

# **PREREQUISITES FOR AGRO-INDUSTRIAL INTEGRATION DEVELOPMENT**

**Tetyana M. Gamma\***

## **1. Introduction**

Despite the attention of the authorities to the problems of agricultural sector, it is still premature to talk about overcoming the crisis in agriculture. Adverse weather conditions, the presence of intermediary chains supporting the mechanism of funds withdrawals from agriculture do not allow a lot of farms providing extended reproduction in the long run.

The development of advanced technologies encouraging productivity could improve the situation. However, this requires significant investment, which the agricultural enterprises lack, and the abilities to attract third party investors in agricultural production are limited owing to the high risk, long operating cycle and low speculative capacity. In addition, the amount of the state support is much lower than in the developed countries.

Therefore, under current conditions, one of the main directions of agriculture development, along with the strengthening of state support, should be considered the stimulation of integration process of agro-industrial manufacturers with agricultural processors.

However, despite the proven benefits of such integration, a lot of participants feel reserved to this form. The majority of the farmers are not involved in the integration process, preferring market mechanisms of interaction. For example, in Odessa region, only about 100 companies, among almost 6 thousand agricultural enterprises and farms, belonging to the 40 integrated entities are involved into the integration processes. This is a consequence of objective reasons to be explained.

## **2. The main material research**

The publications note the following reasons for the dip in popularity of agro-industrial integration:

- 1) the reluctance of financially sound enterprises to integrate with “weak” companies for fear to reduce their cost-effectiveness;
- 2) low investment potential, i.e. level of return on investment;
- 3) fear to lose tax benefits in the case of integration of agricultural producers with processing companies [1].

Obviously, the list of reasons given above is not complete, and we will try to substantiate and expand it in this paper.

From the methodology position, we believe that considering the benefits of integration and restraining factors, we should combine economic approach comparing the costs and the benefits, and the institutional approach investigating the “rules of the game” and the conditions how to coordinate the interests of business processes participants. Their combination will allow investigating the problem and suggesting the ways to solve it from the point of view of the system approach. In this regard, one can identify the following research areas:

- 1) analysis of the institutional environment and transaction costs;

---

\* © Tetyana M. Gamma; Ph.D; assistant professor; Economics of Enterprise Department; Odessa National Economic University; Email: <gamma\_t@mail.ru>.

- 2) search for efficient forms and interaction mechanisms between the participants;
- 3) state support measures.

The problems related to the institutional environment are directly related to the issues of confidence. In the business environment, where the confidence level is high, less guarantees are required and management structure to prevent opportunism (manifestation of perfidy for selfish purposes) is less complex [2]. Low level of confidence narrows the field of joint activities.

In the Ukrainian business environment, level of confidence is extremely low. And the problem does not come down to the features of national mentality. Opportunistic behavior is a consequence of natural human desire to maximize the function of his own utility [3]. The institutions of different nature are called to resist it starting from the judicial system, the mechanisms of company-specific management and ending with the national-cultural traditions. Their underdevelopment is the cause of aggressive opportunism. In particular, the Ukrainian judicial system, due to various factors, is often not able to provide a remedy: such phenomena as the delayed terms of proceedings, judges soliciting, non-enforcement of court sentences. And this leads to an increase in transaction costs.

The desire to preserve the goodwill in the conditions when the state creates knowingly loss-making management mechanisms (especially in agriculture) does not meet the support of the businessmen. The farmers are in the situation where it is difficult to predict financial performance in the short term, not to mention in the long run. Their main focus is on maximizing current profits at the cost of violation of contract terms.

Therefore, renewal and increase of mutual confidence level must be considered as the institutional prerequisite for the development of national entrepreneurial activity. Otherwise, the predictable behavior of participants can be achieved only in the conditions of integration, when it becomes possible to use the administrative arrangements within rigid structures. And the practice has demonstrated the correctness of such path.

This raises the question of the effectiveness of various organizational forms, bringing together the participants' activities. Various forms of agricultural enterprises interaction organization are well-known. Some of them operate in a closed cycle "production – processing – sales", the others combine only production and processing, and the others realize together the same operations. The following can be generalized:

- 1) joining several businesses in order to create a closed cycle in the hands of single owner;
- 2) interaction of several independent legal entities on a contractual basis;
- 3) creation of simple partnership based on joint activity agreement;
- 4) formation of various associations, such as farmers associations.

When choosing a particular organizational form, a key role is played by the factors associated with the property relations, as they often determine the efficiency of the central body in integrated associations and its ability to reach compromises. In case if the property relations between the participants of integrated formation do not exist, then the problems of integration organization is particularly acute due to the significant reduction in central leverage on the members of the integrated structure.

At the same time, one should remember that the majority of enterprise managers prefer if not large-scale, but independent activities. The inclusion of an enterprise to the integrated association limits access to financial flows and increases the level of personal control and responsibility. Therefore, the issues of ownership themselves cannot be an obstacle to integration.

Currently, in Ukrainian food industry, there are three types of integration mechanisms. The first type implements control possibilities associated with the possession of property titles of the integrated companies. The second type involves coordination leverage of joint activities based on access to the joint resources. Finally, the third type of mechanism is based on a voluntary centralization of a group member and the transfer of certain powers.

It should be noted that in the present circumstances, vertically integrated food industry structures are the most competitive, the purpose of which is, first of all, to ensure their own reliable source of raw materials, as well as stable income, the formation of permanent markets for product sales and the expansion of activity spheres. Due to their own system of elevators, agricultural enterprises and trading houses reach closed production cycle, costs savings and efficient management of financial flows.

Another point that determines the appeal of integration is seasonality and asset specificity. Everyone knows that agricultural production is seasonal and main crops can be harvested only once a year. Accordingly, in a specific regional market, there are objective limits of grain volume to be processed. During the years of poor harvest, the processing companies face the challenge of unutilized capacity.

To solve the issue, the delivery of grain from other regions can be considered but it is related to high transport costs. The processing companies can partly solve the problem of capacity utilization and guaranteed supply by vertical integration “back” to the raw materials producers.

Seasonal factor is also essential for the agricultural producers. Since agronomic activities are carried out within a short period, field works must be timely organized and financed. In terms of vertical integration with the processors, the agricultural producers are able to get quick and secure credit facilities to complete the operational cycle, and for the implementation of the investment programs.

The factors associated with the specificity of assets were determined by O. Williamson. He attributed to them:

- 1) the specificity of the location – it occurs due to the proximity of the supplier and the consumer. The reorientation to other partners is associated with additional costs, so the parties will endeavor to maintain the relationships;
- 2) the specificity of physical assets – is a consequence of their special features (e.g. durum wheat). The desire to have guaranteed supply may be a reason for integration;
- 3) the specificity of human resources – any conditions leading to the improvement of company specific relationships and productivity upgrade. The inability to ensure them at the appropriate level (or loss of them) is threatened by additional costs, which is a factor for fuller control through joint ownership;
- 4) target assets – the investment of the partners in the development of the production basis of each other. This leads to a symmetric distribution of the risks and increases confidence level [3].

The fertility of the land and climatic conditions should be added to the listed assets that are not essential to the industry, but are crucial for agriculture:

- a) the land with various fertility and climatic conditions gives rise to different attitudes towards integration. For example, the climatic conditions in Vinnitsa region contribute to grain yield of 30–40 q/ha. Therefore, a farmer in Vinnitsa region feels more financially independent than a farmer in Lviv region, where the average grain yield is 10–15 q/ha, and, accordingly, has a different point of view on integration appeal. And any technological improvements are not able to eliminate such difference;

6) the fertility of the land plot has a similar effect on the assessment of the integration benefits on the part of the agricultural producers, but within a single region and determines the amount of the so-called differential rent.

All of these factors, in one way or another, affect technological and transaction costs, and determine the degree of integration appeal for potential and actual participants.

Furthermore, when forming integrated associations, the ways and the principles of partner economic relationship implementations should be considered. One of the most common mechanisms ensuring to some extent the partners' decency in respect to each other is a transfer pricing.

“Transfer price (internal price) is a price of a product or services that one unit (section, department, division etc.) delivers to another unit of the same entity” [4]. In classical interpretation, internal prices by their nature are far from the market, as the products and services are not sold and not purchased. Transfer prices contribute to objective evaluation of the participants activity and their contribution to the joint result of integration.

The world practice has developed several methods for establishing the level of transfer prices: based on the market price, costs based and contract based.

Transfer prices are generally determined by the following objectives:

1. Regulation of the profit rate. Transfer prices allow to set the required rate of return for various units. The solution to this problem is closely related to the financial structure design, which resulted in the allocation of profit centers and cost centers. For cost centers, a price level is established that allows only offsetting the costs, thereby redirecting the flow of operational profit to the headquarters. This pattern allows concentrating financial resources in one place and facilitates the subsequent investment process, depending on the priorities of the corporation development.
2. Increase both the efficiency of the integrated association as a whole (due to the synergistic effect) and its individual units (first of all, through the reduction in transaction costs at various stages of the business process).
3. Create economic incentives for the units. One of the objectives of transfer pricing is to encourage internal company competition by the organization of the internal market and fair distribution mechanism of the system result.
4. Create clear guidelines for the motivation of department managers. This task is related to the organization of personal motivation of department managers of the corporation. Transfer prices allow establishing clear reference points for fair evaluation of their activities.
5. Minimization of customs and tax payments. Corporate structures often operate simultaneously in several public and tax jurisdictions. Therefore, they have to record all transactions for which customs and tax payments are accrued. It is natural to assume that the corporation will seek to reduce the overall amount of payments. Transfer prices, in this case, are a convenient tool to reduce their accrual basis. Well-designed mechanism of interaction between the integration participants with the use of transfer pricing can generate additional revenue by itself.

However, all these recommendations are not sufficient if the appropriate level of state support for the integration process is not provided.

### **3. Conclusion**

Firstly, it is necessary to adjust the legislation on holding entities, in accordance with which the relationship between the units will not be seen as the results of independent companies activity

subject to taxation, but as the operations of a single economic mechanism with respective exemption from taxation (especially from VAT).

Secondly, the issue of maintenance of preferential taxation of agricultural production within the frameworks of integrated association should be solved.

Thirdly, one should not forget about direct state support, which is significantly lower than in the developed countries. For example, the EEC countries annually subsidize in agriculture about 3 billion euros per year.

It is necessary to continue the development of national projects and regional target programs related to the support of agricultural complex.

In our view, the proposed integrated approach allows you to make a sound estimate of the integration benefits. Finding a balance between the obvious economic interests and implicit constraints will actively involve farmers in the integration processes and, therefore, assist bringing agricultural sector through the crisis.

## **References**

1. Mazloev V. The Mechanisms of Agro industrial Associations Institutional Transformation / V. Mazloev // *Economics of Agricultural and Processing Enterprises*. – 2005. – № 7. – Pp. 37–40.
2. Benso M. The Relationship Between Suppliers and Customers in Industrial Markets: When Consumers Invest in Idiosyncratic Assets / M. Benso, A. Andersen // *Russian Journal of Management*. – 2004. – № 2. – Pp. 111–152.
3. Williamson O. *Economic Institutions of Capitalism: Firms, Markets, “relational” contracting* / O. Williamson. – St. Petersburg. – 1996.
4. Horngren Ch. *Managerial Accounting* / Ch. Horngren, J. Foster // St. Petersburg. – 2005.

## **Summary**

In this article, the author attempts to identify and analyze the main prerequisites of agro-industrial integration in Ukraine at the institutional level: the institutional environment and transaction costs; forms and mechanisms of interaction between the participants, the measures of state support. The implicit constraints of integration processes in the investigated area were examined.

A combined approach to a reasonable assessment of the benefits of integration was proposed. Finding a balance between the obvious economic interests and implicit constraints will actively involve farmers in the integration processes and thus contribute to the removal of the domestic agricultural sector out of the crisis.

**Keywords:** integration, the agro-industrial complex, the institutional environment, taxation.

**JEL classification:** Q13

**UD classification:** 338.432:334.012.82(477)