

The largest increase of assets showed BTA Bank – from the group of small banks. Among medium-sized banks the best dynamics of assets – from TC Bank («Trade Capital Bank»), and of the major banks – BelVEB («Belvnesheconombank»).

In dollar terms of assets growth for the 2nd quarter showed only 8 banks. Across the banking system (including non-banking credit and financial institutions) \$ - equivalent assets decreased from the end of December 2015 till the end of June 2016 by 6,4 %.

During the period from January to June 2016, 22 banks and 2 non-banking credit and financial institutions showed a profit and losses recorded 1 bank and 1 non-banking credit and financial institution. The total profit of the banking system for the 2nd quarter 2016 – Br3,268 trillion.

Priorbank showed the best profitability from the group of large banks, Evrotorginvestbank – from small banks, and from non-banking credit and financial institutions – the newly created institution «SSIS».

The dollar equivalent profit of the Belarusian banking system (including non-banking credit and financial institutions) for the 2nd quarter of 2016 amounted to \$ 163 million, assets profitability – 0,52 %.

Economists expect only moderate growth for the Belarusian banking sector in the following years, influenced by a slowdown in economic growth. Further credit growth is likely to be limited, due to the weakening ability of state support to the real economy and the banking sector.

#### References

1. Национальный банк Республики Беларусь [Электронный ресурс] // О банке. Общие сведения. – Режим доступа: <https://www.nbrb.by/engl/today/about/general>. – Дата доступа: 01.09.2016.
2. Банковский кодекс Республики Беларусь: Кодекс Респ. Беларусь, 25 окт. 2000 г., № 411-3: в ред. Закона Респ. Беларусь от 04.06.2015 г. № 268-3 // Консультант Плюс: Беларусь [Электронный ресурс] / ООО «ЮрСпектр», Нац. реестр правовых актов Респ. Беларусь. – Минск, 2016. – Дата доступа: 01.09.2016.

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#### THE ASSESSMENT OF SOLVENCY OF THE ORGANIZATION

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*Key words: calculation of indicators, evaluation of the financial state, determination of solvency.*

*Abstract. The article demonstrates the calculation of the indicators for assessing the financial condition of the company, such as the current ratio; factor of security of own working capital; the ratio of financial liabilities assets and the calculation of indicators of financial stability such as the ratio of financial independence. On their basis it will be possible to identify the solvency of this organization.*

The main goal of this work is the development of automatic spreadsheets for financial analysis, similar to the MS Excel table (xls), using which it is possible to calculate the financial indicators of the company and its financial stability over a certain time period and calculation of economic-mathematical regression models describing the relationship of the considered factors and their influence on effective results.

As indicators for the assessment of the solvency of the organization used factors of solvency, established item 1 of the resolution of Council of Ministers of the Republic of Belarus dated 12.12.2011 No. 1672 "About determination of criteria of an estimation of solvency of business entities":

- current liquidity ratio, which characterizes the overall security of the organization own circulating assets for conducting economic activities and timely repayment of urgent obligations

$$R_1 = \frac{\text{short term assets}}{\text{short term liabilities}}, \quad (1)$$

- ratio of own working capital (2), characterized by the presence of the organization own circulating assets necessary for its financial stability

$$R_2 = \frac{\text{own capital} + \text{long term liabilities} - \text{long term assets}}{\text{short term assets}}; \quad (2)$$

- the ratio of financial liabilities / assets that characterize the organization's ability to pay its financial obligations after the sale of assets

$$R_3 = \frac{\text{short term liabilities} + \text{long term liabilities}}{\text{balance sheet total}}, \quad (3)$$

- the fourth indicator of financial stability of the enterprise, is the ratio of financial independence

$$R_{fi} = \frac{\text{own capital}}{\text{balance sheet total}} \quad (4)$$

Financial analysis was based on data from the private production unitary enterprise "Polymerconstruction". Is a diversified manufacturing and engineering company, the main activity is the development, production and introduction of modern technologies and equipment on objects of water supply and sanitation of cities, settlements and industrial enterprises. For a comparable assessment of creditworthiness in the dynamics of unitary enterprise "Polymerconstruction" were taken as indicators of quarterly financial statements, starting from 1st quarter 2012 to 4th quarter 2015.

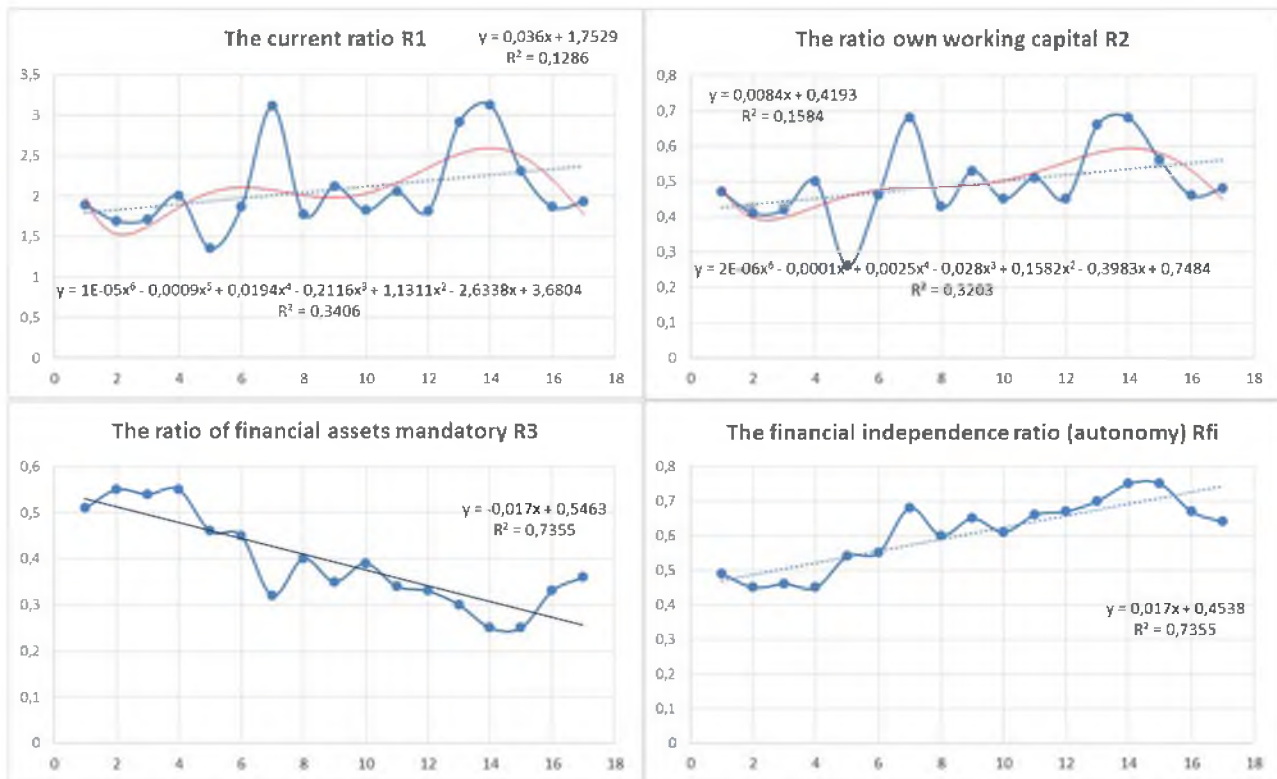
The characteristic values of the solvency ratios are differentiated by type of economic activity. In accordance with the national classifier of the Republic of Belarus OKRB 005-2011 "Kinds of economic activities" approved by the decree of the State Committee for standardization of the Republic of Belarus dated 05.12.2011 No. 85, unitary enterprise "Polymerconstruction" carries out the economic activity, classified code 29242 "manufacture of apparatus for filtering and purifying water." In accordance with this code selected normative values for the organization, as approved

by decree of the Council of Ministers of the Republic of Belarus from 12.12.2011 № 1672 (see table 1).

Table 1 – Normative values of coefficients of solvency

Figure	The normative value of the coefficient
1. The current ratio ( $R1 = \frac{AB \text{ line } 290}{AB \text{ line } 690}$ ) insert shapes in rows	$\geq 1,3$
2. The ratio of own working capital ( $R2 = \frac{AB \text{ line } 490 + AB \text{ line } 590 - AB \text{ line } 190}{AB \text{ line } 290}$ )	$\geq 0,2$
3. The ratio of financial liabilities assets ( $R3 = \frac{AB \text{ line } 690 + AB \text{ line } 590}{AB \text{ line } 300}$ )	$\leq 0,85$
4. The financial independence ratio (autonomy) $Rfi = \frac{AB \text{ line } 490}{AB \text{ line } 700}$	$\geq 0,4 - 0,6$

Next, we calculated the coefficients of unitary enterprise "Polymerconstruction". The next stage of the study was the identification and analysis of the dependence of the calculated coefficients from the various figures of financial-economic activities of the organization. Was calculated the regression equation (1, p. 46-65), showing the change in each coefficient in time, i.e. dependencies of the form  $R1=f(t)$ , ...  $Rfi=f(t)$ , where  $t$  is the time period from 31.12.2011 to 31.12.2015, on the basis of a linear relationship (see figure 1).



The regression model for the first two coefficients R1 and R2 are inadequate (mismatched expectations), The coefficient of determination R2 is very low which means that the change in the effective index is not the result of a temporary period and, therefore, the regression equations cannot be used for analyzing and forecasting activities of the enterprise. However, on R3 and Rfi coefficients, it is possible to predict the operation of a business by time periods. Also on the first two models, which proved unsuccessful, were calculated for other types of dependencies (polynomial, exponential, power), however, this did not improve the situation: the equations were too cumbersome, and the coefficients R2 are still too small.

The significance of the work lies in the fact that, in order to carry out the analysis of any other company or to analyze data for a different period, you only need to fill out an input form, and everything else will make use of software application, because all information is linked through references.

Based on the assessment of the financial condition of the company can be stated that the unitary enterprise "Polymerconstruction" is a profitable and rapidly-growing company with real opportunities to timely and fully fulfill its obligations. Held at the enterprise the program of technical re-equipment and modernization of existing production will allow the plant to increase the competitiveness and quality of products, to strengthen its position in the markets of countries near and far abroad, to increase profits.

#### References

1. U. Sharstniou, A. Vardamatskaja. Computer information technology: software packages for modeling and analysis of problems in economics: a tutorial - Vitebsk EI "VSTU", 2007. 138 str.
2. <http://polymercon.com/about/>

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## **ASSESSMENT OF BUSINESS PERFORMANCE OF "GREEN" ECONOMY**

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*Key words: eco-efficiency, indicators of environmental performance evaluation, integrated indicator of eco-efficiency, "green" economy, sustainable development.*

*Abstract. The article prompted the author's definition of eco-efficiency. The method of environmental performance evaluation, environmental assessment synthesizing activity of the organization and assessment of the environment, held its testing, conclusions are made.*