STATUS, TRENDS AND DEVELOPMENT OF THE LIFE INSURANCE MARKET IN UKRAINE AND IN THE WORLD IN CONDITIONS OF FINANCIAL GLOBALIZATION

Hanna Malynych¹, Nataliia Bazhanova²

¹Ternopil Ivan Puluj National Technical University, Ternopil, Ukraine, gannamalynych@gmail.com ²Ternopil Ivan Puluj National Technical University, Ternopil, Ukraine, bazhanova_natalia@ukr.net

Abstract

The essence and role of life insurance as a method of risk management to ensure personal financial security in the economy has been investigated. There has been characterized the content of financial globalization in modern conditions. The system of indicators for assessing the level of development of the insurance market and their economic interpretation has been investigated. Status and trends of the global life insurance market and regional markets are analyzed. The main macroeconomic indicators of the life insurance market in Ukraine in conditions of intensification of integration and globalization processes has been investigated. Based on the analysis and generalization of the sound system of indicators by the cluster analysis method, it was made the classification of the countries of the world according to the level of development of the life insurance market. The main forms of manifestation of financial globalization in the domestic life insurance market are investigated: absorption, merger of insurance companies and peculiarities of functioning of foreign insurance and reinsurance companies. Reasons for the low level of development of the life insurance market in Ukraine were determined. There has been generalized positive and negative consequences of globalization processes in the life insurance market in Ukraine and their implications for the domestic economy through the method of strategic analysis of PEST. It is made the conclusion about the high potential of the life insurance market in Ukraine. The main measures aimed at activating the life insurance market in Ukraine and the role of foreign insurers in these processes are offered.

Keywords: life insurance market, indicators, cluster method, financial globalization.

INTRODUCTION

Development and formation of mankind are influenced by a set of factors, the impact of which can have both positive and negative consequences. This operation is continuous as human activity leads to new risks, in the process of applying tools and implementing mechanisms to capture existing ones which are manifested in economic and social losses. Thus, human community faces the need to find reliable and effective mechanisms that will enhance the impact of positive factors (achieving sustainable economic growth, increasing life expectancy and quality, increasing people's education, etc.) and avoid or minimize the negative ones (wars, global warming, poverty, overcoming social inequality, disease etc.). One of such effective tools to overcome the economic impact of environmental uncertainty and permanence which was invented by humanity in ancient times and still is used, is insurance.

In today's context, the nature of insurance has been sufficiently researched in the scientific community and there is no discussion about its content, but it is indisputable that the category «insurance» is multifaceted and regarded as a type of civil legal relations [1], as a type of economic activity [2; 3], as a risk management method [4], etc.

RESEARCH RESULTS AND DISCUSSION

Today, the problem of finding ways to ensure personal financial security is increasingly relevant since market-type economic systems reduces the economic contribution of the state, offsetting this by creating effective mechanisms for its implementation within the legal field and providing free choice to the individual, including a specific financial institution.

Having considered many years of experience of functioning of life insurance institution, generalized research in this area, we can distinguish the role of life insurance:

- at the micro-level (individual) it provides protection of property personal interests, related to human life, health and performance; a significant psychological effect of financial security awareness is achieved in case of occurrence of the unforeseen event (certain insurance risk) and the subconscious inclusion of preventive measures by the insured person aimed at minimizing them; is financial service for saving and accumulating cash for citizens by the insurance company;
- at the macro level (country, region, world) is an important financial intermediary, a powerful institutional investor that accumulates a free long-term financial resources and effective division between economic sectors, taxpayers and an integral part of the financial market of the country, etc.

The emergence and further development of life insurance markets is under the influence of financial globalization as an objective process for development of the world economy, caused by the over-openness of the world economies and their desire for sustainable economic growth, domination and competition for financial resources and control over their distribution.

Today, insurance is one of the most globalized forms of the financial market. Globalization of the insurance relations is leveled in the elimination of economic and legal obstacles between national insurance markets in order to form the global insurance space.

Financial globalization is affecting the insurance market because of the emergence and functioning of the global financial market, implementation of global financial strategies of MNCs (multinational companies), free and efficient movement of capital between countries and regions of the world, formation of a system of supranational regulation of international finances, creation of global networks. Creating the global insurance market, the essence of which is determined by the close intertwining of the totality of financial relationships by which national markets influence each other and the world market as a whole, are taking place at the present stage of formation of the global economy. Globalization of the insurance market is a controversial process. On the one hand, it modernizes the mechanism of the insurance activity by applying fundamentally new technologies, allows to diversify risks and reduce the cost of services. On the other hand, participation in globalization processes is not always effective and safe for national insurance operators, as there are risks of absorption related to the low level of their own development and the prospects of expanding the field of activity for transnational insurers [5].

The system of indicators that allows you to make comparison and collation, identify disparities and uneven distribution of life insurance in the world, is formed to

determine the status and level of development of the insurance market in the country. It should be noted that life insurance is not an essential service and its acquisition depends on many factors: financial position of the person, awareness of its need (determined by the level of financial literacy), demographic situation, macroeconomic indicators of the economy of the country (inflation rate, currency, GDP). In general, the insurance market indicators are a kind of indicators of economic development as a whole.

Life insurance market is one of the components of the insurance market of the country; the latter includes the general (risk) insurance market and the reinsurance market (horizontal structure). The insurance market of the country is a component of regional insurance market and the aggregate of regional markets is the world insurance market (vertical structure) (Figure 1).

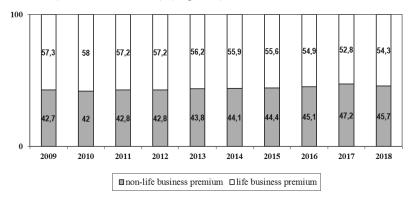


Figure 1. The dynamics of the structure of the world insurance market by the amount of collected premiums, %

Source: Sigma (2010-2019)

Distribution of the world insurance market in the structure on non-life business and life business in 2009-2018 certifies that progressive reduction of the share of life business in the world is happening. If the unit weight of life business in 2009 was 57,3% in the total amount of insurance premiums in the world market, then in 2018 it is by 3 percentage point less, namely, 54,3%. It is noted that the predominance of life business over non-life business underscores the importance of life insurance market for the global economy. It should be noticed that the horizontal structure of the world insurance market and its dynamics does not fully reflect the processes occurring in regional markets and the disparities in the growth rates of individual markets, changes in leaders, etc.

Visual assessment of the trend of life insurance premiums in regions based on estimated growth rates certifies that the structure of the world life insurance market is characterized by disproportions in development which are leveled by powerful regional centers (Figure 2).

In particular, the European Union life insurance market shows a slow decline, and Emerging markets – a pronounced upward trend, namely, the volume of collected premiums doubled in 2008 – 2018. The dynamics of the domestic life insurance

market is characterized by cyclicality, the rapid growth of which in 2013 was changed to the phase of decline due to the global financial crisis, and the reinsurance index was restored only in 2016. Therefore, Emerging markets are characterized by higher growth rates of life insurance market as opposed to Advanced markets.

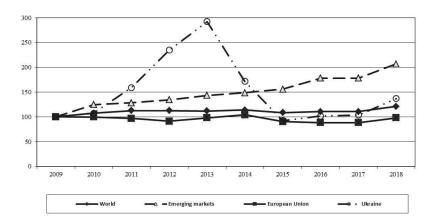


Figure 2. Growth rates of life insurance payments in regions, % (till 2009)

Source: authors' calculations based on Sigma (2010-2019)

Emerging markets capacity building has led to regional structural shifts in the global life insurance market (Figure 3).

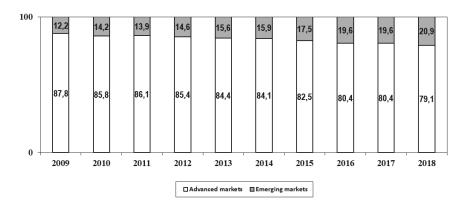


Figure 3. The structure of the world life insurance market by size of insurance premiums, %

Source: Sigma (2010-2019)

Realizing the potential of life insurance market in Emerging markets and slowing the growth of Advanced markets allowed to increase the share of the first ones for 2009 – 2018 by 8,7 % that happened at the expense of the Chinese market.

The demographic factor and the growing economies of developing countries have had a significant impact on this situation.

Modern insurance theory and practice use the system of indicators to evaluate the state and development of the insurance market; among them (for comparative analysis) we use:

- share of total business, %;
- premiums per capita, USD;
- insurance penetration, %.

The domestic life insurance market at the present stage of development of the insurance market is in the formation stage and, compared to the risk the insurance market is characterized by a lower level of attractiveness for potential insurers, as evidenced by the indicator of share of total business, %. This indicator reflects the degree of maturity of life insurance market. It is believed that the higher its value, the more developed is life insurance market and insurance market as a whole.

This indicator is inherently a stimulant indicator. The world experience shows that with high level of development, the share of life insurance market in the insurance market of the country is over 50%.

We want to note a positive trend of growth of the domestic life insurance market in terms of share of total business, % (Figure 4).

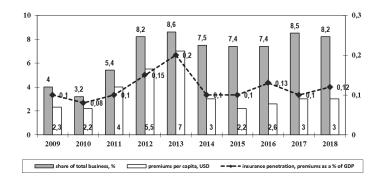


Figure 4. The dynamics of life insurance market development indicators in Ukraine in 2009-2018

Source: Sigma (2010-2019)

In 2018, the share of total business was 8,2%, up 4.2 percentage points or 2,05 times more than in 2009. However, the level of the indicator is quite low compared to its value in the world which was to 54,3% (Figure 5) and the maximum value of 92,6% in Hong Kong. In 2018, life insurance market in Ukraine bypassed only Venezuela (2,5%), Saudi Arabia (3,2%) but gave way to the markets of such countries as Algeria (8,8%), Kazakhstan (25,5%), Nigeria (45%).

The determining factor for development of life insurance market in the country is the level of income of the population, the level of insurance culture, as an awareness of the need for insurance. The quantitative expression of the influence of

these factors is reflected in the indicator of «premiums per capita». This indicator is one of the macroeconomic indicators of development of life insurance in the country and characterizes the density of insurance.

The level and dynamics of premiums per capita in life insurance market in Ukraine are unsatisfactory. For the last decade, the maximum was fixed in 2013 – 7 USD. The financial crisis of 2014-2015 that have led to the depreciation of the national currency, to inflation at 48% offset positive trends in the market. In 2018, premiums per capita in the world life insurance market was 370 USD, while in the domestic market 123.3 times less – 3 USD. Life-business premiums per capita of 3 USD was reached by Ukraine, Algeria, Nigeria and this is the lowest indicator in 2018.

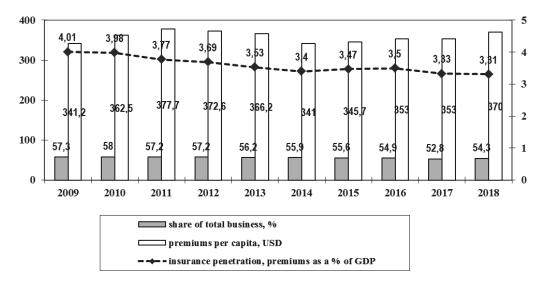


Figure 5. The dynamics of indicators of development of the world life insurance market in Ukraine in 2009-2018

Source: Sigma (2010-2019)

Insurance penetration indicates the level of development of insurance sector in a country. Penetration rate is measured as the ratio of premium underwritten in a particular year to the GDP. This indicator characterizes not only the level of penetration of insurance in the economy of the country, but also the attractiveness for other countries.

The average value of Insurance penetration in the world life-business in 2018 was 3.31% and the leader is the Advanced Asia-Pacific region (Taiwan, Hong Kong, South Korea) – 6,81%. The lowest level of Insurance penetration is found in Emerging Europe, Middle East, and Africa (EMEA) countries. According to this indicator, the domestic market occupies low positions in the rating with value 0,12%, bypassing Algeria (0,06%), Saudi Arabia (0,04%), Venezuela (0,03%).

Thus, the results of the investigation confirm the fact that life insurance market in Ukraine has been in its infancy since the transition to the market economy, is backward compared to most countries in the world, and by some indicators, it is inferior to the poorer economies of the world. Among the reasons for underdevelopment of the domestic life insurance market, taking into account the results of sociological research [6,7], we can highlight: law income of the population, poor financial literacy of the population, distrust of financial institutions, underdevelopment of the financial market, low competitiveness of the domestic life insurance companies compared to commercial banks and highly capitalized insurers with foreign capital.

Comparative analysis of life insurance markets of the countries in the dynamics was performed with the help of Cluster analysis and their classification was conducted to identify groups of similar (homogeneous) life insurance markets (cluster) in 2009 and 2018 for 83 countries of the world (according to statistics of Sigma). Since the selected indicators are hierarchically interconnected to eliminate multicollinearity, Pearson correlation coefficient is determined (Table 1).

Table 1. Pearson correlation coefficient matrices

2009	Premiums per capita	Insurance penetration	Share of total business		
Premiums per capita	1				
Insurance penetration	0,77444	1			
Share of total business	0,619653	0,721924	1		
2018	Premiums per capita	Insurance penetration	Share of total business		
Premiums per capita	1				
	0.040476	1			
Insurance penetration	0,849456	I			

From the obtained Pearson correlation coefficient matrix, premiums per capita and share of total business indicators were selected, since the found relationship is the lowest in 2009 and 2018. Accordingly, a scatter diagram was constructed between the selected indicators in order to justify cluster analysis method and the number of clusters (Figure 6).

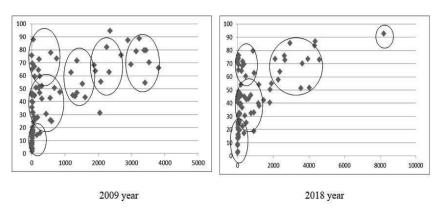


Figure 6. Scatterplots of correlation coefficients for 83 countries of the world

Source: authors' calculations based on Sigma (2010-2019)

Visual evaluation of the scatterplot of the correlation coefficients allowed to hypothesize the presence of clusters, and the application of the method of hierarchical cluster analysis (Hierarchical clustering) – to justify the number of clusters based on the agglomeration schedule.

The implementation of Cluster analysis procedure used Ward's method and obtained 4 variants of clustering solutions which were tested for cluster stability and selected the formation of 5 clusters in 2009 and 2018. Distribution of countries by clusters and their shifts are presented in Figure 7.

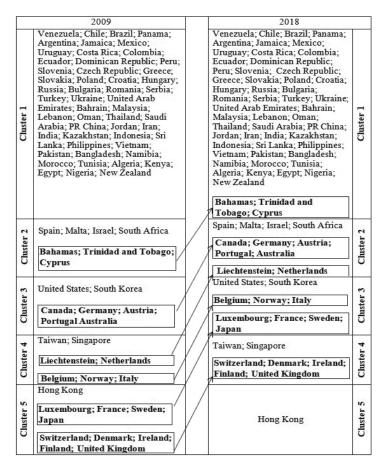


Figure 7. Clusters of countries of the world by level of development of life insurance market in 2009 and 2018

Source: authors' calculations based on Sigma (2010-2019)

The formed Clusters 2,3,4,5 are homogeneous, since the coefficient of variation does not exceed 0,3 (Table 2). The exception is Cluster 1, which includes 52 and 55 countries respectively in 2009 and 2018. Despite the fact that Cluster 1 is characterized by heterogeneity, it includes countries belonging to Emerging markets, in particular, China's life insurance market is expected to grow further in 2018,

accounting for 11,11% share of the world market compared to 4,01% in 2009. In future research, it will be advisable to treat the countries in Cluster 1 as a separate sample in the future.

The growth of the global life insurance market is indicated by the increase of average values of indicators in all clusters, and the differences in the level of development intensity are their absolute size and dynamics. Indicator Premiums per capita in the world market was 341.2 USD and 370 USD respectively in 2009 and 2018, which essentially separates clusters 1 and 2,3,4,5 despite the higher growth rate of the average value of clusters. In general, the average level of indicators of countries in clusters 2,3,4,5 exceeds the corresponding average values in the world life insurance market. Therefore, we can consider that the level of development of life insurance market of countries in cluster 1 is low, and clusters 2,3,4,5 are above average, sufficient, high and very high.

Table 2. Cluster average by level of development of life insurance market in 2009, 2018

Cluster	2009 2018									
	cluster	The aver	age val uster	ue in	00	cluster	The average value in cluster			uo on
	Number of countries in ch	Premiums per capita, USD	Insurance penetration, %	Share of total business, %	The coefficient of variation	Number of countries in ch	Premiums per capita, USD	Insurance penetration, %	Share of total business, %	The coefficient of variation
Cluster 1	52	79,4	0,95	33,0	1,28	55	122,5	1,04	36,5	1,15
Cluster 2	7	653,5	3,94	48,9	0,17	11	976,5	3,06	44,5	0,26
Cluster 3	7	1365,9	4,14	52,4	0,11	9	2278,2	4,82	63,9	0,18
Cluster 4	7	2120,2	5,43	65,9	0,01	7	4059,4	8,23	69,9	0,29
Cluster 5	10	3249,1	7,06	74,9	0,10	1	8204,0	18,81	92,6	_

A feature of clusters in 2018 was the formation of the separate cluster with one country – Hong Kong and the change in the composition of clusters themselves. The value of the investigated life insurance market indicators in Hong Kong reached a historic high in 2018 which secured the leadership of the country in life insurance market and confirmed its status as the global financial center of the world.

Life insurance market of Ukraine belongs to Emerging markets that testifies to its potential if crisis phenomenon is overcome on it. The processes of financial globalization have had a significant impact on the formation and development of the insurance market of independent Ukraine (since 1991) which was caused by the transition of the economic system of the market economy, including the emergence of multinational financial corporations that immediately occupied a dominant position in the market they are still holding.

Transnational corporations had many years of experience in the competitive insurance market, used effective business models, guaranteed the safeguarding of investments with the available large size of the authorized capital and impeccable international reputation in comparison with the domestic insurers.

The main manifestations of financial globalization in the domestic life insurance market are mergers or acquisitions of domestic companies, which have led to high level of market monopolization. In 2018, the Herfindahl-Hirschman Index (HHI) was 1441,37 (in 2017 – 1 417,52), and the top 3 accounted for 54,3% of life insurance market by collected premiums. Market leader is MetLife, Inc. (the largest global providers of insurance, annuities, and employee benefit programs, with 90 million customers in over 60 countries). Overall, in 2018, foreign-owned insurance companies accounted for 66, 64% of the market. Information on the country of origin of the capital of the insurance companies in the domestic life insurance market is presented in Table 3.

Table 3. Foreign capital in life insurance market in Ukraine in 2018

The name of insurance company	Specific weight on life insurance market of Ukraine, %	Country of origin of capital	Market entry year
PJSC «MetLife»	24,36	USA	2002
PJSC «Insurance Company «UNIQA Life»	17,11	Austria	1994
PJSC Insurance Company «PZU Ukraine Life Insurance»	10,57	Poland	2003
PJSC «GRAWE Ukraine Life Insurance»	8,71	Austria	1998
PJSC «AXA Life insurance»	2,39	France	1994
PJSC Insurance Company «Kniazha Life Vienna Insurance Group»	1,76	Austria	1999
PJSC «KD Life»	0,95	Slovenia	2007
PJSC «INGO Ukraine Life»	0,78	Cyprus	2004
TOTAL	66,64	-	-

Financial globalization of the insurance market is objective and inevitable phenomenon of today, it cannot be stopped or "canceled" because it is the imperative requirement of modern society. Due to the processes of interstate integration, internationalization and globalization of the economy, there is a gradual erosion of the identification boundaries between different national models of state regulation of life insurance [8].

Being aware of the inevitability of globalization processes, their consequences for the Ukrainian economy are determined:

- 1. Political factors: political dependence, the need for harmonization of legislation.
- 2. Economic factors: concentration of capital of multinational companies, reducing the competitiveness of insurance companies with Ukrainian capital, reducing the costs of maintaining companies, implementation of successful business models, GDP growth, excessive market monopolization.

- 3. Technological factors: introduction of successful experience in the digitalization of the insurance market and new insurance products, improvement of preventative measures and risk modeling.
- 4. Social factors: the change in standard of living and financial security of the person, raising awareness of risk protection, improving financial literacy.

CONCLUSION

Thus, according to the results of the investigation, we believe that life insurance market in Ukraine is characterized by high potential, for implementation of which it is necessary to introduce effective mechanisms to stimulate its development. Significant pressure on the domestic life insurance market by multinational companies, occupying leadership positions, requires a review of government regulation in order to limit their high concentration which is possible by creating a powerful state insurance company. Realization of the potential of the domestic life insurance market is impossible without continuation of state policy and public organizations, aimed at raising the level of financial literacy of citizens.

Further investigation on development of life insurance markets in China and Hong Kong and possibility of its application in domestic conditions are promising.

REFERENCE

- 1. Law of Ukraine «About insurance» (1996) [Online]. Available at: https://zakon5.rada.gov.ua/laws/show/85/96-%D0%B2%D1%80 (accessed 10 September 2019) (in Ukrainian).
- 2. The Civil Code of Ukraine (2003) [Online]. Available at: http://zakon.rada.gov.ua/laws/show/435-15 (accessed 10 September 2019) (in Ukrainian)
- 3. Voblyi K.G. (2001). *Insurance Economy Foundations*, Ternopil', Ekonomichna Dumka, 2001 (in Russian).
- 4. Naghajchuk N. (2010). Insurance as a tool for crisis management, *Herald of the Banking University*, Vol.3 (9), pp.246–250. (in Ukrainian)
- 5. Nechiporuk L.V. (2012). Strengthening of a threat to the financial security of the state in conditions of financial globalization, *Collection of scientific papers of the State Fiscal Service of Ukraine*, Vol.1, pp.281–298. (in Ukrainian)
- 6. Financial literacy, awareness and inclusion in Ukraine: research report (2017). [Online]. Available at: https://bank.gov.ua/doccatalog/document?id=83136332 (accessed 10 September 2019) (in Ukrainian)
- 7. Insurance market in Ukraine: state, problems and prospects (analytical report of the Razmukov Center (2003), *National security and defense*, Vol. 6(42), pp.2–46. (in Ukrainian)
- 8. Zaljetov O. (2014). Influence of globalization of the world economy on state regulation of the insurance market, *World of Finance*, Vol. 2, pp.89–94. (in Ukrainian)