FEATURES OF THE ASSESSMENT OF THE FINANCIAL CONDITION
OF LIFE INSURANCE COMPANIES IN AN INDEPENDENT REGION:
PRIORITIES FOR INSURANCE BUSINESS AND CLIENTS

Abstract. An article on the subject: «Features of the assessment of the financial condition of life insurance companies in an independent region: priorities for insurance business and clients» highlights the focus on studying the problem of new approaches to assessing the financial situation of an insurance company in the transition of the region to a financially independent infrastructure. The article deals with scientific approaches to the problems of financial analysis of insurers, materials of other domestic and foreign scientists on the assessment of the state of the insurance company's activity have been processed. The urgency and necessity of changes in the system of indices of analysis of activity of insurers are noted. It is determined that life insurance companies must have financial stability, which is a criterion for those who wish to underwrite insurance. Questions about the analysis of the activities of insurers are not enough in Ukraine. A system of indicators for which it is necessary to evaluate the financial condition of an insurance company is proposed. An analysis of the financial status of an insurance company is carried out. The financial support of a life insurance company can be measured by indicators such as the size of the authorized fund, the guarantee fund, own funds, insurance premiums, and the coefficients of the change of such indicators. The use of additional indicators is suggested. Additional indicators of the financial analysis of the insurance company helped to identify the impact and relationship between the indicators of the insurer. Separate performance indicators show the growth dynamics and this is positive for the insurer, but the calculation of additional coefficients revealed the real picture and the decline of the indicator. The conclusions and general results of the research are made. To improve the life insurer's life, we propose to continue research in this area, taking into account the particularities of the independent region.

Keywords: insurance company, evaluation of activity, innovations, financial indicators.

JEL Classification G22

Formulas: 2; fig.: 7; tabl.: 4; bibl.: 11.
ОСОБЛИВОСТІ ОЦІНКИ ФІНАНСОВОГО СТАНУ КОМПАНІЙ ЗІ СТРАХУВАННЯ ЖИТТЯ В УМОВАХ НЕЗАЛЕЖНОГО РЕГІОНУ: ПРИОРІТЕТИ ДЛЯ СТРАХОВОГО БІЗНЕСУ ТА КЛІЄНТИВ

Анотація. Зосереджено на вивченні проблеми нових підходів до здійснення оцінки фінансового стану страхової компанії за умов переходу регіону до фінансово незалежної інфраструктури. Розглянуто наукові підходи до проблематики фінансового аналізу страховиків, опрацьовано матеріали інших вітчизняних та зарубіжних науковців з питання оцінки стану діяльності страхової компанії. Відзначено актуальність та необхідність змін до системи показників аналізу діяльності страховиків. Визначено, що компанії зі страхування життя повинні мати фінансову стабільність, що є критерієм для бажаючих здійснювати страхування. Питаннями аналізу діяльності страховиків займаються в Україні недостатньо. Запропоновано систему показників за якими потрібно здійснювати оцінку фінансового стану страховиків. Здійснено аналіз фінансового стану страхової компанії. Фінансове забезпечення діяльності компанії з страхування життя може бути оцінено за такими показниками, як розмір статутного фонду, гарантійний фонд, власні кошти, страхові премії, коефіцієнти зміни таких показників. Запропоновано використання додаткових показників. Додаткові показники фінансового аналізу страхової компанії допомогли виявити вплив і взаємозв’язок між показниками діяльності страховика. Окремі результативні показники показують динаміку зростання і це є позитивним для страховика, проте розрахунок додаткових коефіцієнтів виявив реальну картину і спад показника. Зроблено висновки і узагальнено результати дослідження. Для удосконалення діяльності страховика з страхування життя, авторами запропоновано продовжувати дослідження в цьому напрямі з урахуванням особливостей незалежного регіону.

Ключові слова: страхова компанія, оцінка діяльності, новації, фінансові показники.

Формул: 2; рис.: 7; табл.: 4; бібл.: 11.

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ОСОБЕННОСТИ ОЦЕНКИ ФИНАНСОВОГО СОСТОЯНЯ КОМПАНИЙ ПО СТРАХОВАНИЮ ЖИЗНИ В УСЛОВИЯХ НЕЗАВИСИМОГО РЕГИОНА: ПРИОРИТЕТЫ ДЛЯ СТРАХОВОГО БИЗНЕСА И КЛИЕНТОВ

Аннотация. Изучены проблемы новых подходов к осуществлению оценки финансового состояния страховой компании в условиях перехода региона к финансово независимой инфраструктуре. Рассмотрены научные подходы к проблематике финансового анализа страховщиков, обработаны материалы отечественных и зарубежных ученых по вопросам оценки состояния деятельности страховой компании. Выделена актуальность и необходимость изменений в системе показателей анализа деятельности страховщиков. Определено, что компании по страхованию жизни должны иметь финансовую стабильность, что является важным критерием для желающих осуществлять страхование. Вопросами анализа деятельности страховщиков занимаются в Украине недостаточно. Авторами предложена система показателей по которым нужно осуществлять оценку финансового состояния страховой компании. Проведенный анализ финансового состояния страховой компании. Финансовое обеспечение деятельности компании по страхованию жизни может быть оценено по таким показателям, как размер уставного фонда, гарантийный фонд, собственные средства, страховые премии, коэффициенты изменения таких показателей. Предложено использование дополнительных показателей финансового анализа страховой компании, что помогло выявить влияние и взаимосвязь между показателями деятельности страховщика. Отдельные результативные показатели показывают динамику роста и это является положительным для страховщика, однако расчет дополнительных коэффициентов обнаружил реальную картину и спад показателя. Сделаны выводы и обобщены результаты исследования. Для усовершенствования деятельности страховщика по страхованию жизни, авторами предложено продолжать исследования в этом направлении с учетом особенностей независимого региона.

Ключевые слова: страховая компания, оценка деятельности, новации, финансовые показатели.

Формул: 2; рис.: 7; табл.: 4; библ.: 11.
full development of human society, the increasing importance of the issue of protecting health and human life, maintaining the conditions of normal life. Unfortunately, in Ukraine the social component of economic development is underemphasized, which leads to a decrease in the standard of living and a slowdown in economic growth. An effective solution to this problem can be a full-fledged life insurance system, which will help protect a person or her family from economic destabilization as a result of the death of the insured and will create the basis for the full life of each person in case of survival to the age stipulated in the insurance contract [1]. That is why life insurance companies must have financial stability, which is a criterion for those who wish to underwrite insurance. Issues of the analysis of the activities of insurers are not enough in Ukraine [2].

The region's financial autonomy means the possibility of solving complex financial and social development issues that fall within the competence of the appropriate level of territorial administration on a legal basis, using financial, economic, and logistical resources of the region, while independently managing the results achieved, meeting the needs of the region, taking into account the national interests. The financial independence of the region lies primarily in the fact that it contributes to the satisfaction, first of all, of the domestic needs of the region and ensuring sustainable development of the national economy without subsidies and other benefits [3]. Therefore, long-term life insurance is one of the areas of financial provision of the region in general, as well as social security of its population for future periods.

The insurance market is one of the most important elements of the regulation of the financial relations system. Life insurance is a form of satisfaction of social needs. Thus, life insurance is one of the main mechanisms in ensuring social stability in the country. First, life insurance can guarantee a standard of living in the event of such events, as a loss to a breadwinner, if necessary, to receive medical services, education, provision of life with the onset of retirement age, etc. Secondly, life insurance is a powerful source of long-term investment in the country's economy. Thus, in the context of the development of a market economy, the market of life insurance services is of great importance, which in turn requires the study of the theoretical and methodological foundations of its functioning. The main attention should be paid to assessing the activities of the insurer, identifying effective indicators that will help citizens trust the insurer and improve the social protection of the population [4].

The success of insurance companies depends to a large extent on their financial sustainability and solvency. Only under the appropriate levels of financial stability and solvency, insurance companies are able to generate factors of positive quantitative and qualitative changes for the normal functioning of today and to ensure the growth of its own financial potential in the future. Therefore, today in Ukraine insuring solvency of insurers is one of the priority tasks, especially taking into account the intensification of diverse processes that accompany economic globalization. It is necessary to take into account the fact that the insolvency of insurers can negatively affect the financial performance of other participants in insurance relations. For business owners, this can, in the end, mean a loss of investment capital, and for clients — a decrease in the attractiveness of insurance. In addition, insolvency of one insurance company may lead to insolvency of the remaining insurers and other participants in insurance relations, generating a «chain of non-payments». Low reliability of insurers limits the possibility of attracting temporarily free funds to the investment process, which, in turn, negatively affects the economy as a whole.

The legislation on life insurance pays much attention to the organizational aspect of the establishment and operation of insurers, however, the implementation of the terms of the law can not reflect the state and reliability of the life insurance company, but does not affect the choice of the company in which the person wants to insure life [5].

The problem of finding funds for solving public problems is of paramount importance, and it is personal insurance combined with life insurance that will allow attracting additional funds, which is the source of long-term investment resources [6]. All financial instruments require detailed analysis and justification, thus achieving an indicator result.

Human advices are useful, but they can be subjective. We are interested in the opinion of really experienced specialists on this issue. There are dozens of such indicators, so it is needed to have
access to information and have experience in financial and analytical work for their calculation [7]. It is necessary to agree with the authors, and therefore it is necessary to consider in more detail the process of financial analysis of the insurance company.

**Researching results.** The financial support of a life insurance company can be measured by indicators such as the size of the authorized fund, the guarantee fund, own funds, insurance premiums, and the coefficients of the change in such indicators [8]. The financial basis of any company's activity should be to analyze its financial security. Analysis of the financial basis of the Insurance Company «TAS Life» we will carry out with the help of financial indicators:

- authorized capital as a criterion for the legal substantiation of the establishment of an insurance company for life insurance;
- equity, capital adequacy provides for coverage of accepted liabilities;
- insurance premiums, the main source of insurer financial provision, formation of reserves and provision of investment activity;
- insurance reserves, guarantor of the insolvency of the insurer, which is formed at the expense of insurance premiums and income from investment of such reserves;
- assets, generalizing the financial support of the company.

Since the Ukrainian legislation strictly regulates the registered (statutory) capital, we have chosen for life insurance company, whose share capital is one of the highest indicators of Insurance yearbook Insurance TOP. Information sources for calculating indicators and analyzing the life insurance company's life insurance business are annual and quarterly reporting: Form-1 «Balance sheet», Form-2 «Financial Statement», Form-3 «Cash Flow Statement», Form-4 «Report on Equity», Form-5 «Notes for Annual Financial Statements». The analysis of the indicators reflecting the financial basis of the insurance company was carried out on the basis of the data of Table 1, using the statistical indicators of the rating Forinsurer in Ukraine [9, 10].

Table 1

<table>
<thead>
<tr>
<th>№</th>
<th>indicator</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Registered capital, thousand UAH</td>
<td>46306</td>
<td>46306</td>
<td>46306</td>
<td>46306</td>
<td>46306</td>
</tr>
<tr>
<td>2</td>
<td>Equity capital, thousand UAH</td>
<td>117369</td>
<td>102271</td>
<td>130925</td>
<td>132867</td>
<td>250461</td>
</tr>
<tr>
<td>3</td>
<td>Insurance reserves, thousand UAH</td>
<td>614547</td>
<td>909259</td>
<td>1241797</td>
<td>1451795</td>
<td>2066736</td>
</tr>
<tr>
<td>4</td>
<td>Assets, thousand UAH</td>
<td>764985</td>
<td>1044738</td>
<td>1415242</td>
<td>1632684</td>
<td>2414392</td>
</tr>
</tbody>
</table>

Developed by the authors according to [9, 10].

According to tabl. 1, we can conclude that for a number of years the registered capital of the insurance company «TAS Life» remained unchanged. The company management does not consider it necessary to increase the size of this indicator. This reflects stability, however, an increase in the registered capital is a positive development of the company's activities. The dynamics of registered capital is shown in Fig. 1.

![Fig. 1. Dynamics of the registered capital of the insurance company «TAS Life» for 2013—2017](built_by_the_authors_in Accordance_with_[10].)
From Fig. 1 shows that for a number of years, the company's authorized capital remains unchanged.

In tabl. 1 deals with the dynamics of equity capital. The results of the comparative analysis showed an increase in the equity index to the amount of 133092 thousand UAH, which reflects positive changes in the organization of business of the company (Fig. 2).

![Fig. 2. Dynamics of growth of equity of the insurance company «TAS Life» for 2013—2017, thousand UAH](image)

In fig. 2 it is clear that the company's equity, despite the invariability of the size of the registered capital, is increasing, with that in the period 2016—2017, such growth was rather high.

The indicator of insurance reserves is reflected in the rapid increase in the volume of money supply from 614547 thousand UAH in 2013 to 2066736 thousand UAH in 2017, that is, the growth for this period is 1452189 thousand UAH (Fig. 3).

From Fig. 3, we can observe the constant growth of the size of insurance reserves of the company, it can be conditioned by various positive factors: an increase in the number of customers in the company, an increase in the cost of insurance programs, an increase in demand for insurance products.

![Fig. 3. Dynamics of growth of insurance reserves of the insurance company «TAS Life» for 2013—2017, thousand UAH](image)

The assets of the company (Table 1) are reflected in the growth of each year. From 764985 thousand UAH in 2013 the figure increased to 2414392 thousand UAH in 2017, which is an increase of UAH 1649407 thousand (Fig. 4).
Fig. 4. Dynamics of growth of assets of insurance company «TAS Life» for 2013—2017, thousand UAH

Source: Built by the authors in accordance with [10].

The assets of the company (Fig. 4) are reflected by constant steady growth, which is a positive indicator of the financial stability of the insurer. For a complete analysis of the financial support of life insurers, we will analyze the auxiliary indicators that also help in analyzing the insurer's financial status, solvency and liquidity, and affect the decision on life insurance (trust to the insurer) (table 2):
- insurance payments, an indicator reflecting the volume of customer payments, one of the indicators of trust in the company.
- insurance payments, indicator of fulfillment of obligations under life insurance contracts.

Table 2

<table>
<thead>
<tr>
<th>№</th>
<th>indicator</th>
<th>on 12/31/2013</th>
<th>on 12/31/2014</th>
<th>on 12/31/2015</th>
<th>on 12/31/2016</th>
<th>on 12/31/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Insurance payments, thousand UAH</td>
<td>145,916</td>
<td>209,464</td>
<td>257,637</td>
<td>285,857</td>
<td>442,105</td>
</tr>
<tr>
<td>2</td>
<td>Insurance payouts, thousand UAH</td>
<td>36,705</td>
<td>49,575</td>
<td>55,145</td>
<td>71,748</td>
<td>108,705</td>
</tr>
<tr>
<td>3</td>
<td>Coverage level of payouts for payments, %</td>
<td>397</td>
<td>422</td>
<td>467</td>
<td>398</td>
<td>407</td>
</tr>
</tbody>
</table>

Source: [9, 10]

According to the data of Table 2, we see an annual increase in the size of insurance payments. This is evidenced by the growing number of clients in the company, or the increase in service cost. In 2013 insurance payments amounted to 145,916 thousand UAH and increased to 442,104.9 thousand UAH at the end of 2017.

Considering insurance payouts, there is a tendency to increase their volume. This is due to the fact that this indicator is probabilistic, in 2013 the insurance payouts amounted to UAH 36,705 thousand, and as of December 31, 2017 the indicator reached UAH 108,070.88 thousand.

The summary indicator, the level of coverage of insurance payouts by insurance payments, more accurately reflects the status of the presence and movement of payments in the company.

A visual display of the movement of payments and payouts can be considered in Fig. 5.
Reflection on the schedule of insurance payments and payouts gives an opportunity to conclude that the growth of insurance payments significantly exceeds a slight increase in the size of insurance payouts. However, in order to see the level of compliance of insurance coverage with insurance payouts, it is necessary to consider the Fig. 6.

As can be seen from Fig. 6, we conclude that in 2015 the coverage ratio was the highest, namely 467%, in other analyzing years the figure was more than 390%, which is a high financial indicator. Positive for the insurer is that insurance payments significantly exceed the insurance payouts, but the security of insurance payments need to be calculated on other indicators, discussed below.

The analysis of financial support enabled to pre-reflect the external financial condition of the insurer and come to the conclusion, that the company is working steadily in the life insurance market, and the indicators of its activity are confirmed by an increase in the number of clients, that is, increasing trust in the company.

The assessment of the effectiveness of life insurance companies should be carried out in the following areas:
1. Analysis of the company's income;
2. Cost analysis of the company;
3. Comprehensive assessment of the insurer's financial status:
   - liquidity and solvency of the company;
   - financial stability of the insurer;
   - financial attractiveness;
   - profitability;
   - calculation of the probability of insolvency of the insurance company.
For such in-depth analysis, it is necessary to use a number of indicators and factors that help
to identify the factors affecting the final results of the activities of insurers. We will use some of the
elements of the analysis to reflect the internal financial status of the insurer's activities in order to
evaluate the financial performance of TAS Life. It is worth assessing the effectiveness of the insurer
to determine its real financial position and position in the life insurance market.

An assessment of the effectiveness of life insurance companies is a comprehensive analysis
of company's income and expenses, financial results, an assessment of the insurer's financial status,
which includes definition of liquidity and solvency, financial attractiveness and stability of the
insurer, profitability and calculation of probability of insolvency of the insurance company.

An assessment of the effectiveness of insurers will begin with the analysis of registered
capital, as the primary source of the establishment and operation of the insurance company. For a
financial reflection of the state of life insurance companies, it is advisable to calculate the growth
rates of key indicators. To calculate, we will take 2013 as the start date and 2017 — as the date of
the end of the analyzed period.

One of the statistical indicators is the growth rate, which characterizes the level of increase
or decrease of the indicator. The coefficient of increase in the authorized capital, we expect based
on the statistical indicator, adapting it for the authorized capital of the insurance company. Indicator
characterizes the level of increase in the authorized capital of an insurance company, the higher the
growth rate, the more stable the financial position is acquired by the insurance company. Similarly,
we will make calculations for other financial indicators, we will list the results in table 3.

Table 3
Calculation of growth rates of the insurance company «TAS Life» for 2013—2017

<table>
<thead>
<tr>
<th>No</th>
<th>Indicator</th>
<th>Indicator at the beginning of the period, thousand UAH</th>
<th>Indicator at the end of the period, thousand UAH</th>
<th>Increase (+, –) thousand UAH</th>
<th>Coefficient of ratio the authorized capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Registered capital</td>
<td>46306,00</td>
<td>46306</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Equity capital</td>
<td>117369</td>
<td>250461</td>
<td>133092</td>
<td>2,13</td>
</tr>
<tr>
<td>3</td>
<td>Insurance reserves</td>
<td>614547</td>
<td>2066736</td>
<td>1452189</td>
<td>3,36</td>
</tr>
<tr>
<td>4</td>
<td>Assets</td>
<td>764985</td>
<td>2414392</td>
<td>1649407</td>
<td>3,16</td>
</tr>
<tr>
<td>5</td>
<td>Insurance payments</td>
<td>145 916</td>
<td>442 105</td>
<td>296189</td>
<td>3,03</td>
</tr>
<tr>
<td>6</td>
<td>insurance payouts</td>
<td>36705</td>
<td>108705</td>
<td>72000</td>
<td>2,96</td>
</tr>
</tbody>
</table>

Source: Developed by the authors according to [9—10].

According to calculations in Table 3 we observe rapid growth rates of indicators, with the
fact that the growth rate of the authorized capital is 0, the growth of equity is 2,13, which covers the
first indicator is quite thorough. Accordingly, the growth of assets, insurance reserves and insurance
payments is positive. An increase in the growth rate of insurance payments reflects the negative
tendency for the company and its financial result, but for clients, it is an attractive indicator that the
company fulfills its obligations under life insurance contracts.

In order to reflect the adequacy of insurance reserves in each of the companies, we think it is
necessary to combine several indicators of the company's activity and calculate indicators indicating
the adequacy of coverage of insurance payments by insurance reserves.

Insurance reserves, by their very nature, reflect the magnitude of the currently unfulfilled
obligations of the insurer under insurance contracts concluded with policyholders. Also, funds from
insurance reserves are used to finance investment projects, that is, it is a source of investment
financing.

The insurance reserves of an insurance company are not its property, but the company
disposes of such money and uses it in investment projects that bring profit. At the expense of such
profits there is an increase in insurance reserves.

Modern financiers should expect indicators that reflect a profound financial value, for example, the coefficient of covering insurance payments with insurance reserves, which will enable
to analyze the status of such reserves and their adequacy to fulfill obligations to customers; the
coefficient of liquidity of insurance payments, that is, how much a company can be liquidated in
repayment of payments under life insurance contracts in the unpredictable case of mass payments.
The coefficient of coverage of insurance payments by insurance reserves, we propose to calculate by the formula:

\[ CC = \frac{IR}{IP}, \]  

where: \( CC \) — Coefficient of coverage of insurance payments by insurance reserves;  
\( IR \) — Insurance reserves;  
\( IP \) — Insurance payments.

The coefficient of liquidity of insurance payments, we propose to calculate by the formula:

\[ CL = \frac{(IR + RC)}{IP} \]  

where: \( CL \) — coefficient of liquidity insurance payments  
\( IR \) — Insurance reserves;  
\( RC \) — Registered capital;  
\( IP \) — Insurance payments.

So, we will make calculations based on the indicators of the table 1—2, the results will be drawn up to the table 4.

### Table 4

<table>
<thead>
<tr>
<th>№ п/п</th>
<th>Indicator</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Coefficient of coverage of insurance payments by insurance reserves</td>
<td>4.21</td>
<td>4.34</td>
<td>4.82</td>
<td>5.08</td>
<td>4.67</td>
</tr>
<tr>
<td>2.</td>
<td>coefficient of liquidity insurance payments</td>
<td>4.53</td>
<td>4.56</td>
<td>5.00</td>
<td>5.24</td>
<td>4.78</td>
</tr>
</tbody>
</table>

Source: Developed by the authors according to [9—10].

The analysis showed (Table 4) that the company is fully capable of meeting its obligations to customers in the event of unforeseen circumstances, such indicators can be high and attractive not only for clients but also for investors. The dynamics of indicators will be considered in Fig. 7.

![Fig. 7. Dynamics of growth of coverage and liquidity ratios of «TAS Life» Insurance Company for 2013—2017, thousand UAH](source)

Source: Built by the authors in accordance with [10].

The peculiarity of such indicators is that the financier can reflect the actual state of security of obligations under life insurance contracts. In fig. 7 shows the growth of the indicators in 2016 and a slight decline in 2017, without the use of coefficients, the dynamics showed the growth of the attracted indicators in 2017, and the analysis shows a decline, which is a financial reflection of the indicators.

**Conclusions.** Additional indicators of the financial analysis of the insurance company helped to identify the impact and relationship between the indicators of the insurer. Separate performance indicators show the dynamics of growth and this is positive for the insurer, but the calculation of additional coefficients revealed a real picture, albeit slight, a decrease in the dynamics in 2017. It should be noted that the results of the analytical calculations are not the only and unconditional criterion for making managerial decisions aimed at improving the financial position of the company. It is necessary
to take into account the knowledge and intelligence of the decision maker, her experience in the field of insurance and personal qualities, which have a great influence on the quality of managerial and financial decisions. Only the optimal combination of analytical (formalized) settlements and unformalized management decision-making procedures provides the insurance company with a victory in the fight against competitors. To improve the life insurer's life, we propose to continue research in this area, taking into account the particularities of the independent region.

References