



Transaction costs and synergy effects in modern corporations

Abstract. Up-to-date integrated structures are managed from a single centre. When such a centre is established, a systemic effect shall arise due to centralisation of several functions at the level of this centre. This effect shall be positive, otherwise the question of reasonability of such centralisation arises. In the accounting system of an integrated structure, all costs borne by the managing company are transactional by nature. Hence, a systemic effect from centralisation stands for saving of those types of transaction costs that result from centralisation of every function: marketing, information, payroll (department), legal support etc. More attention should be paid to the estimation of transaction costs resulting from centralisation of functions at the level of coordinating centre, as this particular type of costs could be easily determined and estimated. In this paper, we propose a formula to estimate the synergy effect resulting from centralization of functions. The costs arisen at the level of the coordinating centre are systematised. A formula to calculate such costs with regard to the standard integrated structure is offered. Particular attention is given to the costs of decision-making: a new type of costs, called costs of consideration, is justified. A simplified procedure for transaction costs management is proposed.

The proposed approach to the assessment of systemic effects to save transaction costs is of high importance for practical activities, as it provides an opportunity to estimate the performance of the whole coordinating centre, evaluate the efficiency of assignment of each function and include positive effects regarding the managing department responsible for implementation of specific centralised functions into the incentive program.

Keywords: Corporation; Transaction Costs; Synergy Effect; Decision-making Transaction Costs; Consideration

JEL Classification: D23; P12; G39

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Про транзакційні витрати та синергетичний ефект у сучасних корпораціях

Анотація

У статті проаналізовано транзакційні витрати, які виникають у результаті централізації ряду функцій на рівні керуючої компанії. Особливу увагу приділено витратам для прийняття управлінських рішень: обґрунтовується новий тип транзакційних витрат – «обмірковування». Запропоновано процедуру управління транзакційними витратами. Зроблено висновок про те, що транзакційні витрати централізації та інтеграції формують системні ефекти, величина яких відображає не тільки рівень ефективності функціонування фірми, а й рівень її динамічної стійкості. Запропоновано формулу розрахунку синергетичного ефекту, який виникає при централізації функцій.

Ключові слова: корпорація; транзакційні витрати; синергетичний ефект; витрати на прийняття рішень; обмірковування.

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К вопросу о транзакционных издержках и синергетическом эффекте в современных корпорациях

Аннотация

В статье рассмотрены транзакционные издержки, которые возникают в результате централизации ряда функций на уровне управляющей компании. Особое внимание уделено расходам на принятие управленческих решений: обосновывается новый тип транзакционных издержек – «обдумывание». Предложена процедура управления транзакционными издержками. Сделан вывод о том, что транзакционные издержки централизации и интеграции формируют системные эффекты, величина которых отражает не только уровень эффективности функционирования фирмы, но и уровень ее динамической устойчивости. Предложена формула расчета синергетического эффекта, который возникает при централизации функций.

Ключевые слова: корпорация; транзакционные издержки; синергетический эффект; затраты на принятие решений; обдумывание.

1. Introduction

A global world is a world of corporation supremacy. Multinational companies (MNC)¹ wield untethered authority not only within a home country, but also extend their influence over all economic communities of the world. As has been reported by the Swiss Federal Institute of Technology (Zurich), 40% of global wealth is controlled by 147 MNC (2011) [1]. Multinational corporations continue to consolidate their assets year by year. According to MCG's (Morris Creative Group) (2011, cit. by A. Lutz, 2012) [2], in 1983, 90% of

American media was owned by 50 companies; in 2011, that same 90% was controlled by 6 companies. The same situation was observed in the food industry - «a handful of multibillion-dollar companies control everything from what we eat to how we dress» (2017) [3]. Ten companies consolidated almost all food assets in the world. Deeper studies of elites made by Robert Gaylon Ross (2017) show that elites control everything significant in the world.

In the context of gradual «line blurring» of the activities of these corporations, an investigation of economic behaviour of such institutions is of key importance in the IT world. It's crucial to understand the basis of institutions' stability, as they

¹ A company whose scope of activity extends to several states.

determine competitive ability of the country, its economic resilience and structural stability. To resist pressure of international corporations, an establishment of powerful, constant and domestic global institutions is required.

Corporations are mainly organised as holdings². A holding is a large hierarchic open system with complex internal and external relations. Complexity of this system depends on a number, as well as on attribute characteristics of its various components and their interaction. All other things being equal, an asset consolidation of the corporate group arises to achieve positive systemic effects, which availability is a key factor of dynamic stability of a holding system.

System effects are generated as a result of integration processes. Such effects appear mainly as a result of savings in transaction costs. The issue of systematisation and measurement the transaction costs remains open to science and practice. This is especially true for the costs that arise when there is a process centralising a number of functions at the level of the coordinating centre. There is no generally accepted formula for calculating the effect that arises from saving this type of costs. Careful study of this issue is required.

2. Brief Literature Review

Academic economists who explore applied aspects of the integrated companies' activities provide theoretical insights.

Scientists, representatives of the neoinstitutional theory adequately worked out and keep working out the issues associated with transaction costs. R. Coase (1993) [5] initiated this trend of research. An outstanding contribution to the theory of transaction costs was made by O. Williamson (1985) [6], Sh. Rosen (1993) [7], O. Hart (2001) [8], H. Demsetz (1993) [9], S.J. P. Milgrom and J. Roberts (2004) [10].

The development of the theory and its implementation into various areas of economics and business are continued by scientists such as E. G. Furubotn and R. Richter (2005) [11], C. Menard, M. Shirley (2008) [12], Q. Zhang, M. Cao (2018) [13], T. Sottinen and L. Vitasaari (2018) [14], R. M. Grüşchow, V. Brettel (2018) [15], K. Fan, E. H. W. Chan and Q. K. Qian (2018) [16] etc.

The issue of measuring the transaction costs and their inclusion in calculations in applied economics and, moreover, in practice, is quite complex and is just beginning to be worked out by scientists. The connection of transaction costs savings with systemic effects has not been studied yet, although according to R. Coase (1993), «the reason of the existence of firms is that some transaction costs within firms are cheaper than similar transactions carried out in markets» [5]. This is an important note for our further discussion.

Another group of authors, among whom are E. A. Gurianova, I. N. Gurianov and S. A. Mechtcheriakova (2014) [17], suggest their own classification of transaction costs. They split them into two groups - internal and external.

The group of internal transaction costs includes:

- 1) costs of collection, storage, and analysis of internal information (plans, identifying resources);
- 2) the costs of coordination (coordination of questions, meetings, influence expenses);
- 3) control costs (including the costs to avoid opportunistic behaviour in the internal environment of the organisation).

The group of external transaction costs includes:

- 1) search costs and processing of external information (pricing, markets, suppliers);
- 2) the costs of negotiating and contracting (conclusion and registration of contracts);
- 3) costs to avoid opportunistic behaviour (losses and costs on the protection against unlawful acts on the part of contractors and public authorities).

The authors conduct a comparison between internal and external costs for the petrochemical industry. They come to the conclusions that internal transaction costs are higher than external costs for petrochemical enterprises. This is due to the fact that these organisations have large dimensions partly

because their structures are included in a single chain. An association in major small disparate organisations' consolidation moves part of external costs into internal transaction costs.

V. M. Marchenko and I. V. Makalyuk (2016), who divide transaction costs into entering and leaving an enterprise as a system, have a similar view of the classification and specify a fraction of transaction investment costs in the cumulative expenditures of enterprises as exemplified by several machine building companies. Yet they do not place the emphasis on their estimation [18].

I. V. Kiryanov (2015) performs an analysis of cost structure and provides decomposition of transaction costs per each type of enterprise costs. He specifies a transaction costs fraction per each type of costs, but does not explain how they are estimated. The author acknowledges that quantitative evaluation of transaction investment costs is possible, but it will not offer a high level of reliability. Besides, an evaluation process is time-taking and complex [19].

V. Holcner, M. Sedlačik and J. Michálek, (2014) who examine and provide new evidence on changes in the costs and other determinants of economic rationality of international sharing of armaments projects, distinguish individual (ITC) and collective (CTC) transaction costs. ITC are traditional transaction costs which occur even if a given contract is implemented by a given government without cooperating with other governments. CTC relate to searching for partners demanding a similar commodity, negotiating terms and conditions of mutual cooperation among partners forming a «weapon system club», and monitoring fulfilment of agreement among partners. Overall transaction costs (TRC) of an internationally shared project then represent the sum of ITC and CTC [20, 223].

Antonio C. L. Nogueira and Walter Bataglia (2012) [21] presented an effort to establish relationships between the approaches of transaction costs and organisational competences in order to explain the choice of governance structures in the manufacturing stage of a product. To that end, they developed a conceptual model to be applied in an empirical study on the governance structures in the Brazilian pharmaceutical sector.

The investigation by K. S. Lee and I. C. L. Ng (2008) follows a theoretic approach in examining transaction cost in order to gain a more precise theoretical understanding of how dyadic interactions involving a buyer and a seller, and triadic interactions involving a buyer and two suppliers, might influence transaction cost [22, 4]. For this purpose they use the game theory, which is the most suitable to understand the relationship between partners who can behave opportunistically.

Movement of production and service processes to other countries or regions, sometimes far from the headquarters of a company, is a permanent practice of many companies, especially MNCs. «The most important reason of this process is mainly decrease in transaction costs, which can be achieved by acquiring knowledge and competences inaccessible in a company, use of cheaper labour force, use of transfer prices as well as transfer of profits to tax havens, etc.» [23].

In the works of scientists who are engaged in the theory of transaction costs, it is implied that these costs are associated with systemic effects.

The general concept of synergy effect estimation involves distinguishing between the scales of the integrated structure before and after consolidation (e.g., can be calculated by discounted cash flow method as a business value). Synergy effect is not estimated for most groups of companies and applied in management accounting for a current management process of the integrated structure. To determine centralised department efficiency, it is reasonable to compare the costs of such department with the costs of a similar one in the market. Based on this information, synergy effect resulting from establishment of such a department can be determined.

V. Y. Baltin and E. V. Skobeleva (2006) propose to estimate synergy effect based on net cash flow forecast, comparing generated flows of companies being a part of a holding,

² In this paper, a holding company stands for a group of companies managed from a single centre.

when they are its business units and if they are separate legal entities (out of integrated consolidation). This approach is absolutely correct. The authors do not point out that such estimation is virtually a time-taking process and there will be low accuracy, as it is challenging to simulate activities of a single enterprise as a standalone unit in a real life. However, it is even more difficult to single out the business unit flowing from a composition of a group of companies without understanding the effects achieved by the integrated structure in case of centralisation and integration [24]. A similar approach is used by the author of paper [25]. Various approaches to the estimation of synergy effects occurred in the groups of companies examined in [26].

Even though it seems obvious that synergy effect in the integrated structures is a result of transaction (along with transformation) costs saving, there are no explicit synergies between the mentioned phenomena (transaction investment costs saving and the related effect) in the consideration of scientists who research these costs and synergy effects. Contemporary authors do not pay due attention to the estimation of transaction costs resulting from centralisation of functions at the level of the coordinating centre, even though this particular type of costs could be easily revealed and estimated.

3. Purpose

The purpose of this paper is systematisation of transaction costs of holdings, associated with centralization of several functions at the level of the coordinating centre to achieve positive systemic effects, as well as establishment of management procedures for transaction costs.

4. Results

The transaction cost management procedure provides the following actions (in a simplified way):

- distinguishing key transaction costs, saved in the case of function centralisation at the level of managing company;
- calculation of centralisation transaction costs;
- making a decision on centralisation of specific type of costs (whether to delegate specific function at the level of the coordinating centre or not);
- determination of cost recording practices in management accounting;
- entering centralisation transaction costs data into management report forms;
- development of an algorithm for cost allocation among holding enterprises referring to products/services.

The transaction costs management procedure shall provide costs monitoring and comparison with similar costs beyond a holding, as well as estimation of synergy effect from centralisation of functions.

Analysing holdings as a system and taking into account the views of some authors [17-18], transaction costs can be classified as follows:

- system entry transaction costs - they include all costs associated with resource inputs in the system of holdings;
- system leave transaction costs; among them there are costs of manufactured product distribution beyond a holding;
- hierarchy transaction costs - these are intracompany transaction costs which include costs associated with coordination and control over transformation function performance. i.e. costs of management and decision-making, costs of politisation³ (group decision-making and influence⁴), costs of internal resource redistribution⁵, costs of opportunist behaviour of holding agents⁶, specification and property rights protection.

Costs of system entry and leave are associated with interaction processes between a holding system and the external

environment and the transaction costs examined in detail by contemporary scientists are peculiar to them.

Let us focus on transaction costs in the «black box», i.e. within a holding. All transaction costs within a multilevel complex system can be considered to be hierarchy costs, i.e. those associated with the implementation of functions within the holding system. Hierarchy of holdings as a system involves subordination of a lower echelon to a higher echelon and provides delegation of part of authorities and responsibilities from subelements to a higher level. Management stands for specific compulsion and violence against the system as part of the environment, designed for standard performance adjustment, defined by initial conditions, initial energy state and exchange processes within the system and with the environment [28, 166].

Hierarchy transaction costs virtually represent the cost of authority/management, i.e. their value indicates the cost of authority for a holding. Centralisation of management and key decision-making is available to complete control over the all adding value chains for the owners and prevent any losses of income beyond the holding system.

Hierarchy transaction costs can be divided into two groups: integration and centralisation transaction costs. As a result, an assessment of systemic effects from integration to centralisation, is conducted (refer to Formulas 1 and 2).

$$S_h = S_c + S_i, \quad (1)$$

where:

S_h - the synergy effect of holding;

S_i - the synergy effect from integration;

S_c - the synergy effect from function centralization, calculated by formula:

$$S_c = \sum_{i=1}^n (\Delta C + E)K, \quad (2)$$

where:

ΔC - transaction cost saving;

E - the additional economic effect;

K - the index of centralization;

n - the number of centralised functions.

An issue of integration is developed sufficiently within a scope of transaction costs theory. The holding chooses one or another way of integration depending on the owner's purposes. The owner makes a decision on integration relying on reasonable considerations not in every instance. Integration is always treated very carefully, as most owners of domestic holdings make a decision to be integrated following a stereotype that each next treatment stage can provide greater added value. This practice demonstrates a general principle, but cannot serve as a single point of reference for decision making, as the specific peculiarities of a certain business should be taken in account. In this paper, we will not consider the transaction costs related to integration. Moreover, R. Coase (1993) concluded that the differences between the vertical and the horizontal integration were of no importance. It is crucial that various functions are virtually brought under a single management process, and the represented production stages make no significant matter [5].

We will consider only those types of transaction costs that accompany the centralisation of functions, i.e. which are related to the implementation of the main range of tasks of strategic nature and/or when making the key decisions for the whole group of companies, carried out by the managing company of the holding:

- 1) costs of information search, consisting of time and resource spend, required for a search, as well as related to its incompleteness and inadequacy;
- 2) costs of negotiating, that include expenditures for negotiation, contract execution and drawing up;
- 3) costs of specification and property rights protection related to protection of property rights for the benefit of the owners and the holding as a whole;

³ The name is borrowed from scientific researches by R. I. Kapelyushnikov (1994) [27].

⁴ They are also highlighted as a separate type of costs by P. Milgrom and J. Roberts, (2004) [10] *ibid*.

⁵ In this paper, not all products and services redistributed within a system are the resources.

⁶ By agents are meant the owners, senior executives of managing company and affiliated companies, managing company of the group, as well as the group subsidiaries.

- 4) costs of opportunist behaviour, i.e. behaviour associated with avoidance of contract performance; this type of costs accompanies virtually every action where there is an economic agent (person);
- 5) costs of management;
- 6) costs of contract execution;
- 7) costs of decision-making; let us add a new type of transaction costs - «consideration» associated with a time of key strategic decision-making.

Transaction costs of information search

Conscious provision of a limited scope of information on enterprise financial figures, volumes, nomenclature and prices for output in contemporary Ukraine raises information search transaction costs. It is difficult to rely on public company data when evaluating business of non-public market player. Consequently, the analysts should work hard to evaluate their businesses, particularly when using the models of similar businesses. This leads to a significant increase in information search transaction costs.

In the world of Internet technologies, the information search and processing are provided much faster than before. Therefore, an information search process also helps to save time spent for it. Coincidentally, time for processing a large scope of received information is increased requiring entirely different mechanisms and tools.

Generally, a managing company provides marketing research and information processing related to operations of the whole group of companies: monitoring of the external environment and conduction of marketing research for business portfolio management (the world economic system, macroeconomic figures of Ukraine, industry-specific indicators etc.) to secure strategic planning, business planning, evaluation of the companies and holdings, as well as M&A deals making in the case of fund raising and forecasting.

Let us mark this type of transaction costs as C_m - marketing costs.

Transaction costs of negotiations

In vertically integrated holdings, the functions of procurements, sales and financial management are often performed at the level of a managing company. Under this approach, transaction costs of negotiation are really cut. For example, to conduct negotiations on credit granting to each legal entity, the appropriate experts have to spend their time to conduct negotiations. We assume that 3 persons participate in negotiations per each enterprise, and the holding consists of 10 enterprises. As a result, 30 persons are involved. In terms of the centralised function of fund raising, we will get an explicit saving, as only 3 persons will have to spend their time (all other things being equal).

Let us mark this type of transaction costs as C_n - costs of negotiations.

Transaction costs of specification and property rights protection

Within a holding, costs relating to property right protection are explicitly saved due to legal centralization of functions. It is expensive enough to sustain the experienced and highly paid experts who can protect the company's interests in court and other institutions. For each separate enterprise, however, this is part of current property right protection policy for managing the company. However, this does not exclude a requirement to provide pre-estimation prior to hiring such experts. Although the legal fees can be lucrative on the date of agreement in the case of outsourcing involvement (hiring a legal firm), one should know that the law offices are interested in a prolonged period of issue resolving, as it is common legal practice to calculate a fee based on the spent time. This process can linger on years and a firm will lose large sums, as well as bear the transaction costs. In the case of skilled professional employment by a holding, it is possible to save on this type of costs.

Let us mark this type of costs as C_r .

Transaction costs of opportunist behaviour

This is the most common type of transaction costs, affecting all hierarchy stages within a holding, as it describes the behavioural characteristics of individuals. In order to

restrict opportunist behaviour within firms, relevant practices (institutes) are established and applied. In such a case, it is important not to overdo, as well as not to harm creative employees.

The centralised functions to control this type of costs include: internal audit, financial policy (fundamentally, any uniform practices and procedures reduce this type of costs significantly, as the experts limit the degree of freedom required to make important financial decisions), planning and budgeting procedures; preparation of reporting, settlement of conflicts, economic resilience, etc.

Let us mark this type of transaction costs associated with opportunist behaviour restriction as C_o .

Costs of management

The managing company of a holding serves as a coordinating centre, activities of which are associated with costs of management or bureaucracy. Within a holding they are as follows: sharing services, incubators for new businesses (referred to a simplified type of costs borne by the managing company until businesses reach a designed capacity), training, instruction, retraining, employee engagement, tax planning, organisation design, functions of special interest and interaction with external institutions.

Let us mark this type of costs as C_{man} .

Costs of contract execution

This type of costs within a holding includes transaction costs associated with the execution of any contracts in case of: M&A deals making; internal financing (cross-subsidization); etc.

Let us mark this type of costs as C_k .

Costs of decision-making

The upper stage of the hierarchy of the holding system is a person that makes the decisions. To gain better understanding of the issue, let us assume that a decision is made individually (by the owner and/or the manager). Now we will speak about the upper stage of hierarchy and strategic decisions (business acquisition, sale, redeployment etc.). Decision-making is a process. And this process flows through time. Time for decision-making requires costs: the process of decision-making itself is not free and demands both time and heavy emotional tension (Shastitko, 2008) [29].

A theory of transaction costs includes such a type of costs as the costs of decision-making delay. To a greater extent, it depends on a degree of economic object opportunism, and is not related to a track of time spent by one or another individual for consideration of such decision. This approach to the consideration of the decision-making process restricts the researcher's abilities, as it misses several important stages of the process related to mental action or consideration: the appearance of idea (thought), its formalised (intuitive) transformation, and only then an objective formation. Moreover, a process of consideration is missed after information processing within the period of decision-making itself. Time spent consideration is not taken into account. It seems appropriate to develop a nominal formula to evaluate transaction costs of decision-making, taking into account time for consideration.

Although a transaction (where at least two agents are involved) is virtually accompanied by transaction costs, we deem it appropriate to add the costs of decision-making just to this type of costs, as they accompany the transaction process and a priori cannot be associated with other types of costs. We will consider the transaction costs of decision-making in an alternative way: as a process through time, divided into parts and processes.

An idea is an initial reference to further actions in the chain. A process of idea incubation may last in different ways: from one moment to many years and, however, it is not accompanied by a process of information collection. In our opinion, this stage is accompanied by the transaction costs of idea generation. This can be evaluated as a value of a person's idea. In this paper, we take it as time spent by person for idea generation. Based on the cost of a working time unit of the specific individual, a value of these costs can be calculated according to the time spent by a certain person for a process of consideration. Why is it acceptable? As a person

does a relatively restricted job during his/her business hours, a working minute of such a person is worth money. If a person spends a portion of time for idea consideration, for example 4 hours out of 8 business hours, this period is reasonably deemed to be time for consideration that costs 4 hours multiplied by the cost of one hour spent by a specialist.

The last stage of the chain is consideration of the obtained results. This process is implemented by a person or persons who make a decision on this issue. This stage may last long enough and, consequently, is accompanied by the costs. We understand that this type of costs cannot be virtually calculated. However, we deem it appropriate to set some time limits for practical activities of the persons who make decisions (including key decisions regarding M&A deals or restructuring), and respectively for the costs. For example, it is required to set the following period for decision-making within a scope of the company's development strategy - 1 month from the date of generalised information receipt to be transformed into specific amounts of costs. It provides sufficient saving for decision-making costs. For detailed information on this type of costs refer to [30].

The whole decision loop is accompanied by the following costs:

$$C_{dm} = C_0 + C_1 + C_2 + C_3 + C_4 + C_5, \tag{3}$$

where:

- C_{dm} - general costs of decision-making;
- C_0 - costs of idea consideration;
- C_1 - costs of information collection;
- C_2 - costs of information generalisation;
- C_3 - costs of information analysis;
- C_4 - costs of consideration of the obtained results (alternatives to idea selection/implementation);
- C_5 - costs of decision-making.

The whole complex of transaction costs resulted from centralization of several functions within a managing company can be presented as follows:

$$C = C_m + C_n + C_l + C_o + C_{man} + C_k + C_{dm}, \tag{4}$$

where:

- C_m - costs of marketing research;
- C_n - costs of negotiations;
- C_l - costs of specification and property right protection;
- C_o - costs of opportunist behaviour;
- C_{man} - costs of management;
- C_k - costs of contract execution;
- C_{dm} - costs of decision-making.

These costs should be shown separately in the earnings statement for management accounting. In practice, this type of costs is usually identified as the operating costs for the managing company. Therefore, let us qualify them as «centralisation costs» (Tables 1 and 2). As a result, these costs will be regularly included in other accounting statements and management accounting (balance sheets, cash flow statements, etc.).

As the managing company's efforts to implement these functions for a certain enterprise differ, the evaluations of the managing company's activities provided by the companies will be different too. It is important not only to estimate the expenses and compare them with the market ones, but also to allocate them properly among the enterprises of the holding in order to transfer to end products and services.

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Tab. 1: Earnings statement distinguishing transaction costs resulted from centralisation of several functions within a managing company for the holding' enterprises

Item	Value (thousand UAH)
Net operating income	
Cost of products sold, including:	
Raw materials	
Tangible costs	
Remuneration	
Energy consumption	
Other operating expenses	
Amortization	
Gross profit margin	
Administrative costs	
Marketing costs	
Centralisation costs	
Earnings before interest and taxes	
Payment of interest	
Pre-tax earnings	
Profit tax	
Net profit	

Source: Compiled by the author

Tab. 2: Supplementary section of earnings statement (thousands UAH)

Explanation for centralization costs	
Transaction cost registry	Formalization
Costs of marketing research	(C_m);
Costs of negotiations	(C_n);
Costs of specification and property rights protection	(C_l);
Costs of opportunist behaviour	(C_o);
Cost of management	(C_{man});
Costs of contract execution	(C_k);
Costs of decision-making	(C_{dm}).

Source: Developed by the author

5. Conclusions

The developed algorithmic procedure for transaction costs management within a holding resulted from centralisation of functions makes it possible to distinguish key transaction costs, calculate such expenses, take them into consideration in management accounting and allocate in a reasonable way among expectable activity areas of the whole list of areas of the holding's business in order to refer to products and services.

It has been determined that transaction costs can be grouped together based on a system approach to the holding as follows: costs of system entry and leave, as well as hierarchy costs (internal system expenditures). At that, all groups of transaction costs have been analysed and the groups created as a result of centralisation of several functions within a holding have been determined. For this reason, it is proposed to keep separate record of transaction costs. In the earnings statement, it is offered to add a separate row, which is centralisation costs for the affiliated companies of a holding.

The process of decision-making is represented as a sequence of stages through time, each accompanied by a specific type of costs. A new type of transaction costs associated with strategic management decision-making, called costs of consideration, is justified.

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