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THE DEPOSIT AND CREDIT ACTIVITY OF INDIVIDUAL FARMERS IN POLAND DURING THE COVID-19 PANDEMIC

Key words: bank credits, bank deposits, farmer debt, COVID-19, structure of farmer debt

ABSTRACT. The article aimed to assess the direction and strength of the impact of the COVID-19 pandemic on the deposit and credit activity of farmers in Poland. The research method was a comparative analysis of the value of farmer deposits and debt time series. The National Bank of Poland was the data source. The research shows that at the beginning of the pandemic, the NBP significantly eased monetary policy. As a result, interest rates in the economy were falling till August and then stabilized. Despite the decline, farmer bank deposits increased. Current deposits in PLN dominated. The drop in interest rates did not increase the farmers' credit demand. Although the debt value climbed at the beginning of the pandemic, it next fell considerably. What is worth underlining is that the debt value trend was similar to such trends in the past. Short term debt decreased mostly, which proves that farmers tried to adapt in this way to the increased uncertainty of farming conditions.

INTRODUCTION

The COVID-19 pandemic has been ongoing for almost two years. It has a global territorial coverage. Although it is a medical phenomenon, it has a huge impact on the world economy, the situation in individual countries and in individual sectors of the economy. Agriculture, even though its share in generating GDP in developed countries is small, is the basic sector of the economy. In times of crisis, the period of the COVID-19 pandemic is considered so, the role of agriculture becomes more visible and appreciated due to the real threat to food security. This problem is most acute in least developed countries [Adhikari et al. 2021, Boughton et al. 2020, Ceballos et al. 2020, WB 2021]. The main problems faced by agriculture, especially in the first year of the COVID-19 pandemic, in many countries, resulted from lockdown and its impact on food processing companies, hospitality, gastronomy sectors as well as food export and import [S. Aday, M. Aday

2020, Štreimikienė et al. 2021, OECD 2021]. An important problem, especially in highly developed countries, was the labor shortage due to quarantine, isolation or restrictions in the movement of the population [Cortignani et al. 2020, Martin 2020]. There have also been changes in the demand and consumption of food [Cranfield 2020, OECD 2021].

In Poland, the problems of agriculture due to the COVID-19 pandemic, as in other countries, were severe in the first year of the pandemic. They were mainly related to limitations in the flow of agri-food products between countries. The production of poultry and live cattle were the most affected industries [Ambroziak 2020, Szajner 2020, Szczepaniak et al. 2020]. Farms were forced to adapt to new operating conditions. Finances were one of the areas of adjustment. The purpose of the analysis undertaken in this article is to assess the direction and strength of the impact of the COVID-19 pandemic on the deposit and credit activity of farmers in Poland. The purpose of the study was to answer the following questions: (i) what trends were observed in interest rates on the credit and deposit market in the economy, (ii) how has the pandemic affected the value and structure of bank deposits of individual farmers, (iii) how has the pandemic affected the value and structure of individual farmer bank debt.

MATERIAL AND METHODS

The deposit and credit activity of individual farmers in Poland during the COVID-19 pandemic is the research subject. The National Bank of Poland was the data source. A comparative analysis of the time series of the value and structure of deposits and debt of individual farmers was the main research method. This analysis allowed us to isolate the impact of the pandemic on the studied phenomena.

RESEARCH RESULTS

MONETARY POLICY AND INTEREST RATES DURING THE COVID-19 PANDEMIC IN POLAND

Like the central banks of other European countries (and nearly all over the world), at the beginning of the pandemic, the NBP took a number of measures to counteract the assumed negative effects of the COVID-19 pandemic for the economy. They were comprehensive in nature, as they were addressed to both banks and their clients. In relation to banks, the NBP applied a number of tools to increase their lending capacity. For this purpose, at the end of April 2020, the central bank lowered the required cash reserve ratio. The reduction was very significant, from 3.5% to 0.50%. As regards bank customers, the aid was aimed at reducing the burden of interest on debt. This was to be achieved by cuts in the central

bank's interest rates. The first one took place at the very beginning of the pandemic, on March 18, 2020. It was the first cut since March 2015. It concerned the rates of central bank credits, the deposit rate remained unchanged. As a result, the reference rate dropped from 1.5% to 1.0%, the lombard rate from 2.5% to 1.5% and the rediscount rate from 1.75% to 1.05%. Further cuts took place in April and May. Eventually, they were established for many months at the following levels: the reference rate at 0.10%, the lombard rate at 0.50% and the rediscount rate at 0.11%. The deposit rate in April fell to 0% and remained at this level for the following months of the pandemic. It should be emphasized that, even though Poland does not belong to the Economic and Monetary Union, it was an action in line with the guidelines of the European Central Bank (ECB), which, on March 12, announced a number of measures to help commercial banks to finance enterprises and households experiencing difficulties in the operating conditions of a pandemic [ECB 2020]. Already in April 2020, the president of the supervisory board of the ECB [Enria 2020] also appealed to commercial banks for flexibility in credit operations.

Despite the easing of the monetary policy in Poland to lower the interest rates on the credit market, the increased risk induced banks to tighten the standards of granting credits and their terms [NBP 2020, Daniłowska 2021], which had the opposite effect. Despite this,

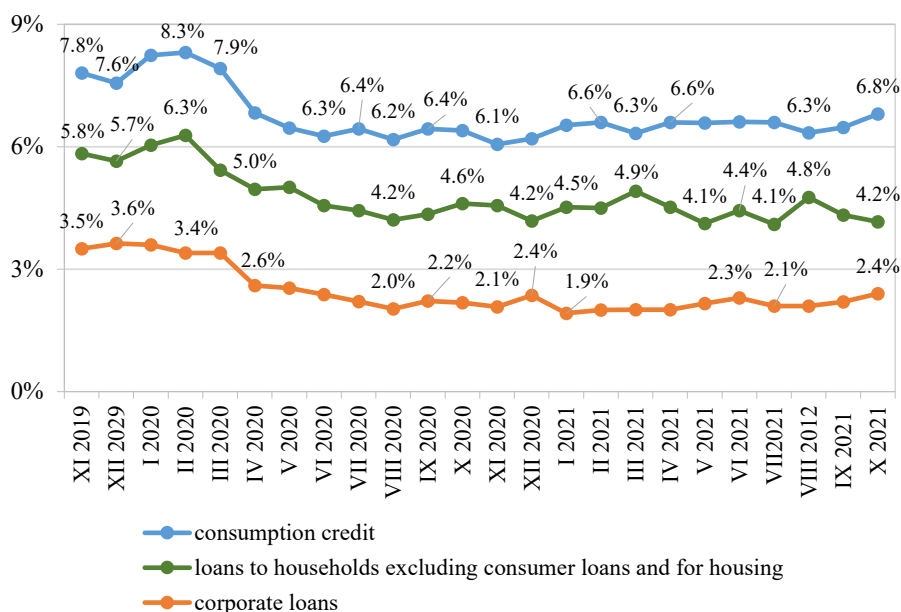


Figure 1. Average interest rate on new credit agreements in PLN, excluding renegotiated agreements

Source: [NBP 2021a]

the actions of the NBP discussed above, in the context of a decline in economic activity in many sectors of the economy, resulted in a decline in interest rates for all types of credits (Figure 1). The analysis of Figure 1 shows that the interest rates in the analyzed period were very different for different groups of borrowers. Consumption credits (for households) were three times more expensive than credits for enterprises and about 1.5 times more expensive than other credits for households (credits for farmers and micro-enterprises). At the beginning of 2020, interest rates on newly granted consumption credits and other credits to households increased quite significantly, while for enterprises they decreased slightly. From March 2020, interest rates began to drop rapidly. It lasted until August, 2020. This decrease was significant. The interest rate on corporate credits decreased by 1.6 percentage points (p.p.), consumer credits and economic credits to households by 2.1 p.p. The interest rates stabilized in the following months. Only in the case of economic credits to households were there greater fluctuations from month to month. It was only in the second half of 2021 that there was an upward trend in consumer and corporate interest rates. Due to inflation, it should be expected to be long-term.

Even before the pandemic, the interest rate on deposits was very low. The interest rate on current deposits, both for households and enterprises, was 0.5%, and for term deposits was 1.4%. Following the outbreak of the pandemic, interest rates on deposits fell to zero.

FARMER DEPOSITS AND DEBT AND THEIR TRENDS DURING THE COVID-19 PANDEMIC

The examination of the behavior of economic entities regarding saving during the Great Economic Crisis of 1929-1933 indicates that the increased uncertainty of functioning resulted in an increase in savings [Mody et al. 2012, Degorce, Monnet 2020]. A similar phenomenon was also observed in the Euro area after the outbreak of the COVID-19 pandemic in the first half of 2020 [Dossche et al. 2021].

The analysis of data on the level of deposits of individual farmers during the pandemic in Poland confirms the above-mentioned phenomenon. Despite the reduction in interest rates, the value of deposits in 2020 and 2021 was much higher than the value of deposits in the corresponding months of the previous year and two years ago. In the first month of the pandemic, the value of deposits decreased significantly, a decline that was rather unrelated to the pandemic, as in previous years there was also a decline in deposits that month. The average deposit value per farm before the pandemic was not high, it amounted to approximately PLN 12,500, and during the pandemic it increased by PLN 4,000 i.e., by approximately 40%. A phenomenon attributable to the pandemic was an increase in the value of deposits in April and its subsequent stabilization until August. In previous years, there was a slight downward trend in these months. However, since August, the

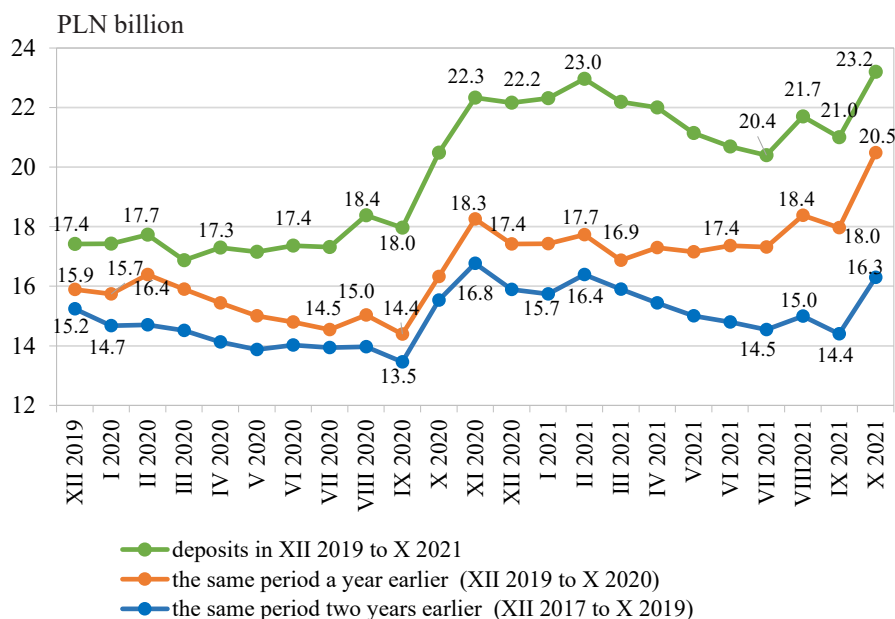


Figure 2. Value of farmer deposits in the period December 2017 to October 2021

Source: [NBP 2021b]

trends have been similar in all three observed periods. In August, there was a significant increase in deposits, a small decrease was observed in September, but in the next two months there was increase again. It was followed by a drop in December and an increase in January and February. Since March to July a decrease occurred, and next a rise again. The high consistency of the trend in the value of deposits except the aforementioned first months of the pandemic is very clearly visible for the periods August 2018 to October 2019 and August 2020 to October 2021. Thus, the impact of the pandemic on the value of deposits was relatively small and short-lived. Fluctuations in the value of deposits in other months result from the cycle of revenues and expenses related to agricultural production and direct payments under the Common Agricultural Policy. The analysis of data in Table 1 shows that farmers keep deposits in the national currency. The share of deposits in other currencies was negligible.

On the other hand, the pandemic had an impact on the deposit maturity structure. This structure was dominated by current deposits. The role of term deposits was very small. From the first month of the pandemic, there was a clear upward trend of the already high share of current deposits in total deposits. From March 2020 to October 2021, the share of current deposits increased by 2.3 p.p. The share of term deposits has become negligible.

Table 1 Structure of bank deposits of individual farmers by currency and term

Date	Credits in PLN	Current credits	Date	Credits in PLN	Current credits	Date	Credits in PLN	Current credits
	%			%			%	
XII 2019	98.8	96.0	VIII 2020	98.8	97.1	IV 2021	99.1	97.8
I 2020	98.9	95.8	IX 2020	98.5	97.1	V 2021	98.9	97.8
II 2020	98.9	95.8	X 2020	98.9	97.5	VI 2021	98.9	97.8
III 2020	98.9	95.9	XI 2020	98.9	97.6	VII 2021	98.9	97.9
IV 2020	98.9	96.2	XII 2020	99.0	97.7	VIII 2021	99.0	98.0
V 2020	98.9	96.4	I 21	99.1	97.7	IX 2021	98.9	97.9
VI 2020	99.0	96.5	II 21	99.1	97.8	X 2021	99.0	98.2
VII 2020	98.9	96.8	III 21	99.1	97.8	x	x	x

Source: own calculation based on [NBP 2021b]

VALUE AND STRUCTURE OF FARMER DEPOSITS AND FARMER DEBT DURING THE PANDEMIC

In contrast to deposits, farmer debt declined during the pandemic. Just before the outbreak of the pandemic – in February 2020 – it was higher than in February 2018 and at the same level as in February 2019. In the first five months of the pandemic, however, it grew at a slower pace than in previous corresponding periods. From August 2020, a period of decline began, which lasted until February 2021. After stabilization, in March to June 2021, in July it increased again, but at a very slow pace, and then began to decline again. Although in the previous corresponding periods, the trends in changes in the debt value were very similar, the spread between the debt values was growing and in the last month of the analysis (October 2021) the debt was lower than the debt in October 2019 by 7% and compared to October 2020 by 4%. This clearly shows that farmers were reducing the financing of their activities with bank credits.

The analysis of the debt structure by maturity shows that the share of current debt in total debt was low – a few percent (average around 5%), medium-term debt over 20% (average around 22%), and long-term over seventy percent (average around 73%). The decrease in the total debt value resulted from the decrease in the value of short- and medium-term debt.

The short-term debt in October 2021 was lower than such debt before the pandemic (February 2020) by 20%, and the medium-term debt by 13%. Long-term debt slightly

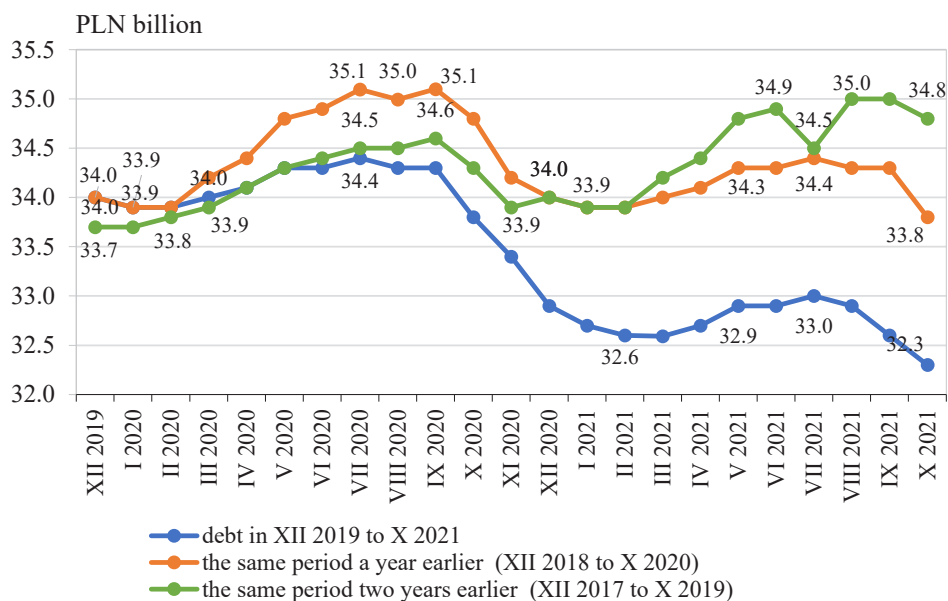


Figure 3. The value of indebtedness of farmers in the period December 2017 to October 2021

Source: [NBP 2021b]

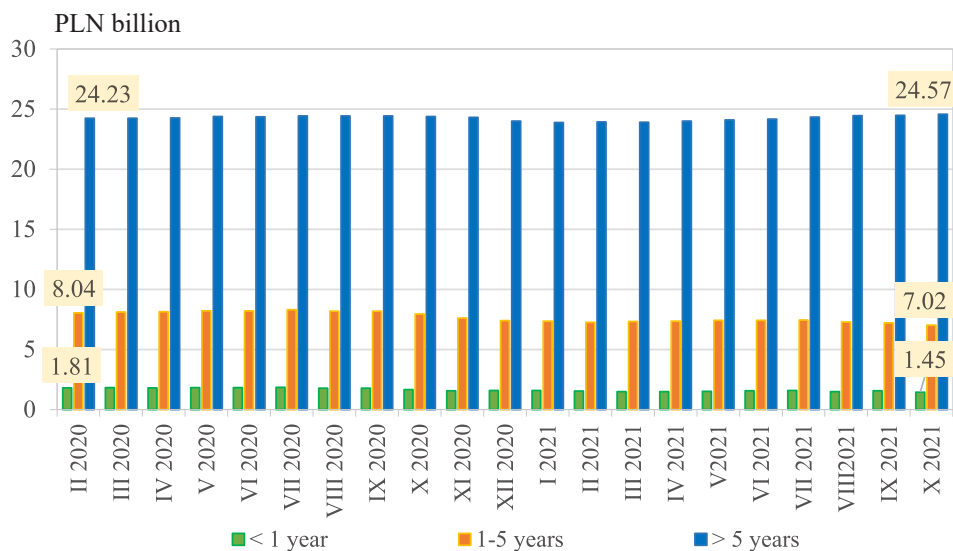


Figure 4. The value of indebtedness of individual farmers in the period from February 2020 to October 2021 by maturity

Source: own calculation based on [NBP 2021b]

increased. In this situation, the share of short-term debt in the debt structure decreased by 0.9 p.p., medium-term debt by 2.4 p.p., while the share of long-term debt increased by 3.3 p.p. [NBP 2021b].

It can, therefore, be concluded that, due to the pandemic, farmers mainly limited the type of indebtedness over which they have current control, i.e., short-term debt. They mainly limited short-term borrowing and rather restrained from investment at least from financing them with credits.

Pandemic current debt decreased by approximately 10%, while investment debt decreased by approximately 4% (Figure 5). Real estate debt remained at the same level, which may be due to the long-term nature of the debt. The data clearly shows that farmers adjusted to the pandemic, mainly by limiting the financing of current inputs on production. The pessimism of farmers is evidenced by the fact that the abovementioned reduction took place in the second year of the pandemic.

The structure of the indebtedness of individual farmers should generally correspond to the maturity structure of the debt and, indeed, the total share of debt due to investment and real estate credits in total debt amounted to over 65% (Figure 6). However, the share of debt due to current expenses was significant, over 30%. You can suppose that farmers financed their day-to-day operations with short- and medium-term credits.

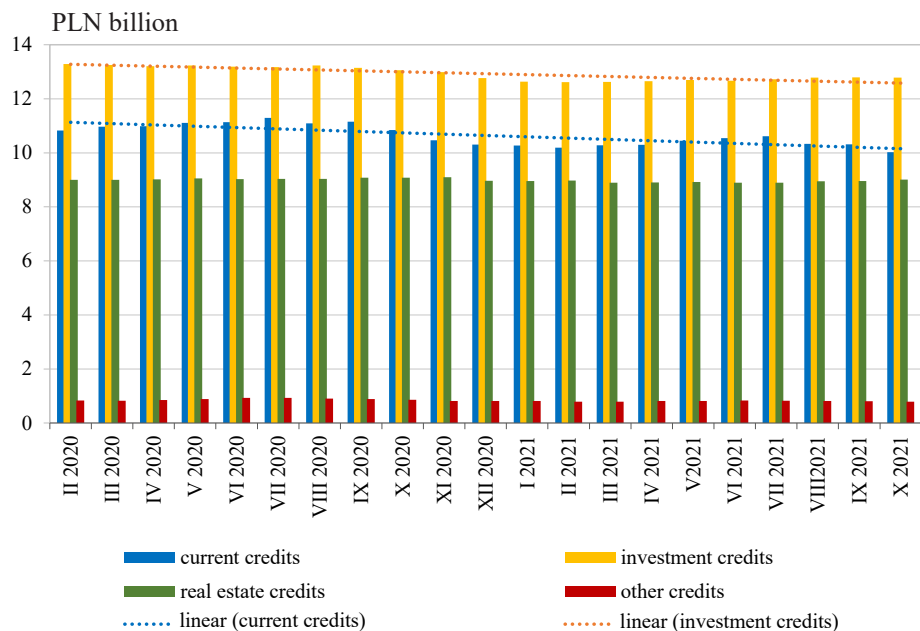


Figure 5. The value of farmer debt due to the aim of credits in the period February 2020 to October 2021

Source: own calculation based on [NBP 2021b]

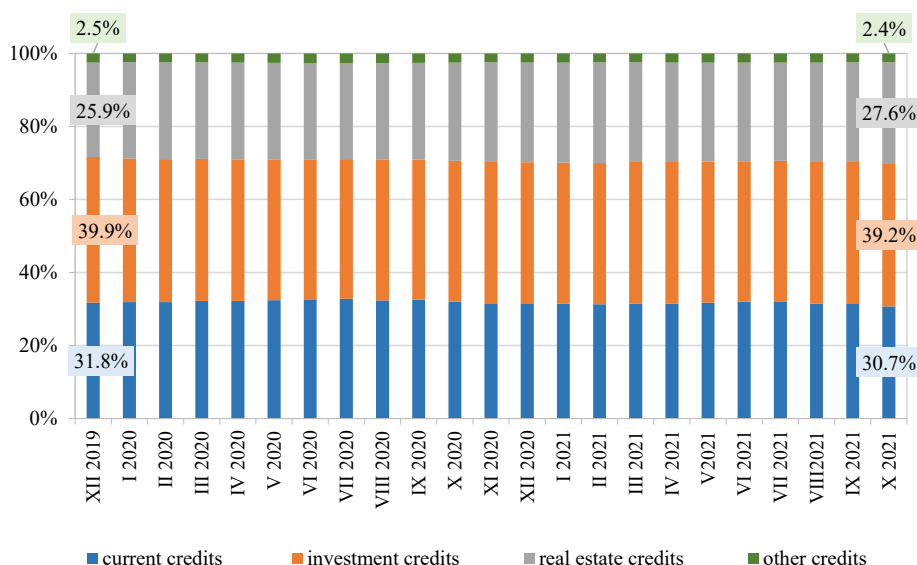


Figure 6. The structure of farmer debt due to the aim of the credits in the period December 2019 to July 2021

Source: own calculation based on [NBP 2021b]

CONCLUSIONS

At the beginning of the COVID-19 pandemic, the Central Bank eased its monetary policy considerably. An increase in risk, due to the pandemic, prompted commercial banks to tighten their standards and terms of granting credits. But, in conditions of a decline in activity in many sectors of the economy, interest rates on credits decreased in all segments of the credit market. Interest rates fell sharply at the beginning of the pandemic – March and April, then interest rates stabilized. The value of individual farmer deposits during the pandemic increased. What is interesting, the trends towards the deposit value were similar to trends in previous years. The average deposit value per farm before the pandemic was not high, and during the pandemic, it increased significantly, by as much as 40%. Current deposits in PLN dominated. At the end of the examined period, they accounted for approximately 99% of the total value of deposits. A distinct increase in deposits occurred in the months of direct payments connected to the Common Agricultural Policy.

In the first months of the pandemic, farmer debt increased and then fell significantly below the value in previous years. However, the trends of these changes during the year were similar. Debt per farm was relatively small. Long-term debt prevailed in the debt

structure. The noticeable decrease in debt occurred in the segment of short-term debt, which proves farmer attempts to adapt to the increased uncertainty of farming conditions. Although the share of the debt due to investment credits in total debt increased, its value fell. It indicates a small reduction in investment in agriculture during the pandemic or at least refraining from financing them with credits. A significant decrease in taking short-term credits and, to a lesser extent, investment credits indicate farmers' concerns about the future, despite the undoubtedly better situation of agriculture and the entire economy in the second year of the COVID-19 pandemic compared to the first year.

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AKTYWNOŚĆ DEPOZYTOWO-KREDYTOWA ROLNIKÓW W CZASIE PANDEMII COVID-19

Słowa kluczowe: kredyty bankowe, depozyty bankowe, zadłużenie rolników,
struktura zadłużenia, pandemia COVID-19

ABSTRAKT

Celem artykułu jest ocena kierunku i siły wpływu pandemii COVID-19 na działalność depozytową i kredytową rolników w Polsce. Główną metodą badawczą była analiza porównawcza szeregów czasowych poziomu depozytów i kredytów rolników indywidualnych w okresie pandemii z poziomami tych zmiennych w latach poprzednich. Źródłem danych były publikacje Narodowego Banku Polskiego. Z analizy wynika, że na początku pandemii NBP znacząco złagodził politykę pieniężną. W efekcie na początku pandemii stopy procentowe w gospodarce spadły, a następnie ich poziom ustabilizował się. Mimo spadku oprocentowania depozytów wzrosły depozyty bankowe rolników indywidualnych. Dominowały depozyty bieżące w PLN. Spadek stóp procentowych nie zwiększył popytu na kredyty ze strony rolników indywidualnych. Co prawda wartość zadłużenia wzrosła w pierwszych miesiącach pandemii, ale potem spadła znacznie poniżej poziomu z lat poprzednich. Tendencje tych zmian w ciągu roku były podobne. Największy spadek zadłużenia miał miejsce w segmencie kredytów krótkoterminowych, co świadczy o tym, że rolnicy starają się dostosować do zwiększonej niepewności warunków gospodarowania.

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