

National Academy of Agrarian Sciences of Ukraine
National Scientific Center
«Institute for Soil Science and Agrochemistry Research
named after O. N. Sokolovsky»
National Scientific Center
«Institute of Agrarian Economics»



LAND CONCENTRATION AND COMPETITIVENESS OF AGRICULTURAL ENTERPRISES IN UKRAINE

KONCENTRACJA GRUNTÓW I KONKURENCYJNOŚĆ PRZEDSIĘBIORSTW ROLNYCH NA UKRAINIE

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Presentation plan

State and trends of land concentration in agricultural enterprises of Ukraine

The level of concentration and the intensity of competition in the land rental market: the case of Ukrainian agroholdings

Impact of the level of land concentration on the competitiveness of agricultural enterprises

1. State and trends of land concentration in agricultural enterprises of Ukraine

Table 1. Distribution of agricultural enterprises (including family farms) in Ukraine, by agricultural lands size in 2010 and 2015

	2010				2015				
	Number of enterprises		Area of agricultural land		Number of enterprises		Area of agricultural land		
Indexes	units	percentage to total enterprises	thsd. ha	percentage to total area of agricultural land	units	percentage to total enterprises	thsd. ha	percentage to total area of agricultural land	
Enterprises, which had agricultural land	48824	86.4	21585.9	100.0	42052	92.7	19922.7	100.0	
including of land, ha									
no more than 5.0	5784	10.2	18.3	0.1	3872	9.2	12.8	0.1	
5.1–10.0	4038	7.1	31.9	0.1	3001	7.1	24.2	0.1	
10.1–20.0	4925	8.7	76.3	0.4	4129	9.8	64.9	0.3	
20.1–50.0	13707	24.3	519.8	2.4	11911	28.3	453.9	2.3	
50.1–100.0	4831	8.6	345.2	1.6	4827	11.5	351.9	1.8	
100.1–500.0	7181	12.7	1743.1	8.1	6919	16.5	1695.4	8.5	
500.1-1000.0	2667	4.7	1919.4	8.9	2467	5.9	1757.9	8.8	
1000.1–2000.0	2661	4.7	3822.8	17.7	2446	5.8	3510.3	17.6	
2000.1–3000.0	1347	2.4	3295.5	15.3	1099	2.6	2659.1	13.3	
3000.1-4000.0	666	1.2	2293.0	10.6	516	1.2	1785.9	9.0	
4000.1–5000.0	376	0.7	1670.5	7.6	282	0.7	1259.8	6.3	
5000.1-7000.0	332	0.6	1919.6	8.9	281	0.7	1646.4	8.3	
7000.1–10000.0	178	0.3	1479.6	6.9	141	0.3	1172.3	5.9	
more than 10000.0	131	0.2	2450.9	11.4	161	0.4	3527.9	17.7	
Enterprises, which did not have agricultural land	7669	13,6	X	X	3327	7,3	X	x	



- The share of agricultural enterprises with a land area of more than 5000 ha in the total number of enterprises, %
- —Trend (The share of agricultural enterprises with a land area of more than 5000 ha in the total number of enterprises, %)

Figure 1 (a). Dynamics of indicators of the relative level of land concentration in agricultural enterprises in Ukraine



- The share of agricultural enterprises with a land area of more than 5000 ha in the total area of agricultural land, %
- —Trend (The share of agricultural enterprises with a land area of more than 5000 ha in the total area of agricultural land, %)

Figure 1 (b). Dynamics of indicators of the relative level of land concentration in agricultural enterprises in Ukraine

Table 2. Dynamics of indicators of the absolute level of land concentration (actual and forecast) in agricultural enterprises in Ukraine

Indexes	Years							
muexes	2010	2011	2012	2013	2014	2015	2016	2020*
Agricultural land area in agricultural enterprises, thsd. ha	20589.6	20499.3	20499.3	20665.5	20437.2	20548.9	20746.9	20697.0
including agricultural land area in family farms, thsd. ha	4290.8	4345.9	4389.4	4451.7	4578.3	4343.7	4437.9	4561.9
Number of agricultural enterprises, units	56493	56133	49415	49046	46199	45379	47697	37274
including number of family farms, units	41524	40965	34035	34168	33084	32303	33682	25230
The average size of agricultural enterprises (including family farms), ha	364	365	415	421	442	453	435	475
including the average size of family farms, ha	103	106	129	130	138	134	132	149
The average size of agricultural enterprises (excluding family farms), ha *Forecast.	1089	1065	1047	1090	1209	1239	1164	1384

Source: author's calculations based on the data of State Statistics Service of Ukraine.

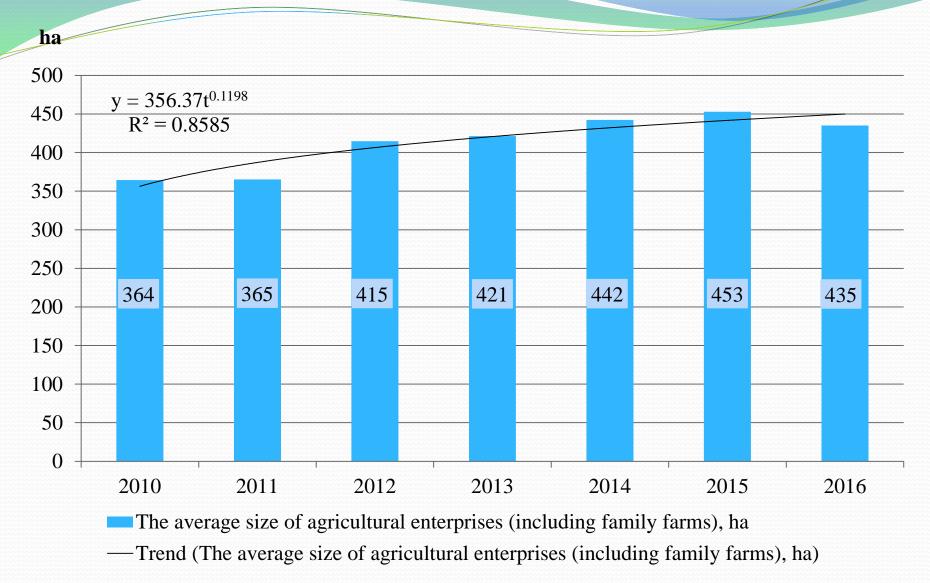


Figure 2. Dynamics of indicators of the absolute level of land concentration in agricultural enterprises (including family farms) in Ukraine, ha

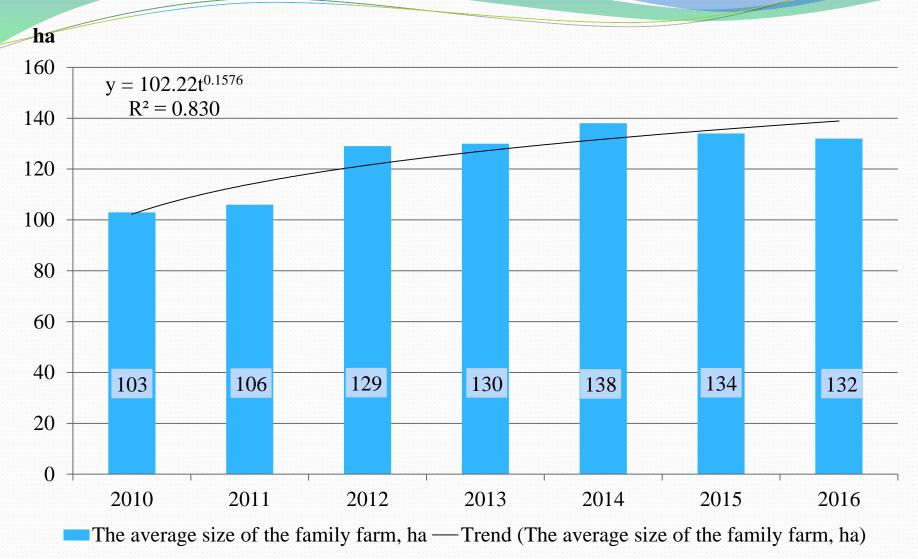


Figure 3. Dynamics of indicators of the absolute level of land concentration in family farms in Ukraine, ha

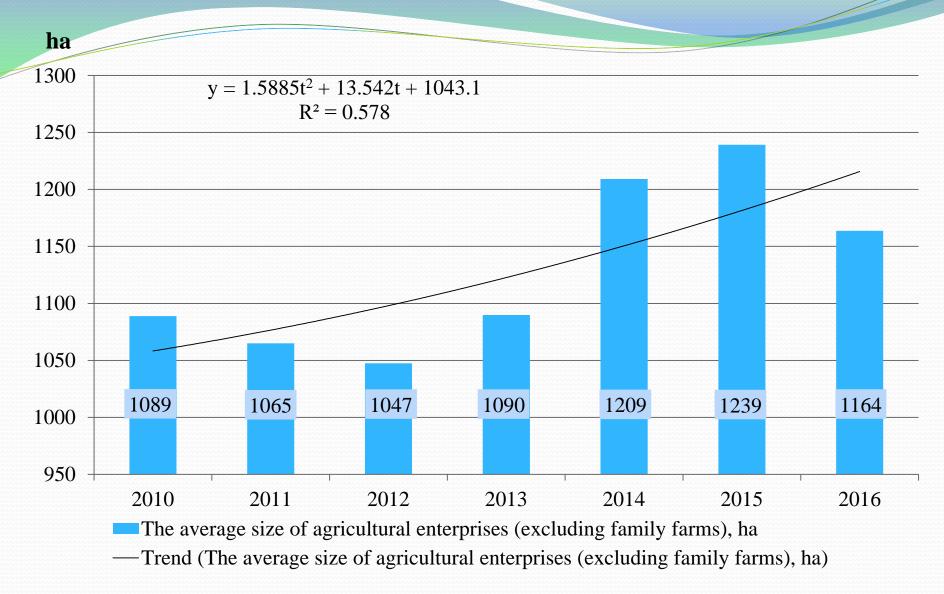


Figure 4. Dynamics of indicators of the absolute level of land concentration in agricultural enterprises (excluding family farms) in Ukraine, ha

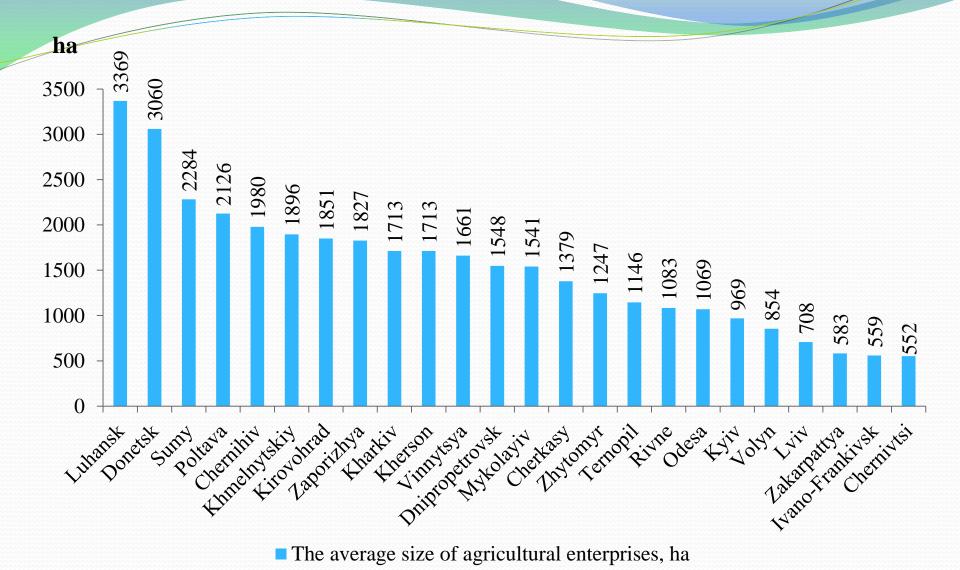


Figure 5. The average indicators of the absolute level of land concentration in agricultural enterprises of the regions of Ukraine, 2016

2. The level of concentration and the intensity of competition in the land rental market: the case of Ukrainian agroholdings

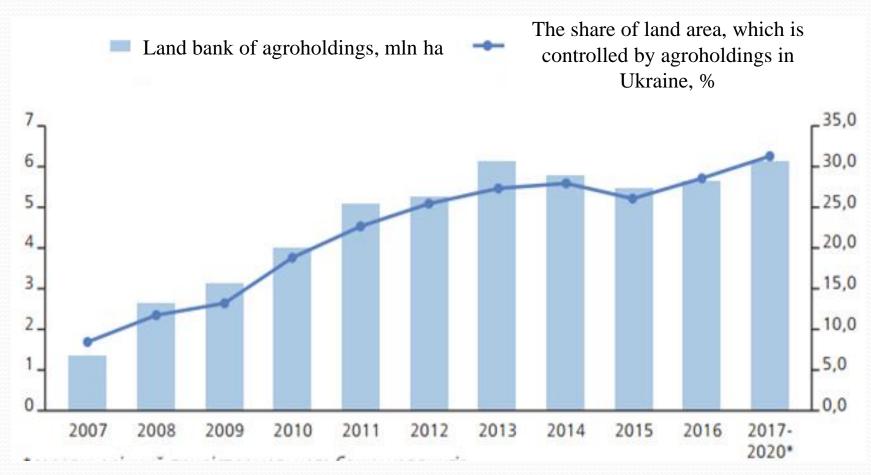


Figure 6. Dynamics and forecast of the land bank of Ukrainian agroholdings *Source:* UCAB.

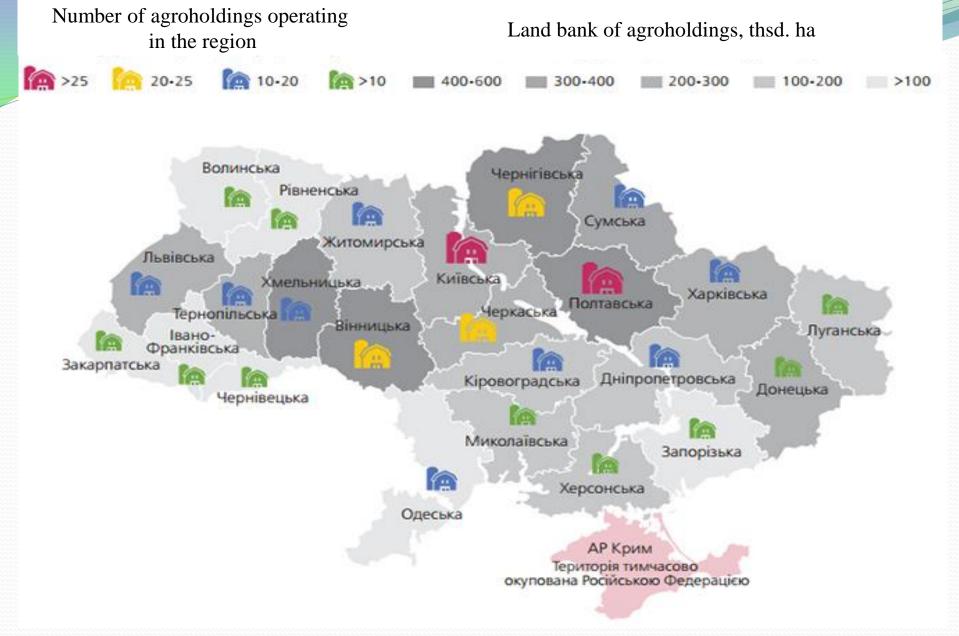


Figure 7. Geographical location and the absolute level of land concentration of the largest agricultural holdings in Ukraine, 2016

Source: UCAB.

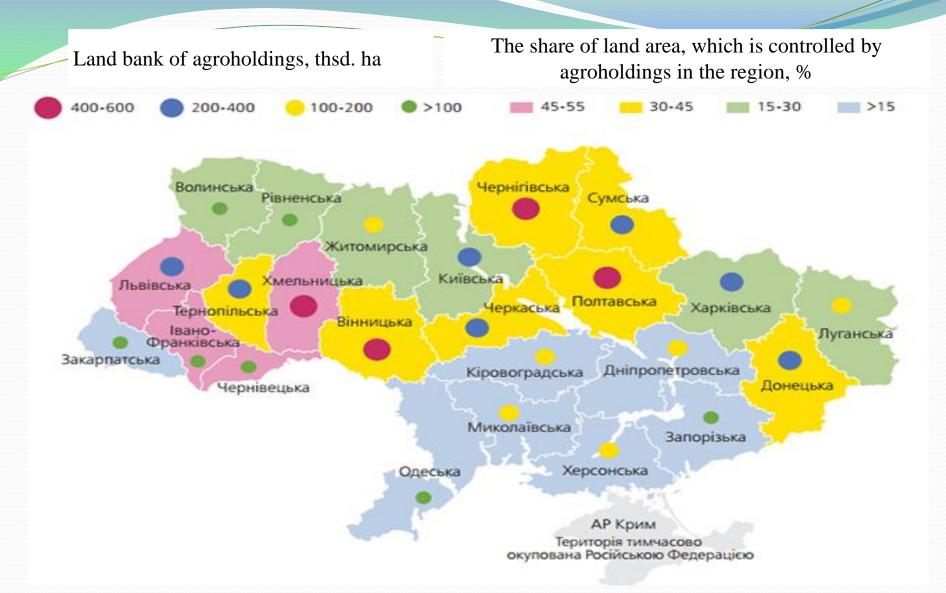


Figure 8. Geographical location and the relative level of land concentration of the largest agricultural holdings in Ukraine, 2016

Source: UCAB.

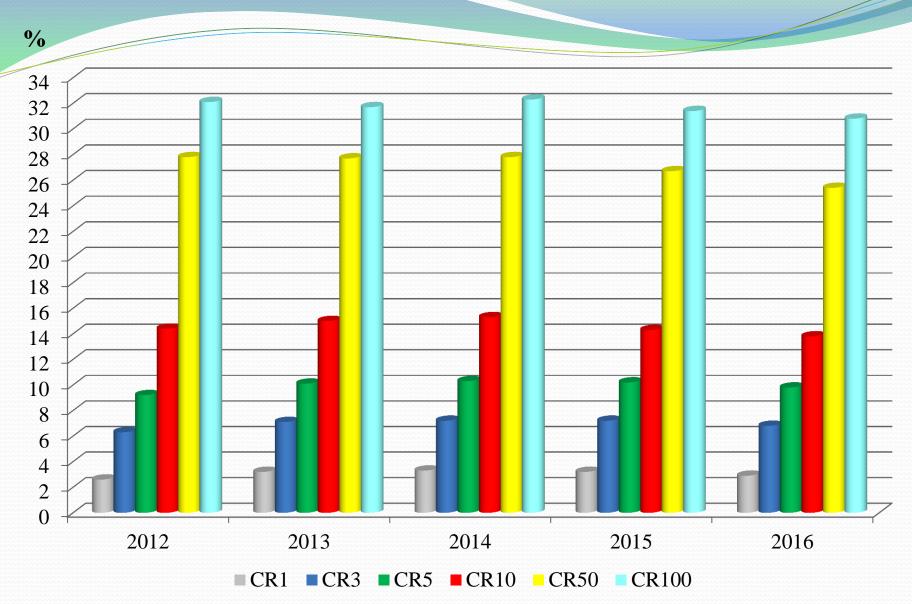


Figure 9. Dynamics of the index (CR) of land concentration in the agricultural enterprises of Ukraine (on the example of the largest agroholdings)

Source: own calculations and composition based on the data of public companies and latifundist.com.

Table 3. Calculation of the Herfindahl-Hirschman Index for the rental market of agricultural land in Ukraine (on the example of the TOP-100 largest agroholdings), 2016

Name of Company	Land bank, thsd. ha	Market share, %	$(a_j)^2$
UkrLandFarming	605	2.92	8.50
Ahroprosperis	430	2.07	4.30
Kernel	385	1.86	3.44
Myronivskyi Khliboprodukt	370	1.78	3.18
Astarta-Kyiv	250	1.20	1.45
Ukrainski ahrarni investytsii	220	1.06	1.12
Mriia Ahrokholdynh	185	0.89	0.80
Ahroton	151	0.73	0.53
IMK	137	0.66	0.44
Ahrein	127	0.61	0.37
•••			
Total / Herfindahl-Hirschman Index	20746.9	100.0	28.74

Source: author's calculations based on the data of public companies and latifundist.com.

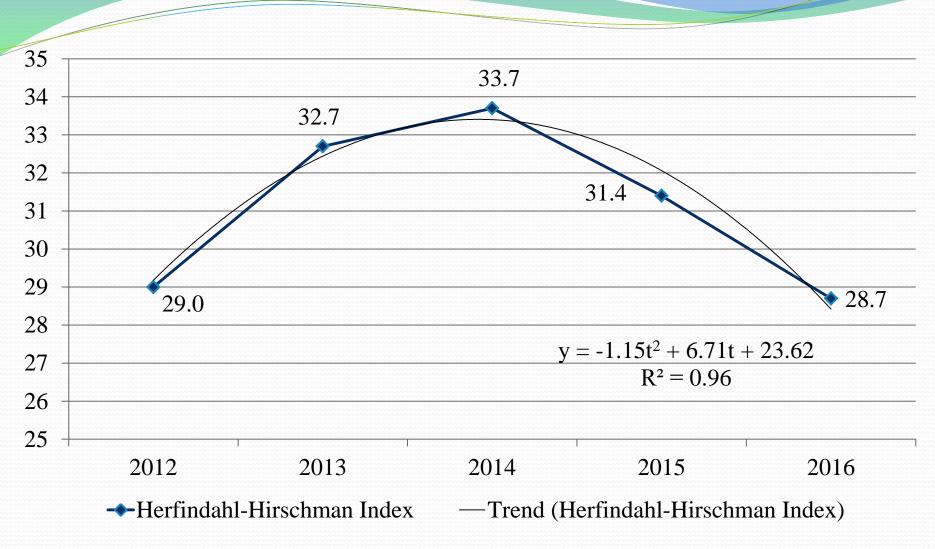
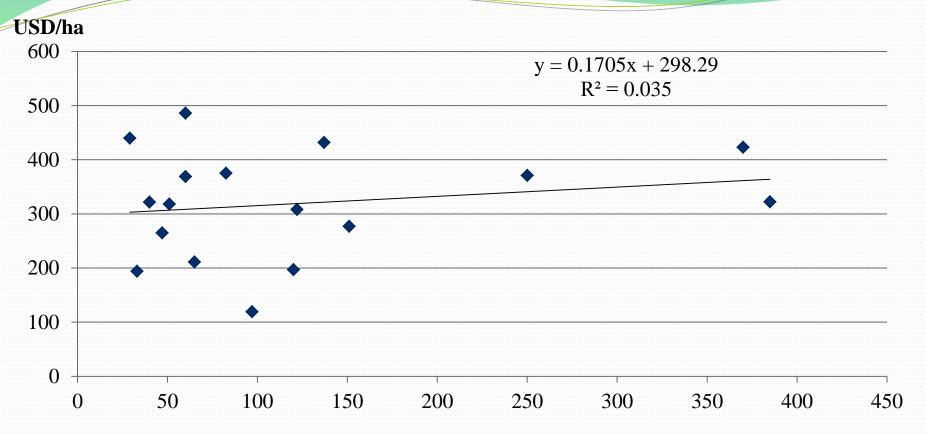


Figure 10. Dynamics of Herfindahl-Hirschman Index for the rental market of agricultural land in Ukraine (on the example of the TOP-100 largest agroholdings)

Source: own calculations and composition based on the data of public companies and latifundist.com.

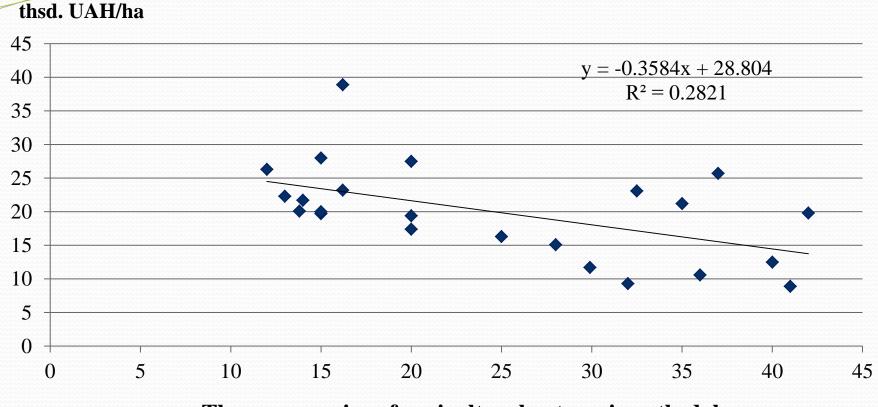
3. Impact of the level of land concentration on the competitiveness of agricultural enterprises



◆ EBITDA in crop production, USD / ha — Trend (EBITDA in crop production, USD / ha)

Figure 11. Impact of the level of land concentration in agroholdings (on the example of the most efficient plant production companies) on their competitiveness (by the EBITDA per hectare of land in crop production), 2016

Source: own calculations and composition based on the data of public companies and latifundist.com.



The average size of agricultural enterprises, thsd. ha

◆ Revenues in crop production, thsd. UAH/ha

Figure 12. Impact of the level of land concentration in agroholdings (on the example of the most efficient plant production companies) on their competitiveness (by the income (revenue) per hectare of land in crop production), 2016

Source: own calculations and composition based on the data of public companies and latifundist.com.

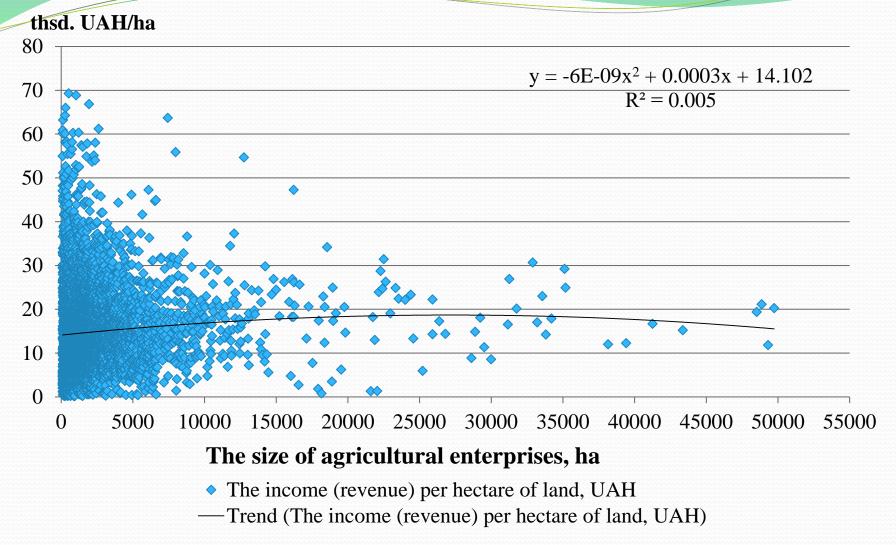


Figure 13. Impact of the level of land concentration in agricultural enterprises on their competitiveness (by the income (revenue) per hectare of land) in Ukraine, 2016

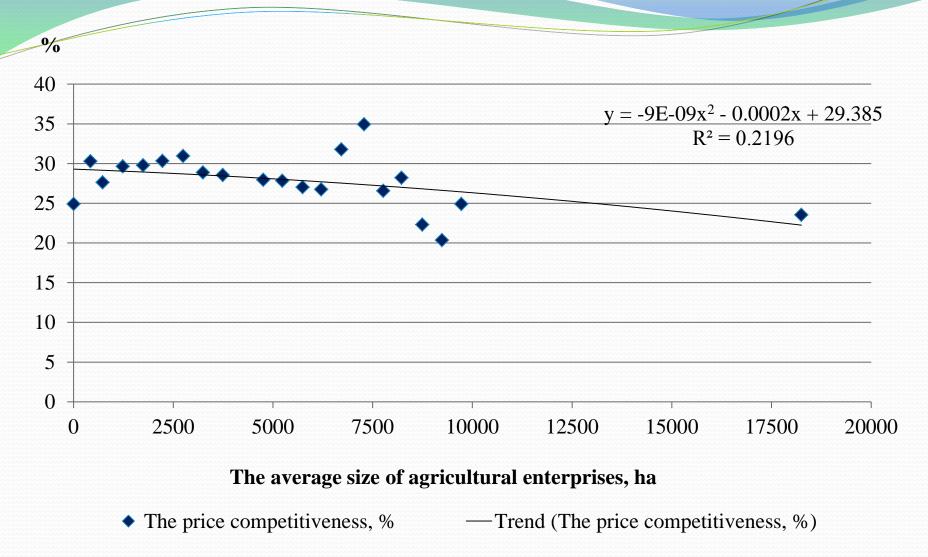


Figure 14. Impact of the level of land concentration in agricultural enterprises on their competitiveness (by the price competitiveness) in Ukraine, 2016 (grouped data) *Source:* own calculations and composition based on the data of State Statistics Service of Ukraine.

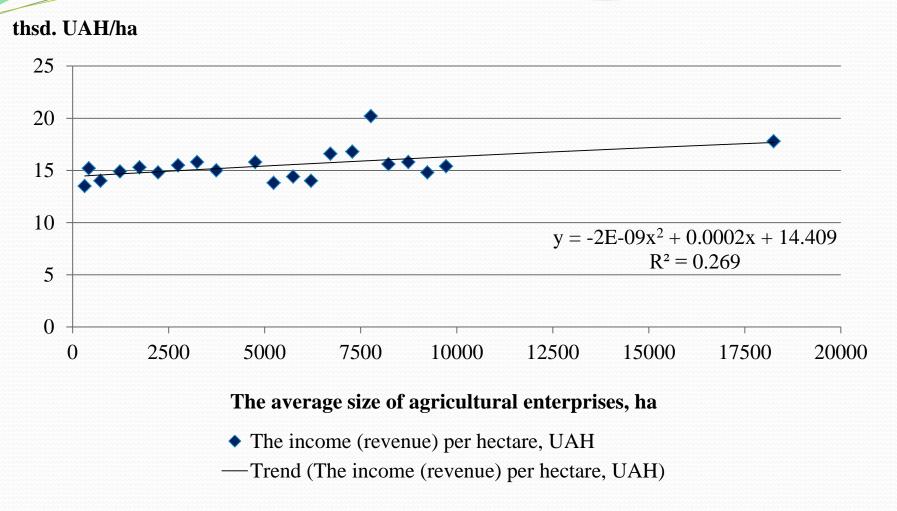
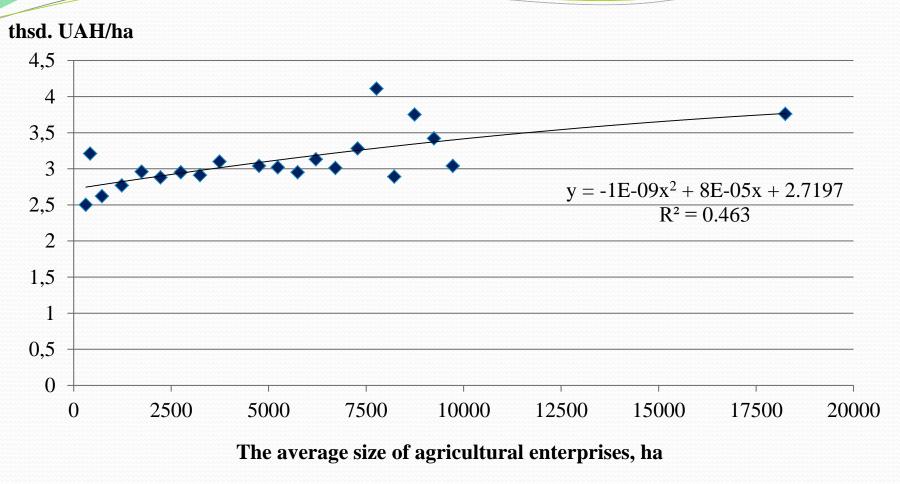


Figure 15. Impact of the level of land concentration in agricultural enterprises on their competitiveness (by the income (revenue) per hectare of land) in Ukraine, 2016 (grouped data)



◆ The newly created value per hectare, UAH — Trend (The newly created value per hectare, UAH)

Figure 16. Impact of the level of land concentration in agricultural enterprises on their competitiveness (by the newly created value per hectare of land) in Ukraine, 2016 (grouped data)





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