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INSTITUTIONAL CONCEPTS AND THEORETICAL-METHODOLOGICAL BASIS OF AGRICULTURAL COOPERATION RELATED WITH TRANSACTIONAL COSTS IN AGRICULTURE

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Abstract

In the article were considered the transaction, its types and transaction costs in agriculture. It has been shown, that the lack of adequate market institutions of outsourcing hampers efficient development cooperation. Institutional theoretical, methodological and methodical approaches to the justification of the efficiency of agricultural cooperation are systematized.

Keywords: agricultural complex, transaction costs, outsourcing, cooperation, specialization and concentration of production.

Introduction. The modern needs of regional development, the practice of management and reform of the agro-industrial complex have brought forward new problems associated with the formation and development of regional market institutions. And although a number of works are devoted to institutional-market changes in the agro-industrial complex economy, there is insufficient development of theoretical, methodological and methodological approaches to solving this problem, as well as its relevance. The complexity and diversity of the market system determine the ambiguity and complex nature of choosing the most effective way to organize a transaction. Each of the methods, that is, markets, hierarchies and hybrid forms, has its own advantages and disadvantages, and at the same time, market agents constantly face the problem of organizing a transaction by independently producing a product or service within the framework of a vertically integrated hierarchy - purchasing them on the market or adopting some kind of hybrid form, partially combining both. One of those who first proposed a theoretical concept for solving the above problem, which was the extent to which it is profitable to increase the size of an enterprise, was I.Y. Wiener. His position was that increasing a firm's output, which requires the use of many resources, should result in more efficient operations.

Methods and discussion. Transaction cost theory is an alternative variant of the agency understanding of governance assumptions. It describes governance frameworks as being based on the net effects of internal and external transactions, rather than as contractual relationships outside the firm (i.e. with shareholders).

Transaction costs will occur when dealing with another external party:

- Search and information costs: to find the supplier;
- Bargaining and decision costs: to purchase the component;
- Policing and enforcement costs: to monitor quality.

The way in which a company is organised can determine its control over transactions, and hence costs. It is in the interests of management to internalise transactions as much as possible, to remove these costs and the resulting risks and uncertainties about prices and quality. For example a beer company owning breweries, public houses and suppliers removes the problems of negotiating prices between supplier and retailer.

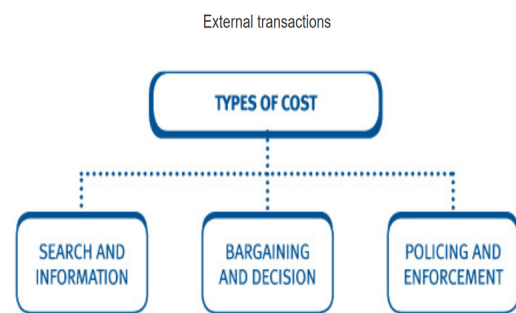


Figure 1. External transactions

From Shelanski & Klein (1995) we learned that TCE analyses how transaction partners protect themselves against dangers that may result from a transaction. The transaction partners choose institutional alternatives that may result in lower transaction cost, in order to protect their transaction specific assets.

After Picot (1981), the transaction costs can be divided in accordance with the phase of transaction (Table 1). This classification allows a better understanding and facilitates the empirical implementation of the transaction cost model. Other classifications are possible, but they will not be further explored in this paper.

Table 1. Transaction costs in dependence of the phase of the transaction

Transaction cost	Where they occur
1) Costs of information	Search and acquisition of information about potential transaction partners and their conditions.
2) Costs of negotiation	Intensity and time consumption of negotiations, contract formulation and reach an agreement.
3) Costs of control and monitoring	Ensuring of compliance of agreed dates, quality, quantity, price and eventually confidentiality.
4) Costs of adaptation	Enforcement of changes in dates, quality, quantity and price due to changing conditions during the agreement period.

Source: Own compilation after Picot (1981), Richter & Furubotn (1999).

According to Heidhues both transacting parties experience transaction costs. They include fix (setup) and variable (running) transaction costs. Information is crucial in all phases of the transaction. To assess transaction costs other indicators than monetary units can be added, since there may be a long-term factor use that may not be quantifiable in monetary units. In many cases, nominal and ordinal comparisons save costly

exact measurements of single transaction costs. According to Williamson, the main importance is not to have exact figures on the transaction costs, but to compare

the different costs resulting from different decisions. Even being a simplification, often ranking lists are enough to show, how important the transaction costs are.

Analysis and methodology. This concept is confirmed by the following provisions: growth in production contributes to deepening specialization and, therefore, increases the effect of a narrower division of labor; Large-scale production allows for better coordination of the various elements of the continuous production process. In this case, the size of the integrated large association ensures a reduction in the risks possible under a contract market system if production is carried out by a group of small producers. In addition, the continuity of proportionality and consistency of the complex production process are very guaranteed, besides that reduced transaction costs associated with risk, as well as administrative costs, research and development costs, and etc.

From a technology point of view, the optimal size of an economic entity is determined by the function of its average and marginal costs, which in most cases change as follows: average costs per unit of output decrease with production growth up to a certain point, and then begin to increase; marginal costs are constantly increasing, which, together with fluctuations in average costs, provides first decreasing and then increasing returns. At the same time, the use of such a simplified model for all existing options for the dynamics of average and marginal costs depending on the technologies used is impossible, since there are likely options for such technologies in which the average cost graph is close to a straight line over a large interval. It is also possible that the average costs per unit of output change subadaptively, that is, they continuously decrease as production increases. At the same time, according to a number of authors, horizontal integration is beneficial. At the same time, in this case, the question arises about the optimal boundaries of production: if technology ensures a constant reduction in average costs, then are there limits to the growth of such an organization?

Most researchers believe that the size of an enterprise is determined by management's ability to manage effectively. In the last decade, a number of works have appeared that explain the need and effectiveness of integrated associations by the role of "asymmetric information". The essence of this theory is that for economic entities working in a single technological chain under market contracting conditions, it is often very difficult, and in the agro-industrial complex it is sometimes impossible to ensure changed supply parameters, regardless of whether this is caused by a deviation from what is described in the contract product quality, timely delivery, supplier dishonesty or unfavorable external conditions. In this case, the interests and income of suppliers of goods and services should be linked to the final profit from the release of the final product, which helps reduce the risk of such phenomena.

However, organizations producing goods and services are not always interested in this, since the above factors that determine the quality indicators of products do not always depend on suppliers, therefore, the latter need protection against the risk associated with the influence of external conditions.

The simplest way out of a situation where partners in the technological chain have "asymmetric information" is either integration or the development of integrated strategies, that is, the conclusion of more complex contracts that can partially eliminate the consequences of "asymmetric information". Such contracts include clauses forcing partners to reduce "information asymmetry."

All these measures, both under a market contract system and under a hierarchy, lead to increased costs for concluding new institutional agreements, as well as for monitoring and appealing their poor quality and (or) incomplete execution. But at the same time, it is not possible to explain the choice between hierarchies, that is, integration and market contracting, using only the factor of production technology, which determines the dynamics of average costs.

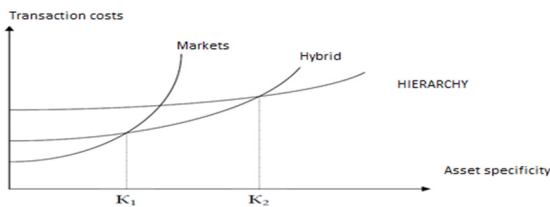
Market agents, making a decision on the method of organizing a transaction based on sufficient information, choose between two alternatives for obtaining a good or service necessary for production: purchase on the market and production within the organization. Most researchers emphasize that the market method is preferable to minimize production costs, since it provides the most effective incentives for the efficient delivery of goods and services to consumers, avoiding the burden of bureaucratic costs. Buyers also benefit from competition from alternative suppliers. The effect of saving management costs, as part of transaction costs, is achieved due to the difference in costs for organizing a transaction within an integrated formation and for completing a market transaction.

As mentioned above, the size of transaction costs is largely determined by the specificity of assets, which in turn affect the costs of their alternative use. Thus, if the specificity of the assets used is low, the costs of their alternative use are low. In this case, a market transaction is appropriate, since it makes it easier to adapt to the terms of the transaction and has the advantage of strong incentives provided by the market. With the increasing specificity of assets and investments in them, their alternative use becomes more difficult, the risk of opportunistic behavior of partners arises, and therefore the costs associated with this sharply increase.

As a result, the benefits of strong incentives for partners' behavior in the market give way to the requirements of guaranteed access to resources and assets, as well as sustainable control over their use. Thus, the choice between two ways of organizing a transaction is a choice between combinations of production and transaction costs caused by market (contractual) interaction and hierarchy as a way of organizing a transaction.

In recent years, a number of attempts have been made in organizational economic theory to substantiate the effectiveness of the creation and functioning of hybrid forms of organizing transactions that are not reducible to either the market or hierarchies. These forms, as their researchers note, include various combinations of elements of both the market and hierarchy as ways of organizing transactions. The essence of the model is that between markets and hierarchies there is a zone corresponding to a level of asset specificity K_1 below which the market method of organizing a transaction is effective (Fig. 1). If the specificity of assets is higher than the upper value of the K_2 zone, then transaction costs caused by the use of the price system, contracting costs and risks associated with this turn out to be so significant that organizing a transaction within a company or an integrated formation is preferable. At the same time, in a zone where the specificity of assets $K_1 < K < K_2$, the choice in favor of either the market or the hierarchy becomes inappropriate; in this zone, a hybrid method of organizing a transaction is effective.

Table 1.
Choosing between three basic ways to organize a transaction.



Currently, as a result of the revolution in the field of information technology, new management structures have emerged that make it possible to combine seemingly completely opposite ways of organizing transactions. A hybrid agreement is concluded when the assets are sufficiently specific to create incentives for opportunistic behavior of market partners along the technological chain and to prevent opportunism "...reliance is required on a contractual agreement that includes a number of guarantees and coordination mechanisms, but at the same time the level of their specificity is insufficient to ensure effectiveness full integration" [2].

In a market system characterized by many independent market agents with full property rights, each of whom independently chooses the trajectory of achieving high profitability, including through outsourcing, the effective size of an enterprise depends not only on its strategy, specialization, availability of auxiliary and servicing divisions, resources, but also from the development of the market for enterprises in production, technical, agricultural and other types of services, that is, cooperation and integration ties within the framework of the regional agro-industrial complex. If the farm has the opportunity to freely maneuver resources, and further specialization is an initiative coming directly from agricultural producers, each of them, based on available resources, will choose a rational production size and decide on the inclusion of a complex of auxiliary and service industries in the enterprise.

One of the main directions of institutional transformations in the emerging agri-food market is the development of institutions for organizing transactions, production and service cooperation, as well as the market for production and infrastructure services. Only in this case can the country ensure freedom of choice by a market agent between effective methods of independent production and transfer of this function to third-party organizations, and significantly reduce the requirements for optimal specialization, as well as the complexity of production and services in an agricultural enterprise. In the absence of such a market for services, the concentration of production should allow the effective use of existing technologies.

One of the main forms of organizing a hybrid way of organizing a transaction is a rationing transaction or cooperation. Its essence is that the existing asymmetry of the legal status of the parties is rationalized by a collective body that differentiates and specifies the rights of acting subjects. Hybrid forms or "...hybrid agreements, which are, as it were, a symbiosis of markets and hierarchy" [1]. Its essence lies in the fact that market agents enter into partnership agreements, relations in which are not regulated by the market as a coordination mechanism, and which are based on commodity exchange, with continuous adaptation of prices that play the role of signals and determine choice. At the same time, the

agents are not involved in the integrated organization, remain legally independent and, although they delegate some of the functions of coordination and management to the leadership of the alliance, through contracts, they independently make the main strategic decisions and bear responsibility for them.

Cooperation is one of the oldest and long-used traditional forms of hybrid agreements, allowing enterprises included in the cooperation to use specific market opportunities that cannot be realized by individual firms. Their advantages are due to the fact that they provide a sufficient degree of structural coordination, where the need for it is dictated by the participation of market agents in a single technological chain, or organizational synergy. This helps reduce uncertainty and reduce risks. In conditions when all members of the alliance remain legally independent, the government, as K. Menard puts it, uses the concept of "power as persuasion," that is, the conscious and voluntary delegation of rights related to decision-making on a certain range of issues in favor of a coordinating authority.

Hybrid organizations see such alliances as a way to obtain additional rents while maintaining organizational autonomy and a certain degree of competition. The most complete definition of hybrid forms given by K. Menard: "Hybrid forms are institutional agreements fixed either in long-term or automatically extended short-term contracts between partners who retain autonomy in decision-making and ownership rights to assets, remaining competitors in the same areas activities, while in others they coordinate actions through formal agreements" [3].

Conclusion. Thus, our research has made it possible to deepen the understanding of agricultural cooperation as a process based on institutional prerequisites associated with the redistribution and voluntary delegation of rights associated with decision-making on a certain range of issues in favor of a coordinating authority. On the other hand, the effectiveness of agricultural cooperation, like any organizational and economic process, must be considered from the point of view of its merits and results. At the same time, it is necessary to see (and this is the difference between our position and the positions of other authors) those negative aspects and phenomena that arise with this method of organizing transactions.

The advantages of a hybrid method of organizing transactions, such as cooperation, compared to a contract or market form, is a significant reduction in the level of uncertainty and risks with a sufficient level of autonomy and adaptability. The advantages of cooperation compared to an integrated organization with a rigid hierarchy and directive planning are the preservation of a high level of independence, autonomy with a sharp reduction in uncertainty and risks and symmetry of information. At the same time, the disadvantages, compared to the market contractual organization of transactions, are the presence in the system of a pronounced level of uncertainty and the presence, albeit minimal, of risk.

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