
Transaction Costs under Globalization: The Example of Russian Economy

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Abstract:

The paper studies the increasing impact of transaction costs on the development of national economies under globalization. Two levels of transaction costs regulation (supranational and national) are described in the paper. The authors believe that international organizations facilitate the global reduction of transaction costs; however, negative tendencies were discovered in the modern development conditions, which consist in an imbalance between the interests of participants. In terms of the national regulation level, it is necessary to search for a vector of development, taking into account the policies of import substitution and the place of transnational corporations in the global value chains. The policy of institutional infrastructure development, based on the estimation of transaction costs, will allow ensuring the development of the national economy under globalization.

Key Words: Transaction cost, Globalization, Innovative Development, Global Value Chains, Infrastructure

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1. Introduction

The modern development of economics is associated with certain changes in the neoclassical economic theory. While studying the neoclassic research paradigm, it is possible to point out the existence of a number of “problematic issues”, which are associated with both the “rigid nucleus” and the “protective cover” of this theory (Oleynik, 2012; Eggertson, 1990; Hodgson, 1988). In terms of the “protective cover”, one of the main innovations of modern economics is the introduction of transaction costs (TC) into the analysis of the economic agents’ behavior. Transaction as the transfer of property rights between economic agents is the basic unit of the institutional analysis (Williamson, 1979; Liapis *et al.*, 2013; Thalassinos *et al.*, 2012).

According to Coase (1988), the presence of TC hinders the effective allocation of rights by the market mechanism. North (1990) studied the importance of TC in terms of the macroeconomic policy and government regulation. He classified different types of exchange that determine the transaction complexity and, consequently, the TC amount. The increase of the transaction complexity, which determines the TC amount in direct ratio, conditions the need for an active participation of the government in the “impersonal exchange, managed by a third party”.

Governmental management of TC becomes especially significant under globalization. The intensification of international exchange, the development and increasing importance of large transnational corporations (TNC) in the economic development leads to the growth of global value chains of TNC, wherein the economies of said corporations’ home countries are links (*World Economic Forum*, 2012). According to the *Open lecture by Pascal Lamy in Higher School of Economics* (2013), former Director-General of the World Trade Organization (WTO), as of today, the key issue is the removal of obstacles to production chains that can cross the borders of 5 countries, under globalization conditions; at that, the “trade payment” is estimated at approximately 15% of the total value of the trade. Global intensification of transactions under globalization brings to the forefront the problems of identifying and reducing TC.

2. Research Method

The research method consists in the analysis of supranational and national regulation of TC and elaboration of ways to determine their amount at the national economy level. The determination of the TC amount and the factors that influence them lays the foundation for the development of national economies under globalization.

In modern economics, there are a number of TC definitions. In a broad sense, TC imply all the costs that exceed production costs. In a narrow sense, they are costs in the exchange field, associated with the transfer of property rights. Their potential cost value not only causes additional expenditures, which reduce business productivity, but can ultimately lead to the cancellation of deals (i.e. the abandonment of business activity). This aspect was reflected in the classification of Williamson (1985), who refers to “ex ante” and “ex post” TC, which occurs before and after the closing of a transaction respectively.

The documents that regulate the operation of International organizations, Conference (rounds) proceedings of WTO member-states, were used to identify the processes of regulation at the supranational level. The authors developed an approach to estimating “ex ante” TC, based on the application of the lost opportunities costs concept. The empirical estimation of the phenomena was based on the publications of The World Bank (WB), The Federal State Statistics Service and the Russian Federal Government.

3. Main part

Under globalization, the supranational regulation of international transactions, with a view to reducing TC, is becoming increasingly important. A number of institutions provide supranational institutional regulation and the ordering of government policies under globalization and current economic conditions: the International Monetary Fund, the World Bank Group, the European Bank for Reconstruction and Development, the United Nations Conference for Trade and Development (UNCTAD), the World Trade Organization (WTO), etc. These organizations aim to reduce TC during international exchange. This article emphasizes that the WTO activity plays the most significant role in terms of the development and optimization of trade transactions under globalization.

It is worth noting that when a country joins the WTO agreement, the amount of TC is generally decreased by lowering the average rates of associated and applicable duties. Furthermore, WTO agreements, which are basically institutions (norms, the observance of which is supported by sanctions), also have to reduce “ex ante” and “ex post” TC when a country joins the WTO Agreement and ceases the maintenance and support of numerous bilateral treaties.

In terms of the influence of international organizations on the TC rate, it is worth noting that researchers, who study the legal framework of International financial organizations and the WTO point out that the legal framework (norms) of the WTO has the signs of both “soft” laws (with optional norms) and “rigid” laws (obligatory norms) (Fogelson and Chekhovaya, 2012). This increases the institutional

possibilities for the WTO to influence global processes and transactions, compared to, for example, the International financial organizations.

The WTO confirmed this by its declared intention (the Eighth Ministerial Conference (December 15-17, 2011 in Geneva) to expand the field of activity by including such new issues as food security, energy development, investments, etc. (Demulen, 2012). Despite the benefits, associated with the reduction of TC, caused by participation in the WTO under modern conditions, it is possible to emphasize certain negative institutional tendencies of the WTO, which can increase TC: contradictions between the developed and the developing countries, caused by attempts to exert political pressure and to create unequal conditions; the possibility of considerable TNC domination during development (Stiglitz, 2002).

In the authors' opinion, the solution of the revealed problems will facilitate the reduction of TC under supranational regulation. In terms of the courses of TC regulation at the level of the national economy under globalization, it is worth noting that taking action in order to reduce said costs has to facilitate the implementation of the strategy aimed at improving the competitiveness of the country. Under modern conditions, as researchers note, this policy can be aimed either at substituting import by means of innovative development (Gordon, 2012) and at creating the most favorable conditions for the operation of TNC in regard to the links of global value chains (*World Economic Forum*, 2012).

Both courses have positive and negative aspects for developing and post-soviet countries. Researches that were conducted in developing and post-soviet countries showed that, under globalization, with the increasing transparency of the national economy with an underdeveloped institutional structure, there is a danger of capital outflow and an increasing threat to the economic security (Garcia-Herrero and Woolridge, 2007; Rustamov, 2010). Capital outflow occurs when the donor country has higher TC rates, associated with its underdeveloped infrastructure, compared to that of the country receiving the flow of funds. In this case, offshore zones are commonly used for capital outflows. Therefore, the course of developing the institutional infrastructure, which reduces TC and, subsequently, reduces transnational capital outflows, is a prerequisite for the government regulation policy aimed at ensuring the development of the country under the improvement of the country's global competitiveness in terms of TNC chains.

According to the studies by Gordon (2012), under modern conditions, countries should search for new courses of innovative growth, since, for example, the "third wave" factors, according to the USA statistics, ceased influencing the productivity growth of national economies (gross domestic product growth rates per capita are decreasing). Intensification of innovative activity should help discover new innovative "growth points" of national economies. The Russian Government

developed relevant documents to ensure the innovative development of the country (*Strategy of innovative development of the Russian Federation till 2020*, 2013). The set objectives and tasks include an almost fivefold growth of the percent of innovatively active enterprises working for technological innovations (from 9.4% in 2010 to 40-50% in 2020), an eightfold growth of the percent of hi-tech production export (from 0.25% to 2 %).

It is worth noting the revealed differences between developed and developing countries in the nature of initiation and funding of innovations. In developing and post-soviet countries, innovation is mostly funded from government funds (for example, in Russia the ratio of government funding in the corporate sector constitutes approximately 70%, while the funding from the business sector – less than 30%). In developed countries, the situation is completely different (for example, the government and private financing in Japan constitutes less than 20% and more than 80%, in the USA – more than 20% and approximately 70%, respectively) (*Expert. Innovations*, 2013).

The provided data on the Russian economy evidences serious attempts to affect the intensification of Russia's innovative development by means of government intervention. However, as researches of institutional economics show, shortcomings that are associated with the labor-consuming control of bureaucracy, the complexity of decision-making procedures in hierarchies, the difference between the expenses and incomes of civil officials and the expenses and incomes of their decisions, are inherent in the state form of ownership. Under the given circumstances, it is necessary to predict the emergence of additional TC that are associated with the opportunistic behavior that causes extortion (corruption) (Odintsova, 2007). It is necessary to combine the approach of active government intervention into innovative development with the implementation of the anti-corruption policy.

Having considered the two approaches to developing the national economy under globalization, the authors believe that a “golden mean” should be found when choosing the course of strategic development. The issue of reducing TC is relevant under any scenario.

This paper emphasizes two types of TC that should be reduced in the process of national regulation during the development of the country under globalization. The costs of the first type are associated with the imperfection of institutions (norms), which leads to a reduction of economic activity. “Imperfections” of norms may concern the uncertainty of rights and, accordingly, their protection, as well as the duration of procedures, regulated by the norms.

The costs of the second type are associated with the opportunistic behavior of both economic agents and representatives of government authorities that exert control over the observance of norms. This type of opportunism leads to corruption

(Belyanova and Nikolayenko, 2013) and economic agents' distrust (Kornai, 2013) of the established and changed institutions.

This article focuses on the estimation of the first TC type, given the availability of the abovementioned publications on the estimation of the second TC type. In order to estimate the rate of TC associated with the imperfection of institutions (norms), which cause a reduction of economic activity, the authors used the World Bank "Doing Business" ranking (*Doing Business*, 2013).

The abovementioned classification of TC into "ex ante" and "ex post" costs is relevant. The said ranking presents the following indicators of determining the TC rate (*Doing Business*, 2013): the duration of procedures for enterprise registration, construction licenses obtainment, connecting to a power supply system, property registration (all measured in days) ("ex ante" costs), protection of investors' interests, taxation, performance bonds, resolving insolvency, crediting ("ex post" costs). In the authors' opinion, under modern economic conditions, the problems of government regulation, aimed at reducing the "ex ante" TC of business and innovative activity, gain particular importance, because the existence of said costs decreases activity due to refusals of projects implementation.

There are no publications that clearly estimate in monetary terms the "ex ante" TC at the national level. Researchers study the estimation problems and present a general estimation of TC as a feature of the types of economic activity that guarantee transactions (Oleynik, 2012). The authors suggest estimating the "ex ante" TC by using the approach that is based on the estimation of lost opportunities costs at a national level. The authors deduced the following formula (1) to evaluate "ex ante" TC (TC_{exa}):

$$TC_{exa} = \sum \Delta t_{PRi} \times I_L \quad (1)$$

where the components of formula (1) are as follows:

- $\sum \Delta t_{PRi}$ (i is the number of ranking indicators that determine "ex ante" TC) is the amount of time difference between the actual duration of the respective procedures for starting a business in Russia and that of the leading countries that attempt to create the most favorable conditions for business (in 2013 the leader of the ranking was Singapore) (*Doing Business*, 2013). At the beginning of 2013, $\sum \Delta t_{PRi}$ amounted to 601 days in terms of the abovementioned procedures that determine "ex ante" TC (for each procedure, in the order of their appearance, Δt_{pr} was 15 (Δt_{PR1}), 318 (Δt_{PR2}), 23 (Δt_{PR3}), 245 (Δt_{PR4}) days, respectively).

- I_L is the potential daily average income, which may be gained by businesses from new projects, but is not gained due to the waiting for the completion of legalization procedures. For example, the turnover of all enterprises in Russia in 2012 was

108902.1 billion rubles (bn. RUB); the number of the registered organizations was 4886.4 thousand; 452284 organizations were registered during 2012 (*Federal Russia State Statistics Service: portal*, 2013). The calculated value of I_L was 27.616 bn. RUB per day:

$$I_L = \frac{108902,1 \text{ bn. RUB}}{4886,4 \text{ thous.org.} \times 365 \text{ days}} \times 452284 \text{ org.} = 27,616 \frac{\text{bn. RUB}}{\text{day}}$$

In accordance with the calculations of formula (1), the estimated value of “ex ante” TC in the Russian economy in 2012 was 17010.8 bn. RUB (approximately 27.17% of the Russian gross domestic product (GDP) (GDP was 62599.1 bn. RUB in current prices (*Doing Business*, 2013))).

The authors propose to use the approach to the calculation of transaction costs "ex ante", based on the method of calculating the cost of missed opportunities at the national level and determined on the indicators basis:

- the time difference between the actual duration of the implementation of appropriate procedures start a business between Russian conditions and the conditions of the country leaders to create the most favorable conditions for doing business (in 2013, the leader of the rating is Singapore);
- the potential average daily income, which can be obtained by starting out firms, but it is impossible to force standby procedures. The value is calculated as the product of the average daily turnover of organization, starting business by the number of new businesses registered in the relevant year.

The calculation of the first indicator can be made basing on the analysis of published ratings of international organizations, the second one – is on the basis of statistics of average daily turnover of one organization in Russia, multiplied by the number of registered enterprises per year. The product of the first indicator by the second will give the sought quantity.

The results of calculations are shown in Table 1.

Table 1. Calculation of Transaction Costs "ex ante" in the Russian Economy

| Indicator | The number of days for business registration procedures | The number of days for the building permits receipt | The number of days for the property registration | The number of days for connection to electricity |
|--|---|---|--|--|
| | 1 | 2 | 3 | 4 |
| Place of the Russian Federation in the rating (by index) | 101 | 178 | 184 | 46 |
| Deviation from the leader of the rating (Singapore), in days | 15 | 318 | 23 | 245 |
| The average daily turnover of opening businesses, billion rubles | 27,615 | | | |
| Transaction costs "ex ante" $((15+318+23+245) \times 27,615)$, billion rubles | 17010,8 | | | |

The results of the estimation evidence the potential for growth of the Russian GDP, which can be achieved by developing the institutional infrastructure, which optimizes the sequence and reduces the duration of procedures, and, subsequently, reduces TC.

However, it is worth noting that in an individual national economy, TC reduction is hindered by the following problems:

- the import of institutions;
- the increasing intensity of procedures, which may lead to the emergence of additional "ex post" costs, attributable to the low quality of the rights registration procedure before the completion of contracts.

When carrying out the policy of infrastructural development in the country, it is necessary to assess the efficiency of institutional changes in order to reduce the determined TC rate.

4. Conclusion

This research shows the significant importance of studying TC in terms of globalization, since TC reduce the activity market mechanisms. Regulation at the supranational level is associated with the reduction of TC through the activity of international organizations. At that, precedent conditions exist for reducing the TC under the increasing role of the WTO agreement. However, there are also trends, caused, among other things, by regionalization and an imbalance of interests of developing and developed countries, TNC.

An important aspect of carrying out a macroeconomic regulation policy in national economies is the choice of a “golden mean” under the policies for improving competitiveness in TNC global value chains and the substitution of import, based on innovative development. At that, the assessment and taking of actions aimed at developing the economic infrastructure, which facilitates the reduction of TC, is critical. The suggested approach to the estimation of “ex ante” TC allows reasonably analyzing the actions aimed at reducing the TC, while taking into account the potential gains and losses.

References

- Belyanova, E., Nikolayenko, S., (2013), “Impact of Corruption on Business Development: Empirical Estimates”, *Economic Issues*, vol. 9, pp. 91-105.
- Coase, R. (1988), “The Firm, the Market and the Law”, *The University of Chicago Press*, pp.115-158
- Demulen, I., (2012), “Eighth ministerial conference of the World Trade Organization (on December 15-17, 2011) and conceptual problems of further activities of the WTO”, *Russia's foreign trade Gazette*, vol. 2 pp. 17-23.
- Doing Business, (2013), “The World Bank”, www.russian.doingbusiness.org/reports/global-reports/doing-business-2013.
- Eggertson, T. (1990), “Economic Behavior and Institutions”, *Cambridge University Press*, pp. 5-6.
- Fogelson, Yu., Chekhovaya, S., (2012), “The soft law in system of the regulator of mechanisms of the WTO”, *Economy and Law*, vol. 12, pp. 12-18.
- Garcia-Herrero, A., Woolridge Ph., (2007), “Global and regional financial integration: progress in emerging markets”, *BIS Quarterly Review*, September, pp. 57-70.
- Gordon, R. (2012), “Is U.S. economic growth over? Faltering innovation confronts the six headwinds”, www.nber.org/papers/w18315
- Hodgson, G. (1988), “Economics and Institutions. A Manifesto for a Modern Institutional Economics”. *Cambridge Polity Press*.

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- Kornai, Ja.(2013), “Breaking Promises: Hungarian Experience”, *Economic Issues*, vol. 8, pp. 123-142.
- Liapis, K., Antonios Rovolis, A., Christos Galanos, C. and Thalassinos, E., (2013), “The Clusters of Economic Similarities between EU Countries: A View Under Recent Financial and Debt Crisis”, *European Research Studies Journal*, XVI, issue 1, pages 41-66.
- North, D. (1990), “Institutions, Institutional change and Economic Performance”, *Cambridge University Press*, pp. 50-55.
- Odintsova, M. (2007), “Institutional economy”, *Moscow “GU VSHE”*, pp. 181-182.
- Oleynik, A. N. (2012), “Institutional economics”, *INFRA-M*.
- Rustamov, E. (2010), “Financial globalization and quality of institutes”, *Economic Issues*, vol. 2, pp. 39-52.
- Stiglitz, D. (2002), “Globalization and Its Discontents”. *W.W.Norton & Company*, P. 281.
- Thalassinos, E., Uğurlu, E. and Muratoğlu, Y., (2012), “Income Inequality and Inflation in the EU”, *European Research Studies Journal*, XV, issue 1, 127-140.
- Williamson, O. (1985), “The economic institutions of Capitalism”, *New York Free Press*, pp. 55-59.
- Williamson, O. (1979), “Transaction-Cost Economics: The Governance of Contractual Relations”, *Journal of Law and Economics*. Vol. 22, No 2, pp. 233-261.
- World Economic Forum (2012), “The Shifting Geography of Global Value Chains: Implications for Developing Countries and Trade Policy”