FINANCIAL SUPPORT FOR THE SUSTAINABLE COMPETITIVENESS OF LAND USE: TRENDS AND OPPORTUNITIES

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Abstract

The paper studied the trends and opportunities of financial support for the formation of sustainable competitiveness of land use of agricultural enterprises in Ukraine. The results of analysis indicate a significant increase in the nominal volume of financial resources of agricultural enterprises of Ukraine during 2010–2018 (6.2 times), however, the structural ratio between the components of financial resources remained almost unchanged. The increase of all financial resources was carried out mainly in the conditions (and, consequently, due to) of inflationary-devaluation processes, and not a real increase in resources. Thus, the sum of financial resources of agricultural enterprises in US dollar terms increased only 1.82 times, and taking into account the inflation index – only 2.15 times during the analyzed period. A similar situation is also characteristic for the sources of formation of financial resources. The correlation analysis confirmed the hypothesis that the dynamics of profit is more connected to the variation of the exchange rate and the inflation rate than to the internal factors of the efficiency of agricultural enterprises. in the system of financial support for the formation of sustainable competitiveness of land use, the financial leasing, agricultural insurance and stock market has a significant (untapped) potential.

Key words: financial resources, sustainable competitiveness, financial leasing, insurance, stock market

INTRODUCTION

Under the effect of sustainable development issues, competitiveness, which is conditional on a collection of institutions, policies, and factors determining the productivity of economic entities, changes [18]. One of the key determinants of the formation of sustainable competitiveness of land use of agricultural enterprises is financial support. Many studies are devoted to various aspects of the current problem of financing the agricultural sector [2; 11; 13; 14; 16] and amalgamated territorial communities in the context of rural development [10]. The importance of financial support for agriculture for the growth of the sector in Ukraine was established. The key techniques to improve the agriculture sector's investment attractiveness were also substantiated [9].

Scientists study and offer various opportunities for financing agribusiness entities, in particular through the stock exchange [2], credit and investment resources [20], leasing mechanisms [14; 19], state support [22], agrarian insurance [26], etc. The scientific provision for financial support for agricultural enterprises has been expanded by substantiating ideas for improving the state support and credit support mechanisms, as well as establishing their essential components [12]. The approach to determining the optimal amount of credit support for innovation has been developed and tested taken into account the agrobiological. economic and financial aspects of the agriculture [17]. The financial support provided to agricultural producers at the expense of the state budget was examined in terms of programs and regional differences. It was demonstrated that the effectiveness of agricultural enterprise activities under modern management settings was impossible to achieve without an adequate state support mechanism [22].

An important aspect of effective financing of

the agricultural sector is the management of this process. These issues are investigated in particular in the works by O. Hudz [6], O. Oliynuk, V. Makohon, V. Mishchenko et al. [17], N. Tanklevska, V. Miroshnichenko [23], V. Zymovets [27]. At the same time, as scientists do not pay enough attention to the comprehensive study of trends, problems and prospects of financial support of the agricultural sector from the standpoint of forming a sustainable competitiveness of land use., the purpose of this paper was to study the trends and opportunities of financial support for the formation of sustainable competitiveness of land use of agricultural enterprises in Ukraine.

MATERIALS AND METHODS

The data of the State Statistics Service of Ukraine, National Bank of Ukraine, and National commission exercising state regulation in the sphere of financial services market [1; 4] regarding the main sources of financial support and the financial results before taxation of enterprises by the types of economic activity with division into large, medium, small and micro enterprises at the national level, as well as public data of agricultural companies [3; 7; 21; 24; 25] were used as an information base in this article.

The research used the following scientific methods: economic-statistical (for analyze the state and dynamics of financial support); mathematical alignment of time series (for determine trends in financial support); correlation and regression analysis (for identify relationships between indicators of financial support); graphical (for the visualize the trends of the analyzed financial indicators); analysis, synthesis (for identifying the main problems and opportunities of financial support).

At the first stage, there were studied the key trends and problems in the practice of support financial resources of agricultural bv enterprises of Ukraine. Secondly, there were studied the own sources of financial support for agricultural enterprises. Thirdly, it was researched the financial leasing and its role in the financial support for agricultural enterprises. In the fourth stage, it was investigated the insurance and its role in the financial support for agricultural enterprises. Finally, in the fifth stage, there were approached some aspects of the stock market and its role in the attraction of funds for public agroholdings.

RESULTS AND DISCUSSIONS

In this section, there are described: condition, problems and justified the prior financial sources which have to be assured to agricultural enterprises in Ukraine in the context of the formation of sustainable competitiveness.

Practice of support by financial resources of agricultural enterprises of Ukraine: key trends and problems.

A significant increase in the volume of financial resources of agricultural enterprises of Ukraine during 2010–2018 was observed as indicated by the achieved analysis (by 293.5 bln UAH, or 6.2 times), however, the structural ratio between the components of financial resources remained almost unchanged (Table 1).

Table 1. Current state and dynamics of the composition and structure of financial resources of agricultural enterprises of Ukraine

Indicators					Years						
Indicators	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Composition of financial resources, bln UAH											
Total amount of financial resources	56.2	72.0	95.8	109.5	162.5	361.0	1,113.7	388.0	349.7		
Including: accounts receivables	49.9	63.4	85.3	98.3	151.5	342.8	1,092.1	365.7	325.9		
current financial investment	0.743	0.767	1.539	1.331	1.565	1.396	2.123	2.161	1.876		
cash	5.54	7.80	9.01	9.89	9.45	16.77	19.48	20.09	21.95		
	Str	ucture of fi	nancial res	ources, %							
Accounts receivables	88.8	88.1	89.0	89.8	93.2	95.0	98.1	94.3	93.2		
Current financial investment	1.3	1.1	1.6	1.2	1.0	0.4	0.2	0.6	0.5		
Cash	9.9	10.8	9.4	9.0	5.8	4.6	1.7	5.2	6.3		

Source: formed and calculated by the author according to the data of the State Statistics Service of Ukraine and National Bank of Ukraine [4].

The largest share in the structure of financial resources is accounts receivables, the share of which increased from 88.8 % in 2010 to 93.2 % in 2018. At the same time, the share of current financial investments decreased from 1.3 % in 2010 to 0.5 % in 2018, and the share of cash decreased from 9.9 % in 2010 to 6.3 % in 2018. The most significant changes in the volume and structure of financial resources occurred in 2016, which is associated with a significant increase in other accounts receivables. At the same time, the increase of all these financial resources was carried out mainly in the conditions (and, consequently, due to) of inflationarydevaluation processes, and not a real increase in resources.

Thus, according to the National Bank of Ukraine, the official average annual exchange rate of Ukrainian Hryvnia (UAH) against the US dollar (USD) was (UAH per 1 USD):

2010 - 7.94; 2011 - 7.97; 2012 - 7.99; 20137.99; 2014 - 11.89; 2015 - 21.85; 2016 -25.55; 2017 - 26.60; 2018 - 27.20. So, the Ukrainian Hryvnia depreciated over the period 2010–2018 by 3.426 times. According to the State Statistics Service of Ukraine, the official average annual inflation index (consumer price index) in Ukraine was: 2010 - 1.091; 2011 - 1.046; 2012 - 0.998; 2013 -1.005; 2014 - 1.249; 2015 - 1.433; 2016 -1.124; 2017 - 1.137; 2018 - 1.098. Thus, the cumulative inflation index for 2010-2018 is 2.880. It follows, that the sum of financial resources of agricultural enterprises in US dollar terms increased only 1.82 times (from 7.078 in 2010 to 12.856 bln USD in 2018), and taking into account the inflation index only 2.15 times during the analyzed period. A similar situation is also characteristic for the sources of formation of financial resources (Table 2).

Table 2. Current state and dynamics of the composition and structure of sources of financial resources of agricultural enterprises of Ukraine

Indicators					Years									
Indicators	2010	2011	2012	2013	2014	2015	2016	2017	2018					
Con	position of	f sources o	f financial	resources,	bln UAH									
Total sources of financial resources	156.4	199.0	257.3	241.3	329.9	572.9	611.8	693.1	760.3					
Including: cash revenue (income) from sales	99.9	127.0	162.6	161.1	213.9	362.3	403.7	454.4	525.1					
short-term banking credits	8.2	12.2	15.7	22.3	27.6	27.9	29.1	46.9	54.9					
current accounts payable	43.8	55.5	72.6	50.6	72.1	137.0	172.1	186.8	176.1					
budgetary funds (state support)	4.6	4.3	6.5	7.3	16.2	45.8	7.0	5.0	4.3					
	Structure	of sources	of financia	l resources	s, %									
Cash revenue (income) from sales	63.9	63.8	63.2	66.8	64.8	63.2	66.0	65.5	69.0					
Short-term banking credits	5.2	6.1	6.1	9.2	8.4	4.9	4.8	6.8	7.2					
Current accounts payable	28.0	27.9	28.2	21.0	21.9	23.9	28.1	27.0	23.2					
Budgetary funds (state support)	2.9	2.2	2.5	3.0	4.9	8.0	1.1	0.7	0.6					

Source: formed and calculated by the author according to the data of the State Statistics Service of Ukraine and National Bank of Ukraine [4].

The total financial resources of agricultural enterprises of Ukraine in 2018 accounted for 760.3 bln UAH, meaning 4.9 times more than in 2010. However, the real (taking into account the inflation index) total amount of sources of financial resources increased only 1.69 times, and in US dollar terms – only 1.42 times during analyzed period. The ratio of the sources of formation of financial resources changed across different stages of the evolution of agricultural enterprises. In the structure of sources of financial resources, the leading positions were held by the following: (i) cash revenue (income) from sales (63.2– 69.0 %), and (ii) current accounts payable (21.0-28.1 %); the minor positions were held by the following: (i) short-term banking credits (4.7-9.3 %), and (ii) budgetary funds (state support) (0.6-8.0 %). There was a noticeable increase in the share of cash revenue (income) from sales in the structure of the sources of financial resources, from 63.9 % in 2010 to 69.0 % in 2018. Unlike the previous source, in terms the share of current accounts payable, we identified a downward trend (from 28.0 % in 2010 to 23.2 % in 2018). Besides, we identified a clear trend of increasing the share of short-term banking loans (from 5.2 % in 2010 to 7.2 % in 2018), while reducing the share of state support in the structure of sources of financial resources (from 2.9 % in 2010 to 0.6 % in 2018).

It should be particularly noted the significant share of current accounts payable and accounts receivables. The calculation results indicate that the volume of accounts receivables in 2010 was 13.9 % higher than the current accounts payable; and in 2018, accounts receivable were 85.1 % higher than the current accounts payable of agricultural enterprises. Thus, we can agree with the opinion that the current practice of financial support for agricultural producers is not characterized by complexity and number systematicity. it has а of disadvantages that do not make it possible to satisfy the financial needs of agricultural enterprises [9]. One of the features of accounts receivable at agricultural enterprises is that in conditions of inflation and/or devaluation, the returned funds lose their initial value, since Ukraine does not have a mechanism for indexing receivables in accordance with inflationary processes. The

main measures for rational management of receivables: (i) to monitor the status of settlements with customers on deferred (overdue) debts; (ii) if possible, focus on a larger number of buyers in order to reduce the risk of non-payment by one or more large buyers; (iii) to monitor the ratio of receivables and payables: significantly exceeded the first financial threatens the stability and competitiveness of the enterprise and requires the attraction of additional sources of financing; (iv) to apply the method of providing discounts for early payments, which is used in foreign practice; (v) to develop measures to limit the term for settlements on deliveries by reissuing overdue payments on receivables into a commercial loan [6].

Own sources of financial support for agricultural enterprises.

Of course, the formation of own sources (domestic private financial resources) of financial support for agricultural enterprises is associated with their financial results of activities (Table 3).

Table 3. Current state and dynamics of the formation of own sources of financial support for agricultural enterprises in Ukraine

Indicators					Years				
Indicators	2010	2011	2012	2013	2014	2015	2016	2017	2018
Financial results before taxation, bln UAH	17.3	25.3	26.8	15.0	21.5	102.0	90.1	68.6	67.2
Enterprises which got profit before taxation:									
percentage to total number	69.8	83.4	78.5	80.3	84.8	89.0	88.4	86.8	86.7
financial result, bln UAH	22.2	30.3	33.7	26.3	51.7	127.6	102.8	89.0	93.4
Enterprises which got loss before taxation:									
percentage to total number	30.2	16.6	21.5	19.7	15.2	11.0	11.6	13.2	13.3
financial result, bln UAH	4.8	4.9	6.8	11.2	30.2	25.6	12.7	20.4	26.2
Net profit (loss), bln UAH	17.3	25.3	26.7	14.9	21.4	101.9	89.8	68.3	66.9
Enterprises which got net profit:									
percentage to total number	69.6	83.5	78.6	80.3	84.7	88.9	88.4	86.7	86.7
financial result, bln UAH	22.1	30.2	33.6	26.2	51.7	127.5	102.5	88.7	93.1
Enterprises which got dead loss:									
percentage to total number	30.4	16.5	21.4	19.7	15.3	11.1	11.6	13.3	13.3
financial result, bln UAH	4.8	4.9	6.8	11.3	30.3	25.6	12.7	20.4	26.3
Profitability level of all types of activity, %	17.5	19.3	16.3	8.3	9.3	30.4	25.6	16.5	13.5
Profitability level of operating activities, %	24.5	24.7	22.8	11.7	21.4	43.0	33.6	23.2	18.5

Source: formed by the author according to the data of the State Statistics Service of Ukraine [4].

Mathematical leveling of dynamic series for 2010–2018 and parameters of obtained equations indicate the general trend to increase of financial results before taxation, net profit and percentage of agricultural enterprises which got net profit (to total number). For example, in Ukrainian agricultural enterprises the average annual increase of financial results before taxation totaled 9.04 bln UAH ($R^2 = 0.535$), net profit 362

- 9.01 bln UAH ($R^2 = 0.533$) and percentage of enterprises which got net profit (to total number) - 1.77 % ($R^2 = 0.625$). The coefficients of determination for these trends suggest that the actual data of investigated dynamic series by an average of 73.1 %, 73.0 and 79.1 % respectively coincide with the estimated (theoretical) data, calculated on the chosen trend line. Therefore, with the appropriate level of probability it can be predicted further increase the amount of the net profit as the main source of own financial resources. In contrast to the previous case, in the dynamics of financial results in US dollar terms there are no clear growth trends, since for linear equations coefficients of determination were significantly lower, indicating that their nonlinear dynamics (Table 4).

 Table 4. Current state and dynamics of formation of own sources of financial support for agricultural enterprises in Ukraine (in US dollar terms)

Indicators					Year								
indicators	2010	2011	2012	2013	2014	2015	2016	2017	2018				
Financial results before taxation, mln USD	2,181.4	3,180.1	3,359.6	1,878.9	1,807.9	4,668.0	3,527.3	2,579.2	2,469.5				
Enterprises which got profit before taxation													
percentage to total number	69.8	83.4	78.5	80.3	84.8	89.0	88.4	86.8	86.7				
financial result, mln USD	2,790.0	3,797.4	4,214.0	3,285.6	4,351.9	5,840.2	4,023.0	3,345.3	3,434.6				
Enterprises which got loss before taxation													
percentage to total number	30.2	16.6	21.5	19.7	15.2	11.0	11.6	13.2	13.3				
financial result, mln USD	608.6	617.3	854.4	1,406.7	2,544.0	1,172.2	495.8	766.2	965.1				
Net profit (loss), mln USD	2,173.0	3,170.3	3,345.2	1,868.0	1,801.0	4,664.2	3,515.3	2,566.8	2,458.8				
Enterprises which got net profit													
percentage to total number	69.6	83.5	78.6	80.3	84.7	88.9	88.4	86.7	86.7				
financial result, mln USD	2,782.7	3,787.0	4,201.5	3,277.4	4,345.5	5,836.4	4,011.6	3,333.7	3,424.1				
Enterprises which got dead loss													
percentage to total number	30.4	16.5	21.4	19.7	15.3	11.1	11.6	13.3	13.3				
financial result, mln USD	609.7	616.7	856.3	1,409.4	2,544.5	1,172.2	496.3	766.9	965.3				

Source: author's calculations based on the data of State Statistics Service of Ukraine [4] using the official exchange rate of Ukrainian Hryvnia to USD set on by the National Bank of Ukraine.

If in national currency the amount of profit increased 3.9 times, then in the US dollar terms - only 13.2 % during the analyzed period. Therefore, it is logical to assume that the change in the amount of profit in the dynamics is more correlated with the change in the exchange rate and the level of inflation than with the internal factors of the efficiency of agricultural enterprises. Correlation confirmed this hypothesis, analysis in particular it is determined that the amount of profit in national currency has a high direct correlation relationship with the official exchange rate of Ukrainian Hryvnia to USD (r = 0.876), official average annual inflation index (r = 0.611), and moderate relationship between the level of devaluation and inflation (r = 0.409). A positive trend is the reduction in the share of unprofitable enterprises (from 30.4 % in 2010 to 13.3 % in 2018), but a negative trend is a decrease in profitability level of all types of activity (from 17.5 % in 2010 to 13.5 % in 2018).

Another important own source of financial resources for sustainable competitiveness is the equity capital, during 2010–2018 it increased significantly (by 396.2 bln UAH, or 5.2 times); however, the real (taking into account the inflation index) sum of the equity capital increased only 1.79 times, and in US dollar terms – only 1.51 times (Table 5).

Table 5. Current state and dynamics of equity capital of agricultural enterprises in Ukraine at the end of the year, bln UAH

Indicators					Years				
indicators	2010	2011	2012	2013	2014	2015	2016	2017	2018
Equity capital – total	95.3	127.6	152.1	162.0	170.1	282.3	377.0	443.1	491.5
Including:									
registered capital	22.4	24.2	27.3	30.2	30.5	33.6	40.1	43.8	54.4
additional capital	25.2	29.2	30.1	29.6	31.2	36.8	46.3	48.8	59.4
reserve capital	8.0	10.3	12.5	14.2	15.2	18.7	24.4	28.6	32.8
undistributed profit									
(pending loss)	37.2	62.2	80.2	85.4	90.1	189.7	262.4	318.5	340.6
unpaid capital and									
disposed capital	2.5	1.7	2.0	2.6	3.1	3.5	3.8	3.4	4.3

Source: formed by the author according to the data of the State Statistics Service of Ukraine [4].

In the structure of equity capital, the leading

positions were held by the following:

(i) undistributed profit (39.0-71.9%), (ii) additional capital (11.0-26.4%), and (iii) registered capital (9.9-23.5%); the minor positions were held by the following: (i) reserve capital (6.5-8.9%), and (ii) unpaid capital and disposed capital (0.8-2.6%). The most significant increase (9.2 times) is characteristic for undistributed profit – the average annual increase is 40.85 bln UAH ($R^2 = 0.906$), accordingly, its share almost

doubled. The calculations indicate an increase in ratio of accounts receivables to equity capital: from 0.524 in 2010 to 0.663 in 2018.

Financial leasing in the financial support for agricultural enterprises.

From the point of view of the formation of sustainable competitiveness of Ukrainian agricultural enterprises, financial leasing is a promising source of financing (Table 6).

Table 6. Current state and d	lynamics of the volumes	of financial leasing	for agricultural ente	rprises in Ukraine
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T					Years											
Indicators	2010	2011	2012	2013	2014	2015	2016	2017 7.7 13.0 22.8	2018							
Number of financial leasing contracts, thsd. units	5.1	10.9	10.8	11.1	8.9	4.1	9.1	7.7	10.3							
Value of financial leasing contracts concluded during the reporting period, total, bln UAH	4.9	11.3	14.7	31.6	7.2	6.2	9.8	13.0	22.2							
Value of existing financial leasing contracts at the end of the period, total, bln UAH	30.5	33.6	41.5	67.1	58.6	26.3	23.2	22.8	25.2							
including: value of existing financial leasing contracts concluded with agricultural enterprises, bln UAH	4.0	4.7	7.9	9.4	11.2	6.6	5.6	5.5	5.3							
percentage to value of existing financial leasing	13.1	14.0	19.0	14.0	19.1	25.1	24.1	24.1	21.0							

Source: formed and calculated by the author according to the data of the National commission exercising state regulation in the sphere of financial services market.

The total number of financial leasing contracts in Ukraine in 2018 was 10.2 thsd. units, which is 2.0 times more than in 2010. The total value of financial leasing contracts concluded during the reporting period in 2018 was 22.2 bln UAH, which is 4.7 times more than in 2010. Simultaneously, we identified a polynomial trend in the dynamics of change of total value of existing (current) financial leasing contracts at the end of period. Nevertheless, the value of existing financial leasing contracts concluded with agricultural enterprises in 2018 was 5.3 bln UAH, which is 32.5 % more than in 2010, but half as much as in 2014. We identified a trend of increasing the share of value of existing leasing contracts concluded with agricultural enterprises in total value (from 13.1 % in 2010 to 21.0 % in 2018), which indicates the growing importance of this source of funding.

State participation in the revitalization of financial support for agricultural enterprises via financial leasing is implemented through National Joint-Stock Company «Ukragroleasing». In 2017, «Ukragroleasing» purchased 246 units of machinery and equipment in the amount of 150.8 mln UAH for their subsequent transfer to leasing. As a result of the conclusion of 189 leasing

agreements 210 units of machinery were transferred to lessees with a total value of 107.5 mln UAH. As we know. «Ukragroleasing» provides services of financial leasing on the following conditions: prepayment in the amount of 15% of the contractual value of the leased object; commission payments from the agreed value of the leasing objects are one-time (2-7%), annual (19-23%); leasing period is 12-45 months; the frequency of leasing payments depends on their components (the main payment is made monthly and/or quarterly, the commission – monthly) [14].

We agree that the main areas of improvement of business activity of «Ukragroleasing» are: (i) enhancement of terms of the leasing services towards the reduction of commission and reducing the list of required paperwork; (ii) improving the quality parameters and expanding the list of technique and equipment that are leased; (iii) individual work with clients and active involvement of small agribusiness, including family farms [8].

Insurance in the financial support for agricultural enterprises.

Agricultural insurance has significant (untapped) potential in the system of financial support for the formation of sustainable

competitiveness of land use of agricultural enterprises (Table 7).

				Years										
2010	2011	2012	2013	2014	2015	2016	2017	2018						
1,217	2,710	1,936	1,722	1,392	1,062	793	957	1,207						
553	786	727	869	732	689	700	661	974						
N/d	N/d	N/d	N/d	3,055	3,969	6,240	5,933	6,675						
72.1	136.3	130.4	135.4	72.8	77.7	157.0	204.3	208.8						
0	0	0.086	0	0	0	0	0	0						
50.9	28.0	41.0	9.7	7.6	12.9	44.2	4.9	4.2						
3.8	3.7	3.8	3.1	2.4	2.0	2.5	3.4	3.1						
N/d	N/d	N/d	N/d	256.9	181.6	244.2	223.0	245.4						
9.1	17.1	16.3	16.9	6.1	3.6	6.1	7.7	7.7						
	1,217 553 N/d 72.1 0 50.9 3.8 N/d	1,217 2,710 553 786 N/d N/d 72.1 136.3 0 0 50.9 28.0 3.8 3.7 N/d N/d	1,217 2,710 1,936 553 786 727 N/d N/d N/d 72.1 136.3 130.4 0 0 0.086 50.9 28.0 41.0 3.8 3.7 3.8 N/d N/d N/d	1,217 2,710 1,936 1,722 553 786 727 869 N/d N/d N/d N/d 72.1 136.3 130.4 135.4 0 0 0.086 0 50.9 28.0 41.0 9.7 3.8 3.7 3.8 3.1 N/d N/d N/d N/d	2010 2011 2012 2013 2014 1,217 2,710 1,936 1,722 1,392 553 786 727 869 732 N/d N/d N/d N/d 3,055 72.1 136.3 130.4 135.4 72.8 0 0 0.086 0 0 50.9 28.0 41.0 9.7 7.6 3.8 3.7 3.8 3.1 2.4 N/d N/d N/d N/d N/d	2010 2011 2012 2013 2014 2015 1,217 2,710 1,936 1,722 1,392 1,062 553 786 727 869 732 689 N/d N/d N/d N/d 3,055 3,969 72.1 136.3 130.4 135.4 72.8 77.7 0 0 0.086 0 0 0 50.9 28.0 41.0 9.7 7.6 12.9 3.8 3.7 3.8 3.1 2.4 2.0 N/d N/d N/d N/d 256.9 181.6	1,217 2,710 1,936 1,722 1,392 1,062 793 553 786 727 869 732 689 700 N/d N/d N/d N/d 3,055 3,969 6,240 72.1 136.3 130.4 135.4 72.8 77.7 157.0 0 0 0.086 0 0 0 0 50.9 28.0 41.0 9.7 7.6 12.9 44.2 3.8 3.7 3.8 3.1 2.4 2.0 2.5 N/d N/d N/d N/d 256.9 181.6 244.2	2010 2011 2012 2013 2014 2015 2016 2017 1,217 2,710 1,936 1,722 1,392 1,062 793 957 553 786 727 869 732 689 700 661 N/d N/d N/d N/d 3,055 3,969 6,240 5,933 72.1 136.3 130.4 135.4 72.8 77.7 157.0 204.3 0 0 0.086 0 0 0 0 0 50.9 28.0 41.0 9.7 7.6 12.9 44.2 4.9 3.8 3.7 3.8 3.1 2.4 2.0 2.5 3.4 N/d N/d N/d N/d N/d 256.9 181.6 244.2 223.0						

Table 7. Current state and dynamics of the volumes of agrarian insurance for agricultural enterprises in Ukraine

Note. N/d – no data.

Source: formed by the author according to the data [1, p. 8].

The positive aspect is that the insured area in 2018 was 974 thsd. ha, which is 1.8 times more than in 2010, however, the number of contracts remained almost unchanged. The insurance amount in 2018 was 6,675 mln UAH, which is 2.2 times more than in 2014. The amount of premium in 2018 was 208.8 mln UAH, which is 2.9 times more than in 2010. However, the amount of premium in US dollar terms is decreased by 15.4 % during analyzed period due to the hryvnia devaluation.

The three-level analysis (territorial, sectoral and institutional levels) of agrarian insurance gives grounds to state that there are positive trends. However, issues concerning the expansion of the agrarian risk insurance coverage, activating the business activity of the insurance market participants for balancing their existing insurance interests, possible sources of insurance payments diversification and the growth of insurance companies capitalization still need improvement [26].

Stock market in the attraction of funds for public agroholdings.

A powerful external source of financial support for large public Ukrainian agricultural holdings is the issue of securities and their placement on international stock exchanges (Table 8).

Table 8. Current state of attraction of financial resources by the largest agroholdings of Ukraine through world's stock exchanges

Company name	Registered office	Stock market	Date of IPO	Currency	Capitalization three months after IPO, mln USD	Share price three months after IPO, USD	Free float as of IPO date, %	Capitalization, mln USD 2017*	Capitalization, mln USD 2019**
Agrogene-ration	Paris	Euronext	March 2010	N/d	72.1	2.1	17.9	N/d	N/d
Agroliga	Nicosia	New- Connect	February 2011	PLN	45.5	81.0	16.7	7	6
Agroton	Nicosia	WSE	November 2010	PLN	312.8	41.0	42.4	35	21
Astarta	Amster dam	WSE	August 2006	PLN	147.3	17.5	14.6	444	159
Avangardco	Limassol	LSE	May 2010	USD	17.8	12.8	22.5	42	18
IMC	Luxembourg	WSE	May 2011	PLN	101.0	9.2	24.0	83	127
Kernel	Luxembourg	WSE	November 2007	PLN	933.8	35.5	36.0	1,466	1,105
KSG Agro	Luxembourg	WSE	May 2011	PLN	103.8	19.9	34.8	10	3
MHP	Luxembourg	LSE	May 2008	USD	1,745.7	15.8	22.3	1,086	1,105
Milkiland	Amsterdam	WSE	December 2010	PLN	461.6	42.0	27.2	14	3
Ovostar	Amster dam	WSE	June 2011	PLN	111.0	59.9	25.0	192	179
Ukrproduct	Jersey	AIM	February 2005	GBP	47.8	63.5	27.2	2	3

Note. N/d – no data. * As of 27.06.2017; ** As of 24.12.2019.

Source: formed by the author according to the data of the public sources [5; 21; 25].

So, more than 10 Ukrainian agroholdings place their stocks and bonds on the stock exchanges (mainly London, Frankfurt, Warsaw and Paris), using such two tools as Initial Public Offering and depository receipts, which give them opportunity to gain competitive advantages and increase the market value of their businesses. According to Ukrainian Agribusiness Club (UCAB), as of March 2019, in comparison to the end of last year, the total market capitalization of Ukrainian public agricultural companies has decreased – down to 2.83 bln USD (from 2.96 bln USD). The agroholding KERNEL is the leading company with of 1.10 bln USD, but since the beginning of the year it shows a weak negative tendency in its market capitalization (Fig. 1) [7].

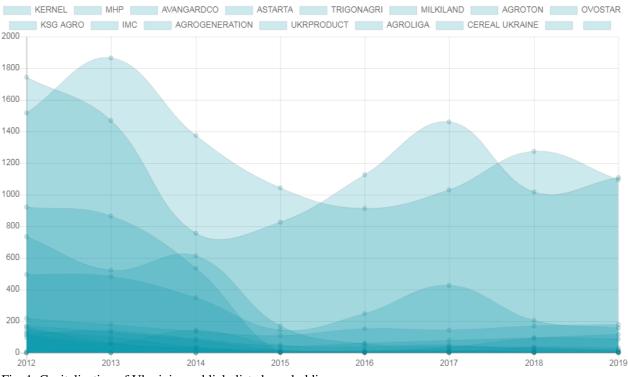
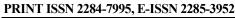


Fig. 1. Capitalization of Ukrainian publicly listed agroholdings Source: Investments & finances [7].

Additional benefits of access to foreign stock exchanges are the access to credit resources of foreign banks, whose cost (usage fee) is 2.0– 2.5 times lower than Ukrainian banks. Ukrainian banks also provided loans to agroholdings on much more attractive terms than other agricultural enterprises. As an alternative way of attracting financial resources, agroholdings have chosen to enter the Eurobond market, cooperate with the European Bank for Reconstruction and Development and other international financial companies [15].

The decrease in market capitalization of agroholdings is due to a number of macrofinancial and political shocks, in particular, hryvnia devaluation, loss of a land bank and production capacities located in the occupied territories. However, due to relative macrofinancial stabilization and improving conditions on the world markets, there was a gradual restoration of investor confidence, which was reflected in the increase in the price of shares of agroholdings [27, p. 20]. It is worth noting that despite political uncertainty farmers remain optimistic. So, for example, a survey of agricultural producers conducted in February 2019 on the agricultural business climate in Ukraine, demonstrates its further improvement (Fig. 2). Since the end of 2017, the indicator has been growing steadily and has now reached the mark of 46.3 points. Most likely, this improvement is the result of stable monetary policy and declining inflation [3].

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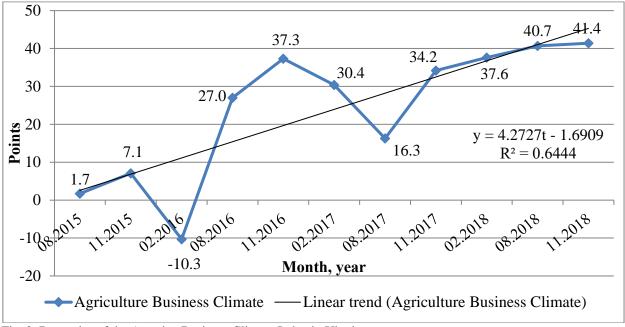


Fig. 2. Dynamics of the Agrarian Business Climate Index in Ukraine Source: UCAB, author's calculations based on the data of the UCAB [24].

Unfortunately, nowadays, attraction of funds through exchanges is available only for Ukrainian large agroholdings, and for small and medium-sized agricultural enterprises this source of financial support is not yet available. In the context of expanding funding opportunities of small and medium-sized agricultural enterprises through the stock exchange it may be useful European experience, in particular the key features of the newly formed SME market in Bulgaria called «BEAM SME growth market» [2]. It is possible to attract and use other sources of financial support.

CONCLUSIONS

The results of the dynamic analysis indicate a significant increase in the nominal volume of financial resources of agricultural enterprises of Ukraine during 2010–2018 (6.2 times), however, the structural ratio between the components of financial resources remained almost unchanged. At the same time, the increase of all financial resources was carried mainly the conditions out in (and. consequently, due inflationaryto) of devaluation processes, and not a real increase in resources. Thus, the sum of financial resources of agricultural enterprises in US dollar terms increased only 1.82 times, and taking into account the inflation index – only 2.15 times during the analyzed period. A similar situation is also characteristic for the sources of formation of financial resources.

Mathematical leveling of dynamic series for 2010–2018 and parameters of obtained equations indicate the general trend to increase of financial results before taxation, net profit and percentage of agricultural enterprises which got net profit (to total number). With the appropriate level of probability, it can be predicted further increase the amount of the net profit as the main source of own financial resources. The correlation analysis confirmed the hypothesis that the amount of profit in the dynamics is more correlated with the change in the exchange rate and the level of inflation than with the internal factors of the efficiency of agricultural enterprises. If in national currency the amount of profit increased 3.9 times, then in the US dollar terms - only 13.2 % during the analyzed period. Another important own source of financial resources for sustainable competitiveness is the equity capital, during 2010-2018 it increased significantly (5.2 times); however, the real (taking into account the inflation index) sum of the equity

capital increased only 1.79 times, and in US dollar terms – only 1.51 times.

The financial leasing, agricultural insurance and stock market has significant (untapped) potential in the system of financial support for the formation of sustainable competitiveness of land use of agricultural enterprises. Substantiation of directions of use of this potential can be one of perspective directions of researches, as well as other external sources of financial support for the formation of sustainable competitiveness of land use of agricultural enterprises.

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