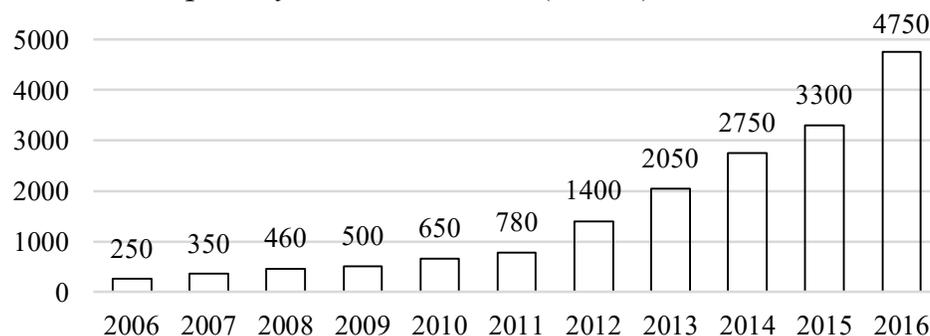


Figure 3.1.5: Dynamics of insurance payments in the Republic of Belarus, bln rubles

Source: according to the data of the Ministry of Finance of the Republic of Belarus (2017)

According to the National Statistical Office of Belarus, the voluntary insurance segment is developing relatively dynamically, viz. in the total amount of insurance contributions, it was 58.7% (55% in the first half of 2016). In this segment in the first half of 2017, insurance premiums amounted to 308 million rubles. In the segment of compulsory insurance for the I half of 2017, insurance premiums amounted to 216.9 million rubles, i.e. 41.3% of the total contributions (for the half of 2016 – 45%).

In Ukraine, net insurance premiums for 2017 amounted to UAH 20,790.9 million, which is 66.2% of gross insurance premiums. Net insurance premiums for 2016 amounted to UAH 19,588.4 million, or 78.8% of gross insurance premiums. The volume of gross insurance premiums for 2017 increased compared to 2016 by 26.4%, net insurance premiums increased by 6.1% (*Figure 3.1.6*).

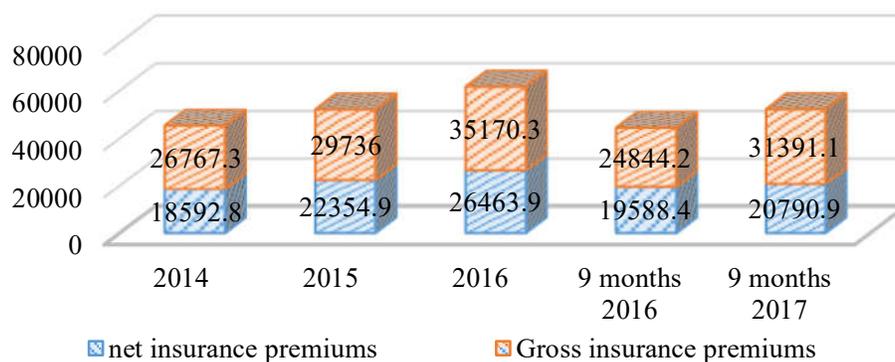


Figure 3.1.6: Dynamics of insurance premiums in Ukraine, mln. UAH

Source: according to *Statistics of the insurance market of Ukraine (2018)*

The structure of net insurance payments 9 months 2017 was redistributed in favor of insuring financial risks (from 8.9% to 16.6%), auto insurance (from 44.1% to 48.5%), property insurance (from 1.5% to 2,7%), medical insurance (from 15.7% to 16.7%), by reducing the share of credit insurance (from 11.1% to 1.4%), insurance against fire and natural hazards (from 0,9% to 0.6%).

On the whole, in the Russian insurance market, the growth rate of premiums exceeds the growth rate of payments, but most non-life companies show the opposite trend. Positive dynamics of premiums in 2017 is provided by life insurance. The volume of premiums increased by 8.3%, which corresponds to the level of 2014. The payout has not changed (*Figure 3.1.7*).

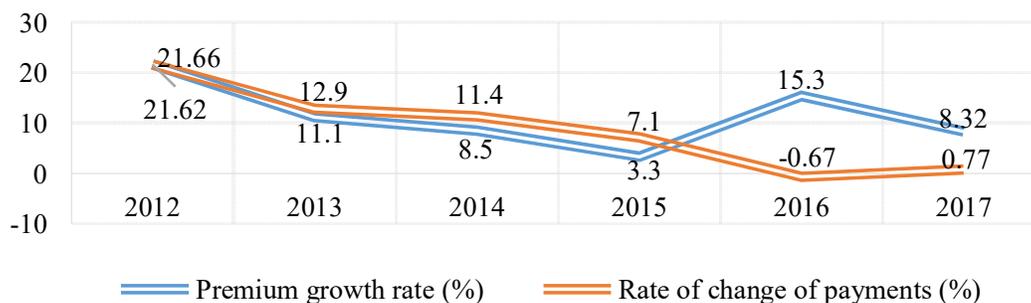


Figure 3.1.7: Dynamics of premiums growth rates and the change rate of payments in Russian Federation, 2012-2017

Source: according to the *National Rating Agency of Russian Federation (2018)*

The most significant changes were made to life insurance and OSAGO: the share of life insurance for the year increased by 1.5 times, the share of OSAGO continues to decline. The long-term personal insurance, liability, business and financial risks and other types of compulsory insurance (OLS, OSOPO, OSGOP) remained at the previous year level (*Figure 3.1.8*).

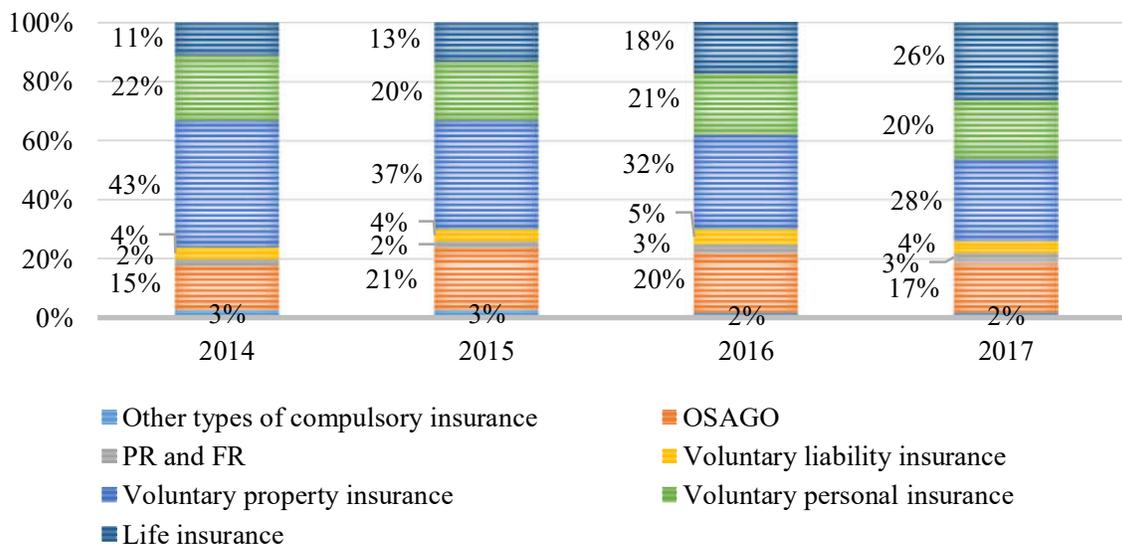


Figure 3.1.8: Structure of Russian insurance premiums by type of insurance

Source: according to the National Rating Agency of Russian Federation (2018)

The share of contracts concluded through intermediaries in 2017 compared to 2016 increased by 4.3 pp. (74.5% against 70.2%). With a total increase in premiums of 97 billion rubles, intermediaries brought in more by 121.8 billion rubles. As in 2016, over 80% of the increase in premiums received through intermediaries was provided by the banking sector. Traditionally, without intermediaries' participation, more than half of the contracts for the insurance of air transport and the responsibility of their owners, voluntary medical insurance, business risks are concluded. In the life and property insurance segments of individuals, over 94% of premiums are collected through intermediaries.

In general, the current trends allow to conclude, that today leaders in the growth rates of the insurance market are the markets of developing countries (China, India, Mexico, Indonesia, Vietnam, etc.). The CIS countries markets including Kazakhstan are also growing, but at a slower rate. Nevertheless, the leader in property and liability insurance is still the United States, which occupies 46% of the world market.

Thus, as it is shown by a study of foreign experience in the development of the insurance market, insurance markets of foreign countries show increasing tendency of insurance in the social sphere, in the field of medical and pension insurance, as well as tax incentives for long-term life insurance. Such experience would be useful in shaping the strategy for the development of the insurance industry in Kazakhstan. Speaking about the Kazakhstan insurance market, it should be noted that the experience of the countries of Central and Eastern Europe suggests that for the insurance market of Kazakhstan, with its low capacity and quality, foreign participation is useful, in

this case, we can expect a decrease in reinsurance abroad, the formation of a genuine competitive environment, the transformation of the insurance technology' level of operations and insurance culture in general, increasing the financial stability of the market, when investing most of the insurance reserves in national assets.

The stabilizing macroeconomic situation of Kazakhstan with moderate real GDP growth will influence the insurance sector in Kazakhstan. By the end of 2017, the penetration level of insurance services is assessed as low, slightly increasing. Thus, the insurance premiums share to Kazakhstan's GDP is about 0.8%, which is 0.03% more than in 2016.

Insurance companies are currently the youngest and most promising financial institution in the financial market of the Republic of Kazakhstan. Today, the insurance sector of Kazakhstan is represented by 32 insurance (reinsurance) organizations and 10 insurance holdings. Concentration Indicators that are widespread in international practice, in particular the Herfindahl – Hirschman Index, show that the insurance sector of Kazakhstan in terms of the volume of insurance premiums received remains as a competitive market with a low monopolization level. At the same time, the index increases since 2014 that indicates an increase in the monopolization level.

First of all, it should be noted that despite the fact that the insurance market has grown rapidly since 2004, its role in the country's economy is still insignificant. The penetration level of insurance services in 2017 is estimated as low, rose slightly. Thus, the share of insurance premiums to Kazakhstan's GDP amounted 0.8%, which is 0.03% more compared to 2016 (RFCA ratings of Republic of Kazakhstan, 2018). The share of insurance sector assets to GDP is assumed at the level of 1.9-2.0%. The average annual growth rate of assets in 2011-2014 was about 16% and 34% in 2015 due to currency revaluation of insurers' investment assets. At the end of 2016, the increase was 3.8% and 7-9% in 2017. In foreign currency equivalent, the insurance premium per capita is about \$ 65. The density of insurance remains extremely low due to the low level of per capita income (*Figure 3.1.9*).

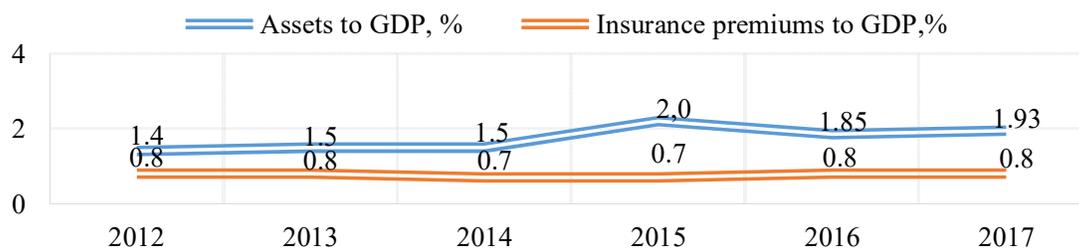


Figure 3.1.9: The share of assets of the insurance sector to GDP, %

Source: RFCA ratings of Republic of Kazakhstan (2018)

Regarding the growth rate of insurance premiums, *RA RFCA* forecasts its value at the level of 9.5-10.0%. Despite moderate economic growth and a pent-up level of consumer inflation within the established corridor, the volatility of the national currency, as well as the reduction in consumer demand and real incomes of the population with some delayed effect over time, will be the main constraints to the growth of the insurance sector in Kazakhstan [ibid].

Indicators of the insurance market evidence that Kazakhstan has laid the foundations of national insurance, the market is in a developmental stage, whose level is lagging significantly behind in terms of both quantitative indicators and development level of insurance culture from the developed countries.

In 2012-2016, the positive dynamics in the volume of insurance premiums, the cumulative amount of which amounted to about 1.4 trillion tenge. At the end of 2017, the insurance portfolio reaches 385 bln tenge. The increase was 12% compared with 2016 that corresponds to the average market rate, estimated at 11.3% (*Figure 3.1.10*).

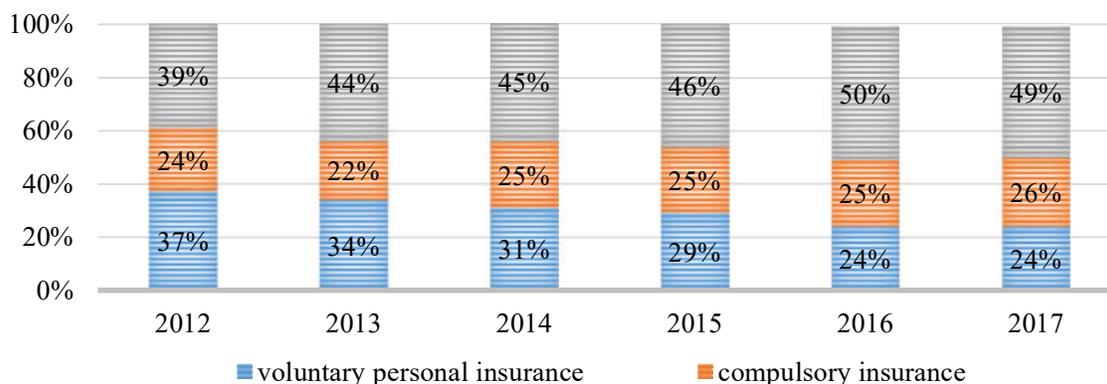


Figure 3.1.10: Insurance premiums by type of insurance in Kazakhstan

Source: RFCA ratings of Republic of Kazakhstan (2018)

Thus, the analysis of changes in the structure and dynamics of growth of insurance premiums and payments allows us to draw the following conclusions: this sector of the economy is at the growth stage. At the same time, in the near medium term, a slowdown in the growth rate of the insurance sector is expected due to the fact that the economy of Kazakhstan has begun to gradually recover. The rate of inflation and real incomes of the population, a freely floating exchange rate of the national currency will put pressure on the insurance portfolio. There remains a strong dependence of the insurance market of Kazakhstan on the banking and commodity sectors of the economy. However, it is possible to note the tendency of shifting development from corporate orientation towards the retail business.

The study showed that despite the considered positive trends, there are some problems of state regulation of the insurance services market of the Republic of Kazakhstan. Current problems of the insurance market at the moment are insufficient capitalization of insurance organizations, continuing high proportion of insurance premiums transferred abroad through reinsurance channels, underdevelopment of long-term life insurance.

The insurance portfolio of Kazakhstan insurers is not diverse.

The key problems of insurance organizations in the field of investment activity are caused by the specific instability in the Kazakhstani financial market, as well as by the insurers' lack of a reasoned and distinct investment strategy. To date, long-term life insurance is not fully implemented, which allows to accumulate significant amounts of long-term resources for such reasons as: citizens' distrust of insurance companies. Second, in the course of long-term life insurance, a permanent payment of insurance

premiums is meant during the entire term of the insurance contract, and in case of non-payment of premiums within a certain period of time, it means that the insurance contract is interrupted. As a result, such an important branch of insurance as life insurance remains unclaimed.

Thus, in order to develop the investment activities of insurance organizations towards the formation of an investment portfolio, firstly, it is necessary to create a suitable situation in the financial market, provide the market with a large number of various financial instruments and ensure the "transparency" of the securities market. Regarding the insurance organizations themselves, there is a development of the life insurance industry, since this will attract long-term resources, transformed in the future into long-term investments in securities; it is necessary to increase the investment potential of insurance organizations and increase its effective use. With the development of the insurance business, the presence of a well-developed infrastructure of state regulation of the insurance market is becoming increasingly important, on the basis of which, the powers of such participants in the insurance market as surveyors, underwriters, emergency commissioners, etc. are required by law. The development of these market participants is due to the need to make an accurate assessment of the insured risks and the amount of harm caused during the occurrence of the insured event. A significant stage in the development of the insurance sector will be the further improvement of the guarantee institutions' activities bringing it in line with international experience. In order to ensure the safety and multiplication of the guarantee reserve amounts, it is necessary to expand the list of financial instruments allowed for their investment.

In the nearest future, the situation in the insurance market of Kazakhstan will probably not improve. Insurance companies will be in a difficult financial situation and without stabilization of the entire economic system, the situation in the insurance market of Kazakhstan will not change for the better.

3.2. CAPACITY REMUNERATION MECHANISM (CRM) IN RESPONSE TO MARKET CONDITIONS FOR ELECTRICITY PRODUCTION IN A SMALL OPEN ECONOMY⁴

Introduction

The electricity market is specific. Because it is inherently unstable in the long run, a special form of its regulation has been developed, in effect throughout the world. According to this regulation, the electricity market operators use special instruments to prevent a cyclical shortage of electricity. One of these instruments, Capacity Remuneration Mechanism (CRM), is presented in this research. Here, a theoretical introduction is followed by a presentation of the potential losses to a small open economy in the case of a blackout. Then an analysis is given of the electricity prices in two chosen EU countries (Germany and Slovenia) with clear signs of deep

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