FINANCIAL RISKS OF AGRO-INDUSTRIAL COMPLEX ENTERPRISES IN THE CONDITIONS OF A PANDEMIC AND IMPLEMENTATION OF ANTI-CRISIS MEASURES FOR THEIR LEVELING

Yaroslav YANYSHYN*, Andriy KOLODIY**, Iryna KOLODII***

L'viv National Agrarian University, *Faculty of Economics, **Department of Finance, Banking and Insurance, ***Department of International Economic Relations and Marketing, 80381, 1 Volodymyra Velykogo Str., Dublyany Zhovkivsky district, L'viv region, Ukraine. Phones: +38 067 341 3715; +38 067 343 2177; +38 068 648 7952.

E-mails: dec.economlnau@ukr.net, andrewkolodiy77@gmail.com, irynasoltys13@gmail.com.

Corresponding author: andrewkolodiy77@gmail.com

Abstract

The purpose of the article is to substantiate the main risks for agro-industrial enterprises in a pandemic and to form solutions for their optimization. The article analyzes the users of the agricultural sector according to the distribution of organizational and legal forms in relation to the use of financial and credit resources during the pandemic and before its onset. The experience of developed countries is used to analyze the financial performance of the credit system in Ukraine. The influence of public authorities and subjects of the banking system of Ukraine in the formation of anti-crisis measures to support agricultural enterprises is considered. The algorithm of the state credit program "Affordable loans 5-7-9%" has been developed and its shortcomings have been improved. A system of anti-crisis measures has been developed to eliminate possible risk situations for the agro-industrial complex of Ukraine during the global pandemic caused by the COVID-19 virus.

Key words: agro-industrial complex, anti-crisis management, credit system, business environment, COVID-19, risk management, state support for cheaper loans

INTRODUCTION

As for today, the pandemic caused by the COVID-19 virus has led to crises around the world. The decline in economic indicators in Ukraine has caused a global economic crisis, which is felt in all sectors of the economy without exception. Significant negative impact is observed in the enterprises of the agro-industrial complex of Ukraine, which gradually lose their solvency and become insolvent general. As agricultural in enterprises are particularly important for food security, the risks to their activities must therefore be kept to a minimum. There is also a need for a clear program to bring agricultural enterprises out of the crisis during pandemic and to improve management in the agricultural sector.

MATERIALS AND METHODS

The theoretical and methodological basis of

the study is the dialectical method of cognition of objective reality. The classical provisions of economic theory and conceptual principles are also considered, which are clearly expressed in the works of domestic and foreign scientists on the theory of crisis phenomena and the effectiveness of crisis management. The study uses the following basic general scientific methods: analysis and synthesis (to assess the parameters and patterns of crisis management), induction and deduction (in the process of learning and forecasting the development of crisis management in agricultural enterprises), terminological approach to justify the term "crisis", "bankruptcy", "system", "management", "crisis management", abstract-logical (for theoretical generalizations of the results of scientific research and the formation of conclusions and proposals). Anti-crisis management of the enterprise is a system of pre-crisis (preventive) measures aimed at diagnosing the threat of bankruptcy and the development and implementation of actions to eliminate the negative consequences of the financial crisis [10]. The practical study of risks in the agro-industrial complex is based on a survey of respondents (representatives of the agricultural sector in terms of enterprises in the L'viv region, divided into organizational and legal forms).

RESULTS AND DISCUSSIONS

Today, the country's agriculture is a significant part of the domestic economy. From the experience of observation, we can say with confidence that the agro-industrial complex of Ukraine survived the crisis and adapted to the market environment.

In conditions of macroeconomic instability and global uncertainty - the agricultural sector is the most defined among other sectors of the economy. The main task of administration in the crisis is to prevent the economic downturn and provide assistance to agricultural producers by reducing the cost of credit. According to the Ministry of economic development, trade and agriculture Ukraine, the state budget for 2020 fixes an amount of UAH 4.2 billion to support the agro-industrial sector, of which UAH 1.2 billion is expected to be allocated to the loan reduction program. In particular, the program will include:

- compensation of interest on loans for agricultural enterprises with an annual turnover of up to UAH 20 million. This area will have no restrictions on the intended use of loans. The state will compensate up to 1.5 of the NBU discount rate, the final cost of the loan for the farmer will not exceed 5%;
- compensation of interest on loans raised for the development of animal husbandry, including "niche" areas - sheep, goats, beekeeping, animal husbandry and others. It is assumed that the amount of loans should not exceed UAH 10-15 million;
- compensation of interest on loans raised for the purchase of agricultural land. The direction will apply to farmers of various forms of management. The amount of interest compensation will not exceed UAH 5 million per year [7].

It should be noted that today there are 42 authorized banks in Ukraine, through which the state support program for agricultural producers is implemented.

However, the support of banks by the regulator of cases of possible outflows and resource volatility also remains relevant today [1].

In Ukraine, the portfolio of banks is 40-50% of the agricultural sector. A similar figure in other developed countries is no more than 10%, which indicates that Ukraine remains a third world country that exports raw materials, rather than engaged in deep processing [3].

As of 2020, there are 35-40 thousand business units engaged in agriculture in Ukraine, while in Poland this figure is 800 thousand, which indicates insufficient funding from the state and lack of access to cheap credit resources of European banks.

The impact of the spread of the pandemic has affected the deterioration of the discipline of repayment of loans by agricultural producers within 5%.

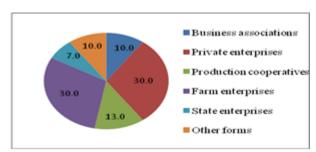


Fig. 1. Analysis of agricultural enterprises of L'viv region in terms of organizational and legal forms that use credit resources provided by state programs before the quarantine,%

Source: calculated by the authors in accordance with a survey of respondents (financial departments), which represent all organizational and legal forms of agricultural enterprises in the L'viv region.

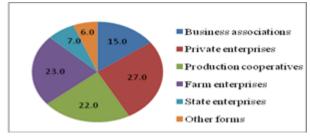


Fig. 2. Analysis of agricultural enterprises of L'viv region in terms of organizational and legal forms that use credit resources provided by state programs during quarantine,%

Source: calculated by the authors in accordance with a

PRINT ISSN 2284-7995, E-ISSN 2285-3952

survey of respondents (financial departments), which represent all organizational and legal forms of agricultural enterprises in the L'viv region.

Thus, analyzing the data in Figure 1 and 2, we can say that changes in demand for credit resources during quarantine have increased significantly in production cooperatives, primarily due to the development of livestock

and agricultural processing.

It should be noted that currently agriculture is one of the most profitable sectors of the economy and profitable. The share of nonprofit enterprises is insignificant. A more detailed analysis is given in Table 1.

Table 1. Dynamics of financial results before taxation of agricultural enterprises by their size and type of economic

activity for the period 2017-2018 (thousand UAH)

activity for the period 2017-2018 (thousand UAH)								
Indicators		Large	Medium	Small	Micro	Total for		
		enterprises	enterprises	enterprises	enterprises	agriculture		
2017 year								
Financial result, total		_*	915,944.9	163,896.8	35,193.3	1,155,653.7		
Profitable enterprises	Financial result, thousand UAH	_*	1,000,433.9	708,648.3	193,164.0	1,784,894.2		
	In % to total number of enterprises	_*	88.7	81.9	81.4	82.1		
Enterprises that received a loss	Financial result, thousand UAH	_*	84,489.0	544,751.5	157,970.7	629,240.5		
	In % to total number of enterprises	_*	11.3	18.1	18.6	17.9		
2018 year								
Financial result, total		_*	518,898.7	231,814.8	-285,856.6	1,232,520.5		
Profitable enterprises	Financial result, thousand UAH	_*	667,576.7	788,058.0	223,747.0	1,937,441.7		
	In % to total number of enterprises	_*	86.0	84.9	84.7	85.0		
Enterprises that received a loss	Financial result, thousand UAH	_*	148,678.0	556,243.2	509,603.6	704,921.2		
	In % to total number of enterprises	_*	14.0	15.1	15.3	15.0		
Deviation, 2018 to 2017 y.								
Financial result, total	thousand UAH	_	-397,046	67,918	-321,050	76,866.8		
	%	_	56.7	141.4	-812.2	106.7		
Profitable enterprises	thousand UAH	_	-332,857	79,409.7	30,583	152,547.5		
	%	_	66.7	111.2	115.8	108.5		
Enterprises that received a loss	thousand UAH	_	64,189.0	11,491.7	351,632.9	75,680.7		
	%	_	176.0	102.1	322.6	112.0		

Source: developed by the authors according to the Main Department of Statistics in L'viv region [4, 5].

In general, it should be noted that during the study period in the agricultural enterprises of L'viv region was profitable business. Losses were suffered in general by medium and micro enterprises. This dynamics of indicators showed us in 2019 about insufficient funding from the state and lack of access to cheap credit resources of European banks to

medium-sized enterprises and start-up microenterprises of L'viv region.

Saving resources, strengthening control over their spending are very important to overcome losses and achieve profitability of any enterprise.

According to A.R. Zhuravs'ka "it is very important that in the system of anti-crisis

management, profits increase, mainly due to intangible assets than due to fixed assets"[12]. E.M. Rudenko believes that to assess the relationship between the financial result and the cost of production, it is advisable to use the index method, which allows you to determine the relationship between the cost of basic products and financial results of agricultural enterprises [6].

Since the current situation in the world in

connection with the pandemic requires a closer connection between public authorities, financial institutions and directly agricultural producers, in this case, we believe that to improve the financial performance of agricultural enterprises of L'viv region it is necessary to thoroughly assess all the risks of the above entities and propose effective anticrisis measures (Table 2).

Table 2. Classification of risks according to the subjectivity of their formation and ways to optimize them through the use of anti-crisis measures

	Risks, problems	Anti-crisis measures		
State	Increase spending on the agricultural	Development of a program to support micro and		
	sector by reducing funding for other	small businesses, reimbursement of all loan rates to		
	important areas of the economy.	zero.		
Banks	 deterioration of the discipline of loan repayment up to 5%; reduction of demand for credit leasing; slowdown in the investment sphere; the presence of discomfort of online communication with farmers; extension of credit holidays; reduction of long-term loans for the development of the processing industry of agricultural products. 	- refinancing of existing debt on loans to micro and small enterprises in banks of Ukraine by providing a new loan and changing the terms of the loan agreement in order to provide it with state support, in the form of interest compensation.		
Agricultural enterprises	 world price situation; closing of markets; problems of import of products; problems in the international delivery of agricultural machinery and spare parts; difficulties associated with the loan application by novice farmers due to the inconvenience of teleworking and a more scrupulous attitude to financial analysis by banks. 	 opening of markets state support in the purchase of domestic agricultural machinery; promoting mutual assistance between farmers through cooperation; development of the investment sphere; creation by the farmer (agricultural enterprise) of additional value and vertically integrated business; deferral of rent payments, land tax for micro, small and medium businesses; 		

Source: developed by the authors.

The main task of the state today is to prevent the economic downturn and the crisis in Ukraine by providing financial support to agricultural enterprises through cheaper bank loans and reimbursement of all credit rates to zero. The state credit program "Affordable loans 5-7-9%" was introduced to facilitate access of micro and small businesses to bank lending. Control over the implementation of the program is entrusted to the Fund for Entrepreneurship Development (FED) [8].

The Ministry of Economic Development, Trade and Agriculture supports the program "Affordable loans 5-7-9%" in terms of educational programs for entrepreneurs who want to become participants in the program [2].

Credit guarantees are provided on loans to micro and small enterprises that do not have sufficient assets to transfer it as collateral for the loan or are characterized by increased credit risks, such as start-ups.

Thanks to credit guarantees, the state through the Fund for Entrepreneurship Development covers part of the credit risk of SMEs, creating conditions for attracting bank loans. Government support in the form of Credit Guarantees is provided exclusively in combination with support in the form of Interest Compensation for SME loans that meet the requirements of the program. The main components of the program "Affordable loans 5-7-9%" are shown in Figure 3.

It should be noted that studying the more detailed operation of the program "Affordable loans 5-7-9%", we found certain shortcomings that reduce the possibility of using it. In particular, the program can not be used by a

private individual who was registered less than a year ago, the need for collateral in the form of real estate or a vehicle, the presence of experience in the case. If at the initial stage of a new business the entrepreneur plans to work alone to gain experience or repay the loan faster, the loan rate will not be 5% per annum, but 7%.

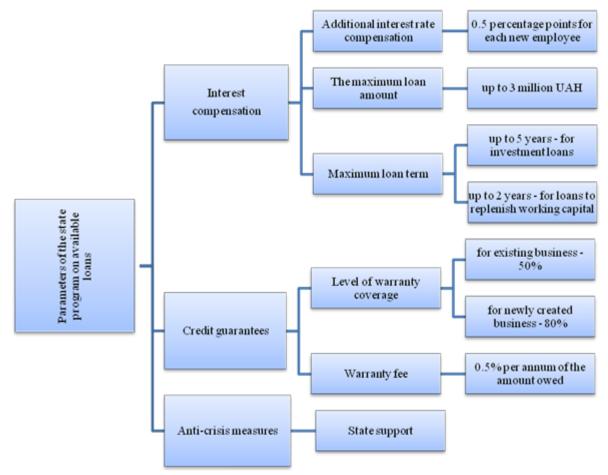


Fig. 3. Algorithm of the program "Affordable loans 5-7-9%" Source: developed by the authors based on the source [9].

Thus, the program "Affordable loans 5-7-9%" will be possible to create businesses, attract more people to the business environment, increase the number of micro and small enterprises operating in the real sector of the economy only by eliminating the above shortcomings.

However, the program can stimulate the development of profitable small and medium-sized businesses. In particular, it provides such businesses with cheap working capital and funds for the acquisition or renewal of fixed assets [2]. According to P. Voitovych, in order to improve the methods of anti-crisis

management, it is necessary to pay attention to the division of agricultural market entities into groups, based on subsystems of numerical orders, due to global trends in agriculture and the existing peculiar and specific conditions of this market in Ukraine [11]. In our opinion, every agricultural producer should strive for vertical integration in business and create added value. Because, it will at least help them to diversify their risks and survive difficult times. Adherence to such positions will make the sustainability of agricultural enterprises more diversified.

CONCLUSIONS

The impact of the COVID-19 coronavirus outbreak has significantly worsened economic conditions for all sectors of the economy and deepened economic uncertainty. In order to stabilize the economic situation in the agricultural sector of the economy, it is necessary, first of all, to implement anti-crisis programs, which are designed to bring agricultural business out of the economic crisis and provide financial support for development and capacity building.

We consider it necessary to improve the state program of support of agrarian business "Affordable loans 5-7-9%" and to apply it effectively. Agricultural producers should be encouraged to buy and use domestic agricultural machinery by developing government programs to reduce interest rates on loans or leasing, as experience shows that the export of machinery or spare parts during quarantine restrictions is also problematic.

Significant assistance from the state, in our opinion, would be the postponement of rent payments, land tax for micro, small and medium-sized agricultural businesses.

All measures should be aimed at improving the business environment and overcoming the crisis.

REFERENCES

[1] Agriculture will suffer the least from quarantine, 2020, https://finclub.net/ua/news/silske-hospodarstvo-naimenshe-postrazhdaie-vid-karantynu.html, Accessed on 17/07/2020.

[2] As "affordable loans 5-7-9%" were not available for new business: the EP experiment, 2020, https://www.epravda.com.ua/publications/2020/03/6/65 7777/, Accessed on 17/07/2020.

[3]Effective models of financing the agricultural sector in 2019, https://finclub.net/ua/projects/kruglye-stoly/efektyvni-modeli-finansuvannia-ahrosektoru-za-pidsumkamy-2019-roku.html, Accessed on 17/07/2020. [4]Financial results before taxation of enterprises by their size by type of economic activity for 2017. https://www.lv.ukrstat.gov.ua/ukr/si/year/2017/t139917 21.pdf, Accessed on 12/08/2020.

[5]Financial results before taxation of enterprises of Lviv region by types of economic activity in 2019. https://www.lv.ukrstat.gov.ua/ukr/-

si/inf_2009.php?vid=1&code=13&ozn_news=2&show =1&show2=1, Accessed on 8/07/2020.

[6]Rudenko, E.M, Skoromna, O., Yu., 2013, Financial results of agricultural enterprises and directions of their improvement. Agrosvit 19 (2013): 43-48.

[7]State support for APC 2020: the program to reduce the cost of lending will work in three areas. https://www.me.gov.ua/News/Detail?lang=uk-UA&id=409b0030-c4de-490f-8fb9-40ccdea42010&title=DerzhavnaPidtrimkaApk2020-

ProgramaZiZdeshevlenniaKredituvanniaPratsiuvatime ZaTromaNapriamami. Accessed on 15/07/2020.

[8]The government has distributed 4 billion state support to farmers in 2020. https://www.eprav-da.com.ua/news/2020/02/19/657232/, Accessed on 17/07/2020.

[9]The government has expanded the capabilities of the program "Affordable loans 5-7-9%". https://www.kmu.gov.ua/news/uryad-rozshiriv-mozhlivosti-programi-dostupni-krediti-5-7-9, Accessed on 15/08/2020.

[10]Tymoshenko, O.V., Buts'ka, O. Yu., Safari, F. Kh., 2016, Anti-crisis management as a prerequisite for improving the efficiency of the enterprise. Economic Analysis, 23 (2), (2016): 187-192.

[11]Voitovych, P., 2017, Basic principles of anti-crisis policy and classification of market participants in agricultural products into subsystems of numerical order. Agrarian Economics, (10, № 1-2), (2017): 52-56. [12]Zhuravs'ka, A.R., 2013, Theoretical principles of anti-crisis management of agricultural enterprises. Bulletin of Zhytomyr National Agroecological University, 1-2 (2), 2013: 227-235.