

## **MODELS OF THE IMPACT OF TRANSACTION COSTS ON THE PROFITABILITY OF ENTERPRISES**

*Tetyana Kuznetsova,*

*Candidate of Economic Sciences, Associate Professor,  
Ukrainian State Employment Service Training Institute*

*Nataliia Ivanova,*

*Candidate of Economic Sciences, Associate Professor,  
National University «Kyiv-Mohyla Academy»*

The existence of transaction costs is recognized by all academic economists, still there is no generally accepted answer to the fundamental questions of this economic category, namely:

- what transaction costs are
- why they exist and what forms of existence they have
- how to measure them
- what impact they have on the efficiency of the companies

The representatives of the two approaches, which are the neoclassical and property rights, are making attempts to answer the first question. There are different interpretations of the nature of transaction costs, thus none of them gives a clear statement of this category. Therefore, we suggest the following definition: transaction costs are the costs associated with the establishment, protection and exchange of property rights.

The absence of the generally accepted interpretation of the nature of the transaction costs has led to the emergence of various theories that explain the causes and forms of their existence. The most common of these are the transaction cost theory, public choice theory, theory of agreements, contract theory of the company and two-factor model of transaction costs. The authors of these theories focus on some extensive (in their view) forms of transaction costs and attempt to explain the reasons for their existence using these forms.

Most frequently the following forms of transaction costs are examined in the economic theory: the costs of information search, the costs of negotiations and agreements, the costs of determining the quality of goods and services, the costs of specification and protection of property rights and the costs of the opportunistic behavior.

The most clear and reasonable classification of transaction costs are based on these forms. It is the classification by O. Williamson, in which transaction costs are divided into those that occur before and after the transaction, classification by S. Arkhiieriev that develops and complements O. Williamson's classification with due consideration for the economy of Ukraine and the classification by H. de Soto, where transaction costs are divided into subordination to law costs and costs of illegality to economy.

Classification by H. de Soto is the most appropriate to determine the impact of transaction costs on the performance of individual enterprise and explain the choice of the institutional environment (either legal or illegal). The researchers (except S. Arkhiieriev) point out only negative transaction costs and do not calculate the value of these costs inherent in a particular company and the extent of their impact on the efficiency of its operation.

According to H. de Soto transaction costs comprise two components: subordination to law cost and cost of illegality to economy. It is possible to evaluate the impact of «transactional burden» on the efficiency of the enterprises by using comsubordination to law cost, which consists of the cost of access to the law and the continuation of acting in compliance with the law. The former include the cost of registration of the company (legal entity), obtaining a license, opening a bank account, acquiring legal address and other formalities. The latter costs are associated with the obligation to pay taxes, the observation of the law in the field of employment (working hours, minimum wages, social security), payment of the court costs of in conflict resolution within the legal court system. It is well known that many enterprises and companies, notwithstanding the often changing tax and legal pressure, shift to the illegal economy. This is because of the high transaction costs related to acting within the limits of the law.

However, the implementation of the contract in illegal sector is also associated with expenses, 'illegal cost'.

H. De Soto identifies the following elements of the subordination to law cost:

1. Costs associated with the avoidance of legal sanctions. They include fees for the services of tax and financial advisors, income lost as a result of 'double accounting'.

2. Cost related to the transfer of income. All economic actors without exception are subject to pay indirect taxes and inflation tax (first of all, it concerns the use of cash only) accompanying illegal exchanges. Though the transfers are one-sided, so that the illegal agents can not apply to the state seeking protection of the property rights.

3. Costs associated with the avoidance of taxes and charges on salaries. They reduce incentives for substitution of labor by capital and technical upgrading. Cheap labor «depraves» the company. In addition, gains from non-payment of VAT limit the scope of illegal activity only by extreme links of the production chain - retail sales and initial stages of processing raw materials.

4. Costs associated with the lack of legally fixed property rights. It is possible to transfer eligibility of the property right only to a limited number of people, among which there is not necessarily a buyer willing to pay the highest price. Moreover, this capital can not be used as a bail, be invested in, freely sold or sometimes even just passed by inheritance.

5. Costs associated with the inability to use the contract system. The illegal contracting procedure impedes the realization of long-term agreements, in which

a large number of economic actors is involved. Since the belief that in any event the rights of investors are protected stands for a real incentive for investment in a long-term project.

6. Costs associated with two-sided nature of the illegal contract.

7. Cost associated with the access to the illegal procedures of the dispute resolution.

Legal judicial system has a number of substitutes like family and mafia conflict resolution mechanisms. The use of these alternatives is attributed to the cost of maintaining friendly relations with numerous relatives, countrymen and other 'fellow' people taking time and money to provide signs of attraction and services exchange. Request for the services of mafia performing the functions of the judicial and enforcement agencies is caused by the need to pay a particular tax. The decision of the economic agent on what institutional environment to choose for their business, either legal or illegal, is defined by the correlation of the subordination to law cost and cost of illegality to economy.

The purpose of the study is to identify the most important components of the subordination to law cost and assessing its impact on profitability of the enterprises.

With the help of the experimental evaluations and statistical calculations the cost of access to the law by the Ukrainian enterprises has been defined, 90 enterprises have been surveyed in Kyiv, Dnipropetrovsk and Zaporizhzhia. Studies show that the expenses associated with registering a limited liability company amount to 240 USD (7-30 days, the cost of registration via intermediary companies is, respectively, 350 to 600 USD (4-15 days). Registration of the closed joint stock company accounts for 1500 to 1900 USD (35 days - 3 months), and 3000-5000 USD through intermediary companies (18-30 days).

According to the research of the World Bank, the average cost of access to the law for Ukrainian entrepreneurs in 2015 amounted to 97.3 USD (including 33 USD as privately paid funds), and part of the cost of continuing operating within the law, assessed as financial losses through inspection activities amounted to an average of 1177.8 USD. Pointing out that payments to the budget reach 40% of the income (and it also constitutes costs associated with the continuation of operating within the law), it becomes clear that, firstly, the cost of the subordination to law is rather high and, and secondly, the lion's share of the 'burden of transaction' accounts for the tax component. Our research shows that essential component of the subordination to law cost in Ukraine is under tax compliance. Thus, the amount of taxes on income ranges from 21 to 35%. This explains the low level of application of the law to ensure the daily functioning of the companies. Almost all the authors examine the impact of one or more taxes on the company's efficiency or its profitability. That is to say, it is reasonable to study the total effects of tax pressure on businesses, because in this case it is possible to explore the synergistic effect of joint influence of taxes.

To assess the impact of the subordination to law cost the methodological

guidelines have been developed.

At the first stage the evaluation of the effectiveness of the company is conducted and subordination to law cost and its components are defined. The purpose of this stage is to gain the information volume to build econometric models and create statistical database for further analysis.

The second stage aims at estimating the significance of the constituents of the subordination to law cost. The purpose of this stage is to build econometric model of the subordination to law cost and determine its most essential components.

At the third stage the impact of the main components of the subordination to law cost to profitability of the businesses is assessed. The purpose of this stage is to build an econometric model to determine the impact of the subordination to law cost.

The methodological guidelines were approved for road sector enterprises. Analysis of the financial condition of these businesses was carried out in terms of their status, profitability, efficiency, solvency and business activity.

The effectiveness estimate has shown that during the study period, all companies were operating in an unsustainable manner.

An econometric model (1) has been built where the subordination to law cost is a dependent factor, while the independent factors include value added tax, income tax, social contributions and administrative costs.

$$\text{TYAGAR} = 1,015409277 \text{ ADM}^{0,4326557487} * \text{VAT}^{0,4821704674} * \text{SOC}^{0,3058248766} * \text{PROT}^{0,02457605771}, \quad (1)$$

where TYAGAR stands for subordination to law cost, thous. UAH

PROT stands for the income tax, thous. UAH

SOC stands for social contributions, thous. UAH

VAT stands for the value added tax, thous. UAH

ADM stands for administrative costs (exclusive of costs which are not transactional), thous. UAH

C stands for the constant, which determines the degree of influence of factors not included into the model

Evaluation of the model adequacy has been carried out by multiple determination coefficients  $R^2$ , F-statistics and standard deviation. High value of coefficients  $R^2$  ( $R^2 = 0,9994$ ,  $F = 0,992$ ), F-statistics (5438,93) and low value of the standard deviation (0,23) confirm the adequacy of the model.

The statistical significance of the components included into the model, has also been confirmed by the tests (standard deviation of the regression coefficient, t-statistics P). This model (1) has made it possible to assess the impact of the component of subordination to law cost and clarify that:

- increase of the administrative costs by 1 % increases subordination to law cost by 0.43 %
- increase of the VAT by 15 % increases subordination to law cost by 0.48%
- increase of the social contributions by 1 % increases subordination to law cost

by 0,31 %

- increase of the income tax by 1% increases subordination to law cost by 0,025 %

The cumulative impact of the factors on the subordination to law cost has been assessed. It has been stated that in case of decrease in the value added tax by 3% and income tax by 5% and a simultaneous increase in administrative costs by 1% and social contributions by 1%, the subordination to law cost rises by 0.8%. The results of the econometric analysis acknowledge that the administrative costs are the most important component of the subordination to law cost, as well as tax component, which includes a value added tax, income tax and other taxes and fees. Therefore, an econometric model has been built at the third stage, through which the influence of the most important constituents of the subordination to law cost on profitability of the enterprises has been investigated.

Model (2) is as follows:

$$\text{NPROF} = 3,64326 * \text{TAXE}^{-1,068571} * \text{ADM}^{-0,754974}, \quad (2)$$

where NPROF stands for the net profit, thous. UAH

TAXE stands for the tax component of subordinate to law cost, thous. UAH

ADM stands for administrative costs, thous. UAH

High coefficients (0,873648), (0,82344) and F-statistics (13,41714), and the low value of the standard deviation (0,31) prove the model adequacy.

Evaluation of the tests of the model parameters proves their statistical significance.

This model (2) has made it possible to conclude that the increase in tax component by a 1%, causes the net profit fall by 1.07%, whereas if the administrative costs increase by 1%, the net profit decreases respectively by 0.75%. Combined effect of the alteration in both factors with reduce the profit to 1.82%.

**Conclusions.** The developed models can be used by the management experts at various levels to assess the impact of changes in tax legislation and other regulatory measures on the profitability of the enterprises and businesses, as well as for forecasting their profits by changing the underlying tax rate and change of the administrative costs value.

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## **LEASING AS A PROGRESSIVE FORM OF LENDING**

*Artur Hniedkov,*

*Candidate of Economic Sciences,  
Donbas State Technical University*

In the conditions of economic instability, the crisis of payments and the emergence of inflationary processes in enterprises of various forms of ownership, there is an increasing need to raise additional funds for ensuring economic activities and profit-making opportunities. The most common form of raising funds is to obtain a bank loan under a loan agreement. According to the recent official statistics, the volume of loans provided to business entities in the national currency has a stable tendency to decrease, and the issuance of loans in foreign currency is practically non-existent. Nowadays many commercial banks are forced to work in emergency conditions and to seek for new forms of lending, such as leasing, which is the most acceptable for business entities.

In the context of the financial crisis, namely, sharp fluctuations in the stock and currency markets respectively, the rise in the cost of credit, the slowdown in the demand for goods, work and services, the majority of enterprises are very responsive to the choice and determination of the type and amount of the borrowed funds. However, the times of cheap money are coming to an end. Therefore, enterprises (and banks) are trying to find an alternative to a bank loan and are increasingly considering leasing as a more promising form of credit for today.

The growth of the role of the leasing services market in Ukraine is also explained