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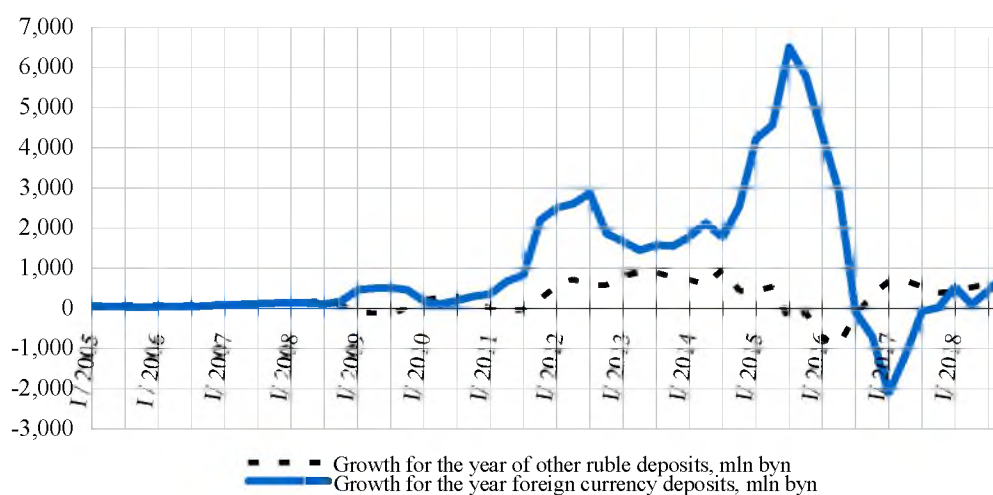
FINANCIAL SAVINGS OF BELARUSIAN HOUSEHOLDS: TRENDS AND DETERMINANTS

Achieving high rates of economic growth largely depends on the solution of the task of increasing the investment activity of economic entities. As known one of the potential sources of investment in the real sector is considered to be the savings of the population in organized forms. The savings market functions due to the financial and investment mechanism, that ensures the attraction of funds for the accumulation of economic entities, as well as the transformation of savings into investments. The main institution for attracting funds of the population and transforming them into investments in Belarus continues to be the banking system. In this effect, an urgent issue for the Republic of Belarus is the improvement of economic policies aimed at increasing the volume and improving the structure of financial savings of the population, i.e. stimulating the growth of savings in the bank deposits, an increase in their terms of attraction, increasing the share of deposits in national currency. All this implies an operational analysis of the dynamics and structure of deposits of individuals, the study of factors that have the greatest influence on the demand for deposits from the population.

Analysis of the structure of deposits of individuals makes it possible to judge what happened in 2000-2018 changes in demand for deposits from the population. Thus, the demand for ruble deposits was observed up to 2006, after which the share of deposits in foreign currency in the total structure of deposits of individuals began to increase. Currently, the ratio of ruble and foreign currency deposits in the overall structure is approximately 3:7. In the last five years, the share of ruble deposits varied from the minimum value of 20.9% (at the end of 2015) to 32.3% (at the end of 2013), at the beginning of 2019 it was 30.5% in the total structure of deposits of individuals and continues to increase. Also, statistical data indicate a predominance of the share of other deposits in the total structure of household deposits, which is 77% at the beginning of the year, while the share of other deposits in foreign currency is – 59%.

The demand for deposits in rubles is usually associated with rising household incomes, a slowdown in the rate of inflation and the relative stability of the national currency exchange rate [1]. During such periods, deposits in belarusian rubles are the most attractive both in terms of diversification of savings, and in terms of increasing the profitability of depositors. So, for 2017-2018 other deposits of natural persons in belarusian rubles increased by 36%, while the refinancing rate decreased from 18%

to 10%. Demand for foreign currency deposits is traditionally rising against the background of high devaluation expectations. The noted trends are revealed not only by the methods of correlation and regression analysis, but also by detailed statistical analysis, for example, the annual growth of deposits of natural persons (graph 1). At the same time, the reduction in the volume of foreign currency deposits can be explained not only by trends in the dynamics of exchange rates and interest rates, but also by consumer behavior of the population, which, in the face of declining real incomes, continues to maintain its standard of living due to accumulated savings [1].



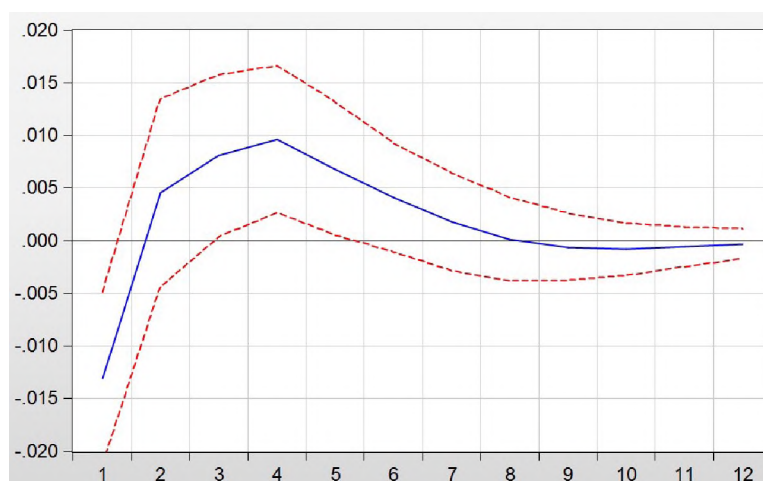
Graph 1. Dynamics of other ruble and foreign currency deposits of the population of the Republic of Belarus

In the scientific literature can be found a sufficient number of studies devoted to the analysis of the determinants of population deposits, among which are the works V.N. Komkov [2], A.Y. Miksyuk [3], J.G. Abakumova [4], A.V. Bezborodova [5]. As a rule, in the presented publications, the tasks of analysis and forecasting other deposits of natural persons, both in national and in foreign currency, are solved, which have a direct impact on the dynamics and structure of the aggregate money supply and form a non-emission resource base of commercial banks, allow you to create a basis for future investments in the real sector, thus represent a potential for the country's economic growth. A detailed analysis of household savings in the form of deposits, the study of factors that have the greatest influence on their dynamics and structure, allows us to draw conclusions, which can be used in the formulation of monetary policy measures designed to contribute to the dynamic development of the savings market as a socio-economic mechanism for attracting people's savings and transforming them into investments for the real economy.

Statistical and econometric methods allow to analyze and select the factors that influence the population's propensity to save in deposits, in order to assess the consequences of destabilizing the monetary system and developing possible ways to eliminate it. The results of model evaluation in [1] showed that the main factors determining the dynamics of other ruble deposits of the population of Belarus are the average monthly wage of employees, the dynamics of the exchange rate of the

Belarusian ruble against the US dollar, the level of inflation and the interest rate on newly attracted other ruble deposits of natural persons.

Since the set of determinants for the savings of the population remains unchanged on the entire information base available (since 1993), as confirmed by an analysis of earlier publications, it is of interest to determine the most significant factor for each period under consideration. To select such a factor, among the determinants, that has the greatest influence on the dynamics of deposits, the vector autoregression method (VAR model) was additionally used for all the indicators listed above. Analysis of the graphs of the impulse response functions showed that the volume of deposits shows a significant response to the shock of the real interest rate on newly attracted deposits of individuals (graph 2). Besides, deposits respond to the innovation of wage growth and CPI with relatively weakly statistically significant reaction. This conclusion is of interest, given the policies pursued in recent years of the National Bank of the Republic of Belarus on the transition to inflation targeting and the using of interest rates as an operational goal.



Graph 2. The graphs of impulse response function of Households' other deposits to the real interest rate on newly attracted deposits of individuals shock

Since the conclusions about determinants are based on regressions constructed at different time intervals, but leading to similar results, it makes sense to check the property of super exogeneity, if confirmed which, Lucas critique does not apply to the models considered. So, for example, in [3] for 2003-2006 the indicator of the exchange rate of the belarusian ruble to the US dollar was subjected this test. In [5] showed the super exogeneity of inflation dynamics for statistical data 2001-2011. It was also argued that decline in the devaluation of the belarusian ruble and reducing inflation are the most effective measures to increase the propensity of the population to financial savings. In our case, we should supplement the recommendations with measures to maintain the level of interest rates and average wages.

To test the independence of the parameters of econometric models from changes in interest rate and wage dynamics, we will similarly use Engle-Hendry's approach implemented in these publications [6]. For the analysis, a model was chosen that was

built earlier in [1] with the input data extended until december 2018 incl., which did not affect the statistical qualities of the models, i.e. they are resistant to newly entered data. In the framework of Engle-Hendry's approach, the super exogeneity of the interest rate and average monthly wages was confirmed. In each case, the conclusion was made on the basis of the F-test hypothesis that the coefficients of all added estimates are equal to zero, since part of the coefficients for the variables entered in the test turned out to be statistically significant on the basis of the t-test. From this we can conclude that the parameters of the model are resistant to changes in the dynamics of the tested variables. For the indicator of the average monthly wage, the null hypothesis is accepted with P-value for F-statistics equal to 0.57, and for the interest rate on newly attracted deposits – $P = 0.14$. From the latter, it can be concluded that the inference with respect to the interest rate requires additional verifications taking into account the peculiarities of the monetary policy of the National Bank of the Republic of Belarus conducted in the current period.

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ОСОБЛИВОСТІ ПОВЕДІНКИ СПОЖИВАЧІВ У МЕРЕЖІ ІНТЕРНЕТ

У сучасному Інтернет-маркетингу, який характеризується використанням соціальних медіа та популяризацією просування товарів та послуг і мережі Інтернет, відбувається трансформація взаємовідносин з кінцевими споживачами – максимальне врахування побажань та інтересів конкретного споживача за схемою: інтереси споживача – товар, що відповідає інтересам споживача – персоніфіковане повідомлення.

У зовнішньому прояві будь-яка поведінка відображається в системі послідовних дій, спрямованих на безпосередній практичний контакт організму