

# **Research Article**

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# Transaction Costs in the Formation of the Socio-Cultural Architecture of the Region: Institutional Development and Regulation

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#### Abstract

The article examines transaction costs, factors that form them, and cultural features of society. A significant result is the identification of a set of socio-cultural characteristics and their transformation into a cultural code, as well as a comparison of types of transaction costs in relation to the specified set of socio-cultural parameters. Based on the algorithm used and significant aspects, a Map of the influence of a set of socio-cultural characteristics on transaction costs is constructed. The key to economic growth is the effective organization of the economy through the development of socio-cultural architecture, science and education. Priority areas of regulation in the vector of economic development are state policy in the socio-economic sphere, the sphere of education (Universities, Scientific Schools, etc.).

**Keywords:** Transaction Costs, Socio-Cultural Architecture, Cultural Code, Socio-Economic Development, Public Policy, Education and Scientific School, Value System, Social Connections, Social Capital, Institution of Trust

# 1. Transaction Costs in the Formation of the Socio-Cultural Architecture of the Region: Institutional Development and Regulation

The article discusses transaction costs, factors that form them, and cultural features of society. A significant result is the identification of a set of socio-cultural characteristics and their transformation into a cultural code, as well as a comparison of types of transaction costs in relation to the specified set of socio-cultural parameters. Based on the algorithm used and significant aspects, a Map of the influence of a set of socio-cultural characteristics on transaction costs is constructed. The key to economic growth is the effective organization of the economy through the development of socio-cultural architecture, science and education. Priority areas of regulation in the vector of economic development are state policy in the socio-economic sphere, the sphere of education (Universities, Scientific Schools, etc.).

American economist Ronald Coase in his 1937 article "The Nature of the Firm" defined transaction costs as "market costs", "the costs of the functioning of the market, the costs of using the price mechanism" <sup>1</sup>. According to R. Coase's theorem, if property rights are clearly defined and transaction costs are zero, then the

allocation of resources (the structure of production) will remain unchanged and effective regardless of changes in the distribution of property rights. With non-zero transaction costs, their value, as well as their structure, will depend on the effective functioning of infrastructure institutions.

Transaction costs are directly related to the implementation of transformation functions, the specificity of the resources used, which determines the need to study costs taking into account industry specifics. For agricultural industries, the structure of transaction costs is associated with the peculiarity of the transformation function. Agriculture is a multi-industry system with many product subcomplexes, each of which uses its own specific production processes, equipment and technology, methods of reproduction and, including, technical potential. A number of distinctive features of agricultural industries are as follows: the interweaving of economic reproduction with natural reproduction makes it dependent on natural and climatic conditions, seasonality and cyclicality of agricultural activity, dependence on biological processes, natural and climatic conditions, as well as the territorial dispersion of agricultural production facilities.

Taking into account the above features, the following cost

components manifest themselves in agriculture:

- costs associated with supply and sales activities.
- costs associated with product processing and packaging.
- costs associated with storage of products.
- costs associated with protection (insurance).
- costs of lost revenue due to dependence on natural and climatic conditions.

The industry is characterized by the following transaction costs:

Information costs are the costs of finding information about potential buyers and sellers, as well as about prices in the market.

Negotiation costs are the costs of negotiating the terms of exchange, and of drawing up and concluding contracts.

Measurement costs are the costs of assessing the characteristics of a product or service.

The costs of specification and protection of property rights are the costs of maintaining courts, arbitration, government agencies, as well as the restoration of violated rights.

The costs of opportunistic behavior are the costs of assessing the partner's behavior after the transaction has been completed.

The costs of "politicization" are the costs of making decisions for an organization.

Quantitative measurement of transaction costs at the macroeconomic level, as well as qualitative definition of the transaction sector was carried out by American economists J. Wallis and D.S. North in 1986 <sup>2</sup>in the article "Measuring the Transaction Sector in the American Economy from 1870 to 1970". The concept of "transaction sector" was introduced 3, this sector includes wholesale and retail trade, insurance services in the banking sector, management costs, costs of the state "transaction sector" (judicial and law enforcement activities). Of course, the efficiency of the transaction sector, infrastructure institutions determine the success of economic development. The more efficient economic institutions are in the evolutionary aspect, the more they contribute to the minimization of transaction costs 4. Institutions are rules, mechanisms that ensure their implementation, and norms of behavior that structure recurring interactions between people 5. In this regard, the study of economic development factors is impossible without taking into account the transaction and institutional components. A very important aspect in the study of economic development and modernization is the socio-cultural aspect.

From the time of Aristotle to the present day, people have maintained that only in a prosperous society, where only a relatively small number of citizens live in a state of genuine poverty, can a situation arise in which the bulk of the population participates intelligently in political life and develops the self-restraint and self-control necessary to avoid the temptations and appeals of irresponsible demagogues. A society in which there is a division between a large dispossessed mass and a small privileged elite ends up either in an oligarchy (dictatorial rule by a small upper class) or in a tyranny (dictatorship based on the bulk of the population) <sup>6</sup>."

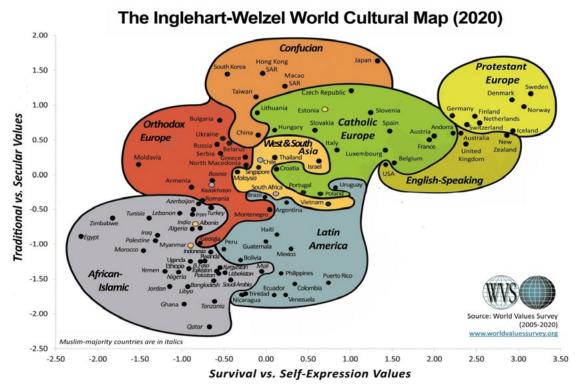
In the 1950s, S. M. Lipset linked economic development with the level of development of democratic institutions. " The more prosperous the country, the higher its well-being, the greater the chances that democracy will be supported in it. The factors influencing modernization processes are the level of education of the population, industrialization, urbanization, and the nature of the distribution of property among citizens. For a substantive test of this hypothesis, S. M. Lipset used indices of economic development: levels of well-being, industrialization, urbanization, and education.

The global connection between economic development and the value system was studied in the works of R. Inglehart and K. Welzel. The main ideology of scientists is that a change in the value system of people affects economic development, the development of democracy and the quality of life of citizens in different countries of the world <sup>7</sup>. A map has been constructed based on surveys regarding the values that guide people. The vertical axis is values from traditional to secular-rational. The horizontal axis is survival values and self-expression values.

Traditional values include communal values, the collective is more important than the individual, family, religion, social conformism, acceptance of authority, the public is more important than the personal. In contrast to traditional values are secular-rational values, i.e. the values of individualism, consumerism, respect for science, rationalism. Survival values are the values of security and self-preservation. Self-expression values are the values of progress, self-expression and transformation. Developed countries are closest to secular-rational values and self-expression values.

In the 1970s, G. Hofstede conducted large-scale cross-cultural studies involving about 50 countries. More than one hundred thousand employees working in IBM branches were interviewed. According to G. Hofstede, culture is a collective programming of consciousness that distinguishes members of one group or type of people from others.

There are correlations between pairs of coefficients and the level of welfare of countries.



Thus, all well-being related phenomena tend to correlate with these two parametric dimensions<sup>8</sup>.

Based on the standard analytical parameters of G. Hofstede, six main continuum dimensions of national culture are proposed. The sixth coefficient was added to the system of parameters based on the research of the Bulgarian scientist Mihail Minkov, who used data from the research project "World Values Survey"<sup>9</sup>.

# 2. Parameters for Measuring National Culture

- 1. Power distance;
- 2. Uncertainty avoidance;
- 3. Individualism/collectivism;
- 4. Masculinity/femininity;

- 5. Long-term/short-term time orientation;
- 6. Indulgence/restraint.

In order to study a set of socio-cultural characteristics and potential for economic development, a study was conducted on the materials of the Siberian Federal District of Russia in the sphere of the agroindustrial complex. Research in this area was conducted over a number of years.

The study of the cultural characteristics of the region was carried out according to the following parameters: power distance, degree of uncertainty avoidance, individualism/collectivism, masculinity/femininity, long-term/short-term time orientation, indulgence/restraint of desires.

| Cultural measurement indicator  | Index intervals/degree characteristic   |  |                           |  |  |
|---------------------------------|---|--|---------------------------|--|--|
|                                 | 0.6 <x<1< td=""><td>0.6<x<0.3< td=""><td>0<x<0.3< td=""></x<0.3<></td></x<0.3<></td></x<1<> | 0.6 <x<0.3< td=""><td>0<x<0.3< td=""></x<0.3<></td></x<0.3<> | 0 <x<0.3< td=""></x<0.3<> |  |  |
| Degree of power distance        | Tall  | Average  | Low                       |  |  |
| Degree of uncertainty avoidance | Tall  | Average  | Low                       |  |  |
| Individualism/collectivism      | Individualism   | Vertical collectivism or horizontal individualism            | Collectivism              |  |  |
| Masculinity/Femininity          | Masculinity   | Equalities prevail   | Femininity                |  |  |
| Temporal orientation            | Long term   | Medium term  | Short term                |  |  |
| Indulgence/restraint            | High  | Average  | Low                       |  |  |

**Table 1: Culture Indicator Intervals** 

The degree of manifestation of cultural characteristics (low/high power distance, etc.) is determined by environmental factors that influence transaction costs.

# 3. Based on the Conducted Research, it was Revealed

1. The high level of masculinity in societies in the agro-industrial

- complex indicates a differentiation of roles between men and women and a desire for competition;
- 2. A low level of individualism and an average level of collectivism indicate that collective consciousness prevails in relationships, and its specific feature is vertical collectivism;
- 3. High degree of uncertainty avoidance. The desire to avoid

uncertain situations is justified by the specifics of agricultural production on the one hand, and the need for order and rules - cultural characteristics on the other;

- 4. A high degree of long-term orientation indicates a need for clarity about the future, a desire to overcome uncertainty;
- 5. Indulgence of desires is also represented by a high coefficient,

which indicates the level of self-control and the need to satisfy basic desires.

The totality of the above cultural characteristics and their magnitude gives an idea of the socio-cultural architecture of the economy.

| Parametric measures of cultural codes of the economy | Sociocultural architecture   |
|--|--|
| Collectivism, individualism                          | Bridging and bonding social capital  |
| High uncertainty avoidance                           | Social capital, the institution of trust   |
| High degree of power distance                        | Vertical connections, social lifts, development of a model of open access to resources <sup>10</sup> |
| Long-term orientation                                | Institutional confidence/institutional resilience  |

Table 2: Sociocultural Architecture in the Context of Economic Development

Based on the parameters of measuring culture, the author determined the influence of a given set of cultural characteristics on the transactional component. To study the influence of cultural characteristics on the transactional component, based on the works<sup>11</sup> and research, <sup>12</sup>a Map of the distribution of the influence of a set of cultural characteristics on transaction costs was developed. When developing the Map, the main, fundamental aspects were taken into account:

- 1. The importance of cultural characteristics in the socio-cultural environment of the industry.
- 2. Two dichotomous sets of sociocultural characteristics are constructed, depending on the

Prevalence of one or another cultural characteristic. The first dichotomous set is constructed for cultures with low power distance, low uncertainty avoidance, prevalence of individualism, masculinity, and long-term time orientation. The second

dichotomous set is constructed for cultures with high power distance, high uncertainty avoidance, prevalence of collectivism, femininity, and short-term time orientation.

- 1. Factors related to each socio-cultural characteristic have been identified and recorded.
- 2. Factors influencing transaction costs related to a given set of sociocultural parameters are determined. Matrices of a set of parameters for measuring cultural characteristics and corresponding types of transaction costs No. 1 and No. 2 are constructed.
- 3. A correspondence between a set of socio-cultural characteristics and types of transaction costs was revealed.
- 4. The number of types of transaction costs related to each set of socio-cultural characteristics was calculated.
- 5. A graphical representation based on the above algorithms has been constructed a map of the influence of a set of socio-cultural characteristics on transaction costs.

| Parameters for measuring cultural characteristics /<br>Types of transaction costs (through factors influencing<br>them) | low power<br>distance | low uncertainty avoidance | individualism | masculinity | long-term time<br>orientation |
|---|-----------------------|---------------------------|---------------|-------------|-------------------------------|
| Costs of information search, processing and storage   | 1                     |                           | 1             | 1           | 1                             |
| Costs of negotiating, measuring and concluding contracts  |                       | 1                         | 1             |             | 1                             |
| Coordination costs  |                       |                           |               |             | 1                             |
| Costs of control and monitoring   |                       |                           |               |             | 1                             |
| Costs of specification and protection of property rights  |                       |                           |               | 1           |                               |
| The costs of politicization, collective decision making   | 1                     |                           |               |             |                               |
| Costs of Avoiding Opportunistic Behavior  | 1                     | 1                         | 1             | 1           | 1                             |
| Costs in the form of lost revenue (other)   |                       | 1                         |               |             |                               |
| Costs of the non-market transaction sector of the economy (education, social security, etc.)                            | 1                     |                           |               |             |                               |
| Number of types of transaction costs, units   | 4                     | 3                         | 3             | 3           | 5                             |

Table 3: Matrix of the Set of Parameters for Measuring Cultural Characteristics and Corresponding types of Transaction Costs No. 1

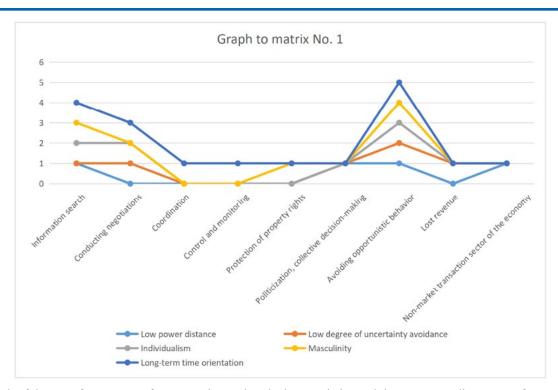


Figure 1: Graph of the Set of Parameters for Measuring Cultural Characteristics and the Corresponding types of Transactional No. 2

| Parameters for measuring cultural characteristics / Types of transaction costs (through factors influencing them) | high power<br>distance | high uncertainty avoidance | collectivism | femininity | short-term time<br>orientation |
|---|------------------------|----------------------------|--------------|------------|--------------------------------|
| Costs of information search, processing and storage   | 1                      | 1                          | 1            |            |                                |
| Costs of negotiating, measuring and concluding contracts  | 1                      |                            |              |            |                                |
| Coordination costs  |                        |                            |              | 1          | 1                              |
| Costs of control and monitoring   | 1                      | 1                          |              | 1          |                                |
| Costs of specification and protection of property rights  |                        | 1                          |              |            | 1                              |
| The costs of politicization, collective decision making   |                        |                            | 1            |            | 1                              |
| Costs of Avoiding Opportunistic<br>Behavior   | 1                      | 1                          |              |            |                                |
| Costs in the form of lost revenue (other)   |                        | 1                          |              |            | 1                              |
| Costs of the non-market transaction sector of the economy (education, social security, etc.)                      |                        |                            |              | 1          |                                |
| Number of types of transaction costs, units   | 4                      | 5                          | 2            | 3          | 4                              |

Table 4: Matrix of the Set of Parameters for Measuring Cultural Characteristics and Corresponding types of Transaction Costs No. 2

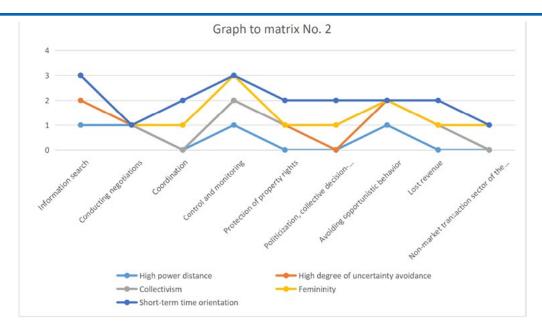


Figure 2: Graph of the Set of Parameters for Measuring Cultural Characteristics and the Corresponding types of Transactional No. 2

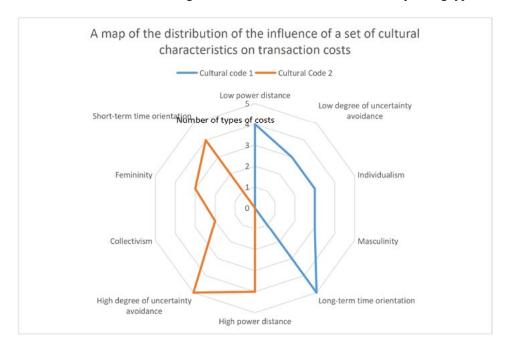


Figure 3: Map of the Distribution of the Influence of a Set of Socio-Cultural Characteristics on Transaction Costs

In the context of institutional economics, the Map presents two types of sets of cultural characteristics to which certain types of transaction costs and their structure are related.

The totality of institutional characteristics of society determines the efficiency of resource use and focus on innovation, as well as the individual's goal-setting in the sphere of socio-economic interaction.

The key to economic growth is the effective organization of the economy, through the development of socio-cultural architecture, science and education<sup>13</sup>.

The priority areas of regulation in the vector of economic development are state policy in the socio-economic sphere, the sphere of education (Universities, Scientific Schools, etc.).

The development of socio-cultural architecture institutions helps to level out the negative effects that hinder economic growth and reduce transaction costs of the "path dependence" problem.

Maintaining the parameters of collectivism and individualism contributes to the accumulation of bridging and bonding social capital. Reducing the high degree of uncertainty avoidance contributes to the accumulation of social capital, the institution of trust. Reducing the distance of power - the development of vertical

connections, the development of social lifts, the development of a model of open access to resources.

To strengthen the value characteristic "long-term orientation" - institutional confidence/stability of institutions [1-11].

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