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ACCOUNTING FOR TRANSACTIONS COSTS OF AGRICULTURAL PRODUCERS IN THE SHADOW ECONOMY

Purpose. *The purpose of the study – to explain the features of disclosure of transaction costs in the accounting of agricultural enterprises, taking into account the peculiarities of the shadow economy; to identify the main factors that lead to transaction costs and make suggestions for improving their accounting.*

Methodology / approach. *The main methods used in this study are: statistical analysis to assess the dynamics and cost structure of agricultural enterprises; graphical and analytical methods used to determine the level of the shadow economy; theoretical generalization and comparison, induction and deduction are used to reveal the content of transaction costs and their values for agricultural producers; the current state and trends of the shadow economy in Ukraine in general and in the agricultural sector in particular are assessed through synthesis and economic analysis.*

Results. *The role of transaction costs as an institutional economic category in the activities of agricultural producers and their impact on the growth of shadow economic processes in agribusiness is studied. The article shows that the share of transaction costs of agricultural enterprises is significant, and this reduces the efficiency of these enterprises. About 8 mln ha of agricultural land are used unofficially, which is about 25 % of all cultivated agricultural land in Ukraine. The classification of factors that contribute to the development of the shadow economy in Ukraine, in particular, the shadow agricultural market, and increase the transaction costs of agricultural producers has been improved. The factors of occurrence of transaction costs and flaws of their coverage by the accounting are investigated, recommendations on their reflection in the accounting are given. The possibilities of reducing the level of transaction costs are substantiated, in particular, due to their more correct accounting, the implementation of information systems and the formation of marketing service cooperatives.*

Originality / scientific novelty. *The transaction costs of agricultural enterprises were further studied. For the first time, the relationship between the main problems of agricultural producers, transaction costs that arise and accounting sub-accounts, which will allow more accurate accounting of these costs, is schematically presented. Our own vision is proposed to identify the transaction costs of agricultural producers under the influence of non-institutional economic theory, their reflection in the methodology of accounting and their minimization through actions of formal and informal accounting institutions.*

Practical value / implications. *The results of the study can be used in business operations of agricultural producers, in particular, the peculiarities of accounting for transaction costs are recommended to be taken into consideration when forming the accounting policy of the entity and also judgment of a professional accountant to be considered. It is also recommended to introduce accounting engineering, ie the format of joint management actions.*

Key words: *transaction costs, shadow economy, agribusiness, agricultural producers, formal and informal accounting institutions.*

Introduction and review of literature. After a deep recession in the transition period of the 1990s, the agricultural sector of Ukraine's economy is growing. Thus, starting in 2013, the added value created in it reached the level of the early 90's, which indicates that agricultural producers are increasingly creating value in the Ukrainian economy, although the gross output of agricultural products remains below 1990 levels. The value added of agriculture per hectare in Ukraine is only a share of similar indicators of other European countries and competitors in world agricultural markets. According to research of V. Budziak and O. Budziak in 2018, value added per hectare was 440 USD in Ukraine, compared to 1100 USD in Poland, 1400 USD in Brazil, 1700 USD in Germany, and 2450 USD in France [1].

Under market conditions, domestic new agricultural formations have faced the problem of cost structure, which is not directly related to changes in the volume of products, works performed and services provided. At the end of the last century, the winner of the Nobel Prize in Economics, D. North pointed out that transaction costs tend to increase, require significant resources and are an important component of the formation of the shadow economy [2; 3]. Their growth is observed in agribusiness, where a significant amount of production, due to flaws in formal rules and the operation of informal institutions falls on the shadow sector, which creates monopolies, forms a significant percentage of costs that do not directly affect the cost of agricultural products.

Many domestic and foreign scientists have studied the impact of the shadow economy on the economic development, in particular on agriculture. Thus, work by V. Ilin et al. [4] is devoted to the study of methods for estimating the volume of the shadow economy. Their article claims that today the shadow economy has become an integral part of the country's economy. This, on the one hand, is a positive factor – according to the authors – because it helps solve a number of complex socio-economic problems of the state, but on the other hand, the size of the shadow economy in Ukraine's gross domestic product (GDP) is so large that it threatens national security.

The results of studies by A. Vysochyna et al. [5] quantify the negative impact of the shadow economy. Thus, an increase in the ratio of the shadow economy to GDP by 1 % leads to a decrease in the Global Innovation Index by 0.5 points (the sample consisted of 9 countries – Azerbaijan, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, Slovenia and Ukraine. The considered time period is 2008–2018, but for Ukraine this is not proven separately – because there are more significant obstacles to innovation (institutional inefficiency, regulatory shortcomings, etc.), although they are also closely intertwined with the shadow processes in the economy.

It is worth noting works by H. Mishchuk et al. [6], which demonstrate that the shadow economy has a negative impact on the standard of living of the part of the population whose income is generated from the redistribution of tax revenues.

All this indicates the importance of considering the factor of the shadow economy in the assessment and accounting of economic activity, including agricultural enterprises. Let's pay attention to a research by P. Quesado et al. [7], who found out that many agricultural managers put accounting and cost control in the background, using only simple control of expenses. Moreover, costs are taken into account in their simplified sense, without a proper classification. This is usually due to the fact that farmers have little knowledge (low level of education) or because they do not realize the importance of adequate cost management for the development of agricultural businesses.

At the same time, in the process of economic activity, each agricultural producer incurs transaction costs that have a significant impact on the financial condition of the enterprise and "support" the shadow sector. As their size is constantly growing, there is a need to take them into account when making management decisions, to ensure their separate accounting and take appropriate action to minimize shadow schemes in agribusiness.

The problem of transaction costs of agricultural producers of Ukraine is associated with the processes of formation of a diversified economy in the countryside, a significant impact on management decisions and the impact on the formation of the shadow economy. Among the main researchers called neo-institutionalists (an updated type of economic institutionalism), there are four Nobel laureates – D. North, R. Coase, O. Williamson and E. Ostrom [2; 3; 8; 9; 10]. In addition, we can note such neo-institutional theorists as A. Alcian, G. Demsetz, A. Greif, J. Barzel, T. Eggertsson, D. Atsemoglu, S. Chung and related areas of theory, such as the analysis of property rights, economic analysis of law, theory of public choice, constitutional economics, theory of collective action, economics of transaction costs, the approach of the main agent, the theory of contractual relations and comparative economic systems. What they have in common is that, unlike neoclassical economics, they are not based on the assumption that the institutional framework is predetermined, but is seen as the object of study. The term "new institutional economy" is used as a general term by different authors for different combinations of these approaches.

O. Williamson and T. Ghani [9], who are ones of the founders of the theory of contracts, define the task of minimizing transaction costs by eliminating the sources of their occurrence. Domestic scientists P. Haidutskyi, O. Kantsurov, G. Kireitsev, V. Litvinenko, O. Laburtseva Y. Popko, O. Sokil, L. Vasa, O. Vlasenko, I. Volkova, D. Liudvenko I. Zamula, V. Zhuk also studied the nature and accounting of transaction costs in agriculture in different periods [11–19], as well as others scientists. In fact, scientists began to pay attention to the importance and significance of accounting for transaction costs of economic entities in domestic agricultural practice at the beginning of the 21st century.

Recently, more and more attention is paid to the study of transaction costs of agricultural producers in foreign countries. In this context, we would note M. Georgiev and A. Roycheva, who studied the transaction costs of agricultural

holdings in Bulgaria. In particular, they developed an analytical framework for practical research into the new institutional economics in agriculture. It covers relationships between agricultural contracts, institutions, markets, property rights and effects of transactions and transaction costs [20].

J. Ismail and H. Tundui [21], studying the transaction costs of agricultural enterprises in Tanzania, emphasize transaction costs as the cost of finding and collecting information and services related to it, as well as the cost of negotiating contracts, and the cost of monitoring and performance of such contracts. These researchers also include part of transportation costs in transaction costs. They emphasize the importance of studying these costs, especially if the distance between producer and consumer is large and the transport infrastructure is poorly developed.

Researchers J. Hou and X. Huo [22] show that levels of the farmers' market participation are mainly determined by the proportional transaction costs and price, while their market integration depends on the fixed transaction costs and price. This suggests that, in order to lower the transaction costs and to enable specialization and market participation, it is necessary to invest and construct the farming infrastructure, update the rural information system, improve the structure of farmer households, and subsidize the cooperative organizations.

Also, the study of transaction costs is carried out by Italian researchers S. Ciliberti et al. [23], Polish researchers K. Mroczek-Dąbrowska and M. Gorynia [24], Turkish researchers A. Aydemir et al. [25], and in the works of many other scholars. It is obvious that despite the fact that a significant number of both domestic and foreign researchers have devoted years to their study in the field of transaction costs, a significant number of issues related to the importance of their reflection in accounting remains unresolved and therefore requires further investigation. In particular, the following question remains under-investigated: by how much segregation and improvement in accounting for transaction costs will contribute to better management of agricultural enterprises, especially under conditions of the shadow economy.

The purpose of the article. The purpose of the study – to explain the features of disclosure of transaction costs in the accounting of agricultural enterprises, taking into account the peculiarities of the shadow economy; to identify the main factors that lead to transaction costs and make suggestions for improving their accounting.

Results and discussion. The process of agricultural production is associated with the occurrence of costs. D. North states: "The total cost of production consists of resource investments of land, labor and capital, and capital is used for transformation, changes in the physical properties of products (size, weight, color, location, chemical composition, etc.) and for implementation transactions – the establishment, protection and enforcement of property rights to products (the right of use, the right to receive income from use, the right to exclude the use by others and the right to exchange) … ie production costs are the sum of transformation and transaction costs" [2; 3, p. 46].

A study of the impact of transaction costs on operations of business entities was started in the 30s of the last century by R. Coase. Based on a number of his articles,

representatives of the new institutional economic theory, formed the famous Coase theorem, which, in fact, comes down to the fact that if there were clear guarantees of property rights and transaction costs approached zero, there would exist a hypothetical mutual trust that would drive a reduction in such costs. In this sense, the classical economic theory derived the basic tenets of operations of business entities, without taking into account transaction costs.

The economic literature provides many approaches to the interpretation and classification of transaction costs. Characteristically, in the institutional theory "there is no clear definition of transaction costs", although in neoclassical economic theory there is also no clear definition of production costs. In the context of the subject of our article it is worth noting such researchers of agricultural economics as P. Haidutskyi and V. Zhuk [12; 13; 14], who defined transaction costs as the cost of supporting business activities, often dependent on the institutional environment. They proposed the following classification:

- costs of business operation (not production, but rather organizational and legal support);
- cost of finding and collecting information required for conducting business (and not just for concluding and implementing contracts);
- cost of concluding agreements and monitoring the implementation of their conditions (including the costs of preventing opportunistic behavior of counterparties and competitors and losses from the negative impact of such behavior);
- costs of lobbying own interests through professional associations and organizations;
- costs of "staff compliance" (search, training and reskilling of employees);
- costs of establishing and maintaining contacts (with stakeholders who have potential or real institutional interests in business);
- costs due to institutions of public trust (costs for independent business evaluation, costs for mandatory audit, etc.);
- costs of socio-environmental compliance.

This classification largely corresponds to the classification proposed by the Corporate Finance Institute [26]. In general, supporting such a classification of transaction costs, we can conclude that these are costs that are directly related to institutional theory and arise under the influence of the functioning of formal and informal institutions of society.

One of the evidences of the importance of understanding and taking into account the accounting of transaction costs is also the opinion of the farmers themselves, which was obtained through sociological surveys. Thus, according to a sociological study conducted by O. Vlasenko and I. Volkova [18], the heads of 32 agricultural enterprises of Zhytomyr region were asked to assess the availability of transaction costs. The results of the study are presented in Figure 1.

The presented data illustrate the significant predominance of losses (funds that cannot be accounted for and in accordance with the formal accounting rules attributed to costs, ie in fact the value of lost business opportunities) over costs (costs that can

be considered indirect). According to the survey, between 74 % and 91 % of respondents incurred transaction costs.

In our opinion, the liberal economic reforms that started in Ukraine's agriculture in the mid-1990s were initiated without taking into account the impact of transaction costs. The idea was to create a small or medium-sized farming business that would reduce administrative and overhead costs and, through innovation, increase productivity and reduce basic production costs. The problems of newly created producers were exacerbated by the inconsistency of actions in the markets of material resources and agricultural products, which became key in the formation of the shadow market, as it gave rise to a large number of intermediaries. These intermediaries were not directly involved in agricultural production, and transferred much of the value added from sales to the shadow sector. High prices for material and technical resources purchased for its production from intermediaries "laundered" working capital, which prevented producers from developing their business and stimulated the growth of transaction costs.

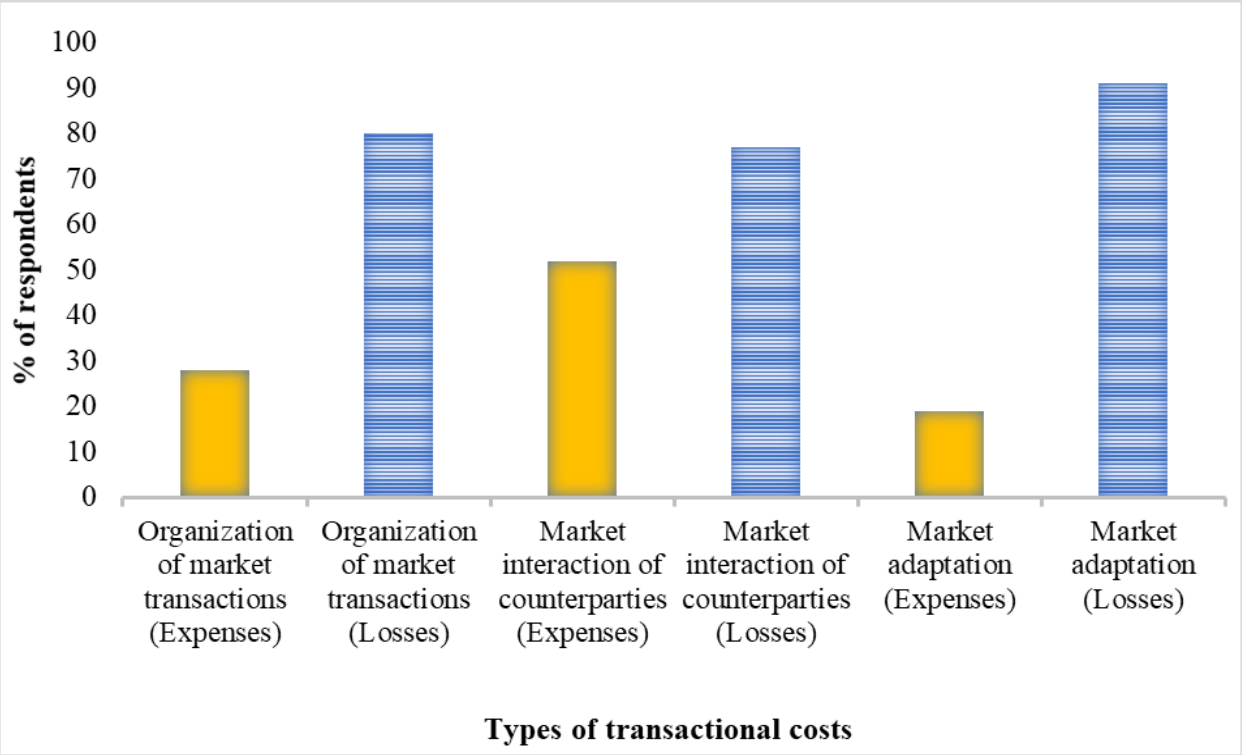

Figure 1. Distribution of respondents' answers on the presence of transaction costs in terms of expenses and losses, %

Source: based on [18].

To understand the importance of studying the transaction costs of agricultural enterprises, we will consider the cost structure of these enterprises over the past three years, paying attention to indirect costs, because these costs are most associated with transactional (Table 1).

As can be seen from the data, the share of indirect cost, which most likely includes part of the transaction costs, is quite high – it is higher than labor cost almost three times, although there is a tendency to reduce it in 2019–2020 (while the total

cost increases). In a shadow economy, transaction costs, especially if they have a corruption component, may be reflected in other cost items that are not related to them, at first glance. On the other hand, the real labor cost can be much higher than stated – because of the salary paid by cash in envelopes. Therefore, official statistics, taking into account information on the level of the shadow economy in Ukraine, may differ to some extent from the real situation in the agricultural sector. This will also apply to transaction costs, which are significantly prone to shadowing.

Table 1

Costs structure of agricultural production (services) in all enterprises of Ukraine in 2018–2020[1]

Types of costs	All enterprises[2]		Including private farms	
	mln UAH	% total costs	mln UAH	% total costs
Costs structure in 2018				
Costs – total	442993.4	100.0	68397.4	100.0
Direct costs – total	247997.2	56.0	41524.8	60.7
Labor costs	25234.4	5.7	3467.8	5.1
Other direct costs – total	95016.8	21.4	15597.1	22.8
Indirect costs – total	74745.0	16.9	7807.7	11.4
Costs structure in 2019				
Costs – total	463271.6	100.0	78580.2	100.0
Direct costs – total	266918.0	57.7	47299.5	60.2
Labor costs	29729.6	6.4	4435.4	5.6
Other direct costs – total	98849.9	21.3	18696.2	23.8
Indirect costs – total	67774.1	14.6	8149.1	10.4
Costs structure in 2020				
Costs – total	441529.6	100.0	76567.4	100.0
Direct costs – total	245959.8	55.7	44138,4	57.6
Labor costs	29932.5	6.8	4682.1	6.1
Other direct costs – total	103553.9	23.4	19718.9	25.8
Indirect costs – total	62083.4	14.1	8028.0	10.5

Notes. 1. Data exclude the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and a part of temporarily occupied territories in the Donetsk and Luhansk regions.

2. Information is compiled by enterprises with the main economic activity "Growing of non-perennial crops", "Growing of perennial crops", "Plant propagation", "Animal production", "Mixed farming", "Support activities to agriculture and post-harvest crop activities" and "Processing and preserving of poultry meat" (codes 01.1 − 01.6 and 10.12 by NACE Rev. 2 – 2006).

Source: compiled on the basis of [27].

According to experts, about 8 mln ha of agricultural land are used unofficially (Table 2), which is about 25 % of all cultivated agricultural land in Ukraine (excluding the Autonomous Republic of Crimea and the temporarily occupied districts of Donetsk and Luhansk regions) and about 12 % of agricultural products are produced in the shadows. At the same time, according to B. Kelmanson et al. [28], in European countries up to 20 % of agricultural GDP is in the shadows: eg. 15 % in Italy and Poland, 12 % in Germany and Spain, 20 % in Turkey.

Table 2

Distribution of agricultural land of Ukraine by types of land use, 2020

Indicator	Land area, mln ha	Weight, %
Total agricultural land that can be cultivated*	33.0	100.0
Land is legally cultivated by legal entities	21.9	66.0
Used by rural households (up to 1 ha) – low risk of shadow tillage	1.5	5.0
Used by rural households (from 1 to 5 ha) – a high risk of shadow tillage	1.5	5.0
Potential shadow tillage	8.1	25.0

Note. * Area of arable lands of Ukraine.

Source: calculated according to the State Geocadastre of Ukraine and own research.

A significant part of land in Ukraine is taxed under the preferential taxation system (60 %), 6 % – is on the general system. Households are mainly payers of land tax (34 %) (Table 3).

Table 3

Distribution of agricultural lands of Ukraine by types of taxpayers, 2020

Indicator	Land area, mln ha	Weight, %
Total agricultural land that can be cultivated*	33.0	100.0
Cultivated by payers of unified tax (preferential taxation system, group 4)	19.8	60.0
Cultivated by payers of income tax (under general taxation system)	2.1	6.0
Used by rural households, registered within rural settlements (land tax payers)	5.3	16.0
Used by individual persons registered outside rural settlements (payers of tax land)	5.8	18.0

Note. * Area of arable lands of Ukraine.

Source: calculated according to the State Tax Service of Ukraine.

However, it is obvious that about 44 % of the land available to households is used for production of marketable products (Table 4). Although they are not properly taxed. There is no cost accounting in these households either.

Table 4

Agricultural lands of Ukraine used by households, 2020

Area of land under cultivation, ha	Number of households, thsd. units	Share of households, %	The total area of land under cultivation, ha	Share area, %	The average area of land under cultivation, ha
0–1.0	3586.5	79.7	1510596	28.0	0.4
1.1–5.0	751.5	16.7	1494639	28.0	2.0
5.1–10.0	99.0	2.2	670194	13.0	7.0
More 10.0	63.0	1.4	1643571	31.0	26.0
Total	4500.0	100.0	5319000	100.0	1.2

Source: calculated according to the State Geocadastre of Ukraine and own research.

Consider the level of the shadow economy in Ukraine in general, and its share in agriculture in particular (Figure 2). Recent studies show that the volume of Ukraine's shadow economy in 2020 reached 30 % of the country's GDP (1.25 trillion UAH of

GDP in 2020) and grew by 3 percentage points over the year. This is stated in a study by the Ministry of Economy of Ukraine [29; 30].

The growth of the indicator was influenced by the introduction of quarantine measures and the desire of businesses in such conditions to reduce the risk of losing limited resources. The growth of the "shadow" level was lower than during previous crises, in particular – the crisis of 2014. At the same time, the traditional channels of shadowing have changed, which has grown among all types of economic activity.

However, the researchers of Kyiv School of Economics – O. Niv'ievskyi and O. Halytsia [30] note – and we agree with them – that there is no comprehensive and accurate study that could give a detailed assessment of the shadow market. Research conducted by KSE provides the following information: market participants estimate that about 40 % of cereals, 10–30 % of oilseeds are sold informally and about 30 % of agricultural land is cultivated informally. Thus, in general, the perceived share of shadow agricultural markets and land is about 30 %, which roughly corresponds to the share of Ukraine's shadow economy as a whole. However, there are studies that show that Ukraine's shadow economy accounts for almost half of GDP [31].

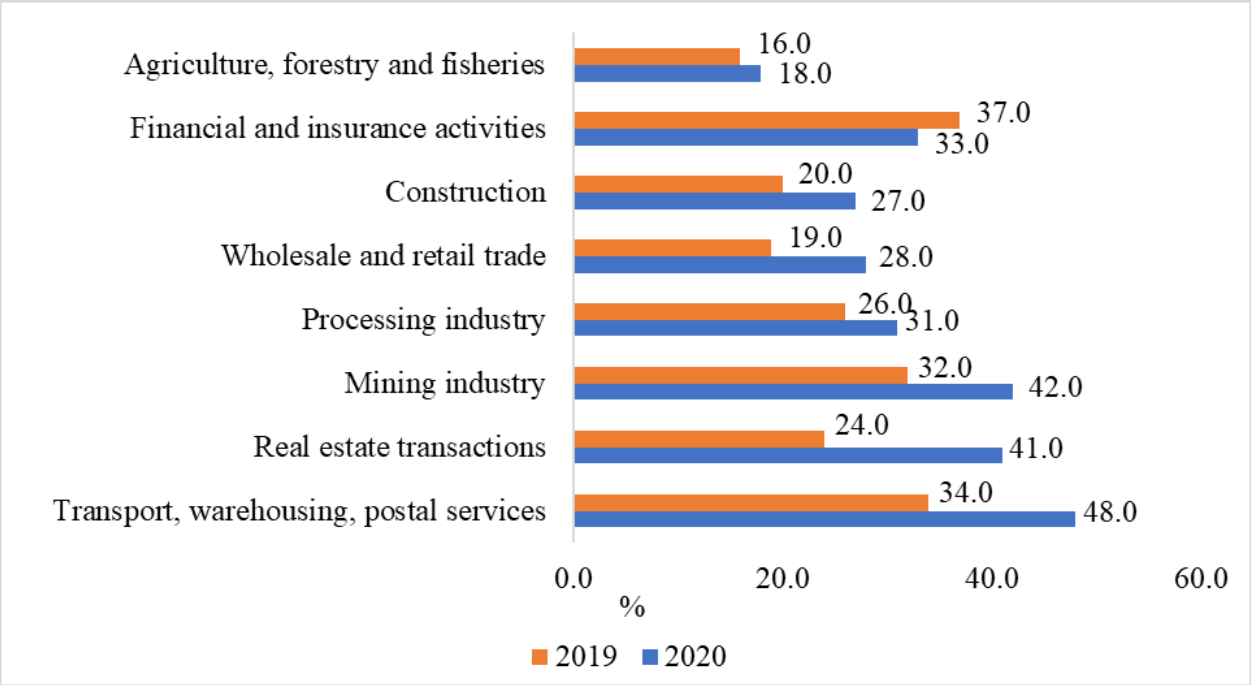

Figure 2. The level of the shadow economy by type of economic activity (% of the volume of official activity according to foreign economic activity)

Source: [32].

It can be concluded from the Figure 2 that agriculture is much less exposed to shadowing than other areas. However, in our opinion, this is not entirely true. It is quite difficult to single out the shadow economy in agriculture, as logistics schemes link it to other industries, including mechanical engineering, chemical fertilizer production, processing and other industries, so the shadowing factor has a general effect.

Researchers identify a number of factors that contribute to the development of the shadow agricultural market in Ukraine and increase transaction costs. In

particular, studies by O. Tylchyk et al. show the following groups of determinants of the shadow economy: 1) social; 2) economic; 3) legal [33]. Having also read the study of the State Financial Monitoring Service of Ukraine and based on the development of other sources [34], we propose the following classification of factors of growth of the shadow agricultural market (Table 5).

Table 5

Factors of growth of the shadow agricultural market

Factors of general influence	Factors specific to the agricultural sector
Low level of protection of property rights (including intellectual) and investors' rights	A significant percentage of informal land lease agreements and the general state of land management in Ukraine
Tolerant attitude of society to the shadow economy, high level of corruption	High level of shadowing of the supply chain of agricultural producers with material values
Low liquidity of stock market	
Imperfection of the judicial system	Dispersion of agricultural enterprises in order to avoid taxation
Optimization of hiring costs, through payment of remuneration "in an envelope"	Abuse and corruption in the field of land relations
Inefficiency of the banking system	Existence of agricultural enterprises operating without proper registration
The presence of uncontrolled territories occupied by Russia	Small and even medium-sized farmers have limited access to bank lending
Complex and costly tax administration and VAT-related corruption	

Source: authors' development on the basis [15; 16].

Significant "shadowing" of agro-industrial relations leads to a decrease in the efficiency of agricultural enterprises due to inefficient allocation of resources, and causes a shortfall in budget revenues. However, in our opinion, this is not all the negative consequences. It is obvious that the agro-industrial sector is developing extremely fast, and we are talking primarily about scientific and technological progress in this area. So, let's look at the study the future of agriculture, published recently in the journal Economist [35]. It describes in detail the main directions and achievements in the field of new technologies: approaches to irrigation, genetic engineering, the use of drones to control crops and work of workers, etc. It is obvious that in the conditions of the shadow economy and high transaction costs, domestic agricultural enterprises are limited in access to these technologies, which may have negative consequences in the long run. After all, the implementation of such technologies usually requires bank lending, or other sources of financial resources that are not available to everyone.

In the realities of Ukrainian agribusiness, business owners and farmers face challenges that lie beyond their specific competencies. In many cases, this is due to institutional factors, especially informal ones, which generate transaction costs. Therefore, an entrepreneur who is better at manipulating these costs or dealing with officials is more successful than one who is only concerned with production. Transaction costs of agricultural producers, which are difficult to "reproduce",

according to modern accounting methodology, are facts that occur in the external environment and are not part of the enterprise system, however, change the behavior of the system.

Thus, Figure 3 shows the general scheme of construction of accounting for the activities of agricultural enterprises.

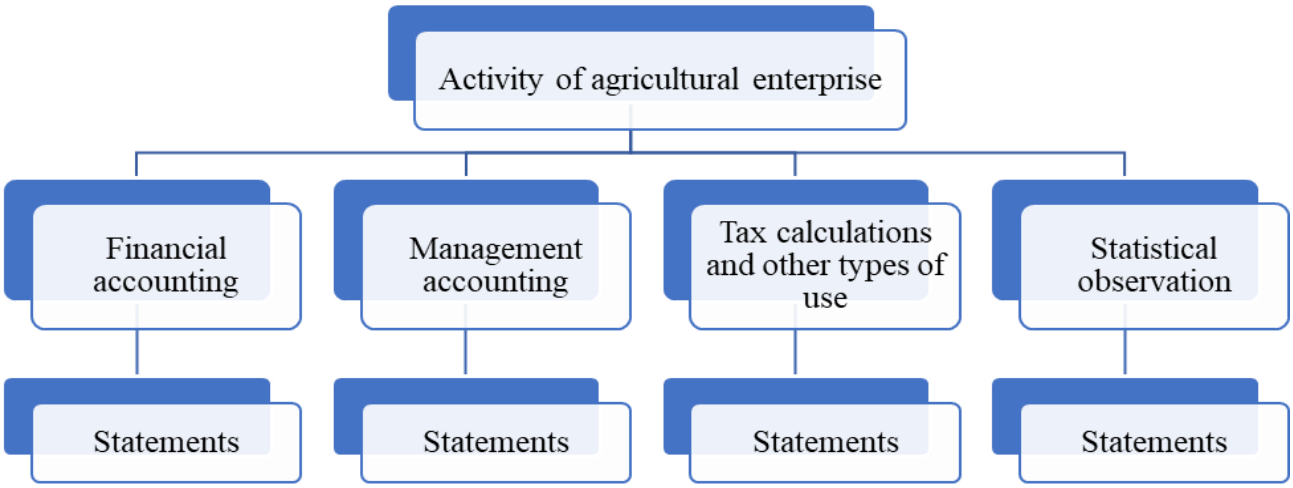

Figure 3. Formation of information in the accounting of agricultural enterprises

Source: authors' development on the basis [15].

Given that statistical observations are usually used to obtain information that is not formed by financial and management accounting, it is advisable to divide all business records, which collect factual information, into:

- business accounting, information which characterizes the activities of enterprises;
- statistical observations, which are designed to obtain information that is not reflected in the reporting of enterprises. The latter can be collected by statistical authorities at enterprises, if they either do not report (for example, household farms), or data are not contained in the report (except for observations aimed at verifying the accuracy of already submitted data);
- observations that allow obtaining data on other events in society (family budget, censuses, etc.).

All these elements will take into account, amongst others, transaction costs, but they cannot always be properly identified and taken into account in full.

Figure 4 shows the relationship between the main problems of Ukrainian agricultural producers (according to expert estimates), the transaction costs that arise (some of them can be formally measured, and some remain unidentified) and the reflection of these costs in accounting. Expert assessments are presented mainly by data, "Harvest Country" – an enterprise of the Sumy region, which is engaged in growing crops. It is part of the structure of the MHP agro-industrial holding; as well as other experts.

Of course, in addition to these specific problems, experts also identify others of a general nature: legislative turbulence, inconsistency of public policy in the agricultural sector and taxation, pressure on business from fiscal and regulatory

authorities [36]. In addition, weather and climatic factors are always relevant for this area of activity. It is also worth noting the cost of corruption.

As can be seen from the Figure 4, the problems of agricultural producers lead to certain transaction costs, which need to be reflected in accounting. This scheme also suggests possible sub-accounts that will allow accounting for transaction costs more fully and accurately. That is, this scheme allows tracking the relationship between the problems of agricultural producers and improvements in accounting, which will more accurately reflect the monetary costs.

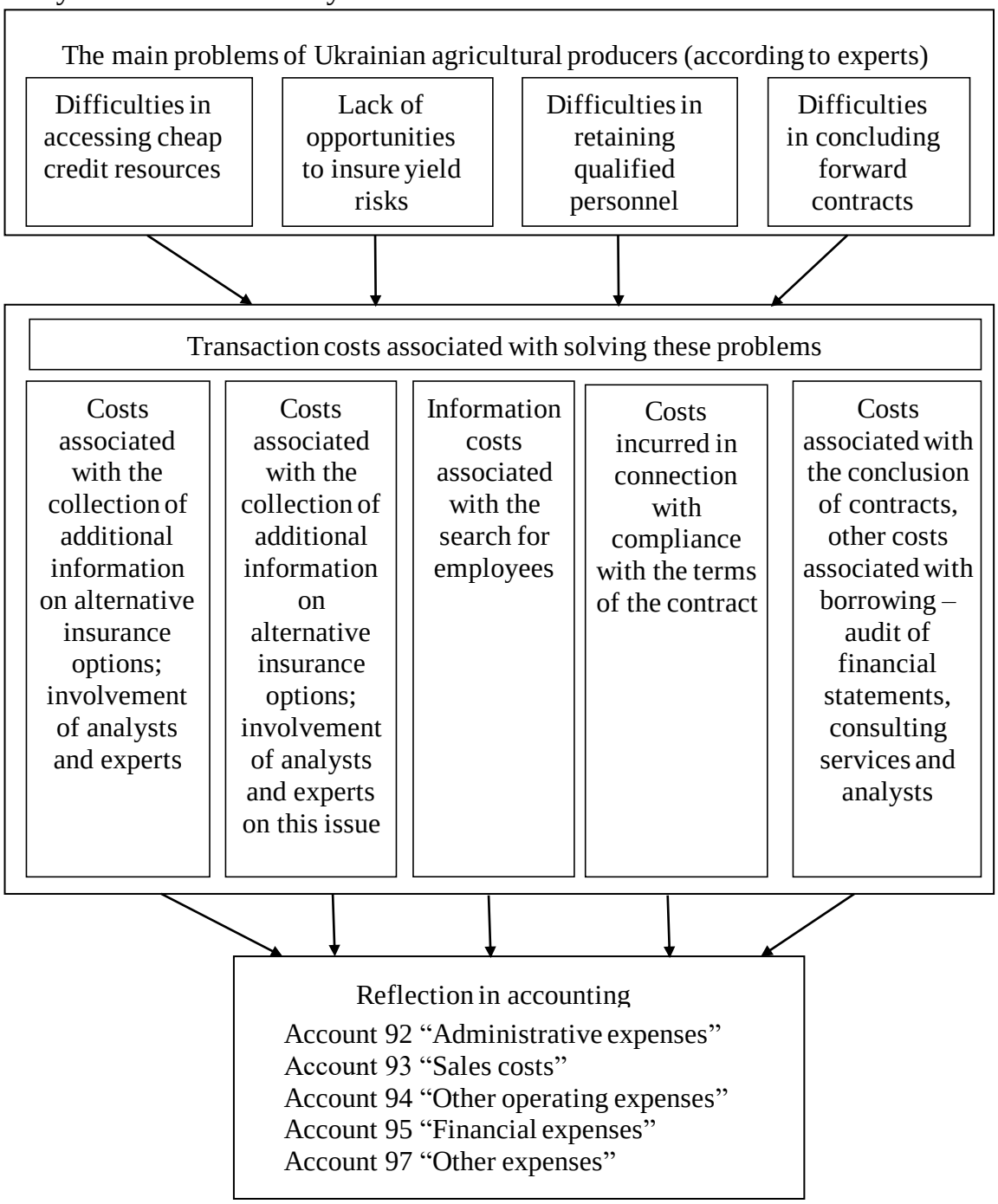

Figure 4. The relationship between the main problems of agricultural producers, transaction costs and their reflection in accounting

Source: own development based on [36].

In our opinion, the transaction costs associated with the activities of agricultural producers (according to Figure 4) can be identified quite clearly, and according to experts, and according to investigation of O. Miasyshchev [29] they can be high. Therefore, we consider it appropriate to indicate in analytical accounting the nature of the origin of these costs and to form more detailed accounting information for enterprise management, indicating the peculiarities of the formation of these costs [37].

According to domestic scholars, it is advisable to allocate a separate class of accounts in the Chart of Accounts: it can be a quite stand-alone class (several accounts) or additions to the 8th class of accounts. Thus, let's refer to some recommendations on this question. Ukrainian scientists, in particular, D. Liudvenko [19], propose to allocate separate sub-accounts within the framework of the accounts shown in Figure 4. Developing further and complementing his approach, we propose to account 93 "Sales Costs" to provide the following sub-accounts:

- 9311 "Transaction costs associated with the conclusion of sales contracts";
- 9312 "Transaction costs associated with the implementation of the terms of the sales contract";
- 9313 "Transaction costs associated with the collection of consumer information";
- 9314 "Other transaction costs of sales activities".

It should be noted that the allocation of sub-accounts can be carried out by the managing entity in accordance with the peculiarities of its activities and the vision of the need for this accountant and head of the enterprise.

These issues, in our opinion, should be included in the accounting policy of the enterprise and developed not only at the level of accounting but also at the level of enterprise management, because it is more complete reflection in cost accounting (taking into account transaction costs, which, without proper treatment, are disguised under other types of costs, and it is not possible to estimate their amount adequately) that will enable a more accurate analysis of costs, assessment of their level and impact on performance, and making the right management decisions.

An important feature of the object under study is the lack of categories, transaction costs, in the formal accounting rules, both domestic and international. Although the considered accounting rules are of a recommendatory nature and determine the conceptual provisions for the formation of accounting information on such costs as: costs of research and development, losses from depreciation of inventories, bad debts and more. However, we do not find definitions of transaction costs. This indicates that according to the formal rules, the transaction costs can include part of the operating and a significant part of the costs of the period, which are accounted for in accounts of class 9 (92, 93, 94 accounts, respectively). It should be borne in mind that the principles, methods and procedures of accounting for costs to reflect them accurately in the financial statements of the entity are reflected in the accounting policy.

In the same way, the institution of professional judgment of an accountant,

which is an economic entity, finds its expression and should be reflected in accounting if it does not comply with accounting legislation. Also, management decisions regarding the reflection of accounting objects, including costs, can be made by an accountant on the basis of the legally prescribed principle of predominance of substance over form, when transactions are accounted for according to their essence, and not only on the basis of legal form.

One of the ways to develop further the accounting of transaction costs, and most importantly their optimization by business entities can be creative accounting, which can act as accounting engineering, ie the format of joint management actions to ensure compliance with strategic goals and requirements of the management vertical. This has a significant effect on minimizing the transaction costs, which are directly related to the effectiveness of decisions.

In turn, the founders of situational accounting theory draw attention to the need to focus accounting on the facts that are valuable for business management through a scheme of economic situations that can be used in possible decision-making models. In addition, it is based on the situational nature of the formation of primary accounting information, which creates the preconditions for inclusion in the objects of accounting objects of the environment, information about which ensures the adoption of sound management decisions [22].

With the widespread use of information systems and internet technologies, which leads to a change in the logic of economic processes, new ways of coexistence of business entities in agribusiness are being formed. In this sense, their economic communication system is interactive, that is, the direct connection of sellers and buyers through websites on the internet. As a result, transaction costs are automatically reduced, as network platforms displace traditional intermediaries and consumers cooperate directly with manufacturers, minimizing transaction costs and bringing in a large number of small agricultural producers out of the shadows, possibly through the formation of marketing service cooperatives. For their founders, they should become "controlled intermediaries" that create competition with commercial structures, as well as help producers to integrate in those areas of agribusiness that provide additional economic benefits. As practice shows, service cooperation should be developed both on a territorial and sectoral basis. Marketing service cooperatives are organizations that, without attracting significant capital funds, show the benefits for agricultural producers that they receive from group actions outside of production activities, minimize transaction costs and the shadow economy. The mission of the service cooperative is also the social aspect of increasing the welfare and quality of life of members of the cooperative and their families, the level of their education and culture, the development of social infrastructure in rural areas.

Conclusions. The reorganization of collective agricultural enterprises and land privatization formed a diversified agricultural economy of Ukraine, characterized by high transaction costs, which caters for a significant shadow economy. In general, transaction costs are costs that accompany the relationship of economic parties in the

conclusion of contracts, they are one of the central concepts of the new institutional economy. The article reviews the study of transaction costs by domestic and foreign researchers, and shows that the share of indirect costs, that are most likely to include part of transaction costs, is high in agricultural enterprises of Ukraine (more than 14 % of total costs), although there is a tendency to reduce it by 2.8 percentage points within 3 years. This indicates the need to reflect them in the account properly, in order to use the data for further analysis and management of this type of costs. It is also noted that the high share of transaction costs reduces the efficiency of agricultural enterprises, so reducing their level is a priority, and it is the most adequate reflection of these costs in accounting that contributes to solving this problem.

Based on the study of scientific sources, the authors classified the factors that contribute to the development of the shadow economy in Ukraine, in particular, the shadow agricultural market, and increase the transaction costs of agricultural enterprises. According to the data on the level of the shadow economy by type of economic activity, it can be seen that agriculture is largely affected by the shadow economy both directly and through interaction with related activities (processing, trade, etc.). About 8 mln ha of agricultural land are used unofficially, which is about 25 % of all cultivated agricultural land in Ukraine. Correct reflection in the accounting of transaction costs allows taking into account more fully the costs associated with the shadow economy, which will allow making more informed decisions about costs and management of the enterprise as a whole.

According to the formal rules, the object of accounting is only those transaction costs that are the result of business operations of the entity and recorded in the primary documents and the implementation of which does not contradict domestic law. Practice shows that the methodology of cost accounting does not provide information on a significant amount of transaction costs that can be identified and measured by elements of the method of accounting. Formal tools for the formation of information about the objects of accounting in modern conditions can be the accounting policy of the business entity and the professional judgment of the accountant. This can be transformed into the formation of creative accounting and act as accounting engineering, ie the format of joint management actions. The article presents the authors' vision of the relationship between the main problems faced by agricultural producers at present, transaction costs incurred in solving them and possible adjustments in the accounting system, in particular, indicates which accounts can be used and the feasibility of appropriate sub-accounts.

It is noted that the widespread use of information systems and internet technologies leads to automatic reduction of transaction costs, due to the fact that network platforms are displacing traditional intermediaries, and consumers are directly cooperating with manufacturers. Another opportunity for reducing transaction costs is the formation of marketing service cooperatives that help producers integrate into those areas of agribusiness that provide additional economic benefits and minimize the shadow economy in agriculture.

Prospects for further research on this topic are a more detailed study of the factors of the shadow economy, in particular, conducting detailed sociological surveys on the opinion of businesses on this issue, further study of the relationship between factors affecting the activities of agricultural producers and transaction costs and presenting it in the form of an econometric model with its further processing.

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