









# “Trends in the functioning of the Ukrainian insurance services market”

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# TRENDS IN THE FUNCTIONING OF THE UKRAINIAN INSURANCE SERVICES MARKET

## Abstract

The Ukrainian market of insurance services is at the stage of formation and development in the absence of a clearly defined model for further functioning. The purpose of the paper is to analyze the trends in the functioning of the Ukrainian insurance services market in the period of 2010–2021.

The results of the study reveal the general trends in the functioning of the Ukrainian insurance services market in terms of transformational features of the market composition (a significant reduction in the number of insurers – by 2.5 times), concluded insurance contracts (a significant increase by 3.5 times), market concentration (moderately concentrated), the level of insurance penetration (the average value was 1.64%).

Considerable attention is paid to the interpretation of the main indicators of market activity and their dynamics, in particular, in terms of insurance premiums and payments (the level of insurance payments was 32.2%), assets of insurers (increase by 1.5 times), formed insurance reserves (a noticeable increase by 3 times), digital transformation (in terms of internetization, individualization, digitalization).

The study made it possible to form promising vectors for the development of the Ukrainian insurance services market based on the model of social responsibility of participants in the insurance process with clear digitalization outlines and the formation of insurance relations based on innovative approaches.

## Keywords

insurance, insurance organizations, policyholders, payments, premiums, digitalization, quality management, innovative approaches

**JEL Classification** G22, G52

## INTRODUCTION

There is a number of problems, in particular, of a financial, economic, political and social nature, which collectively affect the development of the Ukrainian financial market. The market of insurance services occupies an important place in the system of financial mechanisms for protecting the public from adverse events and phenomena. It is also an important component of the state's economic infrastructure.

Indicators of development of the insurance services market provide an opportunity to outline the current key trends, the main financial processes and promising vectors for the development of the state's economy as a whole. In fact, the development of the latter is a barometer for the development of the country's economy.

The Ukrainian market of insurance services is still at the stage of its formation and development in the absence of a clearly defined strategy for further functioning. The functioning of the specified market is accompanied by numerous problems of an economic, normative-legal, organizational-methodological and personnel nature. The main trend that determines its development at the current stage is the financial

market transformation, which consists in the integration and convergence of financial market segments and in the formation of new approaches to management, organization of activities, development and sale of financial products corresponding to these processes, as well as other changes in the functioning of insurance companies.

It is the further development of an effective market of insurance services in Ukraine that should be based on studies of modern trends in its functioning.

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## 1. LITERATURE REVIEW

The scientific analysis of theoretical foundations for the functioning of insurance services market made it possible to deepen, form and offer an improved interpretation of the definition of “insurance services market” as a set of economic relations that balance the “demand and supply for the purchase, sale and production” of insurance services with an emphasis on substantiation of its essence as a complex integrated system that covers various structural links and which is a platform for intersectoral balanced and adjusted interaction of its constituent components. The specified definition comprehensively reflects the scale and specificity of its structural composition, as well as a number of mandatory conditions associated with the possibility of functioning.

In international practice, the level of the insurance business profitability significantly prevails over the profitability of other businesses, in particular, industry and the banking sector (Ionciă et al., 2012; Polinkevych & Kamiński, 2020; Porrini & De Masi, 2019; Liu et al., 2011). A favorable financial environment is formed under the conditions of an effectively functioning insurance services market, which accordingly provides insurance protection to business entities (business protection) and physical persons (provision of social support for the country’s population), which in turn leads to a decrease in state budget expenses for compensation of losses in case of emergencies, natural disasters, etc. Global trends clearly demonstrate a direct relationship between the level of organization of the insurance business and economic development of the state in general. An effective insurance services market determines the formation of an effective system of management of investment activities by insurance organizations operating on it. Insurance companies perform a double role: On the one hand, in the process of carrying out their

basic activity, they provide insurance services to business entities, thereby stimulating investment activities, and on the other hand, they perform the functions of direct investors. Insurance activity accumulates significant funds, which are later transformed into investment resources with the ability to stimulate the socio-economic development of the country (Santeramo, 2018; Tsymbaliuk et al., 2021; Harris et al., 2021). Investment is one of the key components in the general operations carried out by insurance organizations in particular and the functioning of the insurance services market in general. Effective investment activities on the specified market largely depend on the degree of its development and the readiness and desire of society to join the insurance business.

Active asset management is designed to ensure financial reliability for insurers-providers of insurance services, the ability to fully realize insurance obligations based on the results of concluded agreements under the conditions of a deficit of insurance reserves, to receive investment income and mobilize resources in terms of increasing the amount of equity capital. High-quality and liquid assets serve as a guarantee of insurers’ solvency, the ability of the latter to make timely and full payment of insurance indemnities, thus fully fulfilling their obligations to policyholders.

Key trends regarding the establishment, formation and development of the insurance services market as a whole were studied by Bakalova (2020), Prykaziuk (2017), Porrini and De Masi (2019), Ziemele and Voronova (2013), Rahman et al. (2020), Tsvetkova et al. (2019), Tilson et al. (2010), Pikus et al. (2018), Rotova and Trynchuk (2004). Trends in the functioning of the insurance services market reflect a number of indicators, in particular, the level of insurance penetration and market concentration. An important indicator for the development of the insurance services market

is the level of insurance penetration (the ratio of insurance premiums to GDP). It is one of key indicators of financial security of the insurance market and the level of development of the insurance industry in the country's economy. The specified indicator acts as a stimulator-indicator demonstrating the level of financial security of the insurance services market and making a stimulating influence on the level of the state's financial security, directly outlining the specifics of the market's key business processes. The optimal indicator is not less than 8% (Prykaziuk, 2017; Yermoshenko, 2016; Horyslavets et al., 2018).

The concentration of the insurance services market is interpreted as a process of concentration of the provision of specific insurance services by a small number of insurers.

The Ukrainian market of insurance services received new norms regarding the peculiarities of functioning, which are regulated by the significantly updated Law "On Insurance" 1909-IX adopted on November 18, 2021 (Dubyna & Kozlyanchenko, 2021). Such a radical revision of the insurance legislation took place twenty years ago. Legislative transformations in the market of insurance services are primarily caused by changes in market practices, policyholders' expectations of the modern approaches to conducting insurance business and changes to the supervision and regulation of the insurance market functioning (Shubenko, 2020; Kamiński & Polinkevych, 2021). However, the most significant is the change of the regulator of the insurance services market (starting from July 1, 2020, the authority to regulate and supervise most of the non-banking financial market was transferred from the National Financial Services Commission to the National Bank of Ukraine (NBU), which is the main author of the new law.

The specified innovations immediately caused changes in the composition of insurance market participants – insurers. Starting from July 1, 2020, their number decreased by 46 organizations or by 21%, respectively, of which only 8 were forcibly removed from the market as a measure of influence when others voluntarily handed over their licenses, while a significant part of them were under sanctions for violating regulations (Bazylevych et al., 2020).

Having assumed the functions of a new regulator of the non-banking financial market, the National Bank of Ukraine set one of its first key priorities to update rather outdated insurance legislation that did not meet the needs and requests of key market players – both insurance service providers and consumers, as well as the intermediary insurance sector.

Therefore, the document significantly adjusts a number of norms and requirements for insurance organizations operating in the insurance market, in particular, in the areas of licensing of insurance activities, assessment of solvency and liquidity, corporate governance and risk management, termination of activities and transfer of insurance portfolio, intermediary activities in the insurance market.

Some researchers focused in detail on the characteristics of the insurance services market in terms of insurance protection schemes and proposed insurance products (Odening & Shen, 2014; Nesterchuk et al., 2018; Prykaziuk, 2017). Other scientists limited themselves to market research based on the analysis of voluntary and mandatory insurance systems (Bazylevych et al., 2020). A set of options for the formation of insurance protection systems in the cross-section of various industries and spheres has been studied quite widely, in particular the agricultural sector of the economy (Prokopchuk et al., 2018, 2019, 2020; Born et al., 2019; Weber et al., 2015), tourism (Bryan, 2019; Teece, 2010), and the banking sector (Yermoshenko, 2016). Cummins and Rubio-Misas (2021) analyzed the specifics of the insurance services market segmentally, i.e. from the standpoint of risk and life segments (Liu et al., 2011; Simionescu, 2022; Ziemele & Voronova, 2013).

A successful implementation of targeted transformation strategies in a difficult period requires that insurers focus their activities on the needs of customers. Digital technologies and new business models that will allow insurance organizations to become more flexible in meeting these needs (Shevchenko & Rudych, 2020; Korol & Polovyk, 2019; Trushlyakova, 2018).

Insurance organizations can expect to maintain competitive positions in the market of insurance services only under conditions of the correct ap-

proach to the use of information and digital technologies. The above is essential for insurance organizations operating in the market of insurance services, where the use of modern technologies in terms of promotion of insurance services, their implementation and free access for users is important.

Modern technologies have created a complex of benefits for all participants in the insurance market. Insurers have reduced their administrative costs and the risk of fraudulent actions on the part of clients. Policyholders have an easier access to insurance products, shorter time to purchase insurance policies and receive payments for claims, the possibility to customize insurance products (Santeramo, 2018; Gurenko & Gashutina, 2018).

The quality of insurance services is increasing due to the digital transformation of the insurance market with emerging new insurance products that cover new risks associated with technological progress (Ustenko & Ruskikh, 2019). At the same time, digitalization and the spread of technological innovations have created a number of threats, such as the reduction of personnel of insurance companies and improper monitoring of the new relationship between the insurer and the insured (Klapkiv & Melikh, 2019; Motashko, 2019).

There is an objective need for further research, taking into account the given vectors in the existing wide range of challenges and threats of our time that the insurance services market faces.

## 2. AIM

The aim of the paper is to study trends in the functioning of the insurance services market of Ukraine in the period 2010–2021.

## 3. METHODS

The methodological basis of the study is the general scientific methods of scientific research and the study of economic phenomena. The paper uses the following research methods. The abstract-logical approach was applied to summarize the research results and formulate conclusions; the mono-

graphic method was used to study theoretical foundations of the functioning of the insurance services market and form a literature review of the specified problem.

The comparison method was used to compare and contrast the main trends in the functioning of the Ukrainian insurance market. The method of analysis and synthesis was used to study the market's subject composition (insurers), to analyze insurance legislation, the number of concluded insurance agreements, features of market concentration, size of insurance premiums and payments, assets of insurers and formed insurance reserves. The graphic method was used for graphical interpretation of the obtained research results; the methods of scientific generalization and scientific prediction – to formulate promising vectors for the development of the Ukrainian insurance services market.

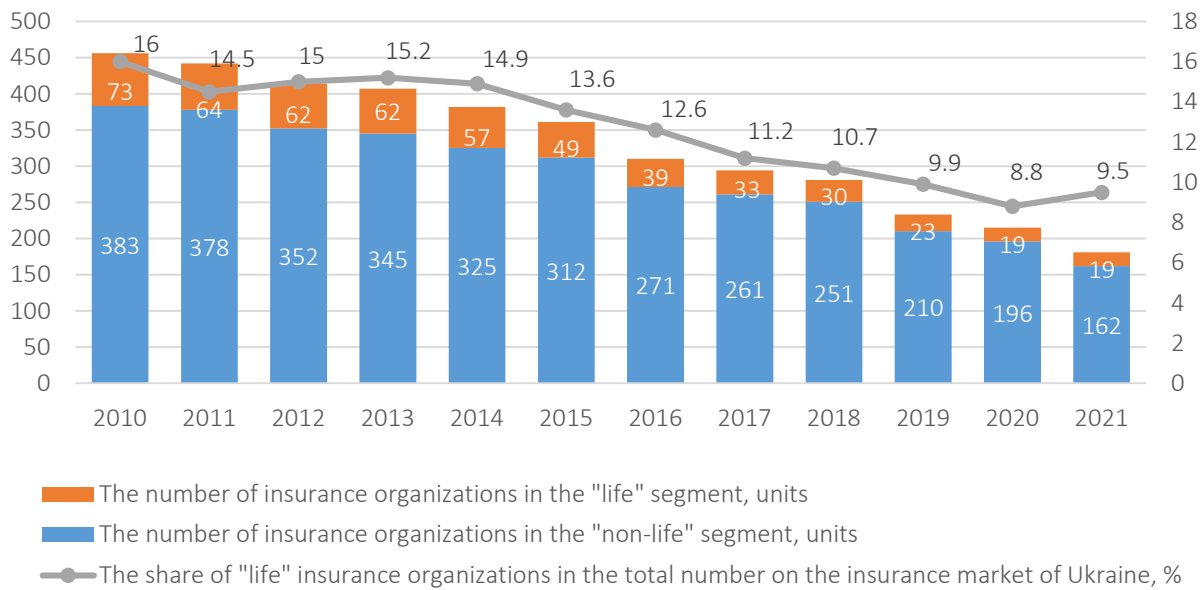
## 4. RESULTS AND DISCUSSION

Data on the quantitative composition of insurance organizations operating on the Ukrainian insurance market in the studied period (2010–2021) are graphically interpreted in Figure 1. The total number of insurance organizations operating on the Ukrainian insurance market in 2021 was 181, including 19 “life” insurance companies and 162 “non-life” insurance companies, respectively. A significant reduction in the number of insurance market players is explained, first of all, by the exit from the market of those participants who did not conduct active activities having voluntarily given up their licenses.

The share of insurers of the life segment during the researched period also decreased significantly, demonstrating the general market trend towards reduction in the number of insurance organizations, in particular, from 73 in 2010 (16% of the total number on the insurance market) to 19 in 2021 (9.5% in the total amount on the insurance market).

There are about two hundred insurance organizations on the Ukrainian market of insurance services, about 20 of which (or 9.5%) are engaged in long-term accumulative types of insurance. In addition, the historical genesis proves that a sig-

Source: Data from the National Commission for State Regulation of Financial Services Markets and the National Bank of Ukraine.



**Figure 1.** The number of insurance organizations at the insurance market by type

nificant share of insurance organizations had a negative reputation, which ultimately cast a shadow over the entire insurance market. At the same time, the situation has changed when foreign insurance companies entered the Ukrainian insurance business. Over the last period, the presence of foreign capital in the Ukrainian insurance market, which has a strong development potential, has not yet been fully realized.

The Ukrainian market of insurance services is quite attractive for foreign investors with its dynamic development, digitalization, and the number of potential consumers of market services. At the same time, they radically changed approaches to the culture of conducting insurance business in Ukraine giving to the market what it lacked – global work experience, technologies, principles and models of building business processes.

The pursuit of leading positions and high rating on the market by both Ukrainian and foreign insurers leads to fierce competition, which is a component of the general strategy of many companies to strengthen their positions and expand their regional presence in Central and Eastern Europe.

Therefore, such situation is indicative for the Ukrainian insurance business, which ultimately stimulates the latter to innovate and develop.

Competing with foreign insurers, the Ukrainian insurers radically counter-positioned themselves and significantly strengthened their rating positions on the Ukrainian market of insurance services.

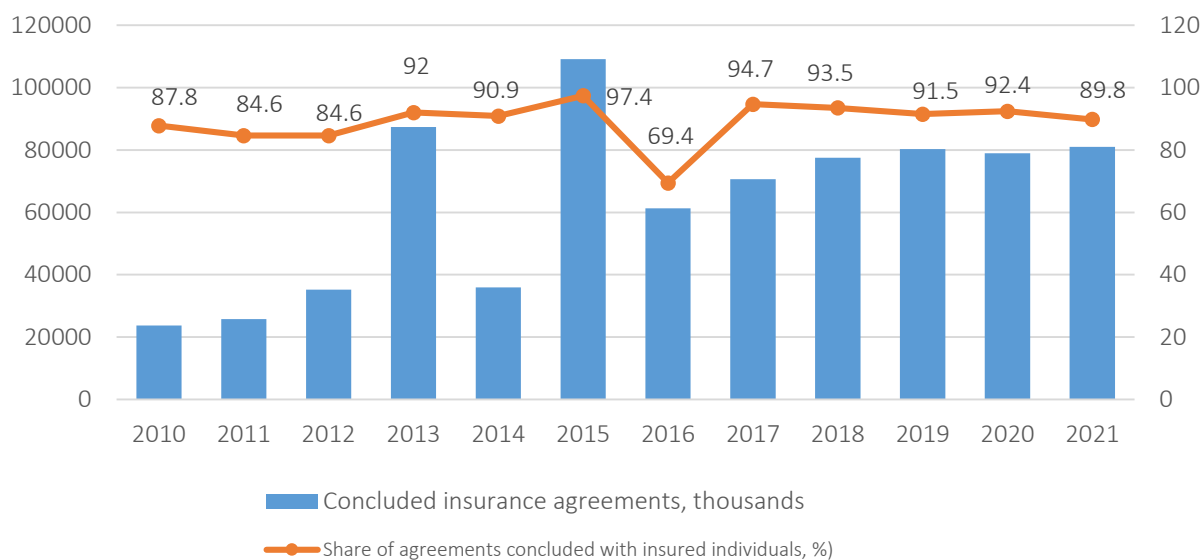
#### 4.1. Insurance agreements concluded between participants in the insurance services market

Insurance agreements concluded between insurance market participants in the period 2010–2021 are shown in Figure 2.

The number of concluded insurance contracts increased significantly during the analyzed period: In 2021 there was an increase by 57,239 thousand (or 3.5 times) compared to 2010. At the same time, the number of concluded compulsory insurance contracts increased by 439,853.2 thousand (or twofold increase), which is due primarily to an increase in the number of insurance contracts against transport accidents.

According to the concluded agreements, the Ukrainian market of insurance services demonstrates a stable development trend, that is, the quantitative indicator of agreements has been increasing since 2016, establishing a clear trend for the future.

Source: Data from the National Commission for State Regulation of Financial Services Markets and the National Bank of Ukraine.



Note: \* Without taking into account contracts of compulsory personal insurance against transport accidents.

**Figure 2.** The number of insurance contracts concluded in 2010–2021\*

#### 4.2. Peculiar features of concentration on the insurance services market

Over the last period, the distribution of concentration of the studied market is quite stable and predictable, without significant changes. In this context, it should be noted that insurers below the 100th position in the rating account for only about 0.5% of total insurance premiums. In 2021, 90% of insurance premiums are concentrated among 60 insurers (50 insurance organizations from the risk segment and 10 from the life segment). The concentration of insurance premiums from individual policyholders is significantly higher – 80% of the insurance market is concentrated in the hands of 20 insurers. In this context, it should be noted that the described trend regarding the concentration of the segmental market is stable throughout the studied period. Certain shifts are characteristic only of the life segment of the insurance market: In 2021, compared to 2010, there was a two-fold increase in the concentration of the accumulative long-term market segment (if in 2010 the main share of gross insurance premiums – 95.8% – was accumulated by 20 “life” insurance organizations (a third of all “life” organizations), then in 2021 – 96.7% – 10 of “life” insurance organizations (almost half of all “life” organizations).

The peculiarities of concentration of the insurance market in segmental terms in 2010 and 2021 are shown in Figure 3.

The life segment of the market (life insurance) is traditionally not numerous and has a high concentration: A quarter of the players in this market segment (5 insurance organizations) account for about 90% of life insurance reserves. Instead, the risk segment of the market is significantly more numerous, where the key share of gross insurance premiums – 98.1% – is accumulated by 100 “non-life” insurance organizations (47.6% of all companies in the risk segment).

The assessment of concentration of Ukraine’s insurance services market in the conditions of its transformation made it possible to reveal that, in general, the latter is moderately concentrated with certain variations in the segmental section: The life segment of the market is characterized by high concentration, on the other hand, the risk segment is characterized by moderate concentration.

#### 4.3. The main indicators of activity of the insurance services market and its dynamics

Data on the share of insurance in Ukraine’s GDP for the studied period (2010–2021) are presented in Figure 4.

Source: Data from the National Commission for State Regulation of Financial Services Markets and the National Bank of Ukraine.

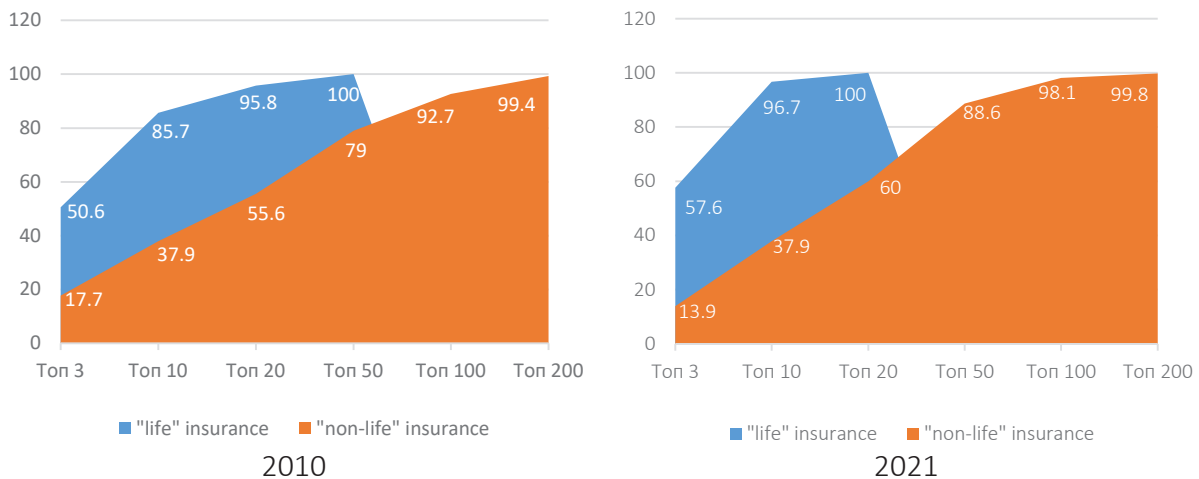
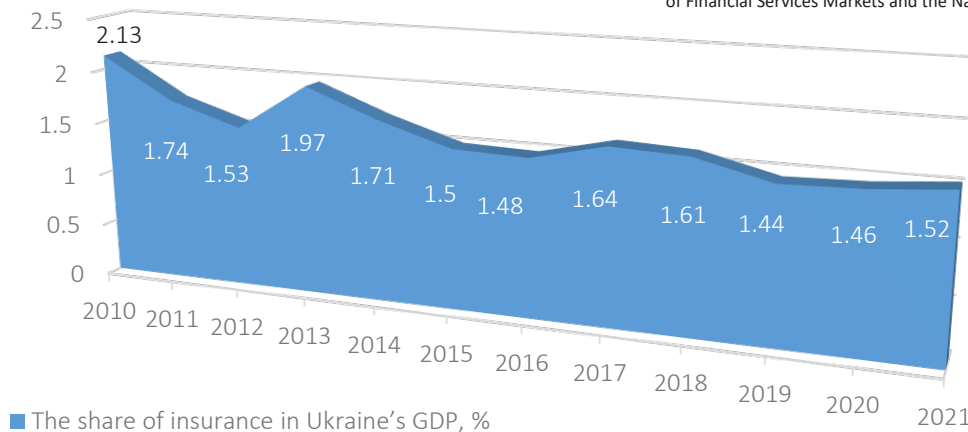


Figure 3. Concentration of the insurance market in 2010 and 2021

Source: Data from the National Commission for State Regulation of Financial Services Markets and the National Bank of Ukraine.



Note: The ratio of insurance premiums to GDP → the level of insurance penetration.

Figure 4. The share of insurance in Ukraine's GDP in 2010–2020\*, %

Over the studied period (2010–2021), the analyzed indicator averaged 1,64%, the highest value of which was in 2010 – 2.13%, and the lowest in 2019 – 1.44%, which is significantly lower than the normative value (threshold value – 8-12%).

As a result, the calculated values of the position of insurance in GDP (the level of insurance penetration) reflect the degree of financial security of Ukraine's insurance services market as close to dangerous.

#### 4.4. Insurance premiums and payments

The volume and structure of gross insurance premiums in 2010–2021 are calculated and shown in Figure 5.

Gross insurance premiums received by insurers for insurance and reinsurance operations of risks from the insured and reinsured in 2021 amounted to UAH 54,011.0 million, which is UAH 34,739.2 million (or almost three-fold) more than in 2010. Studies of revenues from gross insurance premiums made it possible to form the structure of the latter in the following way: 2021 – 1/5 of revenues – from the reinsured, 1/3 – from legal entities and almost 1/2 – from insured individuals; 2010 – 1/3 of revenues came from the reinsured, 1/4 from legal entities, and 1/3 from individual policyholders.

The volumes of net insurance premiums and payments, as well as the level of net payments during 2010–2021, are calculated and shown in Figure 6.

Source: Data from the National Commission for State Regulation of Financial Services Markets and the National Bank of Ukraine.

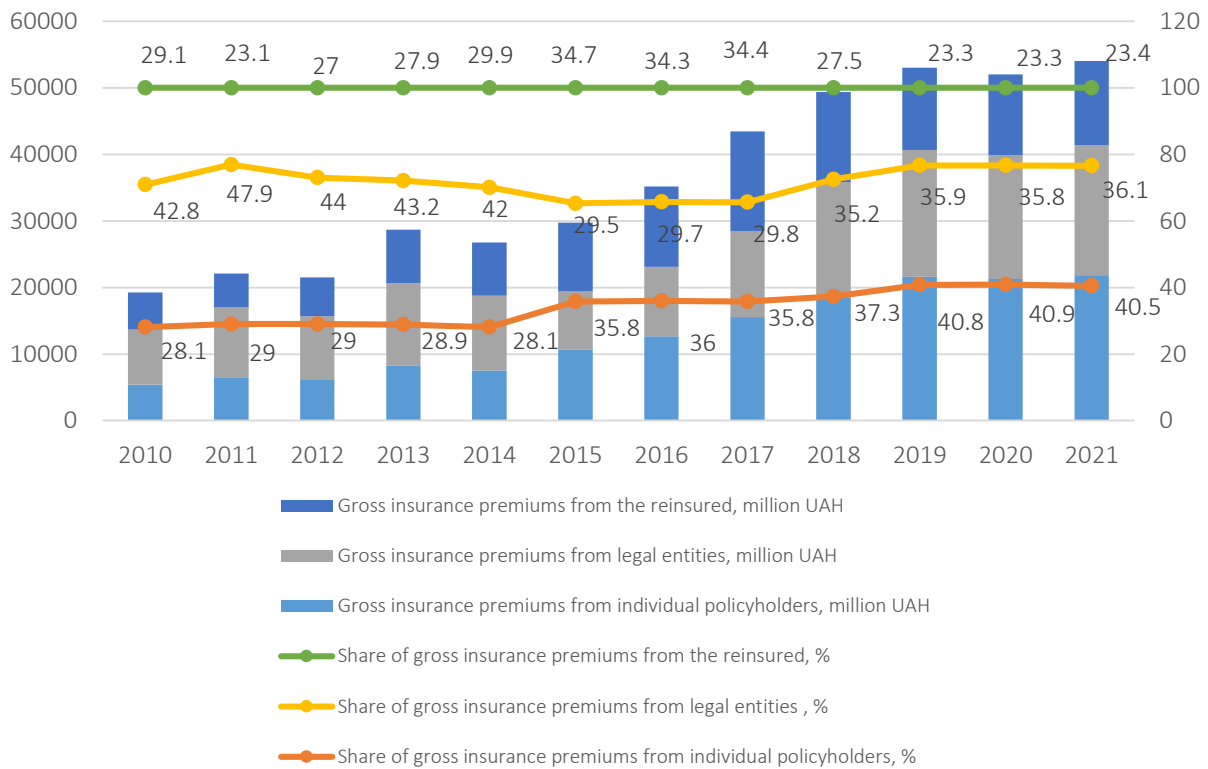


Figure 5. Volume and structure of income from gross insurance premiums in 2010–2021

It should be noted that a decrease in the quantitative composition of the Ukrainian insurance services market did not have a critical impact on the effectiveness of the insurance activity. Net

insurance premiums for 2021 amounted to UAH 39,998.9 million, which is 74.1% of gross insurance premiums; for 2010 – UAH 13,190.5 million, which is 68.4% of gross insurance premi-

Source: Data from the National Commission for State Regulation of Financial Services Markets and the National Bank of Ukraine.

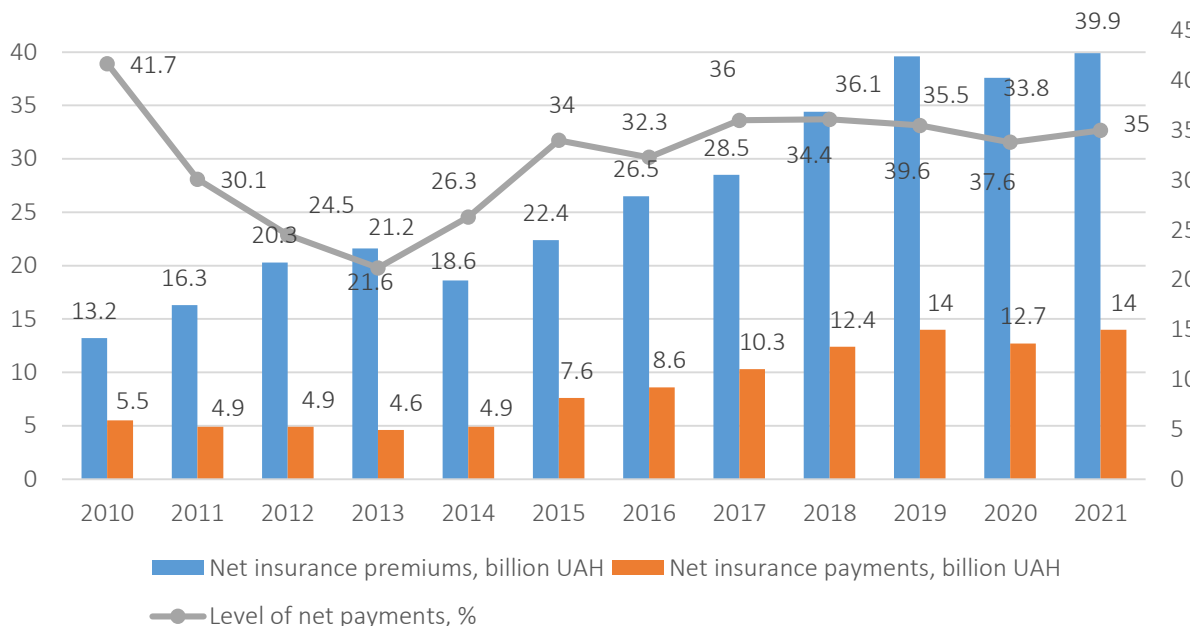


Figure 6. Insurance premiums and payments in 2010–2021

ums, respectively. An important indicator that characterizes a degree of the insurance market development is the level of insurance payments. The indicator of net insurance payments (the ratio of net insurance payments to premiums) under concluded insurance contracts on average was 32.2% during the researched period, reaching a maximum, 41.7%, in 2010, and reaching a minimum, 21.2 %, in 2013. Analyzing the calculated quantitative estimates for the indicator of the level of insurance payments, the level of financial security of the Ukrainian insurance services market according to the specified indicator can be considered satisfactory (the threshold value of the indicator is determined to be at least 30%). Therefore, the obtained calculations indicate that the Ukrainian insurance market is currently at the stage of formation.

In addition, one of the reasons for the mentioned situation was the numerous refusals of insurers to pay insurance indemnities (i.e., in fact, the failure to fulfill their contractual obligations) due to formal reasons, which used to be quite common in Ukrainian insurance practice.

The practice of European insurance markets is somewhat different compared to the Ukrainian one. As a result, the analyzed indicator in the developed European insurance markets approaches 75-80% on average, which is 2.5 times higher than in Ukraine (Bryan, 2019; Porrini & De Masi, 2019; Cummins & Rubio-Misas, 2021).

#### 4.5. Insurers' assets and formed insurance reserves

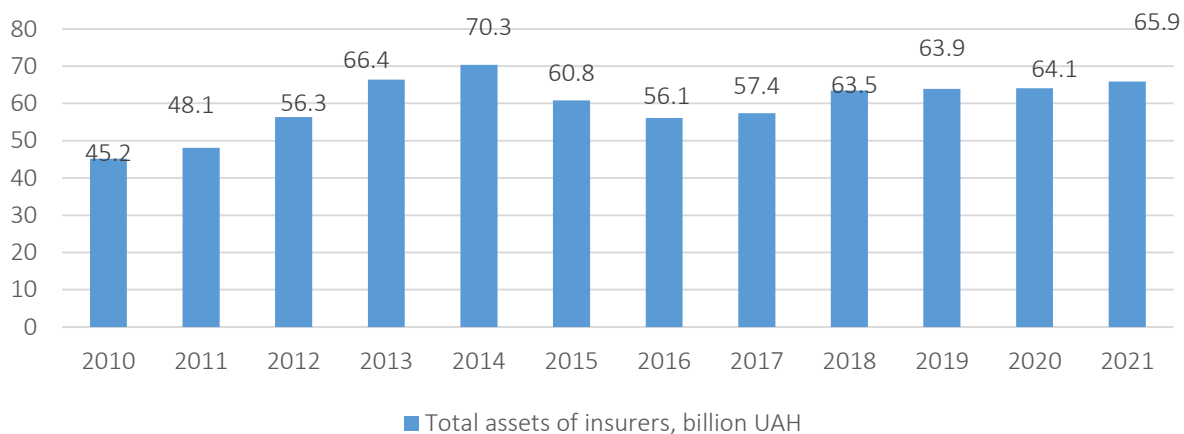
The dynamics of insurers' total assets is shown in Figure 7. Figure 7 shows that compared to 2010, the indicators of insurers' total assets had a significant increase, in particular, in 2021 such an increase occurred 1,5 times: in 2010 the size of the considered indicator was 45.2 billion UAH while in 2021 – almost 66 billion UAH. The analyzed indicator reached its maximum value in 2014 – UAH 70.3 billion.

The specificity of the “nature” of insurance is that the amount of insurance reserves is characterized by variability and, therefore, it is a variable amount, which is caused by a change in the scope of the insurer's responsibility in relation to existing agreements and determined by the continuity of the insurance process.

At the same time, there is a possibility of discrepancies between the volumes of the formed insurance reserves and the volumes of needs for the realization of insurance indemnities, which is caused primarily by the risky nature of cash flows.

As a result, according to the legal requirements and defined methodology for the formation of insurance reserves, a specific category of liabilities of the insurer must be covered by its corresponding component from the reserves of insurance funds, which is regulated by the order “On the accounting policy of the insurer”.

Source: Data from the National Commission for State Regulation of Financial Services Markets and the National Bank of Ukraine.



**Figure 7.** Total assets of insurers, UAH billion

The Law of Ukraine “On Insurance” (in particular, Article 30 of the document) regulates the obligations of insurers to comply with the relevant solvency criteria, one of which is the formation of reserves sufficient to fulfill the obligations assumed by insurers. Insurance reserves are funds created by insurers in order to guarantee the fulfillment of obligations by the latter. They should be used if the amount of paid compensations exceeds the current receipts from insurance premiums in the specified operating period, as well as for other stipulated events. The study of the category of “insurance reserves” in terms of economic meaning made it possible to determine that the latter represents the amount of reserved insurance liabilities on a specific date.

The world insurance practice provides for the coverage of insurer’s obligations with appropriate insurance reserves (Bryan, 2019; Santeramo, 2018).

Moreover, there are significant differences in determining the amount of reserves in terms of the risk and life segments of the insurance services market: the risk segment involves the formation of reserves of a technical nature as well as special reserves; the life segment – mathematical reserves, respectively.

The volumes of formed insurance reserves by type (technical reserves and life insurance reserves) during 2010–2021 are presented in Figure 8.

The dynamics of the volume of insurance reserves during the studied period is characterized by a growing trend, in particular, in 2021 compared to 2010, by UAH 2.5 billion (or three-fold, respectively). The analysis of the breakdown of insurance reserves by type shows the dominant position of their technical types (in 2021, 66.2% share of the latter in total insurance reserves). On the other hand, as for long-term reserves (life insurance), they reached their maximum value during the studied period in 2021 – UAH 10.1 billion (or 33.8% of total insurance reserves).

The results of the study indicate that during 2010–2021 there was a growth in the specific weight of life reserves in the general structure of formed insurance reserves. Therefore, the investment activity of life insurers in the Ukrainian insurance business can become a priority type of investment activity on the financial market.

Source: Data from the National Commission for State Regulation of Financial Services Markets and the National Bank of Ukraine.

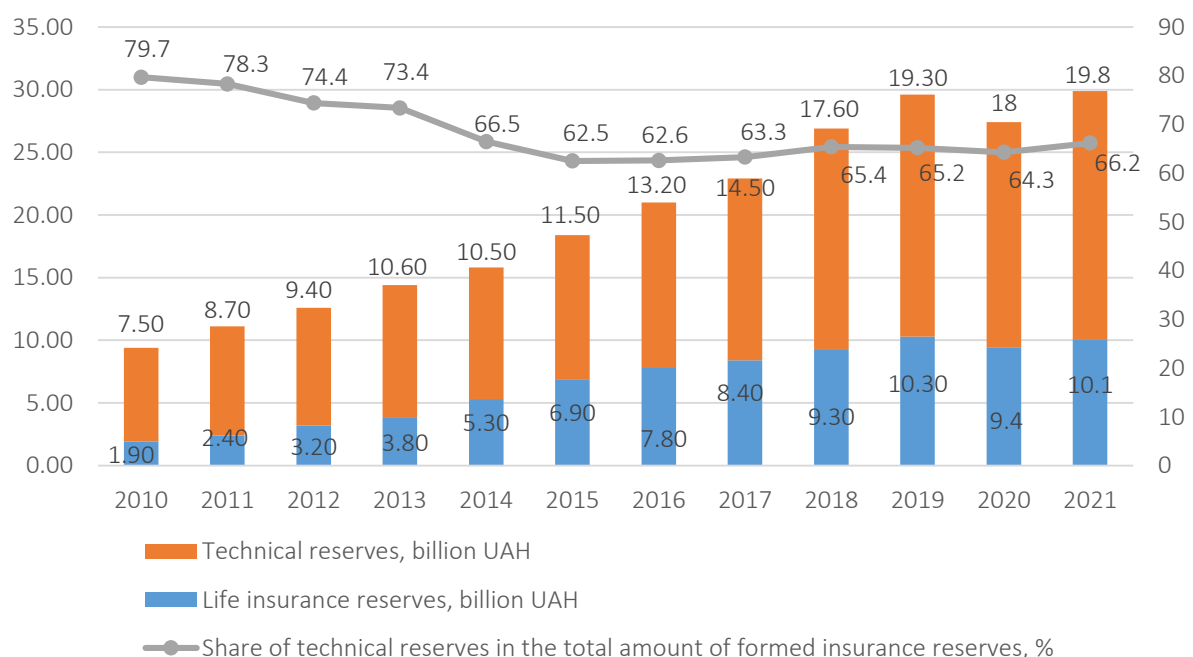


Figure 8. Volumes of formed insurance reserves by type in 2010–2021

#### 4.6. Digital transformation of the Ukrainian insurance services market

Currently, the digital transformation of the country's economy is a key area of development. Digital transformations are intensively taking place in all sectors of the economy, while the process of their digitization and further development of innovative infrastructure is one of the most discussed topics in the sphere of economy and finance of Ukraine.

Modern society is characterized by the focus of markets on the needs of consumers. Digital transformations are primarily aimed at bringing digital technologies closer to citizens, and the market of insurance services is no exception.

To implement the model of a "service" state, Ukraine adopts the trends that are characteristic of countries that are at the peak of digital products development – the USA and Europe. Currently, specialized applications are being developed in Ukraine that assess the readiness of business for digital transformation and determine the next steps of development. For example, if an insurance company develops a new product, it will be possible to immediately assess the demand for it on the Ukrainian or global market.

Digitization is the foundation on which digital transformation is built. Currently, the digitalization of the insurance market is taking place in three directions: internetization (the use of Internet services; application of wireless communication technologies, cloud technologies in insurance organizations' business processes and in communication with policyholders and insurance intermediaries); individualization (development of individual insurance offers in accordance with personal requirements; the use of modern production technologies and big volumes of databases, wireless communication technologies based on obtaining maximum information about the insured and the object of insurance; digitalization (digitization of internal and external business processes of insurance organizations) (Zavoloka et al., 2020; Born et al., 2019).

Digital transformation is a complex process of transformations based on the use of digital technologies. It involves a fundamental rethinking of

how an insurance company works and how it interacts with the environment. This is a repeated action, a complex process that covers all stages of this type of activity, an effective implementation of which is possible when applying the principles of strategy and planning.

In general, a digital transformation of the insurance services market is a large-scale reorganization of insurance business processes with a wide application of digital tools for their implementation, which will ultimately improve the characteristics of insurers and endow them with fundamentally new qualities and properties. Stages of digitalization of the insurance services market: The first is automation (implementation of IT solutions that repeat the processes of insurance activity); the second is digitization (improvement of the existing processes in the insurance market through the introduction of IT, optimization of insurance activities, data analysis for decision-making); the third stage is digital transformation (a combination of traditional methods and the latest technological possibilities of conducting insurance activities with the aim of creating new insurance products with innovative characteristics).

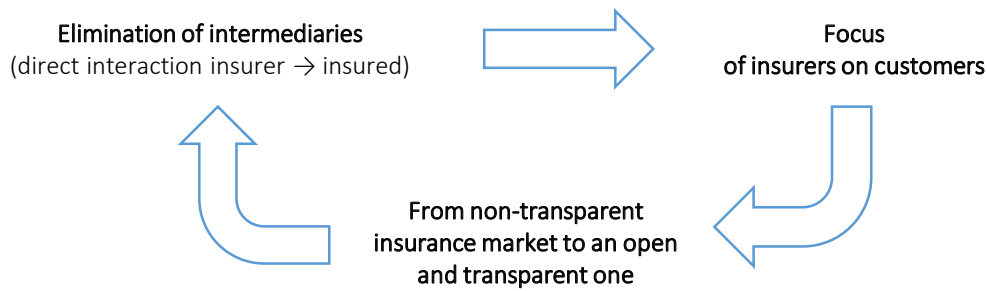
Digital transformation is not a matter of choice, but a matter of time, because in recent years the traditional insurance business model has already begun to change and has positive results in the Ukrainian insurance market (Figure 9).

Currently, standard insurance products do not satisfy the needs of policyholders, because the main issue today is a timely and quick response to the client's needs in a way and at a time that is convenient for him.

Today's digital technologies, the data and analytics they make possible, enable insurers to learn more about their customers and, based on that, develop customized products for them that can be activated in a customer-friendly way.

Insurers can also use new data streams from Internet-capable devices to dynamically price insurance services based on observed consumer behavior patterns and better identify fraudulent schemes. In general, new approaches to insurance through the use of technological innovations de-

Source: Grouped and summarized by authors based on Bazylevych et al. (2020), Kamiński and Polinkevych (2021), and Motashko (2019).



**Figure 9.** Consequences of the impact of digital technologies on the activity of the insurance services market

signed to improve the efficiency of the current insurance industry model have been called Insurtech.

Insurtech is a component of FinTech (new technological developments) – technologies for providing services by financial institutions (Zavoloka et al., 2020; Cummins & Rubio-Misas, 2021). Figure 10 shows a detailed model of InsurTech components.

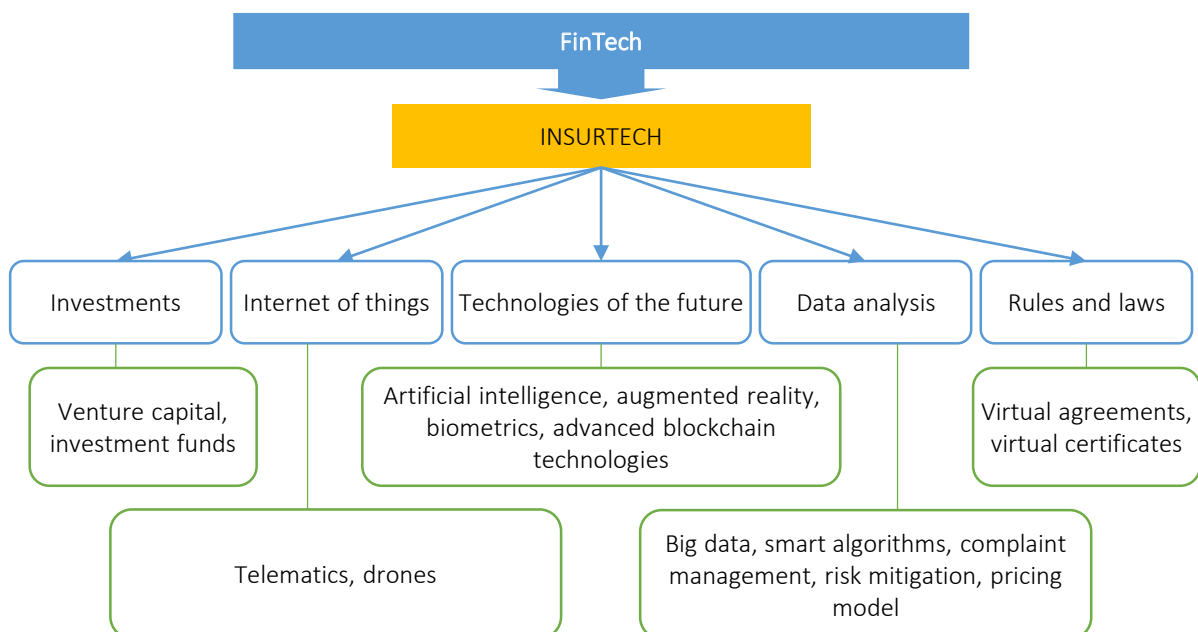
According to LTP MEDICI international database, there are currently 7,891 companies operating in the FinTech field. In 2021, global investments in FinTech companies were spread over the following sectors: payments, lending and banking technologies.

The implementation of InsurTech instruments gained popularity in the United States and Great Britain; innovations in medical care – in Asian countries; and peer-to-peer lending and risk management – only in certain African countries.

In Ukraine, the implementation of FinTech instruments is less active. However, back in 2017, the National Bank of Ukraine launched the Development of FinTech Market project.

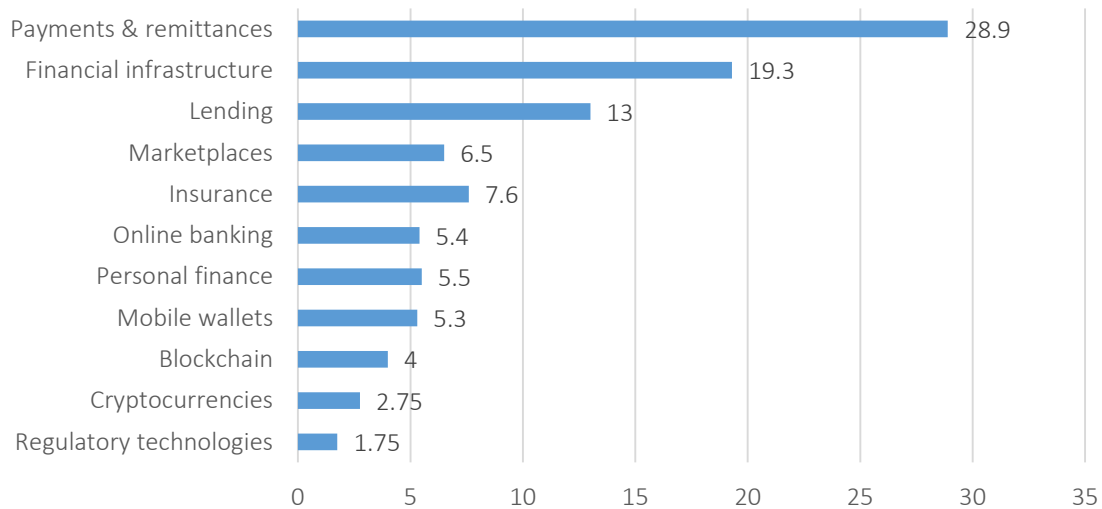
The spread of financial technologies in Ukraine is connected with an increase of Internet users. The National Bank of Ukraine stated that the main spheres of implementation of FinTech instru-

Source: Grouped and summarized by authors based on Cummins and Rubio-Misas (2021) and Simionescu (2022).



**Figure 10.** InsurTech components

Source: Calculated and displayed by the authors based on Bazylevych et al. (2020), Prokopchuk et al. (2018, 2019).



**Figure 11.** The structure of functioning of FinTech products in Ukraine in 2021, %

ments in the domestic financial market are online banking, electronic payments, online lending and InsurTech (Bazylevych et al., 2020; Shevchenko & Rudych, 2020).

On the Ukrainian insurance market, there are more than 80 companies that provide innovative products for the financial sector, 58% of which were created in the last three years.

In Ukraine, the popularity of FinTech companies is currently taking place against the background of unsatisfactory quality of insurance services and today's availability of smartphones and mobile Internet. Figure 11 shows the main areas in which domestic FinTech products are used.

Technological innovations will have an impact on the further development of the insurance services market in Ukraine. We are of the opinion that InsurTech will continue to be one of the most dynamic FinTech components.

In general, the study made it possible to outline the current trends (regarding internetization, individualization and digitalization of insurance activity) and prospects in terms of digitization of the Ukrainian insurance services market in modern conditions.

The conducted research made it possible to determine trends in the use of IT technologies in the insurance protection system and to substantiate the

expediency and necessity of widespread application of modern digitalization in the organization of insurance protection, which is not only a global trend, but also the realities of today, especially in the context of modern transformational shifts in the insurance market.

#### 4.7. Prospective development vectors of the Ukrainian insurance services market

The process of finding an optimal model for the functioning of insurance services market is currently underway in Ukraine, in particular, in the context of modern changes and its current state, taking into account the potential for development.

Therefore, the development of the market is restrained by a number of factors, in particular, the problems with solvency and liquidity of insurance organizations, the absence of a clearly defined business model for the development of insurance companies in particular and the market of insurance services as a whole, as well as a low level of corporate governance and the culture of risk management and organization of internal control systems. As a result, the above factors make the market non-transparent and non-competitive.

Further development of an effective insurance services market in Ukraine, according to the author's vision based on a detailed assessment of modern trends in the latter's functioning in the context of

modern changes, should be based on the model of social responsibility of insurance process participants with the maximum consolidation of interests of the market participants, clear digitalization and formation of insurance relations based on innovative approaches in terms of the use of insurance potential (in particular, regarding the expediency of using information and communication technologies in conducting insurance business; forming relationships between the subject composition of the market based on quality management as a basis for ensuring the competitiveness of insurance services market). In this context, an important aspect is the use of the previous years' achievements, in particular, in terms of the insurance toolkit, which is currently not inferior to world insurance practices and taking into account previous mistakes in the implementation of the policy of further formation of insurance protection system in Ukraine.

The need to form a model of social responsibility of the subject composition of the insurance services market is due to the need to establish a social and ethical basis for the perception of insurance, to observe moral and ethical norms of behavior by the main market participants, to gradually form the phenomenon of insurance culture and ethics, and to defend the system of general value guidelines in mutual relations on the insurance market (Figure 12). The integration of compliance with moral and ethical norms in relationships on the insurance market and social responsibility of the subject composition of the market in professional activities of the latter will contribute to the restoration of trust between them and reproduction of a suitable insurance environment in society.

Quality management is a modern instrument for increasing the competitiveness of product offers on the market of insurance services. Insurance organizations, whose primary tasks are to increase competitiveness in the market of insurance services, must achieve the following goals: increasing the efficiency of insurance organizations' employees and rating indicators; optimization of management of business processes of insurance organizations; achieving a tariff balance of insurance services. A competitive insurance product is currently the most important condition for the survival of an insurance organization

in the context of transformational processes in the market of insurance services and in its future development.

It should be noted that the quality of insurance services is determined by the concept of technical and functional quality.

Therefore, the quality of an insurance service is a measure of compliance of the level of services with the client's expectations. Signs of quality of the insurance service are presented in a criterion section, in particular, in the section of technical qualities (used in the final result assessment) and functional qualities (used in the assessment of the service provision process).

The technical qualities of the insurance service include: reliability (determines the ability of insurance organizations to fulfill their obligations accurately and fully); availability (reflects the possibility of policyholders receiving services without long waiting); security (evaluates the safety and reliability of the provided service); trust (reflects the degree of trust in insurance organizations operating on the insurance market); focus on the needs of insured customers (studying and taking into account the needs of policyholders in insurance protection).

Technical quality is ensured by the package of services offered by the insurance organization to the insured – the necessary condition for the practical implementation of the latter is its technical availability and assurance of the expected result. Instead, the processes accompanying the consumption of the service determine its functional quality. Therefore, it is appropriate to consider the quality characteristics of an agricultural insurance service in terms of its technical and functional criteria, where technical characteristics are used to measure the final result and functional characteristics are used to evaluate the service provision process. Technical characteristics are related to the reflection of its technical availability and assurance of the expected result, which is established by the offered package of insurance services on the insurance market, and functional characteristics accompany the consumption of services in the specified market determining its functional quality.

Source: Developed by the authors.



**Figure 12.** Model of formation of social responsibility of insurance market participants

Flexibility, efficiency and transparency of functioning are the key criteria that will determine the main competitive advantages of an insurance organization on the insurance market in the conditions of transformational processes. It should be noted that the prevailing and necessary conditions of the innovative process of development of the Ukrainian insurance market are in ensuring the quality of insurance services. The system of quality criteria of the latter is formed by image characteristics, signs of a socio-economic and financial nature, the amount

of capital and criteria of moral and ethical character (transparency and degree of accessibility, partner relations, reliability and safety, settlement of insurance cases).

Therefore, a highly profitable activity of insurers in the future (from the standpoint of short-term and long-term time frames) involves the formation of a favorable insurance environment, where the interests of all key participants of the insurance services market will receive maximum consideration and protection. In this con-

text, the introduction of modern innovative developments into the practice of insurance business becomes urgent.

## 5. DISCUSSION

This study contradicts the previous work of Motashko (2019), Shubenko (2020), Gurenko and Gashutina (2018), and Zavoloka et al. (2020), who considered recent changes in the functioning of the insurance market in Ukraine only regarding the use of digitization elements and highlighting the basis for further development of the Ukrainian insurance market from the standpoint of digital processes.

It is believed that in the future, an effective functioning of the Ukrainian insurance services market should be based not only on the elements of digitalization, but also on the constant monitoring of trends in its functioning and the general comprehensive model of social responsibility of participants in the insurance process with clear outlines of digitalization and formation of insurance relations based on innovative approaches regarding the use of insurance potential (feasibility and necessity of using information and communication technologies in conducting insurance business, formation of mutual relations between the market participants on the basis of quality management).

The authors partially agree with the research results and highlighted international experi-

ence of insurance markets formation given by Simionescu (2022) and Ionciță et al. (2012). In particular, in terms of recommending assessment elements of the insurance services market's functioning and a set of factors for the latter's further development.

Currently, the investigated Ukrainian insurance services market is in the process of transition to a qualitatively new stage of functioning, which generally corresponds to global trends while having a strong potential for development. The current key trend of the functioning of the Ukrainian market of insurance services is focused on its sustainable intensive development in modern conditions, which is determined by innovations, technologies and knowledge. And in accordance with Simionescu (2022), this study also includes the position of participants' social responsibility in the insurance process and building an interaction between the structural elements of Ukraine's insurance market.

This study is against the opinion of Horyslavets et al. (2018) regarding the total imposition of negative experiences of previous generations on the formation of relations with modern policyholders. According to the current study, it is the work with the modern insured (mature and sociable) based on the elements of digitalization and the implementation of the social responsibility model that will work and ensure the proper functioning of the Ukrainian insurance services market.

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## CONCLUSION

This study examines trends in the functioning of Ukraine's insurance services market in the period 2010–2021.

The study of general trends in the functioning of the Ukrainian insurance services market made it possible to draw a conclusion about a sufficient level of its development (in the context of the key indicators' detailed analysis) with a significant improvement in quality market characteristics together with the presence of a range of problems and unresolved issues in its functioning. It has been established that the studied market is in the process of transition to a qualitatively new stage of functioning during the studied period, which generally corresponds to global trends, while having a strong potential for development.

The study of specific trends in the functioning of Ukraine's insurance services market made it possible to draw a conclusion about the sufficient level of its digitalization, in particular, in terms of internetization, individualization, and digitalization.

The further formation of insurance relations should be based on innovative approaches in terms of the use of insurance potential, which is implemented in the context of information and communication technologies in the conduct of digital insurance business; building relationships between the market participants based on quality management as a basis for ensuring the competitiveness of insurance services and emphasizing the social responsibility of participants in the insurance process.

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