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MODIFICATION OF ESTIMATE STANDARDS FOR PRICING IN CONSTRUCTION

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The article states that over the years of independence, the construction industry has gone through a thorny path of trial and error, since at the initial stages of its formation, construction organizations did not have sufficient knowledge and practical skills, they worked according to old, still Soviet standards. At present, the experience of Ukrainian builders is much greater, enriched by the new Estimated Norms of Ukraine in the form of two Guidelines - "Guidelines for determining the cost of construction" and "Guidelines for determining the cost of design, scientific design, survey work and examination of design documentation for construction". However, despite this, the issues of the procedure for accounting for the cost of construction products or construction work of transaction costs still remain unresolved in construction practice, which significantly complicates the pricing procedure in construction. For a clear understanding of the essence of the concept of "transaction costs", its interpretation in the reference literature and among scientists is considered. It is stated that a theoretical consensus on the issue, which in fact is transaction costs, has not yet been reached. The author's definition of traction costs is proposed as costs associated with the organization of interaction and coordination of relationships between business entities, which are aimed at creating conditions for the effective conduct of economic activities and provide for a decrease in economic benefits due to the disposal of assets or hidden losses, as a result of the opacity of the economic environment and the asymmetry of market information, or an increase in the obligations associated with the maintenance of the business partnership process. The necessity of making additions and adjustments to the Estimated Standards of Ukraine "Guidelines for determining the cost of construction" in terms of establishing standards for transaction costs for construction projects is proved. Clearly formulated proposals for the modification of estimated standards for pricing in construction, the implementation of which in practice will allow: to determine a more realistic cost of construction and construction work; ensure strict control over the targeted use of funds allocated to finance construction projects, as well as introduce a set of effective measures to maintain an adequate state construction policy, supported by effective institutions for regulating the activities of contractors in the construction sector.

Keywords: estimate norms, estimate standards, pricing in construction, transaction costs, cost of construction and construction works.

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Introduction and problem statement

The development of the construction sector of the economy in the context of Ukraine's recovery from the consequences of the war is of great importance. However, its acceleration is complicated by shadow activity, high transaction costs of legalization and bureaucracy of power structures.

The key reasons for the development of shadow activity in construction are the imperfect regulatory framework and the complexity of construction activities, which are accompanied by many problems at all stages of its implementation — from the process

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of acquiring a land plot and going through imperfect permitting procedures to putting the facility into operation. These problems are connected not only with the policy of developers, but also with the state of adjacent markets, the presence of administrative barriers, the excessive number of which hinders entrepreneurial activity and contributes to the emergence of monopoly structures, which hinders the development of construction, hinders the improvement of its quality, overestimates the cost of construction products and reduces its availability for consumers [1, c. 22].

Therefore, the issues of developing and implementing a set of effective measures to maintain an adequate state construction policy, supported by effective institutions for regulating the activities of contractors in the construction sector, and, above all, estimated standards and norms, become relevant.

Analysis of recent research and publications

Currently, the issue of estimated standards in construction is in the center of attention of scientists and practitioners, which is primarily related to the importance of the construction industry in the recovery of the economy of Ukraine from the consequences of the war and the reform of the system for the development and approval of estimated standards and standards for pricing in construction, initiated with the entry into force of the Law of Ukraine dated September 20, 2019 № 124 "On Amendments to Certain Legislative Acts of Ukraine in Connection with the Adoption of the Law of Ukraine "On Standardization" (hereinafter - Law \mathbb{N} 124) [2]. In our opinion, the works of Pinda Yu.V. [1], Gerasimenko T.V. [9], Shesterniak M.M. [10], Zagorodniy A. G., Voznyuk G.L. [12], Matthews R.C.O. [13], Milosnik V.I. [14], Makaluk I.V. [15], Vlasenko O.P. [16], Pavelko O.V. [18], Amusan L.M., Afolabi A., Ojelabi R., Omuh I. and Okagbue H.I. [20], Tang Y., Chen Y., Hua Y., and Fu Y. [21], Kavuma A., Ock J., and Jang H. [22], and others are interesting for research. Undoubtedly, scientists have submitted valid proposals regarding the modification of estimate standards in pricing in construction. On the other hand, practical experience proves that certain issues remain outside the attention of scientists until now. In particular, the question of the procedure for taking into account transaction costs in the cost of construction products or construction works needs its final solution, which justifies the relevance of this study.

The purpose of the article

The purpose of the article is to search for ways to modify the estimated standards for pricing in construction in terms of normalizing transaction costs.

Presentation of the main material of the study with a full justification of the obtained scientific results

The experience of practical work in the field of construction and the study of many production-scientific connections in the construction industry at the level of interpersonal, collective and corporate relations, allows us to note that the principles and methods of pricing in construction still remain imperfect.

Of course, with the entry into force of the Law of Ukraine № 124 dated 20.09.2019 "On Amendments to Certain Legislative Acts of Ukraine in Connection with the Adoption of the Law of Ukraine "On Standardization" (hereinafter – Law \mathbb{N}_{2} 124) [2] in pricing in construction took place real revolutionary changes, as a result of which art. 7 of the Law of Ukraine "On Prices and Pricing" [3] and Article 3 of the Law of Ukraine "On Investment Activities" [4], where it is clearly established that the formation, development and approval of estimated norms and regulations on pricing in construction, determination of the order of their application, verification of compliance with these norms and standards when calculating the cost of construction of objects built with the involvement of budget funds, funds of state and communal enterprises, institutions and organizations, loans granted under state guarantees, are carried out by the central body of executive power, which ensures the formation and implements state policy in the field of construction, urban planning and architecture [3,4], i.e. at the Ministry of Regions of Ukraine.

In order to implement the specified laws, the Ministry of Regions of Ukraine in accordance with the Order "On the procedure for the application of estimation norms and standards on pricing when determining the cost of construction" dated 06.25.21 under № 162 [5] and the Order "On the approval of estimation norms of Ukraine in construction" dated 01.11.2021 under № 281 [6] approved the Costing Standards of Ukraine in the form of two Guidelines — "Guidelines for Determining the Cost of Construction" (hereinafter — the Guidelines) [7] and "Guidelines for Determining the Cost of Design, Scientific Design, Research Works and Examination of Project Documentation for construction" (hereinafter referred to as the Instruction) [8].

These Guidelines are, in essence, the basic rules for the application of estimated norms and standards for pricing in construction, when performing works on reconstruction, capital repair of buildings, buildings and structures of any purpose, their complexes and parts, linear objects of engineering and transport infrastructure, and as well as restoration

of architectural monuments and urban planning [9]. The main innovations with their implementation were:

- the possibility of forming a firm contractual price using consolidated indicators of the cost of works, which will include costs for the wages of construction workers, costs for the operation of construction machines and mechanisms, costs for construction materials, products and structures, general production and administrative costs, other works and costs (including funds to cover costs associated with inflationary processes) and profit per unit of measurement of a certain type of work. Therefore, it is not necessary to additionally decipher and substantiate all the components of the construction cost, it is enough to record the cost of a unit of work. Such liberalization of the pricing system contributes to a significant reduction in the number of documents that are submitted when agreeing on the contractual price and when the contractor hands over the scope of the completed works to the Customer;
- the possibility of applying internationally recognized forms of reporting for completed works during construction;
- the possibility to form a list of work volumes according to international measurement systems, in particular CESMM4, which will allow foreign contractors to conduct their pricing policy more reliably, based on codes and names of work types that are understandable to them;
- the possibility of applying uniform estimation standards, etc. [7].

According to clause 2.3 of the Guidelines [7], the resource element estimate standards currently belong to the estimate standards:

- a) for construction works;
- b) for installation of equipment;
- c) for repair and construction works;
- d) for restoration works;
- e) for commissioning works;
- f) operation of construction machines and mechanisms [7]; etc.

Of course, the application of estimate standards and standards for pricing in construction is mandatory [7, 8]. On the other hand, the estimated standards do not provide for consideration of transaction costs, which, based on practical experience, make up to 10-15% of the cost of construction, reconstruction and other projects.

Undoubtedly, any construction or implementation of construction works is related to the implementation of transactions, and therefore is accompanied by certain costs of economic agents for searching and checking information about the

counterparty, for concluding an agreement, its implementation and protection of conditions, which are generally called transaction costs.

Note that the concept of "transaction costs" appeared in use with the emergence of the theory of transactions, namely with the publication of Ronald Coase's work "The Nature of the Firm" (1937), which stated that:

- carrying out market exchanges always results in costs;
- depending on the situation, the size of these costs may change, sometimes significantly, but will never be zero [9, p. 61].

On the other hand, despite the ancient origin of this concept, it is still not accepted in the estimation business. It can be explained:

- firstly, the conservatism of the accounting system, which is manifested in the inertia of its reaction to the achievements of economic theory;
- secondly, the lack of proper interconnection of the accounting system with the management system that the accounting serves;
- thirdly, by underestimation of the importance of transaction costs by scientists and practitioners [10, p. 195].

In reference economic literature, "transaction costs" are considered as: operational costs over and above the main costs of production and circulation; incidental expenses related to the organization of the case, obtaining information, conducting negotiations by underestimation of the importance of transaction costs by scientists and practitioners [11, p. 1468]; costs of concluding purchase and sale agreements, conducting negotiations, ensuring contract guarantees, as well as costs associated with any deviations from the optimal way of contract implementation by underestimation of the importance of transaction costs by scientists and practitioners [12, p. 152-153].

However, this concept remains debatable among scientists. The authors offer many typologies and classifications of transaction costs, in which each scientist focuses on priority elements from his point of view. Thus, R. Matthews reveals his own relationship to the essence of transaction costs through the characterization of their typology, saying that they consist of the costs of drawing up and concluding a contract, as well as the costs of monitoring compliance with the contract and its implementation, as opposed to transformational costs, which are the costs of actual implementation of the contract by underestimation of the importance of transaction costs by scientists and practitioners [13, p. 906]. M. Shesternyak recommends that

"transaction costs" should be understood as costs for servicing the contract (agreement, contract), costs for compliance by the participants with the agreements reached, costs for making decisions that minimize risks, for developing long-term plans for the business entity's activities (organization of future activities), as well as – revision of contract terms and settlement of debatable issues by underestimation of the importance of transaction costs by scientists and practitioners [10, p. 195]. T. Gerasimenko interprets "transaction costs" as costs arising during the coordination of the activities of economic agents by underestimation of the importance of transaction costs by scientists and practitioners [9, p. 60]. Y. Pinda considers transaction costs as costs related to legal obligations, short-term and long-term contracts, which require detailed documentation and require a simple mutual understanding of the parties. Such costs include the costs of concluding purchase and sale agreements, conducting negotiations, ensuring contract guarantees, as well as costs associated with any deviations from the optimal way of implementing the contract by underestimation of the importance of transaction costs by scientists and practitioners [1, p. 22]. V.I. Myloshyk emphasizes that transaction costs are costs for establishing and securing property rights by underestimation of the importance of transaction costs by scientists and practitioners [14, p. 46]. I.V. Makaliuk defines transaction costs as costs for the organization of the enterprise's relations with subjects of the economic environment and costs for maintenance of production and economic activity by underestimation of the importance of transaction costs by scientists and practitioners [15, p. 316]. Emphasizing the informational and legal aspects of the occurrence of transaction costs, O.V. Vlasenko expresses the opinion that transaction costs are a set of economic costs for the organization and conduct of contracting between subjects of economic relations, which are determined by formal and informal conditions of market functioning by underestimation of the importance of transaction costs by scientists and practitioners [16, p. 55].

So, the generalization of the interpretations of the concept of "transaction costs" made it possible to come to the conclusion that a theoretical consensus regarding what actually are transaction costs has not yet been reached. In the opinion of the author, transaction costs are costs associated with the organization of interaction and coordination of relations between business entities, which are aimed at creating conditions for the effective conduct of business activities and involve a decrease in economic

benefits due to the disposal of assets or hidden losses, as a result of the opacity of economic environment and asymmetry of market information, or the increase of obligations related to the maintenance of the business partnership process.

Like any object studied in the scientific field, transaction costs in order to ensure a clear understanding of their place and role in pricing in construction require not only clear definitions, but also their breakdown into classes and groups, which means guidelines for the implementation of attempts their typology and classification [17, p. 14].

Since transaction costs in construction arise at each stage of the implementation of construction projects, we consider it quite appropriate to classify them by periods, that is, before, during and after the conclusion of contracts:

- ex-ante costs incurred before the exchange (costs for obtaining information about prices, quality of resources, business reputation of the counterparty, etc.);
- ex-interim costs appear in the process of exchange (payment for insurance services, notarization of documents, calculations, etc.);
- ex-post costs arising after the exchange (costs for checking the execution of contracts, quality control, costs for the protection of contracts, etc.) [18, p. 129].

We emphasize that the need for standards of transaction costs in construction originates from the need of economic decision-making entities to have information about what part of the costs incurred for conducting business activities provides an increase in invested capital, as well as information about the economic and market environment, legal and political conditions, specifics of product demand and supply, establishment of economic and industrial business relations, implementation of measures to promote construction products by underestimation of the importance of transaction costs by scientists and practitioners [10, p. 198].

Instead, the main reason for the existence of the need to allocate transaction costs as part of the total costs of construction is the need to establish economic effectiveness and efficiency of management decision-making in construction. Clause 34 of International Accounting Standards 1 by underestimation of the importance of transaction costs by scientists and practitioners [1] generally determines that an economic entity provides information on expenses that do not generate income, but which are incidental to the main activity, if such presentation reflects the essence of events by reducing income by the amount of expenses that arise during

the same operations. And as an example, the costs of fulfilling the terms of contracts to ensure obligations are given by underestimation of the importance of transaction costs by scientists and practitioners [17, p. 16].

In the system of International Financial Reporting Standards, there is a fairly clear condition for detailing the disclosure of information about expenses — materiality. Given the above facts, it is hardly possible to claim that transaction costs are insignificant for business entities and for the economy as a whole.

The lack of methodological approaches to the identification and allocation of such costs in the system of International Financial Reporting Standards (although these costs are significant), in our opinion, is caused by the lack of a theoretical vision of this problem in pricing in construction by underestimation of the importance of transaction costs by scientists and practitioners [17, p. 18].

Equally important is the lack of "interest" (at least so far) in transaction costs on the part of users of estimated information. As soon as the user understands the importance of these expenses for management, he will see in their control an effective reserve for reducing the cost of business activities — the estimators will be required to provide information about such expenses. After all, as stated in Clause 86 of International Accounting Standards 1, disclosure of information about the components of financial results of activity helps users understand the achieved financial results of activity and predict future financial results [19].

Therefore, in order to take into account when determining the cost of construction works or construction products, we consider it necessary to make additions and clarifications to the following sections of the Guidelines by underestimation of the importance of transaction costs by scientists and practitioners [7], namely:

— to supplement point 1.2 of the definition of the concept of "transaction costs" as costs related to the organization of interaction and coordination of relations between economic entities, which are aimed at creating conditions for the effective conduct of economic activity and involve a decrease in economic benefits due to the disposal of assets or hidden losses, as a consequence of the opacity of the economic environment and the asymmetry of market information, or the increase of obligations related to the maintenance of the business partnership process;

— in clause 3.2 of Chapter III "Determining the cost of construction when drawing up investor

estimate documentation", expand the list of costs that should be taken into account when determining the estimated cost of construction by supplementing it with transaction costs. Accordingly, clause 3.5 should be set out in the following way – transaction costs include all costs associated with the conclusion of contracts and the fulfillment of contractual obligations, which are aimed at creating conditions for the effective conduct of business activities and involve a reduction in economic benefits due to the disposal of assets or hidden losses, as a consequence of the opacity of the economic environment and the asymmetry of market information, or the increase of obligations related to the maintenance of the business partnership process; other costs include all other costs that are not included in the cost of construction works and the cost of equipment, furniture and inventory;

— add to Section IV "Determining individual components of the cost of the construction object at the stage of drawing up the investor estimate documentation" paragraph 4.44 "Funds to cover transaction costs" with the following content "the consolidated estimate of the cost of the construction object includes transaction costs not taken into account by the components the cost of the construction object". The size of these costs is determined based on the norms and basis for their calculation established by legislation and is included in separate lines to the consolidated estimate of the cost of the construction object;

— to expand Section V "Determining the value of the construction object when drawing up the bid price of the participant of the procurement procedure (contractual price)" by adding clause 5.53 "Determining funds to cover transaction costs", which should be set out in the following way — to the price of the bid of the participant of the procurement procedure (contractual price) include transaction costs that are not included in the construction cost components. The size of these costs is determined based on the norms and basis for their calculation established by legislation;

— to amend Appendix 25 of the Guidelines [7] by supplementing it with indicators of transaction costs in order to ensure the correctness of the determination of the estimated profit for the construction object. In the event that the object of construction is a complex (building), which includes objects with different classes of consequences (responsibility), as well as a complex (building), which includes objects with one class of consequences (responsibility), that according to aggregate indicators exceed the level established for objects with the

corresponding class of consequences (responsibility), the size of the estimated profit is determined on the basis of the indicators provided for the corresponding class of consequences, which corresponds to the aggregate indicators of all objects that are part of the complex (buildings) (except for the types of work specified in items 4, 5 and 6 of the table in Appendix 25 of the Guidelines by underestimation of the importance of transaction costs by scientists and practitioners [7]).

Provide in the investor estimate documentation and local estimates a line for displaying transaction costs for construction projects in terms of the following stages:

- a) design stage as part of investor estimate documentation:
- b) the stage of determining the price of the offer of the participant of the procurement procedure (the contractual price, which can be fixed or approximate (dynamic));
- c) stages of mutual settlements by clarifying individual value indicators determined at previous stages, depending on the type of contractual price in the manner specified in the contract [18, p. 129].

Conclusions from this study and prospects for further research in this direction

Thus, according to the results of the study, the need to take into account when determining the cost of construction or construction works transaction costs, which should be understood as costs associated with the organization of interaction and coordination of relations between business entities, which are aimed at creating conditions for the effective conduct of economic activity and involve a decrease in economic benefits due to the disposal of assets or hidden losses, as a result of the opacity of the economic environment and asymmetry of market information, or an increase in obligations related to the maintenance of the business partnership process. Accordingly, the need to make additions and corrections to the "Instructions on determining the cost of construction" approved by the Order "On the approval of the estimation norms of Ukraine in construction" dated November 1, 2021 under № 281 has been proven.

Implementation of the submitted proposals in practice will allow: to determine a more realistic cost of construction and construction works; ensure strict control over the targeted use of funds aimed at financing construction objects, as well as introduce a set of effective measures to conduct an adequate state construction policy, supported by effective institutions for regulating the activities of contractors in the construction sector.

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МОДИФІКАЦІЯ КОШТОРИСНИХ НОРМАТИВІВ З ЦІНОУТВОРЕННЯ У БУДІВНИЦТВІ

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У статті констатовано, що впродовж років незалежності галузь будівництва пройшла тернистим шляхом спроб і помилок, оскільки на початкових етапах свого становлення будівельні організації не володіли достатнім обсягом знань і практичних навичок, працювали за старими, ще радянськими стандартами. Наразі ж досвід українських будівельників ϵ значно більшим, збагаченим новими Кошторисними нормами України у вигляді двох Настанов - КНУ «Настанова з визначення вартості будівництва» та КНУ «Настанова з визначення вартості проектних, науково-проектних, вишукувальних робіт та експертизи проектної документації на будівництво». Однак, незважаючи на це, дотепер у будівельній практиці лишаються невирішеними питання порядку врахування у вартості будівельної продукції чи будівельних робіт трансакційних витрат, що суттєво ускладнює порядок ціноутворення у будівництві. Для чіткого розуміння сутності поняття «трансакцційні витрати» розглянуто його трактування у довідковій літературі та серед науковців. Констатовано, що теоретичного консенсусу з питання, що насправді є трансакційними витратами, досі не досягнуто. Тож, запропоновано авторське визначення траксаційних витрат, як витрат, пов'язаних з організацією взаємодії та координації взаємовідносин між суб'єктами господарювання, які спрямовані на створення умов ефективного ведення господарської діяльності та передбачають зменшення економічних вигод внаслідок вибуття активів чи прихованих втрат, як наслідка непрозорості економічного середовища та асиметрії ринкової інформації, або ж збільшення зобов 'язань, пов 'язаних з обслуговуванням процесу ділового партнерства. Доведено необхідність внесення доповнень та коректив до Кошторисних нормативів України «Настанови з визначення вартості будівництва» в частині встановлення нормативів трансакційних витрат за будівельними проектами. Чітко сформульовано пропозиції щодо модифікації кошторисних нормативів з ціноутворення у будівництві, запровадження яких на практииі дозволить: визначати більш реалістичну вартість будівництва та будівельних робіт; забезпечити жорсткий контроль за цільовим використанням коштів, спрямованих на фінансування об'єктів будівництва, а також запровадити комплекс дієвих заходів щодо ведення адекватної державної будівельної політики, підкріпленої дієвими інститутами регулювання діяльності контрагентів будівельного сектора.

Ключові слова: кошторисні норми, кошторисні нормативи, ціноутворення у будівництві, трансакційні витрати, вартість будівництва та будівельних робіт.

MODIFICATION OF ESTIMATE STANDARDS FOR PRICING IN CONSTRUCTION

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The article states that over the years of independence, the construction industry has gone through a thorny path of trial and error, since at the initial stages of its formation, construction organizations did not have sufficient knowledge and practical skills, they worked according to old, still Soviet standards. At present, the experience of Ukrainian builders is much greater, enriched by the new Estimated Norms of Ukraine in the form of two Guidelines -"Guidelines for determining the cost of construction" and "Guidelines for determining the cost of design, scientific design, survey work and examination of design documentation for construction". However, despite this, the issues of the procedure for accounting for the cost of construction products or construction work of transaction costs still remain unresolved in construction practice, which significantly complicates the pricing procedure in construction. For a clear understanding of the essence of the concept of "transaction costs", its interpretation in the reference literature and among scientists is considered. It is stated that a theoretical consensus on the issue. which in fact is transaction costs, has not yet been reached. The author's definition of traction costs is proposed as costs associated with the organization of interaction and coordination of relationships between business entities, which are aimed at creating conditions for the effective conduct of economic activities and provide for a decrease in economic benefits due to the disposal of assets or hidden losses, as a result of the opacity of the economic environment and the asymmetry of market information, or an increase in the obligations associated with the maintenance of the business partnership process. The necessity of making additions and adjustments to the Estimated Standards of Ukraine "Guidelines for determining the cost of construction" in terms of establishing standards for transaction costs for construction projects is proved. Clearly formulated proposals for the modification of estimated standards for pricing in construction, the implementation of which in practice will allow: to determine a more realistic cost of construction and construction work; ensure strict control over the targeted use of funds allocated to finance construction projects, as well as introduce a set of effective measures to maintain an adequate state construction policy, supported by effective institutions for regulating the activities of contractors in the construction sector.

Keywords: estimate norms, estimate standards, pricing in construction, transaction costs, cost of construction and construction works.

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