

Super-large farms in Ukraine and their integration into international markets

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Abstract

This paper is aimed to show the main reasons of rising of super-large farms in Ukraine and to display tendencies of their development and integration into international markets.

It is well known, that the powerful potential of Ukrainian agricultural production, determined by such factors as large area of high productive black soils, favorable climatic conditions did not get enough additional impulse in the first transition years to increase their production and efficiency. For the last 2-3 years in Ukrainian could be observed the essential increase of role in total agricultural production of new agricultural operators known as agro-holdings. The formation of agro-holdings in Ukraine and other countries of the former Soviet Union are primarily connected with transitional problems, such as inadequacy of the institutional framework and disturb between the main market players. Ukrainian agro-holdings started accumulation of lands and other resources and became eminent players at the market, not only in Ukraine, but also in the world. At the end of 2008 about 70 agro-holdings with an agricultural cultivated area of about 6 million ha exist in Ukraine. The lack of own financial resources and the opportunities to enlarge their production and market share lead national agro-holdings to attract money from abroad and to become more integrated into international markets. Ten of the largest Ukrainian agro-holdings are listed at international stock markets where they drew more than 3 billion US\$ investment.

This paper examines the official statistics data, statements of the sector players in a course of interviews.

Key words: super-large farms, land market, Ukraine

Introduction

It is well known, that the powerful potential of Ukrainian agricultural production is determined by several factors make Ukraine uniquely suited for agriculture:

- ❖ 1/3 of the world's fertile black soil belongs to Ukraine. Besides, according to USAID, Ukraine's humus layer is between 40-50 cm or more deep (vs. 5-30 cm in neighboring European states).
- ❖ Land acquisition is not limited by low provision as for example in European countries. Furthermore 5 mln ha of formerly productive agricultural land is currently lying fallow. It is nearly 1% of all agricultural land in Ukraine.
- ❖ Low farming cost as a result of low land leasing costs (USD 30-50/ha per annum on average) and low agricultural labor costs (USD 192 per month as of Nov. 2008).

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- ❖ Ukrainian agricultural companies have a great potential not only to achieve yields close to the EU average, but also to increase their average efficiency. To evaluate the efficiency of agro-enterprises we used the Data Envelopment Analysis (DEA) method and made calculations with a program DEAP 2.1 (created by Tim Coelli). The input parameters were: land-plot size, livestock number, number of workers, depreciation, other expenses. The output parameters: cash crop revenue, livestock revenue; other revenue. The average efficiency of 2 736 agricultural enterprises (large and medium enterprises - > 100 ha land or > 50 employees) in Central Ukraine in 2005 was 0,391, and in 2006 for 2 591 agro-enterprises – 0,377. This shows the huge potential for efficiency increase at production level with a requirement only for minor additional resources.

But all these factors did not get enough additional impulse in the first transition years to increase the agricultural production.

Agro-holdings: definition

As a result of instability of prices and volumes of raw materials for processing plants a whole number of food industry companies have decided about the necessity of vertical integration with raw material producers. First of all, this concerns the sugar industry, the animal sector, bakers and processors of sunflower oil. It was one of the reasons why did the agro-holdings appear.

To collect the information about agro-holdings in Ukraine we made a survey and developed a questionnaire, because statistical reports of agricultural enterprises do not reflect affiliation of agricultural enterprises with any of holdings.

Agro-holdings are described as "a union of related to each other legal entities all managed by the head company and having mutual contracts and/or common property". In most cases, this head company is not engaged in agricultural production, being a managing company or a representative of the food processing or some other industry.

The agro-holdings embrace a wide range of activities: such as ownership, leasing, joint planning of production process, contracts for land lease, service etc.

Entities' organizational forms differ from each other. However, in general, four different but interrelated integration types are usually used:

1. ownership or leasing of land;
2. common goals and tasks;
3. vertical coordination;
4. know-how.

It is impossible to describe a typical structure of these entities because all agro-holding differ from each other by the following characteristics:

1. number of integrated enterprises,
2. type of processing and service;
3. type and terms of integration;
4. independence degree of united companies;
5. location.

Reasons for agricultural holdings formation

As mentioned above, one of reasons why the agro-holdings appeared was the raw material supply for processing. The other results of the key factors analysis of founding agro-holdings which presently operate in Ukraine are given in the table below, expressed in percents:

Table 1. Ukraine: Significance of reasons for agricultural holdings formation

Reasons	Significance (%)
Raw material supply for processing	38.9%
Investments of industrial capital	16.7%
Investments of financial capital	11.1%
Foreign investments	11.1%
Own and other investment sources	16.7%
Investments of agricultural production exporters	5.6%

The main factor is singled out conventionally. Obviously, a few factors combined while making the decision for developing towards an agro-holding.

Apart from the above-mentioned special factors, general motives are present, too:

- beneficial taxation of agricultural enterprises,
- increasing margins of crop production,
- relatively small costs of arranging land expanses in the past years,
- prospects of operation in the conditions of the land market development after lifting the land market moratorium.

Geographic location

It should be noticed that the holdings can be conventionally divided into two categories with regard to territorial priorities of their activities:

1. Monoterritorial ones (operating in 3-5 regions). This category would include holdings which are specialized in processing agricultural produce at affiliated processing facilities or were founded at the expense of investments from the industrial capital.
2. Distributed holdings that are not bound to any certain territory and run their business in 5-10 regions of Ukraine.

While the initial territorial aspects of the holding formation differed rather greatly, the difference between the two said categories was obliterated in 2006, first of all due to strengthening competition for land accumulation.

The Poltava, Cherkasy, and Vinnytsya regions are most “popular” from the viewpoint of land expanses accumulation. This is explained by their optimum combination of land quality and natural and climatic conditions.

Peculiarities of vertical integration in Ukrainian agriculture

The degree of vertical integration in each agricultural production sector and development of agro-holdings is different and has some peculiarities:

1. Long-term contracts for raw material supply are almost absent in the dairy sector because milk production has been shifting from large farms to individual household farms since long ago. In addition, the very commercial dairy farms had not looked attractive for agro-holdings investments until recently.

Poor quality of milk, constant violation of contractual obligations by milk suppliers and rising prices cause grave problems for leading manufacturers of dairy products. We expect large investments and deepening of the vertical integration in the dairy sector in the near future.

2. The sugar sector is featured by quite a high degree of integration. All leaders of the market have established vertically integrated structures with large farmland areas and diversified business. This enables them to ensure stable raw material deliveries and correspondingly improve planning of their production.
3. The situation in Ukraine's grain market is more specific and differs from those seen in Kazakhstan and Russia. 6 out of Russia's 10 major grain traders have created their agro-holdings. Only Nibulon can be mentioned as Ukraine's agro-holding.

Nibulon is actually the only Ukrainian grain trader. The remaining operators of the grain market are in fact subdivisions of transnational companies. They are not interested in making own investments in such a risky activity as agricultural production. However, almost all suppliers of grain for export help farmers to receive a credit or extend it themselves against the future crop.

4. The vertical integration in the fruit and vegetable sector is associated rather with toughening retailer requirements to product quality and timely delivery than with the appearance and role of agro-holdings. Due to specific requirements of retailers, it is extremely difficult to single out general trends in this sector's integration development. The most typical are programs of potato-growing assistance to peasants from Kraft Food Company, direct deliveries of produce to METRO's trade networks.
5. The meat sector, except poultry production, still remains stagnant that hampers the vertical integration's development. Only the successfully restructured poultry branch shows effective integration.

Vertical integration's effects

We can assess the vertical integration's effectiveness on the example of agricultural produce growing and processing within one holding.

Table 2. Producer margin at different stages of cost generation, UAH/MT

Crop	Full production cost, 2006 ¹	Minimum grower price, 2007 (A) ²	Market price, September 2007 ³ (B)	Margin 1 (B-A)	Margin/production cost ratio
wheat	484	600	900-1100 ⁴	400	67
barley	368	500	1100-1500 ⁵	650	130
corn	471	550	1000	450	82
sun seed	783	1000	2400	1400	140
rapeseed	986	1100	2400	1300	118

sugar beet	168	180	190	10	6
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¹ – calculations on the basis of official statistics data

² – own estimate (including delivery to elevator / enterprise and finishing)

³ – data of UkrAgroConsult

⁴ – feed – milling wheat

⁵ - feed – brewer's barley

Food industry enterprises save 6% to 170% of their costs for raw material purchases. Combined with accumulated incomes from growing and processing, an additional profit (margin) is generated due to minimized transactional costs. The absence of middlemen also leads to the profit/margin accumulation among participants of vertically integrated holdings.

Investment sources when forming agro-holdings

In addition to the companies from food industry, which have decided about the necessity of vertical integration with raw material producers, there are also the other few sources when forming agro-holdings.

Holdings originated from other (non-food) industries. The main investments were made in the period after 1998, when a beneficial fixed agricultural tax was introduced. Besides, one or several oil companies are expected to come to the agricultural sector.

Investments of financial capital (the investment, banking sector) started to apparently appear after 2004.

Foreign companies specialized in producing or processing agricultural produce abroad strengthened their interest in the Ukrainian market in 2005 – 2006. This fact is explained not only by rising margins of the agricultural business in Ukraine but also by poor opportunities for development of the agricultural business in the companies' home countries, first of all in the EU.

Besides the above-mentioned reasons, there is a group of holdings whose capital's origins are difficult to trace. This group is unified by a desire towards gradual enlargement of their operation scale – from one agricultural enterprise to forming a holding.

At last, export-oriented companies unwilling came to the agricultural production branch before 2005-2006. But due to unstable harvests, unpredictable market regulation, and VAT refund problems, the agricultural production has been getting increasingly topical to them since then. This group may become more influential in prospect.

Integration of agro-holdings into international financial markets

World food crisis caused by growing population and biodiesel production led to a huge world food prices growth, increasing profits and investment boom in cash crop production branch of Ukraine in the last few years.

A growing need to raise capital and to gain international recognition have led a number of Ukrainian agro-holdings in the last four years to exposure to international capital markets via initial public offerings (IPO). IPO – it is not only a capital attraction mean, but it is also an important development stage, connected with getting public capacity. It has to enforce the brand and image of the company. Besides publicity induce the company to improve its management, increase the efficiency and business transparency.

A number of pioneering IPOs have already taken place (Table 3)

Table 3. Financing the expansion of agro-holdings

Company	Date of placement	Share sold of capital, %	Equity raised on IPO, mln \$	Market capitalization on the moment of placement, mln \$
Ukrproduct	Feb 2005	27	11	42
Astarta-Kiev	Aug 2006	20	32	155
Dakor	May 2007	20	21	103
Ukrros	Jul 2007	20	42	210
Landkom International	Nov 2007	54,9	111	202
Kernel	Nov 2007	38	218	574
Landwest	Dec 2007	20	43	215
Landkom International	Mar 2008	10	22	220
Kernel	Mar 2008	9	84	933
MCB Agricole	Mar 2008	24	56	233
Mironivskiy khiboproduct	May 2008	19,4	322,5	1700
Mriya	Jun 2008	20	90	450,5
Sintal Agriculture	Aug 2008	15	34,5	230

Source: Kommersant-Ukraine, Bloomberg, Concorde Capital, Dragon Capital

In this way the development of agroholdings in the last few years was marked by the following key points:

- Dramatic structural changes in the agricultural sector. As a result, in 2007 25 agro-holdings control over 2,5-3,0 mln. ha of farmland. In addition 75-80 “smaller” agricultural producers operate 1,5-2,0 mln. ha of farmland. But already in 2008 about 40 agro-holdings cultivate more than 4,0-4,5 mln. ha of farmland and the next 90-100 agricultural enterprises operate 2,2-2,5 mln. ha of farmland.
- An opportunity to attract some additional financial resources helped to expand the production. According to the UCAB’s estimation, ~150 largest agricultural operators produce about 20% of wheat, 25% of corn, 35% of sunflower seed, 75% of sunflower oil, 70% of rapeseed, 30% of total meat output, 7% of milk.

Some conclusions and recommendations

The most of agro-holdings appeared in the hard 1990s, on the ruins of the soviet agriculture, during the deepest phase of the crisis. That’s why they know, how to overcome problems. The main advantages of such agro-holdings is a skill of selling the products that will always enjoy a good demand at the market and an opportunity to diverse production risks and control their cost at every link of the supply chain - from field to supermarket. Thanks a diversified sales

structure and rather low dependence of agro-holdings on the price fluctuations in comparison to the other market players they can better minimize the risks.

We also must take into account the production scale effects: as an example, an agro-holding with app.100 tsd. ha farmland can easier get some financial means for its development, as a small farm, especially at the period of financial crisis. More over agro-holdings are mostly financially strong enough to keep control over the leased land plots and purchase them in the next years, perhaps not so intensive, like in the last few years.

In this way, the increase of efficiency and business transparency of Ukrainian agro-holdings will support their further expansion and importance growth of the Ukraine's agricultural sector at the world market and we expect that agro-holdings and super-large farms will dominate the farms structure of Ukraine in the next 5-7 year.