

PEDTR 2019**18th International Scientific Conference “Problems of Enterprise Development:
Theory and Practice”****FUNDAMENTAL TRANSFORMATION OF THE RUSSIAN
AGRICULTURAL SECTOR AND INSTITUTIONS (1906-1932
YEARS)**

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Abstract

The authors analyze the institutional changes caused by the fundamental transformation of economic relations in the agricultural sector in the first third of the twentieth century. The purpose of the research is to study the evolution of institutions under conditions of fundamental transformation and to identify the reasons for the stability of new formal institutions. The authors examined the basic elements of the institutional environment of the first third of the twentieth century, and identified stable informal institutions (nepotism and communalism), determined their supra-constitutional nature, examined the evolution of economic rules in the agricultural sector for three decades of the twentieth century. The authors came to the conclusion that formal institutions showed high effectiveness in any reforms of the first third of the twentieth century. Supraconstitutional informal institutions of communalism and nepotism were stabilizers of the agrarian institutional environment. Fundamental transformation of the agricultural sector of the 1930s. provided a replacement for economic rules (formal institutions of competition and lending, freedom of choice of an algorithm of action in the production process) with new formal planning institutions for all economic activity. The old informal institutions of nepotism and community did not disappear and ensured the success of collectivization. Another informal institution (freedom of choice of an algorithm of action) operated in the shadow sector of the agrarian economy. Individuals continued to defend themselves against the negative factors of the external institutional environment and, albeit forcedly, made the choice in favor of combining the institutional agreements proposed by the state.

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Keywords: Institute, institutional agreement, nepotism, communalism, informal institute of freedom of choice of an algorithm of actions in the production process, shadow institute production.



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1. Introduction

The relevance of the consistent and systematic study of the institutional environment transformation process is due to the current state of the agricultural sector, where institutions were formed under the influence of economic rules of past historical periods. This extended effect has been felt in economic agricultural reforms since the 1990s, when not every institution showed a high activity result in the current institutional environment. The study of the historical experience of the agricultural sector of institutional environment transformation, the institutions analysis of high performance of past eras are the necessary component for the development of the strategy of economic and innovative development in the XXI century.

Two major agrarian reforms were carried out in Russia in the first third of the twentieth century: from 1906 to 1916 - Stolypin reform and from 1927 to 1932 – collectivization. Both of them created new institutions in the institutional environment and were accompanied by a sharp change in political rules of the game during the collectivization years. In both cases, institutional changes in the agricultural sector occurred quickly and had a high result of action, which was manifested in the quantitative increase in new agricultural organizations (firms), during the P. A. Stolypin years of the reformation – an increase in the number of individual farms (holdings, homestead), during the years of collectivization - collective farms. There was no sharp decline in agricultural industry, quite the contrary.

The main emphasis in the analysis of these changes varies in the scientific literature. Economic historians study the reproduction of agricultural products from the point of innovative development, economic growth, market command and administration management system, transformation of social and economic system models and land relations. Theoretical economists consider the economic institutions system functioning in periods of political institutions stability (Gagarina, 2019), analyze certain areas of reproduction of the agricultural sector (Rushiczka, 2019), institutional changes. But this approach does not help us to answer the question - what are the reasons for the high result of institutional changes actions, which are essentially opposite? What is the correlation between different levels of institutional environment, economic rules in the system of institutions in different historical periods, and institutional agreements created by individuals? How do institutions function during the periods of fundamental transformations, which is, with no doubts, is the Great Russian revolution of 1917-1922?

2. Problem Statement

Economic relations in the agricultural sector are formed between individuals in the process of production, sale, distribution and consumption of agricultural products. This kind of activity has specific features. These features, in our opinion, were most fully characterized in the 1920s by Brutskus (1988): it is impossible to create an artificial environment in agriculture and to plan economic capacity and sales; agricultural companies are limited in the choice of the most favourable economic environment location, tax regime, terms of products transportation; the use of the earth's surface makes agriculture a production, dispersed over a large territory, puts certain limits of its concentration; concerning about the nature preservation is an important part of the production process – the agricultural enterprise should care about the distant future; plants and animals are individualized, work in agriculture cannot be mechanized to the

same extent, as in other economic sectors where we have to deal with dead matter; periodicity of physiological processes leads to the fact that agricultural work is developing in a certain sequence. In this regard, specialization, division of labor is less possible in agriculture than in the industry; technical innovations also have to consider these features and improve production efficiency under various climatic conditions in a specific economic environment and consider other factors (Brutskus, 1988).

In agriculture, it is impossible to specify a certain algorithm of actions, which must always be followed to ensure a high result. For example, in animal agriculture, the result depends on the proper care of cattle (milking, feeding, childbirth). The agricultural specifics determine the value of the organizational abilities of workers engaged in production. Institutions and institutional environment are equally important in the agricultural sector of production. How do they behave in a fundamental transformation conditions? Reform of P.A. Stolypin created one kind of institutions, mass collectivization – the others. Which of them were more viable?

We consider the fundamental transformation of the agricultural sector in the first third of the twentieth century as a process of institutions evolution: changes in the institutional environment and institutional agreements (contracts). The situation in the agricultural sector of Russia in the first third of the twentieth century was the documentary basis of the analysis.

3. Research Questions

- What elements of the institutional environment of the agricultural sector in the first third of the twentieth century can be identified, including its stable elements?
- How some formal and informal institutions were displaced from the institutional environment by other economic rules? What kinds of agreements were made in different institutional frameworks?
- What factor determined the high efficiency of the institutions of the institutional environment agricultural sector in 1906-1916 (reform of P. A. Stolypin) and in 1927-1932 (mass collectivization)?

4. Purpose of the Study

The purpose of the article is to identify reasons for the high adaptability and effectiveness of institutions introduced in the process of carrying out essentially opposite reforms of the agricultural sector in the first third of the twentieth century. The achievement of this purpose involves:

- Identification of supra-constitutional informal institutions of the institutional environment agricultural sector (during the reforms of 1906-1916 and the reforms of 1927-1932);
- Comparison of the evolution process of the main formal and informal institutions of the first third of the twentieth century institutional environment, as well as institutional agreements within various institutional systems;
- Comparison of the institutional environment institutions effectiveness in the period of agricultural transformations of the early twentieth century and in the period of collectivization.

5. Research Methods

An institutional approach as a methodological basis for the economic relations study in the agricultural sector is used in the article. The authors base their research on the scheme of interaction between institutions and individuals by O. Williamson (1995), which allows us to identify and analyze institutions, their correlation and evolution in the indicated periods. The main angle of our study is based on the theory of the firm. The analysis and synthesis methods allow us to present an argument for the stability of supra-constitutional informal institutions of nepotism and communality throughout the indicated period. Statistical methods made it possible to evaluate the effectiveness of institutions and the institutional environment.

6. Findings

6.1. "Nepotism" and "communality" as stable, unchanging elements of the first third of the twentieth century institutional environment

Institutional environment consist of institutions, where individuals make decisions, follow or break rules, form institutional agreements. Institutional agreements are voluntary agreements between individuals and / or groups that define ways of cooperation and competition (Williamson, 1995). Every institutional agreement is based on specific rules:

- Functioning of economic and political markets;
- Interactions within hierarchical structures. These interactions can combine the features of market and hierarchical, individual and group agreements; determine the forms of the individuals' interaction.
- According to O. Williamson (1995), the interaction of institutions can be considered at different levels - individual (interaction of individuals with each other), institutional (interaction of different types of institutions is an agreement), as well as in a certain institutional environment. All these levels also interact with each other.
- Let's define the main blocks of relations:
 1. Individuals affect institutional agreements. Individuals play an important role in the beginning (creation) of a certain institutional agreements in their interests;
 2. Institutional agreements affect each other;
 3. Institutional environment influences institutional agreements;
 4. Institutional agreements influence individual behavior;
 5. Institutional agreements affect institutional environment;
 6. Institutional environment affects individual behavior;
 7. The individual affects institutional environment.

According to North (1997), institutional environment consist of supra-constitutional, constitutional and economic rules. The first one, as a component of the institutional environment, are the most common and has difficulties in changing informal rules that have deep historical roots in the lives of various nations. Their formalization is expressed in the constitutional (political) rules: hierarchical state structure, decision-making rules, etc. (North, 1997). Formal and informal rules are the conditions and prerequisites of

proprietary rights formation. Proprietary rights (economic rules) occur during formation of institutions that regulate the choice of ways to use limited goods. The same rules define the forms of business organization in which economic agents form institutional agreements and make decisions about the use of resources. Let's take a closer look at the agrarian realities of Russia in the early twentieth century. Traditional for the Russian village "nepotism" and "communality" can be specified as supra-constitutional informal rules that determined the order of acquisition and suspension of ownership right of various resources (the creation of individual farms, the formation of institutional agreements in the agricultural sector during the agrarian reform of P. A. Stolypin. "Nepotism", in fact, was an informal norm of production experience transfer, of training in subtleties of agriculture on a specific territory, in certain economic conditions from generation to generation. Within the framework of this Institute, farmers creatively studied the production experience of previous generations and applied it in practice. The rationale for this institution was given even earlier, in the XIX century: family, community, and city differ only in form, but in fact they are according to Slavophil Samarin (1997) "a gradual extension of one communal principle" (p.18). Informal institution "nepotism", expanding beyond the family farm, turned into an institution of "communality". It also has deep cultural and historical roots. The concept of communality was first and most fully discovered in the research of Slavophile, as an image of the sociality principles of community types inherent in Russian society (Antonov, 2013).

The institution of "communality" can be defined as a way of organizations interaction, family farms, individuals in accordance with the principles of collectivist type of social development. It manifests itself in a joint protection from negative environmental factors, in mutual assistance, joint construction of various objects, charity.

In the community, as in an institutional agreement (contract), individuals acted within the informal institution of communality, for example, decided matters of charity. According to resident of the village of Nepremennaya Lodzya which is located in the Zavyalovskij district of the Republic of Udmurtia, who was born in 1928, mutual assistance was provided in the process of household building construction, grain threshing, mud stove beating, manure removal, wells-sinking. Archival records indicate that the types of assistance were divided into mixed, male and female. Men were collected for the most difficult work - wood chopping, logs hauling, house building: they put a log house, laid the floor and ceiling, covered the roof, raised the rafters, transported ready-made huts. Types of women's mutual assistance were quite different from each other: flax and hemp dressing, spinning, yarn washing, curtains sewing, cabbage chopping, crutching, collecting hops, washing the house. Resident of the village Necessarily Lodja of the Zavyalovsky district of the Republic of Udmurtia 1928 reports - gathered together even for geese plucking and cabbage salting (Kondratieva, 2014).

In some cases, individuals gathered together in small groups and did some work, in others-a group of individuals helped one individual to complete a certain stage of work. Farmers themselves or the village community meeting decided to help some individual: a widow, a soldier, orphans, feeble old people, sick people, homeless fire victims (Kondratieva, 2014).

Participation in joint work was common, public opinion regulated it, individuals were condemned for non-fulfilment of work norms. Young generation learned how to interact with each other through active

joint work within the framework of the informal communality Institute. For example, children had to watch the threshing of grain (Kondratieva, 2014).

Communal land ownership and land use, equalizing distribution of taxes and fines (mutual responsibility) were economic rules that are not identical to communality, but also were one of the elements of the formal Institute of taxation (Kuznetsov, 2011), or the economic rule of institutional environment. Institute of taxation, or "system of legal norms that regulate the tax relations of economic agents with each other and with the state" (Merkulova, 2005, p. 65). Communal land ownership and land use, including the equalizing distribution of the tax burden and field boundaries were elements of the taxation Institute. Detailed examination of land relations in the early twentieth century is a complex range of problems and will be the object of subsequent studies analysis.

The success of the cooperative movement during the new economic policy (1921-1927) was due to the action of the informal institution of communality. It also operated during the period of collectivization. In collective farms, individuals provided mutual assistance to each other, engaged in joint construction in the countryside. Collective assistance in various needs was a socially approved economic behavior. In 1928-1932, mutual assistance of individuals to each other did not disappear, but was carried out on a limited basis, as it was regulated by the state and was aimed at collective farms strengthening and fulfilling the procurement plan. In accordance with the Decision of the CEC USSR "On the funds of community mutual assistance of the collective farms" from February 1, 1932, mutual assistance funds in the village were created to "promote the improvement of labor discipline and increase labor productivity on the farm." (Section 3) Farmers could be dismissed for miss-out due to illness and death of their relatives (Bondarev & Samsonenko, 2010).

The practice of helping to the sick or temporarily disabled workers in collective farms, in contrast to industrial enterprises, was not applied. However, even this fact did not reduce collective mutual assistance. So, in may 1939, collective farmers of the "Harvest control" farm of the Arzgirskij district of the Ortdzhonikidzevskij region decided to provide bread to poor farmers (Bondarev & Samsonenko, 2010). Supra-constitutional informal institutions of nepotism and communality maintained their stability during periods of active agrarian reforms throughout the affected period.

6.2. Economic rules changes in the institutional environment of the first third of the twentieth century

During the reform of P. A. Stolypin in the institutional environment there was a **formal Institute of taxation, lending institutions and competition institutions**, defined as "a system of formal rules regulating the process of providing financial resources on the principles of urgency, payment and repayment" and rules containing "situations of competitive interaction and legal mechanisms of coercion and inducement to complying these rules" (Nikolaeva & Azarova, 2016, p. 132). They created the background for private ownership of the production factors and the labor results. It allowed individuals to act within the informal institution **freedom to choose the algorithm of actions** in the production process. Great opportunities were given, which is associated with features of agricultural production, according to Brtuskus (1874-1938) (Brtuskus, 1988). It is within the framework of this institution that an individual could fully realize the accumulated economic experience and intellectual potential, show organizational skills.

The system of institutions has changed since the late 1920s. **The formal Institute of economic planning canceled freedom of choice.** The system of norms regulating relations between the state and agricultural enterprises regarding the development and implementation of state tasks for the production and sale of agricultural products has become the main one. The means of production and the results of the agricultural workers labor belonged to the state from that moment. In other words, the institutional environment created the conditions for the formation of a certain system of property rights-the institution of state ownership of land and other factors of production in the agricultural sector was formed.

State developed regulations for the entire reproductive cycle- for production, sales, distribution and consumption. Accordingly, the rules that actualize the mechanisms of state ownership have been approved. Within the framework of the institutional environment, individuals have formed the institutional agreements "collective economy" and "private subsidiary farm". The last one was the successor of individual farms of the P. A. Stolypin time.

But in fact, it was not only official institutions that determined the development of the agricultural sector. The functioning of agricultural enterprises in accordance with the norms of the economic planning formal Institute was accompanied by the development of the shadow sector elements of the economy and informal shadow institutions of production, distribution and sale, in which individuals still had relative freedom in choosing economic actions. Shadow institutions have replaced the informal institution of freedom choice of the actions algorithm in the production process in the institutional environment. These changes are summarized in Table 01.

Table 01. Evolution of institutions and institutional agreements during the first third of the twentieth century (according to O. Williamson's scheme).

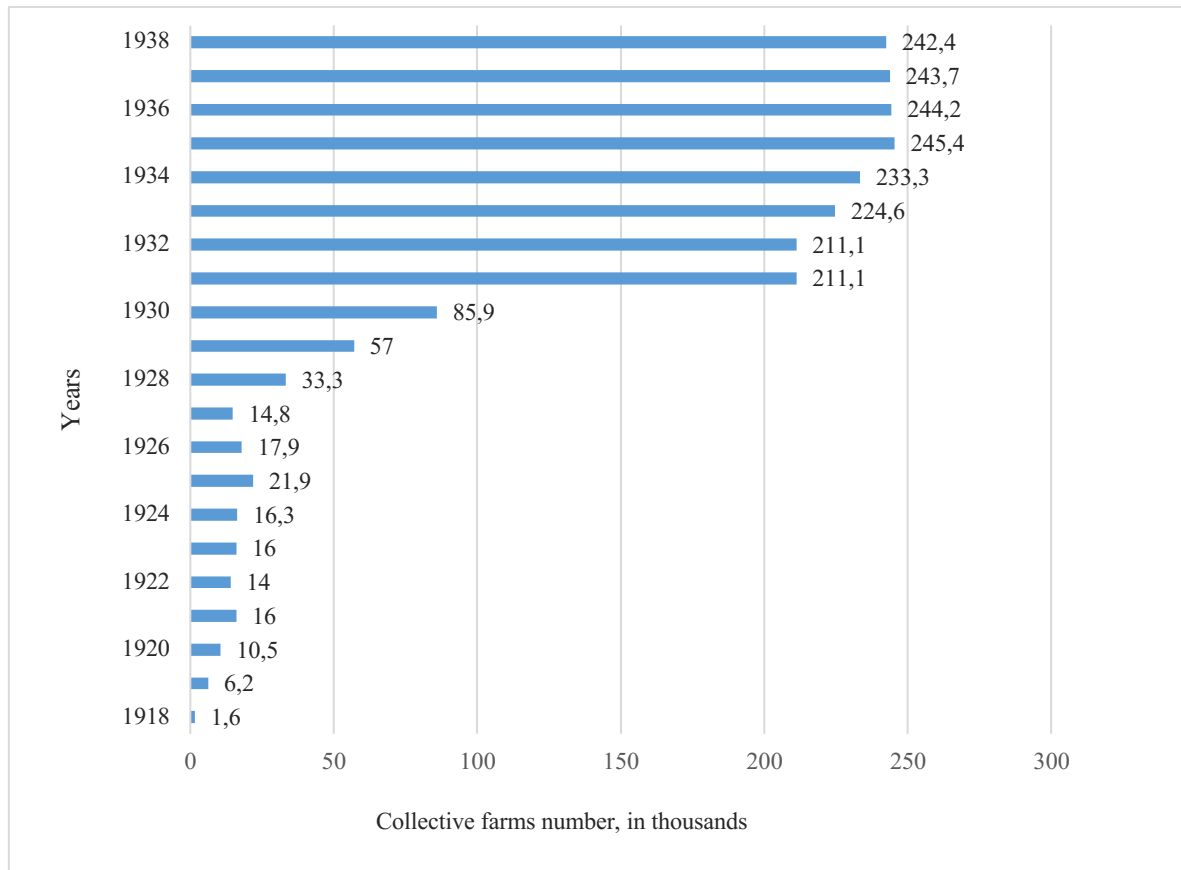
Institutions of the institutional environment	The period of the Stolypin agrarian reform	Collectivization
Supra-constitutional informal institutions	Nepotism, communality	
Formal institutions	Taxation	
	Competition Lending	Economic activity planning
Informal institutions	Freedom of choosing the algorithm of actions in the production process	Shadow institutions of production, sales and distribution
Ownership right	Private ownership on production factors and labor results	State (collective) ownership of production factors and labor results
Institutional agreements	Community, individual family farms	Collective economy, private subsidiary farm

Source: authors based on (Williamson, 1995).

The institutional environment during the three decades of the twentieth century changed the formal and informal institutions in village, while significantly changing the economic rules. But the deep supra-constitutional institutions of nepotism and communality were not affected, they found different existence possibilities.

6.3. Changes in the institutional environment in terms of institutional activities result

Reform of P. A. Stolypin created favorable conditions for the development of economic initiative of individuals within the framework of the freedom of choice Institute of the actions algorithm: mutual responsibility, equalizing land use and land ownership were canceled, and the rules of the taxation formal Institute were changed. The community gradually turned into an association of economically independent family farms (Kuznetsov, 2011), which had more opportunities to act within the informal Institute of freedom of choosing the algorithm of actions in the production process. The institutional environment received the "feedback»: in 1912-1913 in Russia, on average 160,952 farms wanted to be allocated, i.e 2.09 times more than in 1907-1911 (76,798 farms). The number of finally approved land management projects and individual allotments increased even more: from 55,933 to 111,865 (in 2.34 times). In 47 provinces of European Russia, almost 5 million households (38.8 %) supported the reform (Davydov, 2002). The new collectivization institutions also had a high result of action, we can see the growth on a figure of the collective farms number since 1918 (Figure 01).



Source: authors based on (Sautin, 1939).

Figure 01. Number of collective farms in the USSR in 1918-1938 (on July 1)

The first period (1918-1925) collectivization was slow, the number of collective farms grew from 1, 6 thousand to 21, 9 thousand, in 1925-1927 there were fluctuations, and in 1928, simultaneously with the beginning of mass and continuous collectivization, the formal Institute of economic activity planning

began to work. By 1938, the number of collective farms reached 242.4 thousand, they included in their turnover 99.3% of all sown areas and 93.5 % of individual farms.

The high efficiency of the economic rules introduced during the period of collectivization was associated not only with state coercion, but also with the action of supra-constitutional informal institutions of nepotism and communality, which supported the formation process of institutional agreements "collective economy" and "private subsidiary farm". Participation in joint work as one of the informal institution norms of communality continued in collective farms. Both in the beginning of the twentieth century and in the 1930-s years. collective labor was directed to mutual assistance of individuals to each other and to the implementation of the rules of the taxation Institute. Individuals were still protected from the negative factors of the external institutional environment and, even if they were forced, they chose to join proposed by the state institutional agreements.

7. Conclusion

Radical changes in political rules in 1917 did not lead to the eradication of all institutions in the institutional environment of the Russian village. Despite the fundamental transformation of the village, deep supra-constitutional informal institutions of nepotism and communality functioned in the agricultural sector, and mutual assistance was remained.

In the 1930s, the informal Institute of freedom of the algorithm of actions choice in the production process ceased to operate in the institutional environment. It remained in demand in the informal sector of the economy in the form of shadow institutions of production, sale and distribution. A formal institute of economic planning began its work to replace the formal institutions of competition and lending of the period of P.A. Stolypin in the institutional environment of the 1930s. These changes created the conditions for the transformation of the institution of ownership right (from private to public (collective)) and institutional agreements (collective farm and private subsidiary farm instead of the community, individual farm).

At the same time, the high performance of the Stolypin institutions in the early twentieth century was due to the fact that the rules were supported by the informal Institute of freedom of actions algorithm choice in the production process. After 30 years, the supra-constitutional informal institution of nepotism and communality also "held" collectivization. This institution proved to be the most effective in terms of adaptation to the formal institutions of collectivization. It also found its place in the unregulated "shadow sector and mutual assistance".

References

- Antonov, D. A. (2013). Sobornost and community as significant definitions of Russian society's identity. *Central Russian Journal of Social Sciences*, 3(29), 7-13. [In Rus.].
- Bondarev, V. A., & Samsonenko, T. A. (2010). *Social assistance in collective farms of the 1930s: On materials of the South of Russia*. Novocherkassk: Platov South-Russian State Polytechnic University. [In Rus.].
- Brutskus, B. (1988). *Socialist economy. Theoretical thoughts on the Russian experience*. Paris: Search.
- Davydov, M. A. (2002). *Land management statistics in Russia (1907-1913). Economic history: Yearbook*. Moscow: ROSSPEN. [In Rus.].

- Decision of the CEC USSR "On the funds of community mutual assistance of the collective farms" from February 1, 1932. Retrieved from <http://www.consultant.ru/cons/cgi/online.cgi?req=doc&base=ESU&n=31423#034977662746724025>. Accessed: 14.11.2019. [In Rus.].
- Gagarina, M. V. (2019). *Sustainable development of agricultural organizations in the context of institutional changes: Thesis PhD in economics*. Moscow: Ural State Agrarian University. [In Rus.].
- Kondratieva, E. V. (2014). Communal traditions in the working mutual aid (Chuvash and Udmurts). *Bulletin of the Chuvash University*, 4(47), 44-49.
- Kuznetsov, D. V. (2011). Stolypin agrarian reform and the peasant community: A new look at an old problem. *Bulletin of the Omsk State Agrarian University*, 2(2), 76-81. [In Rus.].
- Merkulova, T. V. (2005). Formal and informal institutions of tax: interconnections and contradictions. *Scientific Papers of DonNTU: Economics*, 91, 64–70. [In Rus.].
- Nikolaeva, E., & Azarova, T. V. (2016). To a question on the competition as institute. *Modern High Technologies. Regional Application*, 3(47), 132-140. [In Rus.].
- North, D. (1997). *Institutions, institutional changes, and economic performance*. Moscow: Economic book fund "Beginnings".
- Rushiczka, O. A. (2019). Organization of the food market of agricultural organic products in the industrial and agricultural region: Theses PhD. Yekaterinburg: Ural State Agrarian University.
- Samarin, Y. F. (1997). *Articles. Memoirs. Letters*. Moscow: Terra. [In Rus.].
- Sautin, I. V. (1939). *Collective farms in the second Stalin five-year plan: Statistical digest*. Moscow; Leningrad: Gosplanizdat. [In Rus.].
- Williamson, O. (1995). Hierarchies, markets, and power in the economy: An economic perspective. *Industrial and Corporate Change*, 4(1), 21-49.