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SCIENTIFIC APPROACH TO A COMPLEX ASSESSMENT OF DETERMINANTS OF THE INSURANCE MARKET DEVELOPMENT OF UKRAINE

Abstract. Variability of economic and political conditions in Ukraine put forward new requirements for assessing the development of the insurance market, the state of which has a significant impact on the activities of economic relations and the state as a whole. Building an adequate model for assessing the insurance market and its practical use may affect the timely adoption of managerial decisions and the development of measures to improve the insurance market functioning. This is confirmed by a large number of scientific studies in the economic literature on the analytical component of the insurance market management, as well as the fact that a timely and objective comprehensive analysis is an integral part of the adoption of effective managerial decisions.

In view of this, trends of the insurance market in Ukraine in difficult geopolitical and economic conditions, which are characterized by the influence of variables of the unstable economic environment, are outlined. Linear multifactorial models, which give an opportunity to assess the influence of factors on the dynamics of changes in the volume of insurance premiums and insurance payments in the market, are constructed. An estimation of the influence of each of the selected factors is carried out and based on the conducted factor analysis, a significant impact on their volume of indicators of the number of insurance companies, GDP per capita and exchange rate, is performed. Alongside with this, trend lines are constructed and forecast values of gross insurance premiums and payments are determined. Based on the conducted analysis, ways of activating the development of the market as an important subject of the country's financial and credit system are proposed.

Another significant result of the research is the formation of an indicative model-scheme of the comprehensive assessment of the determinants of the insurance market development. The developed model contains a clear list and sequence of stages of the insurance market analysis and a specific methodology for assessing the impact of key factors, characteristic for changing conditions of management, on the efficiency of its functioning. Practical application allows to take into consideration the influence of individual determinants of the insurance market development on its condition, to increase the efficiency of managerial decisions in this area.

Keywords: insurance market, insurance premiums, insurance payments, factorial analysis, econometric model, model-scheme.

JEL Classification C5, E44, G14, G22

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НАУКОВИЙ ПІДХІД ДО КОМПЛЕКСНОЇ ОЦІНКИ ДЕТЕРМІНАНТІВ РОЗВИТКУ СТРАХОВОГО РИНКУ УКРАЇНИ

Анотація. Мінливість економічних та політичних умов господарювання в Україні висувають нові вимоги до оцінки розвитку страхового ринку, стан якого справляє значний вплив на діяльність суб'єктів економічних відносин та держави в цілому. Побудова адекватної моделі оцінки страхового ринку та практичне її використання може вплинути на своєчасне прийняття управлінських рішень та розробку заходів підвищення ефективності функціонування страхового ринку. Це підтверджує значна кількість наукових досліджень в економічній літературі щодо аналітичної складової управління страховим ринком, а також те, що своєчасний та об'єктивний комплексний аналіз – невід'ємна складова прийняття ефективних управлінських рішень.

З огляду на це, в статті проаналізовано тенденції розвитку страхового ринку в Україні у складних геополітичних та економічних умовах, що характеризуються впливом змінних чинників нестабільного економічного середовища. Побудовано лінійні багатофакторні моделі, які дають можливість оцінити вплив факторів на динаміку зміни обсягів страхових премій та страхових виплат на ринку. Проведено оцінку впливу кожного з обраних факторів та на основі проведеного факторного аналізу визначено значний вплив на їх обсяг показників кількості страхових компаній, ВВП на душу населення та валютного курсу. Поряд з цим побудовано лінії тренду та визначено прогнозні значення валових страхових премій та виплат. На основі проведеного аналізу запропоновано шляхи активізації розвитку ринку як важливого суб'єкта фінансово – кредитної системи країни.

Ще одним значним результатом наукового дослідження стало формування орієнтовної моделі-схеми комплексної оцінки детермінантів розвитку страхового ринку. Розроблена модель містить чіткий перелік та послідовність етапів проведення аналізу ринку страхування та конкретну методикку оцінки впливу ключових факторів, характерних для мінливих умов господарювання, на ефективність його функціонування. Практичне застосування дозволяє врахувати вплив окремих детермінантів розвитку страхового ринку на його стан, підвищити ефективність управлінських рішень в даній сфері.

Ключові слова: страховий ринок, страхові премії, страхові виплати, факторний аналіз, економетрична модель, модель-схема.

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НАУЧНЫЙ ПОДХОД К КОМПЛЕКСНОЙ ОЦЕНКИ ДЕТЕРМИНАНТ РАЗВИТИЯ СТРАХОВОГО РЫНКА УКРАИНЫ

Аннотация. Проанализированы тенденции развития страхового рынка в Украине в сложных геополитических и экономических условиях. Построены эконометрические модели, позволяющие оценить влияние факторов на динамику изменения объемов страховых премий и страховых выплат на рынке. Проведена оценка влияния каждого из выбранных факторов и на основе проведенного факторного анализа определено значительное влияние на их объем показателей количества страховых компаний, ВВП на душу населения и валютного курса. Наряду с этим построены линии тренда и определены прогнозные значения валовых страховых премий и выплат, сформирована ориентировочная модель-схема комплексной оценки детерминант развития страхового рынка. На основе проведенного анализа предложены пути активизации развития рынка как важного субъекта финансово-кредитной системы страны.

Ключевые слова: страховой рынок, страховые премии, страховые выплаты, факторный анализ, эконометрическая модель, модель-схема.

Формул: 6; рис.: 3; табл.: 7; библи.: 15.

Introduction. The insurance market is one of the most important components of the financial market of Ukraine. Over the past few years, the market has evolved with considerable difficulties and obstacles. Therefore, the difficult economic conditions, in which the national economy functions today, and instability in the financial market require constant analysis and objective assessment of factors, which influence the level of the insurance market development with a view to anticipating, timely response and solving emerging problems.

Accordingly, the assessment of the insurance market effectiveness in crisis conditions and the construction of a factor model becomes relevant. In current conditions, insurance is a necessary type of activity that can significantly affect social protection of citizens and ensure economic stability in the country. Efficient functioning of the insurance market is one of the most important tasks for today. After all, current conditions for raising the level of the entrepreneurial activity unsafety, the need to ensure proper social standards of citizens' life, intensive development of integration processes lead to a change in the working conditions of insurance companies, demand to increase their financial security and expand the range of insurance products. Today the market is in the process of important changes in the regulatory policy. Without timely analysis of the insurance market development and the assessment of the factors influence on it, its further effective functioning is impossible.

Actual scientific research and issues analysis. Numerous works on the assessment of the state of the insurance market development, the indicators that determine it and the methods of their analysis are presented in scientific literature. In particular, one should note the achievements in the study of the aforementioned issues in scientific works of such scientists: Odo Cosmas Ogobuchi (2011) [1], Hamankova O. and Khlivnyi V. (2012) [2], Kozmenko O., Kozmenko S. and Vasileva T. (2012) [3], Achkasova S. (2015) [4], Dubyna M. and Tunik M. (2015) [5], Dyba V. (2016) [6], Hudakova M. and Adamko J. (2016) [7], Kosova T. and Slobodyanyuk N. (2016) [8], Vyhovska V., Marhasova V. and Klymenko T. (2016) [9], Kurylo V., Kurylo L., Zhovnrchyk Y., Kartashov Ye. and Sokol S. (2017) [10], Tkachenko N. (2017) [11], Seliverstova L. (2018) [12].

However, despite considerable number of publications and recommendations of scientists, given the dynamism of the environment and difficult economic conditions, there is a need for a deep analysis of the sources of the emergence of crisis phenomena using methods of economic and mathematical modeling for quantitative assessment of the factors of influence on the state of the domestic insurance market and the development of a model-scheme of a comprehensive assessment of the determinants of its development. Deep economic, political and social crisis in Ukraine confirms the need to develop the latest methods of the analysis of the insurance market, their integration with new emerging problems of the development of this segment of the financial market in order to increase the efficiency of managerial decisions, which emphasizes the relevance of the research topic.

The objective of the article is the development of a scientific and methodological approach to assessing the state of the insurance market through the prism of mathematical formalization of indicators in order to form the efficient development of the insurance market of Ukraine based on managerial decisions.

Methods of investigation used for a comprehensive assessment of the determinants of the insurance market development in Ukraine: the method of comparison and calculation, analysis and synthesis, structured-deduction, economic and statistical, mathematical methods, the method of factorial analysis, modeling

modeling, tabular and graphical methods.

Results of investigation. Current unstable economic conditions emphasize the important role of the insurance market as an integral part of the financial market, which provides the significant influence on the system of the protection of property interests of individuals and legal entities, supports social stability and economic security of the state. At the same time, it is the main financial lever for national economy regulation and a powerful source of funds accumulation for their further investment. Therefore, timely monitoring and control of the state, trends of change and forecasting of further development of the insurance industry based on the methods and techniques of mathematical modeling are important.

The end result of any comprehensive study depends to a large extent on the quality, completeness and timeliness of the primary data processing, therefore, as the initial stage of the study, the analysis of the main indicators of the state of the insurance market is chosen, namely: the number of insurance companies operating in the insurance market; the number of concluded insurance agreements; the size of gross insurance premiums and gross insurance payments [15].

During the investigated period, the dynamics of changes in the number of insurance companies tends to decrease — from 382 companies in 2014 to 294 — in 2017 [15], which is due to the crisis in the economy and requirements strengthening of the regulator. There is also a gradual increase in the number of concluded agreements: compared to 2014, in 2017, insurance agreements were concluded for 50,769.7 thousand, that is (37%) more.

The next stage of the study is an analysis of the dynamics of changes in the size of gross insurance premiums and the construction of the forecast value, the trend line, for 2018 (Fig. 1).

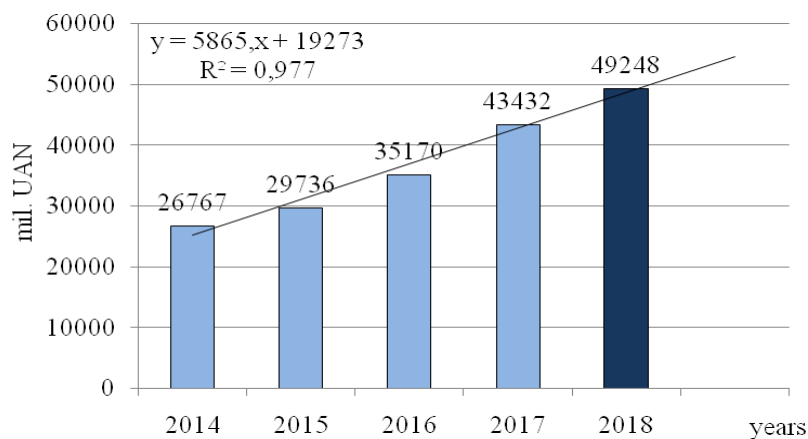


Fig. 1. Trend line in the size of gross insurance premiums

Source: Created by authors

According to Fig. 1, the size of gross insurance premiums during the period under study is gradually increasing and has a tendency to increase.

Based on primary data of the insurance market state with the help of mathematical transformations we obtain a linear function:

$$Y = 5865,7x + 19274 \quad (1)$$

Based on the constructed trend line, the forecast value of gross insurance premiums in 2018 is estimated at UAH 49248,1 million, which is 13% more than in 2017.

Along with the construction of the trend line of the size of gross insurance premiums, we

will examine the dynamics of changes in the size of gross insurance payments and construct the forecast value, the trend line, for 2018 (Fig. 2).

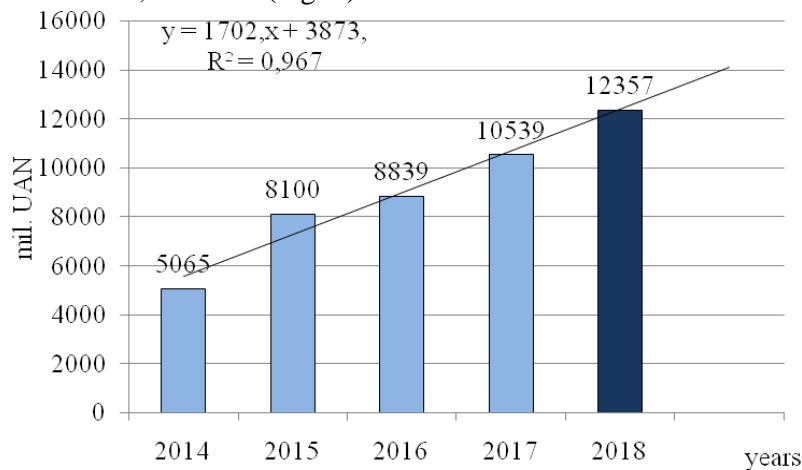


Fig. 2. Trend line for the size of gross insurance premiums

Source: Created by authors

In Fig. 2, a dynamic increase in gross insurance premiums is shown, first of all, this indicates an increase in the level of the economic activity unsafety, as well as the increased control over the processes of regulating insurance claims by the regulatory body.

Using mathematical transformations, the linear function has the form:

$$Y = 1702,3x + 3873,1 \quad (2)$$

The trend line is constructed and the forecast value of gross insurance payments in 2018 is determined –UAH 12357 million, that for 1818 million UAH (17%) more than in 2017, that for UAH 1818 million (17%) more than in 2017.

Therefore, during the investigated period, the growth of gross insurance payments significantly exceeds the growth rate of gross insurance premiums. Thus, the growth rate of gross insurance premiums in 2017 compared with 2014 increased by 62%, in turn, the growth rate of gross insurance payments for the same period increased by 108%.

In order to analyze the influence of factors on the change in the volume of insurance premiums and payments, we will form two factor models that characterize best the insurance market:

- for the first model, these are the growth rates of gross insurance premiums (Y1) and independent variables;
- for the second model, these are the growth rate of gross insurance premiums (Y2) and independent variables.

The main task is to determine the interconnections in the dynamics, so it is better to use as an analysis not absolute variables, but the pace of their growth before the previous period.

Independent variable factors for both factor models are the following indicators:

- X_1 – is the growth rate of insurance companies [15];
- X_2 – GDP growth rate (in USD) per capita [14];
- X_3 – growth rate of the inflation index [14];
- X_4 – growth rate of the discount rate [13];
- X_5 – growth rate of the exchange rate (USD to UAH) [13].

Let's assume that there is a linear relationship between the economic index Y_i and factors X_1, X_2, X_3, X_4 and X_5 :

$$Y = a_0 + a_1 X_1 + a_2 X_2 + a_3 X_3 + a_4 X_4 + a_5 X_5 \quad (3)$$

where, $a_0, a_1, a_2, a_3, a_4, a_5$ – model parameters to be evaluated.

To construct a multifactor linear econometric model, we'll use the data of the National Bank of Ukraine (NBU), State Service of Statistics of Ukraine (SSSU) and the National Commission for the state regulation of financial services markets (NKRFSM) for 2008—2017 in order to more accurately track the existing trends in the insurance market.

We will construct the first econometric model, which is based on the dependent variable Y_1 — the growth rate of gross insurance premiums (Table 1).

Table 1

Output data for the construction of the first and second econometric models
(in% to the previous period)

Surveillance number	year	Y_1	Y_2	X_1	X_2	X_3	X_4	X_5
1	2008	33,3	67,4	5,2	26,8	4,9	50,0	7,9
2	2009	-14,9	-4,4	-4,1	-34,6	-8,2	-8,3	42,9
3	2010	12,9	-9,4	1,3	16,8	-2,8	-13,6	1,8
4	2011	-1,7	-20,3	-3,1	20,1	-4,1	0,0	0,3
5	2012	-5,2	5,9	-6,3	8,0	-4,6	-21,1	0,5
6	2013	33,3	-9,7	-0,7	4,5	0,7	-6,7	0
7	2014	-6,6	8,9	-7,1	-25,2	24,3	100,0	48,8
8	2015	11,1	59,9	-5,5	-29,8	14,7	114,3	83,9
9	2016	18,3	9,1	-14,1	-3,0	-21,6	-26,7	16,9
10	2017	23,5	19,2	-5,2	-1,8	1,2	-34,1	4,2

Source: authors' own calculations based on [13; 14; 15]

According to the results of the regression analysis, we obtain the following results for the first model (Table 2).

Table 2

Results of regression analysis

Indicator	Result
Multiple R	0,91703
R^2	0,86732
Nominal R-square	0,64853
Standard error	21,85837
Observation	10

Source: Created by authors

Consequently, according to the results of regression analysis, the quality of approximation is determined using the determination coefficient R^2 , which is 86,7%. This suggests that the variable Y_1 at 86,7% is characterized by a change in the factors selected for research, and 13,3% belongs to other factors that can influence the growth rate of gross insurance premiums. The coefficient of multiple correlation R shows the adequacy of the constructed model, the closer this indicator approaches 1, the more appropriate will be the factor model. In our case it can be argued that the model is adequate, since $R = 0,917$. Results of the factorial analysis are shown in Table 3.

Table 3

Results of factor analysis

Variables	Coefficients	Standard error	t- statistics
Y_1	9,706690142	21,86439381	0,443949657
Variable X_1	0,346646542	1,942615692	0,178443191
Variable X_2	0,50793827	1,248672858	0,406782503
Variable X_3	0,045144978	1,645734378	0,027431509
Variable X_4	-0,024392223	0,650919164	-0,037473506
Variable X_5	0,161453425	1,358787084	0,118821725

Source: Created by authors

Thus, the linear multi-factor regression equation (estimation of the regression level) will have the following form:

$$Y_1 = 9,71 + 0,347 X_1 + 0,508 X_2 + 0,045 X_3 - 0,024X_4 + 0,161X_5 \quad (4)$$

Analyzing the coefficients of regression, we can note the following:

- an increase in the growth rate of insurance companies by 1% will lead to the growth rate of gross insurance premiums by 0,35%;
- an increase in the growth rate of GDP (in USD) per capita by 1% will lead to an increase in the growth rate of gross insurance premiums by 0,51%;
- an increase in the growth rate of the inflation index by 1% will lead to an increase in the growth rate of gross insurance premiums by 0,05%;
- an increase in the rate of growth of the discount rate of the NBU by 1% will lead to a decrease in the growth rate of gross insurance premiums by 0,02%;
- an increase in the rate of growth of the NBU exchange rate (USD to UAH in UAH) by 1% will lead to an increase in the growth rate of gross insurance premiums by 0,16%.

Thus, among the factors we have chosen, the following factors influence the growth rates of gross insurance premiums: X_1 (growth rate of insurance companies) and X_2 (GDP growth rate (in USD) per capita).

The indicator characterizing the dependence of changes in insurance premiums for each of the investigated factors is the partial coefficient of elasticity, which shows how much percentage Y_1 changes if X_i changes to 1% and is determined by the formula:

$$K_{el}(i) = a_i * X_{i\text{ aver.}} / Y_1, \quad (5)$$

where $K_{el}(i)$ – partial elasticity coefficient;

a_i – model parameters to be evaluated;

$X_{i\text{ cep.}}$ – mean values of independent variables of the model;

Y_1 – the value of the dependent variable of the model.

Partial coefficients of elasticity for the constructed factor model are grouped in Table 4.

Table 4

Results of calculation of partial elasticity coefficients

Elasticity coefficients	
$K_{el}(1)$	-0,13199
$K_{el}(2)$	-0,08889
$K_{el}(3)$	0,01953
$K_{el}(4)$	-0,03607
$K_{el}(5)$	0,32166

Source: Created by authors

Thus, $K_{E1} = -0,13199$ informs that with an increase in the growth rate of insurance companies by 1%, the value of the dependent variable of the model Y_1 (the growth rate of gross insurance premiums) will decrease by 13,2%; with the increase of the second factor (the growth rate of the inflation index) by 1%, Y_1 will decrease by 8,9%; with the increase of the third factor (the growth rate of the inflation index) for 1%, Y_1 will increase by 0,02%; with the increase of the fourth factor (the growth rate of increase of the discount rate of the NBU) by 1%, Y_1 will decrease by 0,04%; with the increase of the fifth factor (rate of appreciation of the exchange rate (USD to UAH) by 1%, Y_1 will decrease by 32,2%.

Consequently, when considering the model of the factorial analysis and calculation of partial elasticity coefficients, it can be argued that the level of gross insurance premiums in the insurance market, among the selected criteria, depends to a large extent on the growth rates of insurance companies (with growth of insurance companies by 1%, gross insurance premiums increase by 13,2%) and the rate of appreciation of the exchange rate (USD to UAH), with an increase in the exchange rate of 1%, gross insurance premiums will increase by 32,2%.

The next stage of the study is the construction of a second econometric model based on the dependent variable Y_2 – growth rates of gross insurance premiums and factors selected for the

research (Table 1). Results of the regression analysis are summarized in Table 5.

Table 5

Results of regression analysis

Indicator	Result
Multiple R	0,94644
R ²	0,90329
Nominal R-square	0,69508
Standard error	30,62365
Observation	10

Source: Created by authors

Considering data of the regression analysis for the second model (the growth rates of gross insurance payments), it can be noted that the quality of approximation (R²) makes 90,3%. That means, that the variable Y₂ for 90,3% is determined by the change of the selected factors and only 9,7% is due to other factors, which can have an impact on the growth rate of gross insurance premiums. This model is more adequate than the first constructed model, since the coefficient of multiple correlation R is equal to 0,946.

Let's define and characterize the factors of the factorial analysis for the second econometric model (Table 6).

Table 6

Results of factor analysis

Variables	Coefficients	Standard error	t- statistics
Y ₁	-12,89751152	30,6321	-0,42105
Variable X ₁	0,359120808	2,721612	0,131951
Variable X ₂	1,458347039	1,749396	0,833629
Variable X ₃	0,325825734	2,30568	0,141314
Variable X ₄	-0,128243276	0,91194	-0,14063
Variable X ₅	1,518319572	1,903666	0,797577

Source: Created by authors

Thus, the linear equation of multi-factor regression has the following form:

$$Y_2 = -12,90 + 0,36X_1 + 1,45 X_2 + 0,33 X_3 - 0,13X_4 + 1,52X_5 \quad (6)$$

The analysis of regression coefficients testifies to the following:

- an increase in the growth rate of insurance companies by 1% will lead to an increase in the growth rate of gross insurance payments by 0,36%;
- an increase of the growth rate of GDP (in USD) per capita by 1%. will lead to an increase in the growth rate of gross insurance premiums by 1,46%;
- an increase in the growth rate of the inflation index by 1 unit will result in an increase in the growth rate of gross insurance payments by 0,33%;
- an increase in the growth rate of the discount rate of the NBU by 1% will lead to a decrease in the growth rate of gross insurance payments by 0,13%;
- an increase in the growth rate of the NBU exchange rate (USD to UAH) by 1% will lead to an increase in the growth rate of gross insurance payments by 1,52%.

So, when considering this model, it can be noted that the most statistically significant are the following indicators: X₂ (the growth rate of GDP (in USD) per capita) and X₅ (the growth rate of the NBU exchange rate (USD to UAH)).

Compared to the first econometric model, the growth rate of insurance companies has a similar effect on the dependent variable, however, in the second model, the growth rate of the NBU's exchange rate becomes significant (USD to UAH), and this suggests that this indicator is more typical of gross insurance payments.

In accordance with formula 5, partial elasticity coefficients for the second model are determined and grouped in Table 7.

Thus, $K_{E1} = -0,13199$ informs that with an increase in the growth rate of insurance companies by 1%, the value of the dependent variable of the model Y_2 (the growth rate of gross insurance payments) will decrease by 11,2%; with an increase in the second factor (the growth rate of GDP (in USD) per capita) by 1%, Y_2 will decrease by 21,0%; with an increase of the third regressor (the growth rate of the inflation index) by 1%, Y_2 will increase by 1,2%; with an increase in the fourth factor (the growth rate of the discount rate of the NBU) by 1%, Y_2 will decrease by 15,6%; with an increase of the fifth regressor (the growth rate of the exchange rate (USD to UAH)) by 1%, Y_2 will increase by 58,5%. In the analysis, it was determined that gross domestic product (in USD) per capita and exchange rate (USD to UAH) have the greatest impact on gross insurance payments. The influence of others is also significant and varies within 11-15%.

Table 7

Results of calculation of partial elasticity coefficients

Elasticity coefficients	
$K_{el(1)}$	-0,11233
$K_{el(2)}$	-0,20965
$K_{el(3)}$	0,011581
$K_{el(4)}$	-0,1558
$K_{el(5)}$	0,584959

Source: Created by authors

Therefore, analyzing both econometric models, we can conclude:

- the largest influence on gross insurance premiums and payments is carried out by the number of insurance companies, GDP per capita and the exchange rate (USD to UAH);
- the growth of the level of insurance premiums and payments on the insurance market is possible with the growth of the number of insurance companies, GDP per capita and the exchange rate (USD to UAH);
- the influence of the inflation index, the NBU discount rate is insignificant compared to other indicators, however, with the growth of the inflation index and the reduction of the discount rate, the growth of insurance premiums and payments may increase;
- constructed econometric models show an adequate impact on gross insurance premiums and gross insurance payments. Therefore, it can be argued that the analysis carried out is correct and reflects the efficiency of the development of the insurance market.

Based on the application of the mathematical modeling and the factorial analysis, we propose the use of an indicative model-scheme of a comprehensive assessment of the state of the insurance market (Fig. 3).

Thus, the growth of the size of insurance premiums and insurance payments shows the intensification of the insurance market development, an increase in the level of insurance penetration rate in all areas of management. Conducting the factorial analysis allows predicting market scenarios under the influence of certain factors, which will further improve the mechanism for its regulation and timely management decisions to ensure effective functioning.

Among the main directions for solving systemic problems in the insurance market and creating conditions for its effective functioning, one can distinguish:

1. Deregulation in the insurance market and simplification of the regulatory environment by bringing it closer to European and international regulatory and supervisory standards. In the sphere of the non-banking financial market, the problem of proper regulation and effective supervision is relevant. In accordance with the commitments of Ukraine within the framework of the Association Agreement between the EU and Ukraine, the legislation regulating the financial market should be subject to the speedy reformation in order to approach the standards of the European Union. Therefore, the adoption of the draft law "On Amending Certain Legislative Acts of Ukraine regarding the consolidation of the functions of state regulation of financial services markets" (the "split law") will be an important step towards achieving this goal in terms of restoring confidence in the financial market and its further development.

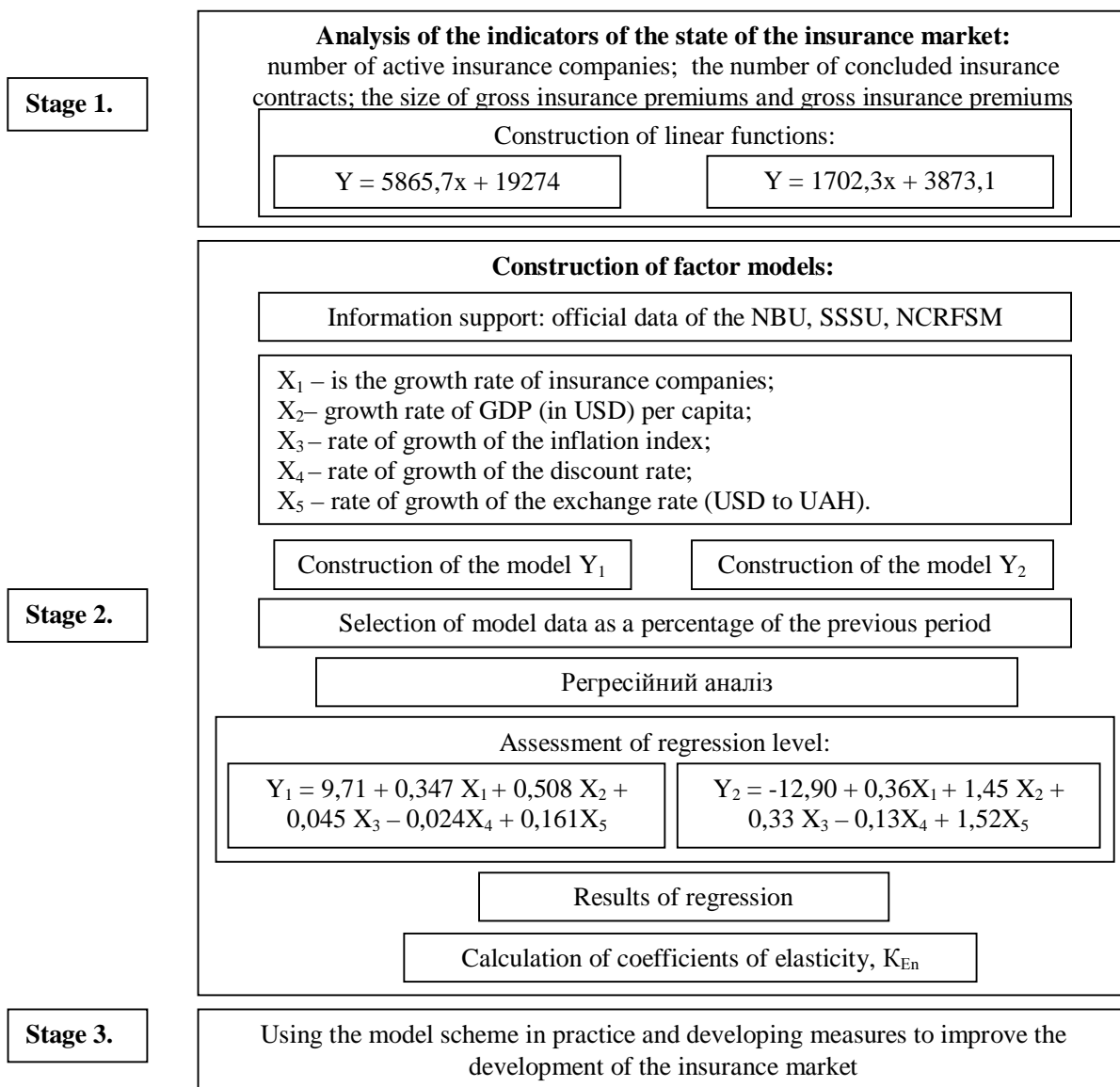


Fig. 3. Model-scheme of complex assessment of the state of the insurance market

Source: Created by authors

2. Protection the interests of consumers of financial services and implementation of decisive measures to increase confidence in the insurance market. Adoption of the Law of Ukraine "On Protection of the Rights of Consumers of Financial Services" will contribute to improving the quality of providing insurance services and bringing them in line with European requirements.

3. Creation of favorable conditions for strengthening and sustainable development of the insurance market through the system of formation of a competitive environment and improvement of the organizational structure of the market.

4. Development of a mechanism for attracting into the investment process temporarily free funds of insurance companies and introduction of an effective system of informing consumers of insurance services.

Conclusions. Therefore, in order to develop the insurance market and build an effective system of insurance protection in the country, it is necessary to analyze and assess the factors influencing the dynamics of key indicators. Thus, among methods of evaluation, we have identified the method of factor analysis and the method of economic-mathematical modeling. These methods have allowed conducting a qualitative analysis of the influence of factors, building lines of trends of the volume of insurance premiums and payments, and with the help of mathematical transformations, to justify linear functions. According to the results of the assessment, the growth of the volume of insurance premiums and payments

is predicted and the factors of the growth of the number of insurance companies, GDP per capita and the exchange rate (USD to UAH) as the ones having the greatest impact on the amount of insurance premiums and payments and are recommended when making managerial decisions on the development of the insurance industry, are determined. The methodology of evaluation and the sequence of its stages, indicated in the developed model-scheme of integrated assessment of the insurance market, will improve the quality of the analysis, allows conducting it taking into consideration the influence of changing factors of the environment. Practical application of calculations provides an opportunity to increase the level of insurance management in the part of solving systemic problems of the insurance market in order to ensure its effective functioning and the formation of a reliable system of protection the interests of the society.

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