Integration of banks and insurance companies activities in Ukraine

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Abstract
The article reveals the essence of modern bancassurance and new challenges and prospects for its development in Ukraine. The definition of “bancassurance” is theoretically substantiated and the general financial and economic characteristics of Ukrainian banks is given. The normative indicators of commercial institutions are analyzed along with the main risks affecting banking and insurance activities, the possibility of their leveling are determined. The study provides theoretical and practical information on the process of banks capital of and insurance companies merging, financial and economic analysis of JSC PrivatBank – one of the largest banks in modern Ukraine, and the assessment of the financial stability of its insurance partners. The insurance Ukrainian market study concerning the detection of possible prospects for cooperation with the studied bank was done. The calculations suggest that PrivatBank can cooperate with the leading insurance companies, such as AXA Insurance and Providna recommended as new partners. It is established that bancassurance technologies have a significant place at the current stage of development of the domestic financial market. Using a large customer base and a wide network of branches and outlets, banking experts expect that revenues from the sale of insurance products in 2021 may amount to 15% of total bank revenues, as the volume of bank insurance in JSC CB PrivatBank is growing quite rapidly. The activity of banks in market conditions is subject to its general laws, and therefore requires the development of a viable mechanism for managing financial activities, aimed at increasing the competitiveness of banks. Thus, the ability of bank managers to determine the degree of financial stability of their bank as well as that of the competing banks and counterparties is essential in making decisions. Therefore, the search for ways to optimize the financial condition of the bank is one of the principles of further rapid development of the banking system in Ukraine.

Key words: bank, banking activity, bancassurance, integration, integration mechanism, banking institutions, insurance companies, banking risk, crediting.

Introduction

Today, given the functioning of a market economy, all parts of the financial services market need to improve their activities and find new ways to innovate in their activities to strengthen their position in the market niche, to rise the competitiveness and expand sales channels for their products and services. The process of globalization of financial markets in the world economy has transformed the relationship between banks and insurance companies. Banking and insurance are among the riskiest areas, so the process of integrating banking and insurance capital began in the 70s of last century. Mutual entering of banking and insurance business has been the dominant trend in the financial market for over the past ten
years, which created the preconditions for consideration and analysis of the bancassurance phenomenon. Integration in the form of bank insurance has been put into practice in the domestic market and has its own dynamics of development. The integration of banks and insurance companies is currently a new stage in the development of the banking and insurance systems. It is predetermined by both the expansion of activities and spheres of influence of banks, and the insurance companies desire to increase the number of customers and, hence, the amount of profits. Therefore, there arises a need for research on the best option for unification and its possible forms to achieve the abovementioned goals at the current period of economic development of Ukraine.

**Literature review.** Theoretical fundamentals of banking are studied in the scientific works of G. Azarenkov, A. Achkasov, A. Epifanov, V. Kovalyov, O. Lavrushyn, V. Lahutin, I. Luty, V. A. Podderyohin, S. Salyha, I. Salo, E. Stoyanov (Davydenko, N. M., 2006). The papers by O. Vasyurenko, S. Kozmenko, A. Meshcheryakov, and R. Pavlov are devoted to the study of certain issues of preventing the negative impact of the results of credit operations on the sustainability of a bank operation (Reverchuk, S. K., 2005). An important role of credit in the economy at the stage of economic theory formation was emphasized by well-known scientists – A. Smith, D. Ricardo, J. Schumpeter, A. Pigou, J. M. Keynes. They made significant contributions to the development of credit theory. Paying tribute to the scientific work of scientists on this issue, it should be noted that there is a need for its further study due to the insufficient level of development of certain issues. In addition, the state of bank lending changes every year and new problems that need to be addressed arise.

**The aim of the article** is to provide a scientific substantiation of theoretical and practical principles of bancassurance in Ukraine, to carry out a detailed financial and economic analysis of JSC CB *PrivatBank* – one of the largest banks in modern Ukraine, and the assessment of the financial stability of its insurance partners. The study also aims to develop recommendations on ways to optimize the process of lending to banking institutions in Ukraine and identify possible prospects for cooperation with the studied bank.

**Materials and methods**

A set of general scientific methods was used to achieve the aim of the study. Observation and comparison methods were used to determine the analysis of the loan portfolio of a commercial bank. Selective method was applied in the research since the degree of integration of banks and insurance companies is individual. Therefore, it is advisable for each institution to use a representative sample of several companies. The method for mathematical processing of the time series was also in the study as it is the basis of horizontal and vertical analysis of the enterprise operation, value assessment of financial condition, as well as research of operational and financial levers.

**Results and discussion**

The banking system is a set of financial institutions. They aim to comprehensively carry out operations to attract temporarily available financial resources, preserve individuals and legal entities and allocate the accumulated resources on their behalf in accordance with their paying back in accordance with the agreements (Pikus, R. V., 2012). The banking system organizes the capital and moves the main attribute of the market, i.e. capital, it ensures its attractiveness, accumulation and distribution to the areas of social production with the deficit.

Insurance is a system of economic relations between policyholders and insurers, which includes a set of forms and methods of creating trust funds (insurance funds) and their use to compensate for losses caused by various
adverse events (insurance events) (Novykova, M. V., Svyrydovych, M. S., 2014). Also, insurance is a system of economic relations arising from the purchase and sale of insurance coverage in the process of meeting public needs for insurance protection (Zhuravin, S. H., 2009). For most domestic banks, credit risk is the main importance that needs to be controlled and minimized. Credit risk is the one that a borrower defaulting on required payments to a bank. In terms of economic transformation, bancassurance can be an effective method of minimizing the bank's credit risk (Volkova, V. V., Volkova, N. I., 2016).

The interaction of banking and insurance business is predetermined by the common interest in bancassurance. Banks benefit from the maximum load of the network of their branches, diversification of their traditional business areas by providing customers with a wide range of financial and insurance services, as well as receiving additional commissions for their implementation. Cooperation with banks allows the insurance company to take advantage of synergistic opportunities to use a common customer base, use of the brand or reputation of the bank in bancassurance (Ohliadrynku). It comprises the following activities:

- examination of the structure of liabilities by sources of resource formation (Table 1);
- determination of the amount of equity and its structure (Table 2);
- assessment of the degree of compliance with the basic standards of capital adequacy (Table 3).

The results of the study on the structure of liabilities by sources of resource formation are given in table 1.

| Balance figure                        | 2016   | 2017   | 2018   | 2019   | Deviation |
|---------------------------------------|--------|--------|--------|--------|-----------|
|                                       | %      | +/-    |
| Total liabilities and capital, including | 179,833| 253,740| 278,120| 309,659| 172.19    |
| Liabilities                           | 206,116| 230,032| 246,545| 255,033| 123.73    |
| Capital                               | (26,283)| 23,708| 31,575| 54,626| 148.11    |

Source: compiled by the authors based on their own research

Therefore, table 1 data show that the resource structure of the bank determines the tactics of bank action in the issue of the resources formation. During the analyzed period, the volume of the bank’s liabilities increased by 72% or by UAH 129,826 million, including the one due to an increase in obligations and liabilities by 23% and 48%, respectively. Calculation of the amount of equity and its structure are presented in table 2.

Thus, the share capital and the results of transactions with the shareholder make the gross part of the bank’s capital. However, the amount of share capital for the entire study period has always been leveled by the value of the accumulated deficit of the bank, which amounted up to 90% of its value. The bank’s deficit tends to decrease and in 2019 it amounted to only 81% of the lack of funds for 2016. In addition to analyzing the capital structure, it is important to determine the efficiency of its use. Analysis of relative indicators of profitability (return) of the bank is determined by the following formulas (1-2):

\[ RE = \frac{NP}{E} \]  (1)

where \( RE \) – is return on equity,
\( NP \) – net profit;
\( E \) – equity.

Return on equity of JSC PrivatBank for 2019 = 59.8%:

\[ Aci = \frac{CI}{E} \]  (2)

where \( Aci \) is the amount of credit investments per UAH 1 of capital,
\( CI \) – credit investments,
\( E \) – equity.

The amount of credit investments per UAH 1 for 2019 = UAH 1.09
Table 2 – JSC PrivatBank bank capital structure, UAH mln

| Balance figure, UAH mln | 2016 | 2017 | %  | 2018 | %  | 2019 | %  | 2020 | %  | Deviation | %  | +/- |
|------------------------|------|------|----|------|----|------|----|------|----|-----------|----|------|
| Equity                 | 50695| 206060| 869.19 | 206060| 652.62 | 206060 | 377.22 | 40647 | 155365 |          |    |      |
| Issue income           | 23   | 23   | 0.09 | 23   | 0.07 | 23   | 0.042 | 100   | 0    |          |    |      |
| Capital contributions  |      |      |      |      |      |      |      |      |      | (111591) |    |      |
| received on the shares |      |      |      |      |      |      |      |      |      | (111591) |    |      |
| that were issued but   |      |      |      |      |      |      |      |      |      |          |    |      |
| not used               |      |      |      |      |      |      |      |      |      |          |    |      |
| Premises revaluation   | 842  | 804  | 3.39 | 722  | 2.28 | 614  | 1.12  | 72.92 | (228) |          |    |      |
| reserve                |      |      |      |      |      |      |      |      |      |          |    |      |
| Unrealized loss on     | 521  | (479)| (2.02)| (3303)| (10.46)| (1274)| (2.33)| (244.53)| (1795)|          |    |      |
| investment securities  |      |      |      |      |      |      |      |      |      |          |    |      |
| The result of         | 9934 | 12174| 51.35| 12174| 38.55| 12174| 22.28| 122.54| 2240  |          |    |      |
| transactions with the  |      |      |      |      |      |      |      |      |      |          |    |      |
| shareholder           |      |      |      |      |      |      |      |      |      |          |    |      |
| Currency revaluation   | 29   | 27   | 0.11 | 27   | 0.08 | 27   | 0.049| 93.1  | (2)   |          |    |      |
| reserve                |      |      |      |      |      |      |      |      |      |          |    |      |
| Accumulated deficit    | (199919)| (194902)| (822.12)| (184129)| (583.16)| (162999)| (298.39)| 81.53 | 36920  |          |    |      |
| Total capital          | (26284)| 23707| 100  | 31574| 100  | 54625| 100  | 148.11| 80909 |          |    |      |

Source: compiled by the authors based on their own research

The bank’s capital adequacy is determined by the bank’s ability to protect the interests of its creditors and owners from unplanned losses. The amount of capital adequacy depends on the impact of risks arising from the bank’s active operations. Assessment of capital adequacy is carried out by the implementation of economic standards of bank capital (table 3) on the three indicators set by the NBU:

**Indicators of the bank capital adequacy**

- **N1** – regulatory capital of the bank (normative UAH 500 million);
- **N2** – regulatory capital adequacy normative (not less than 10%);
- **N3** – fixed capital adequacy normative (not less than 9%).

Table 3 – Indicators of capital adequacy of the bank

| Indicator | Normative | 2016 | 2017 | 2018 | 2019 | Deviation | % | +/- |
|-----------|-----------|------|------|------|------|------------|---|-----|
| N1, UAH mln | 163,180  | 206,914| 206,832| 206,724| 126.68 | 43544 |    |     |
| N2, %      | 2.1       | 13.36| 17.46| 14.15| 673.81| 12.05  |    |     |
| S3, %      | 0         | 0    | 0    | 7.13 | -     | 7.13   |    |     |

Source: compiled by the authors based on their own research

It should be noted that the N3 ratio was first calculated by the bank in 2019. It indicates that the regulatory capital covers total assets by only 7%, the value does not meet the standards set by the NBU. The value of the N2 ratio has corresponded to the established norms starting...
from 2017, i.e. during the process of nationalization of the bank. Efficient allocation of resources, along with their formation is an important point in the bank's activity. Therefore, the analysis of banks active operations is one of the main areas of their analysis. The total amount of assets is the sum of all categories of assets minus the amount of all contra asset accounts such as reserves for possible losses from lending activities and a discount on purchased securities. In the 4th quarter of 2020, the assets of the banking sector of Ukraine grew: total – by 5.7%, and net ones – by 8.8%. At the end of 2019, banks investments in deposits reached UAH 152.2 billion. Cash in circulation, funds in the NBU and interbank loans also increased. Net hryvnia loans to economic entities decreased by 6.2% year in a year. Net foreign currency loans grew by 1.3% in dollar terms for the quarter, though it decreased by 4.1% in 2019. Also, net hryvnia loans to individuals grew by 29.8% over the year. The share of non-performing loans decreased to 48.4% (Ohliad bankivskoho sektoru za 2020 r). The structure of assets of the banking sector of Ukraine is shown in fig. 1.

![Fig. 1 Structure of the active part of the balance sheet of the banking sector for 2021 %](image)

Source: (Ohliad bankivskoho sektoru za liutyi 2021 r.)

Thus, the largest contribution to the growth of banks' net assets was made by the increase in government securities. The growth of domestic governmental bonds provided two thirds of the nominal annual growth of net assets and almost 80% growth in the 4th quarter of 2020. Due to the budget expenditures, banks' liquidity and their investment in NBU certificates of deposit were improved. Net loans to businesses in the national currency increased after the falling in the first half of the year due to the coronary crisis. Conducting a ratio analysis makes it possible to assess the state of liquidity and solvency of the bank, the quality of its loan portfolio, the reliability of the bank, the state of development of the resource base and its profitability (Zinkovska, Ya. V., 2012).

Analysis of changes in total assets using standard indicators of dynamics involves the following stages:

1) studying the dynamics of changes in total assets, including some of its articles (Table 4);

2) analysis of the structure of the bank's assets according to different classification criteria.
Table 4 – Analysis of the dynamics of JSC PrivatBank assets, UAH mln

| Balance figure                      | 2016   | 2017    | 2018    | 2019   | Deviation |
|-------------------------------------|--------|---------|---------|--------|-----------|
|                                     |        |         |         |        | %         | +/-      |
| Monetary assets                     | 30159  | 25300   | 27360   | 45891  | 152.16    | 15732.00 |
| Banks debt                          | -      | 2903    | -       | 27118  | 934.14    | 24215.00 |
| Credits and prepayments to the      | 32615  | 38335   | 50140   | 59544  | 182.57    | 26929.00 |
| customers                           |        |         |         |        |           |          |
| Investment securities               |        |         |         |        |           |          |
| - fair cost through profit/loss     | -      | -       | 86244   | 84680  | 98.19     | -1564.00 |
| - fair cost through individual total return | -   | -       | 79299   | 66602  | 83.99     | -12697.00|
| - amortized cost price              | -      | -       | 14577   | 875    | 6.00      | -13702.00|
| Current tax assets                  | -      | -       | 184     | 2257   | 1226.63   | 2073.00  |
| Investment fixed property           | 691    | 3,648   | 3,340   | 3,379  | 489.00    | 2688.00  |
| Fixed assets and intangible assets  | -      | -       | 3,843   | 4,850  | 175.98    | 1007.00  |
| Other financial assets              | 2,679  | 2,981   | 2,756   | 2,228  | 83.17     | -451.00  |
| Other assets                        | 9,585  | 8,815   | 8,899   | 9,285  | 96.87     | -300.00  |
| Property that became the property of the bank as a mortgagee | 8,782 | 7,069   | 1,244   | 1,361  | 15.50     | -7421.00 |
| Assets for sale                     | -      | 117     | 117     | -      | 100.00    | 0.00     |
| Total assets                        | 179,833| 253,740 | 278,120 | 309,659| 172.19    | 129826.00|

Source: compiled by the authors based on their own research

Analysis of changes in total assets using standard indicators of dynamics involves the calculation of the following ones, according to formulas 3-5:

$$\Delta A = A_{ep} - A_{bp}, \quad (3)$$

where, $\Delta A$ – is the absolute increase in assets

$A_{ep}$ – assets by the end of the period

$A_{bp}$ – assets by the beginning of the period

Absolute increase in assets = UAH 129,826 million.

$$Gr = A_{ep} - A_{bp}, \quad (4)$$

where, $Gr$ – is the assets growth rate

$A_{ep}$ – assets by the end of the period

$A_{bp}$ – assets by the beginning of the period

Asset growth rate = 172.19%

$$Ir = \frac{\Delta A}{A_{bp}}, \quad (5)$$

where, $Ir$ – is the assets increase rate

$\Delta A$ – is the absolute increase in assets

$A_{bp}$ – assets by the beginning of the period

 Asset increase rate = 72%.

Thus, the analysis of the dynamics of assets of JSC CB PrivatBank shows that the bank’s assets increased in total by 72%. It was contributed, along with other incentives, by increase in cash by 52% compared to 2016, increased loans to customers by 82% and investment property by almost 4 times. However, the volume of investment securities decreased by a total of 16% or UAH 152,157 million, other assets and other financial assets decreased by 4% and 17%, respectively (Table 5). The most significant part of the bank’s assets during the study period was occupied by the amount of cash and loans issued – 15% and 19%, respectively, in 2019. In recent years the amount of investment securities at fair value through profit or other total income of about 27% and 22% was added to the figure. In 2017, a significant share was also occupied by investments for sale and redemption – 35% and 14%, respectively.

The grouping method is commonly used to study the structure of banking resources. The method of grouping the bank’s assets is based on the following features:

- type of operations;
- term of placement;
- degree of liquidity;
- degree of risk;
- impact on the bank profitability level.

The bank's assets can be divided into five main categories by types of operations (Fig. 2). To determine the deviations on the balance sheet figures that affect the stability of the bank,
the asset items of the balance sheet are grouped on the descending degree of assets liquidity.

### Fig. 2 Main categories of bank assets
Source: compiled by the authors based on their own research

Liquidity is bank’s ability to quickly convert its assets into cash without significant loss of their value in order to meet debt obligations. According to the degree of liquidity, the asset balance sheet is divided into five main groups (Fig. 3). Primary reserves are all cash assets, funds on a correspondent account with the NBU. Secondary, or “non-cash”, reserves are securities that can be quickly sold on the money market and can be converted into cash, i.e. into primary reserves with minimal loss of their value. Primary and secondary reserves make highly liquid assets.

### Fig. 3 Distribution of assets by degree of liquidity
Source: compiled by the authors based on their own research

Most liquid assets are cash on hand, in the National Bank of Ukraine and other banks, securities, as well as assets that can be quickly converted into cash or non-cash funds.

Low-liquid assets are borrowed assets with more than one month to maturity.

Illiquid assets – capitalized assets, financial investments, including financial investments in associates and subsidiaries, receivables and other immobilized funds.

Other liquid assets include loans and other payments provided by the bank, which have no more than one month to repay.

To analyze the assets by the degree of liquidity, it is necessary to allocate the share of each group of assets on this basis in the total assets of the bank. At the same time, special attention is paid to the share of absolutely liquid assets in total and operating assets. The share of absolutely liquid assets in working assets should range within 20-25%. Ratio and quantitative analysis allow to assess the dynamics of the quality of assets by profitability, risk, liquidity and turnover criteria.

Return on assets can be analyzed using the rate of return (Rret), formula 6:
\[ R_{ret} = \frac{IA}{A} \]  

(6)

where, \( R_{ret} \) – is return on assets;  
\( IA \) – is income assets;  
\( A \) – is assets.

\[ R_{ret} = \frac{(27118 + 59544 + 84680 + 66602 + 875 + 3379)}{309659} = 78.2\% \]

This ratio characterizes the business activity of the bank in terms of resource allocation efficiency. In the world practice, it is believed that this ratio should be above 93%, but given the peculiarities of the Ukrainian banks development, the average value of this ratio ranges within 70%. According to the degree of risk, the quality of bank assets can be analyzed using the risk assets ratio (RAR), formula 7:

\[ RAR = \frac{Ar_{iriz}}{A} \]  

(7)

where, \( RAR \) – is risk asset ratio;  
\( Ar_{iriz} \) – assets in risk;  
\( A \) – assets.

\[ RAR = \frac{(59544 + 27118)}{309659} = 42.23\% \]

Thus, an increase in this ratio indicates an increase in the riskiness of active banking operations. The next step is the analysis of liquidity standards and their compliance with the standards (Table 5).

| Ratio | 2017 | 2018 | 2019 | Deviation |
|-------|------|------|------|-----------|
|       |      |      |      | %         | +/-       |
| N4, % | 58.59| 32.47| 43.46| 74.18     | 43.46     |
| N5, % | 106.61| 155  | 142  | 133.20    | 142       |
| N6, % | 94.95| 98   | 100.4| 105.74    | 5.45      |
| LCRBB | 258.67| 263.6| 268.26| 103.71   | 9.59      |

Source: compiled by the authors based on their own research

Thus, the bank maintained a very good stock in terms of all liquidity ratio: the quick liquidity ratio (N4) exceeded the minimum mark set by the NBU by 23.46%, the current liquidity ratio (N5) – by 101.98%, and the short-term liquidity ratio (N6) – by 37.74%. Ratios N5 and N6 of the bank as of 2019 exceeded not only the limits set by the NBU, but also the average values for these ratios in the banking system of Ukraine. The quick liquidity normative (N4) is defined as the ratio of highly liquid assets to current liabilities of the bank. It characterizes the minimum amount of most liquid assets required to meet current liabilities in one transaction day. The normative value of the N4 ratio must be at least 20%.

The current liquidity normative (N5) is defined as the ratio of assets with a final maturity of up to 31 days to the liabilities of the bank with a final maturity of up to 31 days. This normative characterizes the minimum amount of the bank’s assets required to ensure the fulfillment of the current amount of liabilities within one calendar month. The normative value of the N5 ratio must be at least 40%. The short-term liquidity normative (N6) is defined as the ratio of liquid assets to liabilities with a final maturity of up to one year. It determines the minimum amount of assets required to meet its obligations within a year. The normative value of the N6 ratio must be at least 60%.

Currently, almost every bank has at least one insurance partner or more. The insurance market of Ukraine is multifaceted, and the owners of insurance companies have a common goal – to increase the efficiency of the insurance business, expand the customer base, expand and stabilize the insurance portfolio and financial performance. The main reasons for the increased mutual interest of insurers and banks are (Zubariev V., 2004):
- entering new markets and ensuring efficient use of the branch system;
- the ability to significantly expand the customer base and information exchange;
- the need to accumulate all cash flows in one system;
- diversification of capital and income, increasing the rate of return on investment resources;
- the ability to provide a full range of banking and insurance services.

Thus, JSC CB PrivatBank cooperates with the leading insurance companies IC VUSO, IC UNIKA and IC KRAÏNA (Pro zatverdzhennia Vymoh). The terms for obtaining accreditation from PrivatBank are: Ukrainian insurance company that has been operating on the market for at least three years; the company has no unfulfilled influence measures of the National committee for financial services; its insurance premiums for the previous year exceed UAH 50 million. The loss ratio of the IC shall be at least 15%, and the formed insurance reserves amount over 50%. The insurer shall have to open a bank account for crediting insurance payments and place a deposit for a period of six months in the amount of UAH 5 million for insurance of risks of individuals and UAH 10 million for insurance of risks of legal entities and operational risks of the bank (property, employees, responsibility). The unchanged balance on the current account shall be UAH 500,000 (Kontseptsii realizatsii derzhavnoi). The analysis of the financial condition of VUSO Insurance Company for 2018 – 2019 is given in Table 6.

### Table 6 – Analysis of the financial condition of VUSO Insurance Company, UAH thousand

| Index                            | 2018    | 2019    | Deviation % | +/-    |
|----------------------------------|---------|---------|-------------|--------|
| Total assets                     | 412857  | 636770  | 154.24      | 223913.00 |
| Fixed assets (residual value)    | 23616   | 67485   | 285.76      | 43869.00  |
| Stocks                           | 530     | 366     | 69.06       | -164.00  |
| The number of receivables        | 43,161  | 44,117  | 102.21      | 956.00   |
| Money and equivalents            | 134,072 | 273,031 | 203.65      | 138959.00 |
| Undivided profit                 | 21,910  | 56,227  | 256.63      | 34317.00  |
| Equity                           | 160,652 | 198,420 | 123.51      | 37768.00  |
| Share capital                    | 60,000  | 60,000  | 100.00      | 0.00     |
| Long-term liabilities            | 208,046 | 337,744 | 162.34      | 129698.00 |
| Current liabilities              | 44,159  | 100,606 | 227.83      | 56447.00  |
| Net profit                       | 408     | 37,768  | 9256.86     | 37360.00  |

**Source:** compiled by the authors based on their own research

During the analyzed period there was an improvement in the financial condition of the Insurance Company, which indicates an improvement in the economic stability of the company and an increase in deposits, and hence public confidence in it. Analysis of indicators of financial condition of VUSO Insurance Company: Solvency and capital adequacy normative (SCAN) is the amount of eligible assets, which shall exceed the value of long-term and current liabilities and guarantees at any date, calculated in accordance with the law and defined as the total value of sections II-IV of the balance sheet liabilities.

The standard established by the state: \( SSN + C \)

\[
SSN = Volume\ of\ insurance\ premiums \times 0.18 = 728400 \times 0.18 = UAH\ 131,112\ thousand
\]

\[
SSN - \text{solvency stock normative}
\]

\[
C - \text{the company’s capital}
\]

\[
\text{Normative for IC VUSO = 131 112 + 198 420 = UAH 329, 532 thousand}
\]

\[
\text{Actual amount: UAH 438,350 thousand}
\]

\[
\text{ACV (actual characteristic value) > NCV (normative characteristic value), the value corresponds to the normative.}
\]

Transactions risk ratio is the amount of eligible assets that meet the requirements of diversification, which shall exceed the regulatory amount of assets. They are defined as the amount
of insurance reserves, which are calculated in accordance with the law.

Eligible assets include:
- Cash;
- Deposits of individuals;
- Real Estate;
- Securities;
- Government loan bonds;
- Loans to individuals;
- Bank metals;
- Investments in the economy of Ukraine.

Standard for VUSO Insurance Company = UAH 351,367 thousand.
Actual amount: UAH 368,516 thousand

FCV > NCV, the value corresponds to the normative

Asset quality ratio is the amount of low-risk assets, which must be not less than the regulatory volume of assets.

Standard for VUSO Insurance Company = 40% of insurance reserves = 0.4 \cdot 80,339 = UAH 32,135.6 thousand
Actual amount: UAH 273,031 thousand

ACV > NCV, the value corresponds to the normative

Analysis of the financial condition of UNICA Insurance Company for 2018 – 2019 is given in Table 7.

Table 7 – Analysis of the financial condition of UNICA Insurance Company, UAH thousand

| Index                                | 2018       | 2019       | %       | +/-      |
|--------------------------------------|------------|------------|---------|----------|
| Total assets                         | 337,4471   | 243,2213   | 72.08   | -942,258.00 |
| Intangible assets                   | 17,307     | 19,370     | 111.92  | 2,063.00  |
| Long-term financial investments     | 273,875    | 134,893    | 49.25   | -138,982.00 |
| Fixed assets (residual value)       | 27,802     | 29,858     | 107.40  | 2,056.00  |
| Deferred acquisition expenses      | 148,243    | 144,964    | 97.79   | -3,279.00 |
| Stocks                              | 13,89       | 11,77      | 84.74   | -212.00   |
| The amount of receivables           | 110,579    | 28,266     | 25.56   | -82,313.00 |
| Money and equivalents               | 89,142     | 30,387     | 34.09   | -58,755.00 |
| Current financial investments       | 612,765    | 96,070     | 156.78  | 347,942.00 |
| Undivided profit                    | 242,219    | 326,830    | 134.93  | 84,611.00 |
| Equity                              | 430,785    | 529,741    | 122.97  | 98,956.00 |
| Share capital                       | 155,480    | 155,480    | 100.00  | 0.00      |
| Long-term liabilities               | 178,0279   | 160,2357   | 90.01   | -17,792.00 |
| Current liabilities                 | 116,3407   | 300,115    | 25.80   | -863,292.00 |
| Net profit                          | 88,988     | 25,151     | 28.26   | -63,837.00 |

Source: compiled by the authors based on their own research

In general, during the analyzed period the assets of the insurance company decreased by almost 30%, which indicates a decrease in the value and volume of assets of the IC, this was mainly due to a decrease in long-term financial investments and, consequently, a decrease in income from these investments. At this time, the volume of current financial investments increased by 56%, which demonstrates the company’s transition to a model of investment activity in which current financial investments are more profitable than long-term ones. The company’s retained earnings also increased by 34%, while net profit decreased by 72%, which is a negative trend.

Analysis of indicators of the financial condition of UNICA Insurance Company:
Solvency and capital adequacy normative (SCAN)
Normative for UNICA Insurance Company = 23,490 + 529,741 = UAH 553,231 thousand
Actual amount: UAH 1,902,472
ACV > NCV, the value corresponds to the normative
Risk ratio of operations
Normative for UNICA Insurance Company = UAH 1,780,279  
Actual amount: UAH 1,895,897  
ACV > NCV, the value corresponds to the normative  
Quality standard  

Normative for UNICA IC = 40% of insurance reserves = 0.4 \cdot 1667985 = UAH 667, 194  
Actual amount: UAH 1,884,823.05 thousand  
ACV> NCV, the value corresponds to the normative  

Analysis of the financial condition of Kraïna IC for 2018 – 2019 is given in table 8.

| Table 8 – Analysis of the financial condition of Kraïna Insurance Company |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Index                       | 2018           | 2019           | %           | +/-       |
| Total assets                | 226836         | 249185         | 109.85      | 22349.00 |
| Intangible assets           | 355            | 355            | 100.00      | 0.00      |
| Fixed assets (residual value) | 20718         | 29977         | 144.69      | 9259.00  |
| Deferred acquisition expenses | 11818        | 21479         | 181.75      | 9661.00  |
| Stocks                      | 518            | 454            | 87.64       | -64.00   |
| The amount of receivables   | 34050          | 47644          | 139.92      | 13594.00 |
| Money and equivalents       | 74278          | 48304          | 65.03       | -25974.00 |
| Current financial investments | 47048       | 68670          | 145.96      | 21622.00 |
| Undivided profit            | 3087           | 1001           | 32.43       | -2086.00 |
| Equity                      | 109957         | 111708         | 101.59      | 1751.00  |
| Share capital               | 84985          | 84985          | 100.00      | 0.00     |
| Long-term liabilities       | 107020         | 125874         | 117.62      | 18854.00 |
| Current liabilities         | 9859           | 11603          | 117.69      | 1744.00  |
| Net profit                  | 468            | 2368           | 505.98      | 1900.00  |

*Source: compiled by the authors based on their own research*

During the analyzed period, the company has improved its financial condition, as evidenced by an increase in assets by 10%, as well as fixed assets growth by 44%, receivables by 40%, and the amount of current and long-term investments by 46% and 17%, respectively. In addition, there was also a decrease in retained earnings by almost three times and 5 folds’ increase in net income.

Analysis of indicators of the financial condition of Kraïna IC:

Solvency and capital adequacy normative (SCAN)

Normative for Kraïna IC = 20 769 + 111 708 = UAH 132,477 thousand  
Actual amount: UAH 137, 477 thousand  
ACV > NCV, the value corresponds to the normative  
Risk ratio of operations  
Standard for Kraïna IC = UAH 125, 316 thousand.  
Actual amount: 137,865 UAH thousand  

ACV > NCV, the value corresponds to the normative  
Asset quality standard  

Analysis of the financial condition of Kraïna IC:  

Therefore, PrivatBank has registered the requirements on the selection of candidates for cooperation. These include the term of the company’s operation, the value of its risk ratio, the amount of insurance payments for the previous year and the IC tariff. The maximum rate for mortgage insurance will be 1%, and the franchise – no more than 2%, with CASCO – 9% and 3% respectively (with 15% of the franchise for theft), 1.5% and 3% for borrowers personal property insurance. The bank has also detailed tariffs for various risks for vehicles and property categories. All companies must comply with the criteria set by the legislation of Ukraine and the...
management of PrivatBank. The companies cooperating with the bank have had satisfactory results as of 2019.

According to the analysis of the financial condition of JSC CB PrivatBank and the above information, it can be concluded that the concept of “financial condition” of the bank is inseparable from the “financial stability”. According to data for 2019, JSC CB PrivatBank meets the established standards of the NBU. Based on the results of PrivatBank annual stress testing conducted by the NBU, it was found that the business model approved by the bank’s board and currently being implemented is viable, the bank has the highest profits among Ukrainian banks and is resilient to future crises. PrivatBank shall continue to form a buffer of capital conservation – by the beginning of 2021 it is supposed to reach 1.25%, as well as form a systemic importance buffer stock. According to the results of the analysis of the Mind business portal, insurance companies were rated on the basis of the analysis of the activities of 34 largest market participants in 2018 (Table 9). The business model of these markets has signs of “market activity” and includes the following indices: debt burden, level of insurance payments, the dynamics of collected premiums and capital, the financial stability of the company.

Table 9 – Leading companies in the Ukrainian insurance market

| IC name       | Insurance payment in 2018, UAH mln | Insurance payment in 2019, UAH mln | Growth for 2019, % | Payments, % |
|---------------|-----------------------------------|-----------------------------------|--------------------|-------------|
| Providna      | 354,44                            | 400,1                             | 11.5               | 69.2        |
| Unica         | 226,43                            | 387,2                             | 71                 | 76.5        |
| Naftogasstrakh| 252,33                            | 249                               | -1.34              | 71.3        |
| AXA Insurance | 205,49                            | 224,7                             | 9.35               | 71.7        |
| INGO Ukraine  | 133,57                            | 187,1                             | 40.47              | 71.7        |
| Alfa Insurance| 124,67                            | 177,9                             | 42.74              | 101.0       |
| USG           | 95,99                             | 131,8                             | 37.3               | 81.6        |
| PZU Ukraine   | 151,22                            | 131,5                             | -15                | 55.8        |
| Kraina        | 131,00                            | 125,6                             | -4.3               | 70.0        |
| IG TAS        | 58,18                             | 85,3                              | 46.62              | 74.6        |

Source: compiled by the authors based on their own research

27 out of the 34 rated insurers have a rating of three or more “stars”, which is a normal indicator and indicates a satisfactory solvency of insurance companies. The leader of the rating was AXA Insurance, which was purchased by the Canadian financial holding Fair Fax in 2017. Along with AXA, the companies Knyazha, Universalna, Unika and two Ukrainian companies, Ingo Ukraine and Arsenal Strakhuvannia, were rated high. A high rating of 4 “stars” was also given to Just insurance, SG TAS and Mustache. According to the National Commission for Financial Services Markets Regulation, the total volume of gross insurance premiums in 2019 amounted to UAH 57.45 billion, which is 16.3% more than in 2018. Net insurance premiums amounted to UAH 39.59 billion. The share of net insurance premiums in gross premiums reached as much as 68.9% in 2019, which is 1% less than in 2018. This is due to a decrease in net premiums in 2019 and an increase in gross insurance premiums. The table shows that three partners of JSC CB PrivatBank, namely Unika IC and Kraïna IC, were among the leading insurance companies in 2019. Vuso Insurance Company has become one of the largest insurance companies for CASCO, tourism and the volume of policies sold online. Also, insurance companies significantly increased assets and reserves in 2019 - by 10.7 and 18%, respectively (Fig. 4).
In 2019, deposits, i.e. deposits of individuals, investments of companies in IGLBs, as well as receivables from the reinsurers made the largest share in the total assets of companies in the Ukrainian insurance market. Based on the results of the calculations, the leading companies AXA Insurance and Providna can be recommended to new partners for cooperation with JSC CB PrivatBank. The approaches considering the specific risks seem to be the most adapted in terms of risk management implementation. They reflect not only the risks classification and methods of their management, but methods of their measurement as well. However, risk classifications do not reflect the full list of hazards that threaten different segments of the business, they rather focus on its individual parts which is a significant disadvantage of the approaches. Despite the existence of risk management systems today, they still do not provide fully effective protection of the insurer from various types of financial threats.

Currently, there are many opportunities and forms of merging an insurance company and a bank. However, the most promising are the forms of interaction between financial intermediaries that allow their full integration. The model of a financial supermarket is among the forms. The main goal of a financial supermarket is to maximize customer satisfaction by accelerating and facilitating the provision of a wide range of financial services in one place. Financial supermarket (Fig. 5) is a customer-oriented business model, which is an integrated channel of consumer access to financial services (Kubiv, S., 2006). A financial supermarket is a universal financial intermediary that is able to provide customers with a full range of financial services. However, in real economic conditions, the package of services offered by the financial supermarket is somewhat narrowed. Banking, insurance and investment are the main components of the model having a stable market demand.

The addition of other components of the financial supermarket is determined considering the following:
- legislative boundaries governing financial activities;
- existing and potential demand for financial products;
- the level of the financial market development in the country as a whole and its individual segments (Kubiv, S., 2006).

PrivatBank is now approaching the above definition of a financial supermarket. The main feature of this phenomenon is that a banking and insurance business was established on the basis of a powerful bank. The bank also actively cooperates with customers online, which significantly expands the range of possible financial and other services (Rudenko, V., 2017). Graphic models of financial supermarket model the studied was designed on the basis of the obtained data.
**Fig. 5 Financial supermarket model**

Source: designed by the authors based on their own research

**Conclusions**

Therefore, on the example of JSC CB *PrivatBank* we can conclude that banking insurance technologies have a significant place at the present stage of development of the domestic financial market segment. Using a large customer base and a wide network of branches and outlets, banking experts expect that revenues from the sale of insurance products in 2021 may amount to 15% of total bank revenues, as the volume of bank insurance in JSC CB *PrivatBank* is growing quite rapidly. The activity of banks in market conditions is subject to its general laws, and therefore requires the development of a viable mechanism for managing financial activities, aimed at increasing the competitiveness of banks. The ability of bank managers to determine the degree of financial stability of their bank, that of the competing banks and counterparties is rather important in running the bank. Therefore, the search for ways to optimize the financial condition of banks is one of the principles of further rapid development of the banking system of Ukraine.

**References**

Avanesova, N.E. (2012). Bancassurance yak forma spivpratsi strakhovykh kompanii ta bankivskykh ustanov. Aktual'ni problemy upravlinnja ta finansovo-gospodars'koi' dijal'nosti pidpryjemstva. (S. 3-9). Harkiv: NTU "HPI". Retrieved from: http://repository.kpi.kharkov.ua/handle/KhPI-Press/10396 [in Ukrainian].

Bulatova, E. V. (2004). Razvitie mezhrionalnogo sotrudnichestva kak osnovy integracii. Problemy razvitiya vnesheekonomicheskikh svyazej i privlechenie inostrannyh investicij: regionalnyi aspekt. Sbornik nauchnyh trudov. (s. 120-123). Doneck: DonNU [in Russian].

Davydenko, N. M. (2006). Kontseptualna model otsinky finansovoho stanu bankivskykh ustanov. Aktualni problemy ekonomiky, 9, 30–37 [in Ukrainian].

Doroshenko, N., Zahorska, D., Sui, I. (2018). Ryzyky strakhovoi kompanii: klasifikatsiia ta metody analizu. Visnyk Kharkivskoho natsionalnoho universytetu imeni V. N. Karazina serii «Ekonomichna», (94), 82-89 [in Ukrainian].

Fostiak, V. V. (2011). Osoblyvosti pobudovy mekanizmu upravlinnia kapitalom bankiv. Visnyk Universytetu bankivskoi spravy Natsionalnoho banku Ukrainy. 2, 184–189 [in Ukrainian].
Fostiak, V.V. (2012). Shliakhiv pidvyshchennia kapitalizatsii bankiv Ukrainy. Sovremennyj banking. Problemy i perspektivy razvitija, 1(12). DOI: 10.18371/fcaptp.v1i12.28836 [in Russian].

Haidukevych, T.B. (2017). Funktsionuvannia ta vzaiemodiia bankivskykh ta nebankivskykh finansovyh instytutiv v Ukraini. Ternopilskyi natsionalnyi ekonomichnyi universytet. Ternopil [in Ukrainian].

Herasymovych, A.M., Alekseienko, M.D., Parasii-Verhunenko, I.M. (2004). Analiz bankivskoi diialnosti: pidruchnyk. Kyi'v: KNEU [in Ukrainian].

Kloba, L. H. (2012). Finansovyi supermarket – innovatsiina model rozvytku komertsiiinoho banku. Visnyk Nacional'nogo universytetu "L'vivs'ka politehnika”. 725, 103–110 [in Ukrainian].

Kontseptsiia realizatsii derzhavnoi polityky u sferi informuvannia ta nahahodzhennia komunikatsii z hromadskistiu z aktualnykh pytan yevropeiskoi integratsii Ukrainy na period do 2017 roku. Rozporjadzhennia vid 27 bereznja 2013 r. № 168 [in Ukrainian].

Kremen, V. M. (2008). Osoblyvosti vykorystannia kontseptsii “bancassurance” u dialnosti finansovyh konhlomerativ. Ekonomichnyi prostir, 20, 99–106 [in Ukrainian].

Kubiv, S. (2006). Vsi vydy finansovyh posluh – v osnovnomu ofisi. Kredobiznes. 2, 4–7 [in Ukrainian].

Nieizviestna, O. V., Shyshov, V. Otsinka ta shliakhy pokrashchennia finansovoho stanu bankiv Ukrainy, 1–2, 41–48. Retrieved from: http://www.securities.usmdi.org/?p=22&n=42&s=401 [in Ukrainian].

Novyko, M. V., Svyrydovych, M. S., (2014). Finansovyi supermarket yak forma intebratesii bankiv i strakhovkykh kompanii. Problemy pidvyshchennia efektyvnosti infrastruktury, 38 [in Ukrainian].

Ohliad bankivskoho sektoru za 2020 r. Nacional'ny bank Ukrainy. Retrieved from: https://bank.gov.ua/admin uploads/article/Banking_Sector_Review_2020-02.pdf?v=4 [in Ukrainian].

Ohliad bankivskoho sektoru za liutyi 2021 r. Nacional'ny bank Ukrainy. Retrieved from: https://bank.gov.ua/admin uploads/article/Banking_Sector_Review_2021-02.pdf?v=4 [in Ukrainian].

Pro zatverdzhennia Vymoh shchodo rehuliarnoho provedennia stres-testuvannia strakhovykh kompanii ta rozkryttia informatsii shchodo kluchovykh ryzykiv ta rezultativ provedenykh stres-testiv: Rozporiadzhennia natsionalnoi komisii, shcho zdiisniuie derzhavne rehuliuvannia u sferi rynkiv finansovykh vid 13.02.2014 № 484. Retrieved from: https://zakon.rada.gov.ua/laws/show/z0352-14#Text [in Ukrainian].

Prykaziuk, N. V., Bilokin’, L.O. (2017). Teoretychne uporiadkuvannia metodiv ta instrumentiv finansovoho ryzyk-menedzhmentu strakhovykh kompanii. Ekonomichnyi analiz: zb.na uk. prats. Ternopil: «Ekonomichna dumka», 27 (1), 139-149 [in Ukrainian].

Reverchuk, S. K., Syva, T. V., Kubiv, S. I., Vovchak, O. D. (2005) Istoriia strakhuvannia: pidruchnyk. Kyiv: Znannia [in Ukrainian].
Rudenko, V. (2017). PryvatBank zastrakhuiu kliientiv po-novomu. Zhurnal Financial Club [in Ukrainian].
Shelest, I. (2020). Pidstrakhui sebe. Komu potribna strakhovka ta yak yii vyhidnishe oformyty. Zhurnal "NV". Retrieved from: https://shopping.nv.ua/predlozheniya-bankov/strahovka-ot-koronavirusa-osago-ikasko-onlayn-privatbank-i-alfa-bank-50089721.html [in Ukrainian].
Sliusar, A. (2006). Bancassurance yak finansovy produkt i biznes. Finansovy rynok Ukrainy. 3, 21–22 [in Ukrainian].
Solovei, N. V. Vziemodia strakhovykh kompanii ta komertiynykh bankiv. Retrieved from: 296-1141-1-PB.pdf [in Ukrainian].
Strakhuvannia. (2008). Kyiv: Znannia [in Ukrainian].
Sytnyk, N. S., Sambirska, O. R. (2019). Finansova bezpeka banku yak osnova yohy stikosti. Rehionalna ekonomika ta upravlinnia. 4 (26), 100-103 [in Ukrainian].
Tagirbekov, K. R. (2003). Osnovy bankovskoj deyatelnosti: uchebnik. Moskva: «Yinfra-M» [in Russian].
Tkachenko, N. (2015). Determinanty rozv'ytku bankivskostrakhovoi modeli kompleksnoho obsluhovuvannya spozhyvachiv finansovykh posluh. Elektronnyi zhurnal «Svit finansiv», 4, 56-64. Retrieved from: http://nbuv.gov.ua/UJRN/svitfin_2015_4_7 [in Ukrainian].
Uhryn6 L. (2002). Intehratsiini protsesy: mizhnarodniy aspect. Visnyk Lvivskoho universytetu. Seria: filosofski nauky. 4, 256-264 [in Ukrainian].
Van den Berghe, L.A. A., Verweire, K., Carchon, S.W.M. (1999). Convergence in the Financial Services Industry, 94. Retrieved from: http://www.oecd.org/finance/insurance/1915267.pdf.
Vasiurenko, O. V., Volokhata, N. O. (2006). Ekonomichnyi analiz diialnosti komertiynykh bankiv: navchalnyi posibnyk. Kyiv: Znannia [in Ukrainian].
Vasylichevshyn, O. B. (2017). Finansova bezpeka bankivskoi systemy Ukrainy: filosofski determinanty: monohrafiia. Ternopil: TNE [in Ukrainian].
Vasyltsiv, T. H., Voloshyn, V. I., Boikevych, O. R., Karkavchuk, V. V. (2012). Finansovo-ekonomichna bezpeka pidpriyemstv Ukrainy: stratehiia ta mekanizmy zabezpechennia: monohrafiia. Lviv: Liha-Pres [in Ukrainian].
Volkova, V. V., Volkova, N. I. (2016). Bankostrakhuvannia yak suchasnyi metod minimizatsii kredytnoho ryzyku banku. Elektronnyi zhurnal «Finansy, oblik, banky» 1(21). Retrieved from: http://nbuv.gov.ua/UJRN/Fub_2016_1_7 [in Ukrainian].
Yermoshenko, A. M. (2012). Mehanizm intehratsii strakhovykh kompanii z bankamy u systemi vzaiemodii uchasnykov finansovoho rynku. BIZNES INFORM, 6, 152-155 [in Ukrainian].
Zhuravin, S. H. (2009). Korporativnoe upravlenye: slov.-sprav. Moskva: Ankyl, 920 [in Russian].
Zinkovska, Ya. V. (2012). Aktualni aspekty upravlinnia kapitalom komertiinoho banku. Kul'tura narodov Prichernomor'ja, 252, 31-35. Retrieved from: http://dspace.nbuv.gov.ua/handle/123456789/91500 [in Russian].
Zubariev V. (2004). Bank i strakhuvannia: «za» i «proty». Visnyk natsional'noho banku Ukrayiny, 11(105), 32-38. Retrieved from: https://old.bank.gov.ua/doccatalog/document?id=36659 [in Ukrainian].