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THE IMPORTANCE OF DETERMINING THE EFFICIENCY OF BUSINESS OF AGRICULTURAL FARMS IN RELATION TO THE USE OF CREDITS IN AGRICULTURE, THE EXAMPLE OF THE REPUBLIC OF SERBIA

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Abstract: The organization of agricultural production in countries such as the Republic of Serbia should be as close as possible to optimality. This can be achieved in different ways. One of the ways to improve the success and efficiency of business should be seen in the search for the most favorable form of obtaining loans from commercial banks. The paper highlights the importance of analyzing three types of loans, namely: a loan for refinancing intended for agriculture, an investment loan intended for agriculture and a loan for working capital intended for agriculture from the perspective of the efficiency of agricultural operations. A Pearson correlation analysis was performed for the observation period 2021-2022. The main conclusion is that there is a connection between the efficiency of agricultural operations with all three forms of taking loans by agricultural farms on a sample of N =149, that is, the obtained results confirmed this ($p < .05$).

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In addition, the study points to the existence of another conclusion, i.e. that the costs related to the taken loans in the observed period have an increase, but they do not have such an impact as the analyzed three forms of loans taken by agricultural holdings, because their impact is in the interval of 0.067 for 2021 to 0.070 in 2022.

Ključne reči: Agriculture holding, credit, business efficiency

INTRODUCTION

The organization of agricultural production requires the holder of agricultural production to be based on the use of valid documentation so that decisions on business activities can be made in accordance with real and realistic business conditions [1-2].

A realistic approach to organizing agricultural production should be such that it gets closer to an organization that will use recognized business standards as much as possible [3], in order to reduce business risk as much as possible [4-6] and essentially improve the system of making business decisions of all decision-makers.

The bearers of agricultural organization, that is, agricultural production, rely to a large extent in their activities on the improvement of the evaluation process [7], but also on the issues of essential improvement of business decision-making in management processes [8-11] in different agricultural systems and forms of organization.

Countries where a more realistic approach to the organization of agricultural production is being developed [12-14], regardless of the type of agricultural production, are paying more and more attention to the real organization of the same, where the establishment of controls within the organization itself, which is essentially engaged in agricultural production, is becoming more and more important in one economy.

The importance of determining business efficiency in agricultural activity has a wide range of opportunities for improving management functions through decision-making by decision-makers [15-19]. One of the ways to improve the management and application of management forms in agricultural farms in relation to the use of loans in agriculture [20-23] which in the long term can have effects on the overall operations of numerous organizational parts in agriculture.

MATERIAL AND METHODS

For the purposes of the study, a survey was conducted in 149 agricultural farms in the Republic of Serbia. The research period referred to 2021-2022. The observation related to the use of three types of loans, namely: loans for re-financing intended for agriculture, investment loans intended for agriculture and loans for working capital intended for agriculture from the aspect of the efficiency of agricultural operations. In addition, data from the final balance sheet for the observation period 2020-2022 were used for expenses related to loans taken during 2021-2022. Only the final research was completed in the period July-August 2023.

Confirmation of the results obtained after the survey was done through Pearson's correlation analysis, with the aim of confirming the existence of a significant connection

between the use of different forms of credit in the business of agricultural farms with the factor of business efficiency.

Statistical processing of data and analyzes were performed using the software IBM SPSS (Statistical Package of Social Science) version 25. The level of 0.05 was used for the threshold value of the existence of significance.

RESULTS AND DISCUSSIONS

Confirmation of the possible connection between the efficiency of agricultural operations and the type of loans received was done using Pearson's correlation analysis.

Testing using Pearson's correlation analysis covered the period from 2021-2022. and that for three forms of credit, as well as for observing the achieved impact on the basis of allocated funds of agricultural farms and the overall impact on business efficiency.

The display after the performed test is given in the display Table 1-2.

Table 1. Presentation of the obtained results of the Pearson correlation analysis related to the efficiency of the agricultural business and the type of lending for 2021.

Serial number	The connection between the form of credit and the costs related to lending to agricultural holdings		Business efficiency
1.	Types of loans	Loan for re-financing intended for agriculture	-0.83
		Investment loan intended for agriculture	-0.69
		Loan for working capital intended for agriculture	-0.85
2.	Allocated funds based on loans taken in the business year 2021	Costs related to loans taken during 2021	-0.067
3.	Agricultural farms (N=149)		

*Statistical significance at the level of 0.05

Table 2. Presentation of the obtained results of the Pearson correlation analysis related to the efficiency of the agricultural business and the type of lending for 2022.

Serial number	The connection between the form of credit and the costs related to lending to agricultural holdings		Business efficiency
1.	Types of loans	Loan for re-financing intended for agriculture	-0.87
		Investment loan intended for agriculture	-0.70
		Loan for working capital intended for agriculture	-0.88
2.	Allocated funds based on loans taken in the business year 2022	Costs related to loans taken during 2022	-0.07
3.	Agricultural farms (N=149)		

*Statistical significance at the level of 0.05

Based on the results of the correlation analysis shown in Table 1-2, it can be concluded that there is a connection between the efficiency of agricultural operations and the three forms of loans taken from commercial banks. However, it can be said that the obtained values ($p < 0.05$) are significant for all three forms of observed loans, but loans for working capital intended for agriculture has a slightly higher impact value and is moving for 2021 at a value of 0.85, and in 2022 it will be 0.88 .

Allocated funds on the basis of loans taken in the business year 2021 have an impact on business efficiency of 0.067, and in the following year 2022 this impact will continue and amount to 0.070, with a note that this monitoring for both years has a weaker impact than the observed three forms of lending.

Essentially, it can be pointed out that there is a connection between three forms of lending, namely: a loan for re-financing intended for agriculture, an investment loan intended for agriculture and a loan for working capital intended for agriculture in relation to the observation of the efficiency of agricultural operations, this indicates that such a realistic assessment lending represents an important factor for making valid management decisions in the business of agricultural farms in the future, because the realistic and correct setting of lending can affect the improvement of the efficiency of the operations of a large number of agricultural farms.

CONCLUSIONS

Based on the results obtained in the study, it can be concluded that there is a basic conclusion, which is that there is a connection between three forms of lending, namely the observed loans for re-financing intended for agriculture, investment loans intended for agriculture and loans for working capital intended for agriculture in relation to the observation of efficiency of agricultural operations.

In addition, it was determined that there is a slight increase in observed loans in terms of its importance for the entire observation period of 2021-2022.

The third conclusion would be that allocated funds based on loans taken for the same period have an impact on business efficiency, but it is far less than the choice of loans. In the end, the results of the study indicate that there is an importance of a realistic view of lending in the process of making valid decisions by the owners of agricultural farms, because a realistic approach to lending can have a great impact on improving business efficiency.

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**ZNAČAJ UTVRĐIVANJA EFIKASNOSTI POSLOVANJA POLJOPRIVREDNIH
GAZDINSTAVA U ODNOSU NA KORIŠĆENJE VRSTE KREDITA
U POLJOPRIVREDI, PRIMER REPUBLIKE SRBIJE**

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Abstract: Organizacija poljoprivredne proizvodnje u zemljama, poput Republike Srbije, treba da bude takva da se približi što više optimalnoj. To je moguće postići na različite načine. Jedan od načina poboljšanja uspešnosti i efikasnosti poslovanja treba posmatrati u traženju najpovoljnijeg oblika dobijanja kredita od strane poslovnih banaka. U radu, je istaknut značaj analiziranja tri vrste kredita i to: kredit za re-finansiranje namenjen poljoprivredi, investicioni kredit namenjen poljoprivredi i kredit za obrtna sredstva namenjen poljoprivredi sa aspekta efikasnosti poslovanja poljoprivrednog gazdinstva. Urađena je Pearsonova korelaciona analiza za period posmatranja 2021-2022.godina. Osnovni zaključak je da postoji povezanost između efikasnosti poslovanja poljoprivrednog gazdinstva sa sva tri oblika uzimanja kredita od strane poljoprivrednih gazdinstava na uzorku od N=149, odnosno dobijeni rezultati su to potvrdili (p<.05).

Osim toga, studija upućuje na postojanje i drugog zaključka, odnosno da troškovi vezani za uzete kredite u posmatranom periodu imaju rast, ali oni nemaju takav uticaj kao analizirana tri oblika kredita koje uzimaju poljoprivredna gazdinstva, jer se njihov uticaj kreće u intervalu od 0.067 za 2021., do 0.070 za 2022. godinu.

***Ključne reči:** Poljoprivredno gazdinstvo, kredit, efikasnost poslovanja.*

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