ASIAN SOCIAL SCIENCE

CANADIAN CENTER OF SCIENCE AND EDUCATION

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Land-Property Complex of Saint-Petersburg and Its Development in Present Situation

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Abstract

Today state and development of land-property complex of Saint-Petersburg that is number 2 city of Russia and one of the greatest cities of the Europe has been reviewed in the article. Trends and problems of development of land-property complex of Saint-Petersburg have been revealed, measures to increase efficiency of its utilization in today situation have been defined. Definition of the concept of land-property complex has been provided together with data on land structure of Saint-Petersburg and its dynamics in last decade. Changes in land property forms, volume and structure of nonresidential property by building types have been shown. Disproportions in spatial and territorial structure of the city, problems of effective use of city land and other realty and differences in land tenure and development compared with global trends have been revealed as a result of analysis. High priority activities necessary to increase efficiency of land-property utilization have been defined.

Keywords: land-property complex, Saint-Petersburg, spatial and territorial structure, disproportions, problems, trends, development strategies

1. Introduction

Land-property relations are the base of any social and economic system because land, buildings, constructions is spatial and material foundation of economic activity and social development. That is why scientists of many countries pay much attention to research of land tenure, to forming and development of territorial land-property complexes. Foreign researches point out the growth of city land utilization efficiency (Wu, Zhang, Skitmore, Song, & Hui, 2014) and expansion of domestic buildings to suburban zones (Liu, Yue, Fan, & Song, 2015). Other works deal with the problems of optimization of ratio of government control to market development mechanisms in development of land-property relations and real estate market (Alexander, 2014; Qian, 2010). These are pressing problems for Russian megalopolises among which Saint-Petersburg has a special place.

Saint-Petersburg is thought of as a second capital of Russia, it has special historical and cultural importance not only in national but in global scope. Radical economic reforms of 1990s have affected its spatial and territorial development. These reforms caused transformation of land property relations and other estate and land tenure rules changes.

In addition to special role in economy and social life of Russia, Saint-Petersburg is one of the greatest cities of Europe by population that equals now 5 131 942 people (Federal State Statistic Service, 2014). It is larger than such cities as Paris, Rome, Madrid, Berlin. Saint-Petersburg is first city of Europe by population that is not a capital of the country. That is why problems of territorial and spatial development of the city in the context of efficiency of land-property relations have great scientific and practical interest.

2. Research Method

Complex of approaches, methods and means of scientific research have been applied in present research.

2.1 Methodology and Methods of Research

Complex and system approach, works of Russian and foreign economists, scientists that work in land tenure study, legal and economic regulation of land relations and managing objects of land-property complexes are

theoretical and methodological base of this research. Such methods as analysis, synthesis, analytical method, system analysis technique, retrospective, graphical and statistic analysis method were applied in research. Application of these methods in complex allowed analyzing studied phenomena in their relationship and in development. Analysis of the term "land-property complex" was starting point of the research. Term "land-property complex" became popular in scientific area and in practice but there is no common approach to definition of the essence of this concept. Legislation in force of Russia does not define this concept too. Still such definition is required due to the role land-property complexes play in development of the country, regions, cities and other territories. Present analysis resulted in author interpretation of the concept "land-property complex" and further research was based on this definition.

2.2 Content of "Land-Property Complex" Concept

Different points of view on the essence of the concept "land-property complex" are presented in scientific literature. According to one of the approaches land-property complex should be viewed from the point of view of administrative division of a territory and thus separate land-property complex of Russian Federation, subject of Russian Federation, municipal entity. For example, in one of the works land-property complex of a subject of Russian Federation and municipal entity are defined as "an aggregate of land resources, other estate and other relative resources being the property of a subject of Russian Federation" (Khametov, 2009).

According to many authors land-property complex is based on physical aggregate of an object of a property and land parcel. For example, Bondarenko S. I. Defines it as "an aggregate of land parcel with other property placed on it, infrastructure objects relating to their usage by functionality, isolation and alienation" (Bondarenko, 2012). Sai S.I. considers land-property complex "as an aggregate of estate objects, unified by common territory" (Sai, 2001).

Some Russian authors also stress legal dimension of this concept. Land-property complex is defined as "an object of property interest, aggregate of land and estate objects placed on it with a certain functionality, belonging to a certain legal (natural) person" (Khametov, 2009); as "an aggregate of rights on estate objects an(or) improvements with legal rights on land parcel they are placed on and joined by common aim of functioning and development" (Bondarenko, 2012).

According to authors of the book on managing of land resources two components of land-property complex may be separated: "land as spatial, social and economic concept of existing of a nation and state and the concept of "property" as social and political idea that defines the volume of interests and obligations of different legal entities in relation to legal real estate" (Kukhtin, Levov, Lobanov, & Semina, 2005).

Considering opinions presented in scientific literature we may note that administrative and legal interpretation of the idea of "land-property complex" are overstressed with prejudice to economic and managerial approach. Undoubtedly legal component is important considering possibilities of this or that subject (owner, administrative and territorial entity) to make decisions on disposal, alienation, etc. of land-property complexes. Still it is not less important to understand that land-property complex is not just a set of land parcels and land parcels that belongs to a certain territory. It is integral entity represented by a part of a territory of a land with land parcels on it, buildings and constructions that mutually complement each other and that are united by common destination, functional and infrastructure unity. This integrity allows viewing land-property complexes as integral object of reproduction and management. Territorial land-property complexes viewed in different levels of land-property hierarchy (country, region, settlement) act as a systems consisting of relatively autonomous but interrelated elements (subsystems). Primary cell of such systems (basic level system) is real estate object that is an integral entity consisting of land parcel and its improvements (buildings, constructions).

System approach to understanding of territorial and property complexes of settlements including big ones such as Saint-Petersburg presupposes that all decisions concerning their separate subsystems (for example, land-property complexes of industrial enterprises, residential development districts, etc.) should be made with regard to their internal and external relations in the context of development of all land-property complex of a city. The most important condition of grounded decision making is understanding of today state and existing trends of development of land-property complex of Saint-Petersburg.

Development of land-property complexes of various purposes is done in relation with purpose (category) and approved land tenure. Seven categories of lands assigned by purpose are separated in Land Code of Russian Federation: agricultural holdings; urban lands; industrial, power industry, transportation, communication, radio broadcasting, TV, computing lands, lands for provisioning space industry, defense lands, security provisioning lands and lands of other special purposes lands; lands of specially protected areas and objects; lands of forest

resources; lands of water resources; reserve lands. Land-property complex of Saint-Petersburg is located on urban lands provided for development and growth of the city.

Land-property complex of Saint-Petersburg may be defined with regard to these facts as system aggregate of intra-urban land-property complexes of different functionality, located on land parcels that relate to residential, social and business, recreational, engineering and transportation infrastructure zones, agricultural lands, special purpose lands, lands of defense objects and other territorial zones.

3. Results

3.1 Analysis of Land-Property Complex of Saint-Petersburg Structure

Total area of Saint-Petersburg in administrative boundaries is 140.3 thousand hectare. Being one of the biggest cities of Europe by territory (after Moscow and London) it has significantly lower population density that is 3566 (Moscow – 4823 people per 1 square km, London - 5173 people per 1 square km) and has free territories for development and growth of intra-city land-property complexes. At the same time existing structure of city's land are being underutilized according to Table 1.

Table 1. Structure of land-property complex of Saint-Petersburg by land types

#	Land types	01.01.2003		01.01.2010		01.01.2014
		Area, thousand hectare	Area, %	Area, thousand hectare	Area, %	Area, thousand hectare
1.	Residential development lands			9.7	6.9	11.9
2.	Lands of social and office development	20.4	14.6	12.5	8.9	15
3.	Industrial lands	17.7	12.7	19	13.6	16.1
4.	Shared lands	12.5	8.9	12.6	9	10
5.	Transportation, communication, facilities lands	8.7	6.2	6.8	4.9	8.2
6.	Agricultural holdings	28.6	20.4	28.9	20.6	29
7.	Lands of specially protected areas and objects	30.5	21.8	33.1	23.7	32.3
8.	Water resources lands	5.3	3.8	5.3	3.8	5.3
9.	Defense and other regime objects' lands	6.3	4.5	7.7	5.5	7.7
10.	Other special purpose objects' lands	1.5	1.1	1.3	1	2.8
11.	Lands not used in town development and other economic activity	8.4	6	3	2.1	2
	Total	139.9	100	139.9	100	140.3

Land of specially protected territories and objects and agricultural lands has the greatest share in the structure of land-property complex of Saint-Petersburg now, 23% and 20.7%, respectively. These shares have reduces in last decade but they are still substantial. It is obvious that perspectives of these territories are different. Share of agricultural lands will be reducing under the pressure of urban development and this trend should be considered normal. At the same time share of lands of specially protected territories may be reducing compared with other lands but these area as they are should be preserved at large. Legal order of using these lands should be preserved too. It is specifics and problem of development of land-property complex of the city.

According to statistical data (see Table 1) the share of residential lands and lands for social and business purposes growth by 4.6% in 2003-2014, the share of industrial lands has reduced from 12.7% to 11.5%. The share of water resources remains the same. The share of lands out of land turnover has reduced significantly (4.2 times). In practice these changes are greater because a number of industrial territories in downtown are not in fact industrial, but this fact is not reflected in statistical data.

In general the following trends should be mentioned:

- forming new land-property complexes mainly residential and social and business lands by active usage in urban development free lands and changing specialty of industrial lands;

- trend on preserving historical look of the city, architectural complexes that relate to specially protected land-property complexes;

- transformation of territorial and spatial structure of the city by expansion of area under urban development due to usage of former agricultural lands and transformation of formerly developed lands;

- expansion of actual city boundaries by active urban development on territories that are not administrative territories of Saint-Petersburg.

It should be notes that problems of optimizing urban lands structure, intensifying land usage in cities, drawing if investments and using of industrial lands are typical for other countries (Rossi-Hansberg, 2004; Wang, Antipova, & Porta, 2011; Wu, Zhang, Skitmore, Song, & Hui, 2014).

3.2 Disproportions of Spatial and Territorial Structure of the City

Modern urban look is being forming in Saint-Petersburg now but the same time disproportions in spatial and territorial structure of the city are growing. More than a half of land-property complexes with work places of the citizens are located on a quarter of the territory. Disproportions in location of work places and dwellings of working people cause increase in daily migration flows "downtown – peripheral districts".

Concentration of social and business, educational, tourist, cultural and entertaining objects in downtown causes its transport overloading while great spaces in peripheral districts lack these objects. Excessive intensity of land usage and building density in downtowns is typical for cities of foreign countries too (Wang, Antipova, & Porta, 2011; Munneke, 2005; Kärrholm, Nylund, & Paulina Prieto de la Fuente, 2014).

Structure of land-property complex of Saint-Petersburg by development types is presented in Figure 1.
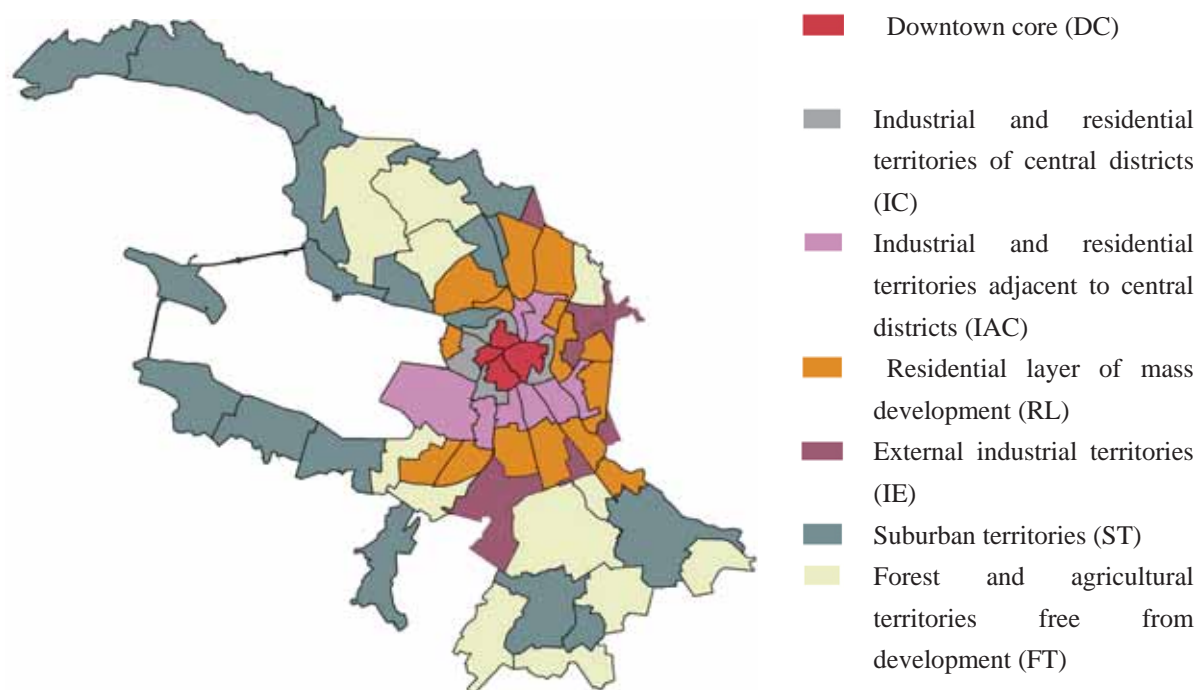
Figure 1. Types of development in Saint-Petersburg

Historical center of the city and "internal city" are surrounded by the ring of industrial zones. Many districts in historical center of the city require renovation. 85% of all shared apartments (about 90 thousand of apartments) are in "internal city"; 62% of buildings are worn-out. There are no bathtubs, about a thousand buildings have wooden ceilings.

Ring of industrial zones take 11% of the city territory. Equipment is worn-out up to 70%. Many of these enterprises do not work in their core business and just occupy "valuable" territories reducing price of city land.

Most buildings in the territory of mass development are obsolescent; possibilities of changing functionality of existing space are limited due to overall development.

Many territories used for development of new residential complexes in the city territory have no necessary facilities and transport infrastructure and power resources of some districts are almost exhausted.

Besides, the city has some characteristics typical for post-Soviet cities:

1) vast territories with high density of development with panel buildings in peripheral city districts;

2) excessive share of industrial development in zones adjacent to historical center;

3) underdeveloped commerce and services in center;

4) underdeveloped transport infrastructure, improper maintenance of transport;

5) problems with property rights and irregular structure of land property in central zone that hamper its prompt change to comply today requirements.

Global trends in city lands usage and some parameters of land-property complex of Saint-Petersburg are compared in Table 2.

Table 2. Differences in land usage in cities

Parameters	Global trends	Saint-Petersburg
Industrial development share	5-8%	12%
Share of lands for transportation infrastructure	20%	5 %
Network of streets density	10-15 km/square km	3.8 km/square km
Development density	Reducing from center to periphery	Reducing from periphery to center

According to these parameters situation in Saint-Petersburg is notably different from global trends (Liu & Lin, 2014; Henderson, 2011). It concerns in the first place the problem of transport infrastructure. It requires large-scale decisions about the usage of land-property complex of Saint-Petersburg as a whole (Lascano Kezič & Durango-Cohen, 2012).

It should be noted that development of the city is going on in worse economic conditions than in the period before crisis (greatest figures of economic growth were reached in 2004-2007). Today situation is characterized by reduction of federal budget and own revenue due to changes in territorial distribution of taxes of the biggest companies.

3.3 Development of Land and Other Real Estate Property Forms

Processes of privatization and changing of property forms impacted land-property complex of Saint-Petersburg. Intensity of privatization of land parcels and other real estate (buildings, constructions, premises) is significantly different. It resulted in emerging of land-property complexes with different land and building property rights when a building is in property of one subject and land parcel is a property of the other. This situation does not stimulate drawing of investments in development of such land-property complexes and make taxation and managing more complicated.

Dynamics of changing ok land property forms in Saint-Petersburg is presented in Table 1 and Figure 1.

Table 2. Saint-Petersburg land structure by property forms

Years	State and municipal, %%	Property of citizens, %%
2003	87.6	1.7
2004	87.0	2.0
2005	87.0	2.0
2006	85.5	2.5
2007	84.0	3.0
2008	83.0	3.0
2009	83.1	3.4
2010	82.7	3.8
2011	82.0	4.0
2012	80.0	5.7
2013	76.7	6.4

Dynamics of land property forms changing in the city is presented in Figure 1.
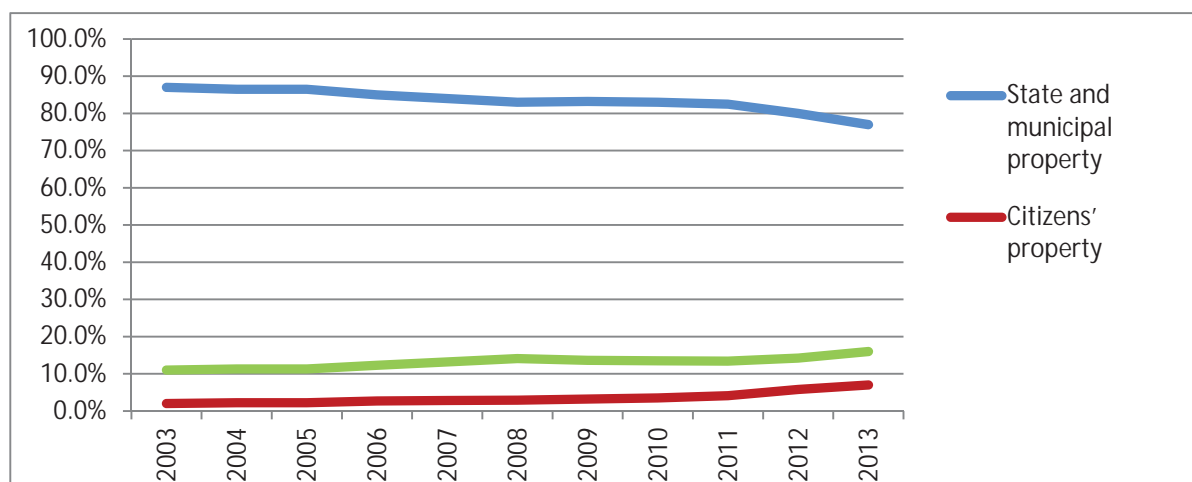
Figure 1. Changes in land structure of Saint-Petersburg by property forms

Share of lands in private property in Saint-Petersburg is growing, but the greatest share of lands is still lands in property of state (77%). Land parcels for individual residential development (59%), part-time farming (27%), buildings of country houses (6%) as well as redeemed for commercial purposes (3%) and other purposes (%5) are in private property. Lands owned by agricultural enterprises (85%), land parcels redeemed by private non-agricultural enterprises (13%), common use lands in non-profit communities of citizens, including lands occupied by tenement houses (2%) are lands owned by legal entities (Peterburg in figures, 2012).

Buildings property forms is another. According to Rosstat, 85.7% of all residential resources are in private property. 81.4% of this property are citizens' property and 14.3% are in the property of the state (Social and economic indicators, 2013). Data of nonresidential resources are provided in Table 3, compiled from the source (Peterburg in figures, 2012).

Table 3. Nonresidential resources of Saint-Petersburg by building types

#	Building type	Total floor, thousand square m	Share, %
1	Point of sales	5775.9	7
2	Industrial	27336.9	33.2
3	Warehouse	6915.6	8.4
4	Homehold services	954.8	1.2
5	Garages	1918.2	2.3
6	Office	11352.7	13.8
7	Public catering	664.2	0.8
8	School	4298.8	5.2
9	Educational and scientific	4344.4	5.3
10	Medical and sanitary	4533.3	5.5
11	Cultural and educational	1760.2	2.1
12	Kindergarten and day nursery	1987.7	2.4
13	Theatres and entertaining	485.6	0.6
14	Art schools	79.3	0.1
15	Trade schools	919.9	1.1
16	Communication and ATE	485.7	0.6
17	Hotels	1282.3	1.6
18	Resorts and camping	157.8	0.2
19	Public transport	147.3	0.2
20	Boarding schools	250.2	0.3
21	Other	6721.6	8.1
	Total	82372.4	100

Industrial buildings have the greatest share in nonresidential resources of the city (33.2%), followed by offices (13.8%), warehouses (8.4%), points of sales (7%). Other types of buildings have insignificant share – from 0.1 to 5.55%. Most part of buildings is located in peripheral districts of the city – Nevski, Kolpinski, Vyborgski, Kirovski, Kalininski, Krasnogvardeiski. About 30% of all buildings are located in central part of the city.

Structure of nonresidential resources of the city by users is the following: state authorities and industry – 55.3%, private persons – 27.4%, department of the city government – 17%, mixed property – 0.3% (Peterburg in figures, 2012).

This data highlight disproportions in property rights on land parcels and buildings located on them that makes managing of such object as common land-property complex complicated.

4. Discussion of Measures of Improvement of Efficiency of Usage of Land-Property Complex of Saint-Petersburg

Buildings and lands property rights should be balanced. For example, it is necessary to form legal land-property complexes in residential area of the city by support of the process of official registration of land parcels of apartment houses to the property of citizens who are owners of apartments in these houses. Processes of official registration of rights on lands of privatized enterprises should be promoted too.

Balanced development of land-property complex of Saint-Petersburg presupposes provisioning territories for development of necessary infrastructure, complete elimination of compacting building and transfer to complex development of territories.

Existing system of property record also affects efficiency of usage of land-property complex of Saint-Petersburg because it does not allow getting full actual information about all land parcels and buildings on them out of single information system. This information is distributed over different sources and often does not coincide. It is only fair to say that the process of forming united state information resource of real estate has been already launched (Federal Law of RF, 2014) but yet only a small part of required information is contained in it. Joining of three departments – Rosregistratsia, Rosnedvizhimost and Roskartografia – had been required to form real estate cadastre. Information systems of these departments that were highly diverse and have no common communication network and postal services were also unified. Classified information on a number of activities was unavailable. To form real estate cadastre it would be necessary to join different information, link resources, fix errors and develop relevant normative documentation, etc.

On Development of Common State System of Property Rights Registration and Cadastre Recording of Real Estate (2014-2019) Federal Target Program was approved in October 2013. One of target indicators of progress of this program is share of real estate objects recorded in state cadastre of real estate, Common state register of rights on real estate and contracts with it. In 2012 this indicator was 7.2%, 8% has been planned on 2014, complete registration) (100%) has been planned on 2019 (Government of RF Order, 2013). Fulfillment of tasks of the Program allows provisioning comprehensive reliable spatial and statistical data on real estate objects that form the basis of effective decision making in managing land-property complex of Saint-Petersburg and other cities and regions of Russia.

Strategy of Economic and Social Development of Saint-Petersburg until 2030 was approved in May 2014. For the first time it contains chapter on development of city territories with regard on their scope, specialty, development perspectives (Saint-Petersburg Government Order, 2014). The fact of understanding of importance of this problem and including if it in the list of strategic tasks of the city is inspiring by itself. But it is not enough. It is necessary to carry out complex of measures of administrative and organizational, economic and social character focused on improvement of efficiency of land-property complex of the city usage with regard to territorial and economic zones and balance of city territory development as a whole.

Adjustment of documents of town planning regulation (General layout, Land tenure and development rules, Territorial town planning norms) is a part of these measures with regard to trends of development of territorial and economic zones of the city; improvement of manageability of social and economic development of territories of the city by changing administrative and territorial structure of Saint-Petersburg; fulfillment of selective policy on support of business and investment activity with application of tax and other instruments considering specifics of each of territorial and economic zone.

5. Conclusion

Land-property complex of Saint-Petersburg should be viewed as complicated system the development of which is being affected by totality of internal and external factors such as changed on geopolitical and geo-economical

situation of the city, distribution of economic and social activity on city territory, social and economic factors and first of all transformations in structure of land-property resources, etc.

Land-property complex of the city should be viewed as the system comprised of land-property complexes of lower level as subsystems. It presupposes that any decisions regarding separate objects of real estate as elementary land-property complexes and separate territories should be made with regard of their impact on functioning and development of land-property complex of the city as a whole.

Carrying out of active territorial policy by authority bodies of the city using existing administrative and organizational tools is necessary conditions of improvement of the balance in development of city territory.

In the scope of the present article authors do not touch the problem of optimization of the ratio of state regulatory agencies and market instruments of land-property complexes development of post-Soviet cities and the effect of this ratio of efficiency of land tenure and territorial and spatial development. It may be a subject of further research.

Acknowledgement

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The Impact of Financial Instruments of the Foreign Exchange Market on Capital Migration in Kazakhstan

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Abstract

The capital migration is one of the important economic processes in a state. There many reasons for the capital exports and imports: the investment climate in a country, the changing rate of profit, labor, raw materials, environmental standards, etc. In the circumstances of global financial crises, which unveil the dependence of countries, the analysis of capital flows is an essential issue. The result of this analysis is the development of anti-migration measures. This article deals with the influence of financial instruments of the foreign exchange market on the migration of capital in the Republic of Kazakhstan. To date, the majority of transactions are conducted on the foreign exchange market of Kazakhstan, which gives reason to make assumptions about the impact of the foreign exchange market on the capital flows in Kazakhstan. The article provides statistical data for the period from 2007 to 2013, a regression analysis, conclusions, and recommendations. The resulting coefficient of determination at 96% confirms the impact of money market instruments on the capital migration in Kazakhstan. Based on the calculated model, we can conclude on the strong interrelation between capital flows and indicators such as the volume of transactions by resident banks, net operations by exchange offices (Foreign exchange cash), imports/exports of the foreign exchange cash by second-tier banks, the trading volume on the Kazakhstan Stock Exchange.

Keywords: capital migration, foreign exchange market, private capital flow, exchange rate, exchange trading

1. Introduction

The international capital flow holds a leading position in international economic relations and has a huge impact on the global economy.

The specificity of Kazakhstan at the present stage is the combination of a developed and developing country. On the one hand, it is the overall literacy of the population, an extensive network of research institutions, and space research. On the other hand, the raw material orientation of the economy, the environmental pollution in many regions, the need for foreign investment and import of new technologies, the infrastructure backlog. Nevertheless, Kazakhstan has positive expectations for the future: it expects a strong increase in exports and external surplus, GDP growth, reduction of unemployment, and convertibility of the national currency.

State programs of development of the monetary and foreign exchange sectors of Kazakhstan clearly demonstrate the intention of the leading public financial and monetary authorities to pursue a policy of strengthening the position of Kazakhstan on the world financial and foreign exchange market and complete the process of Kazakhstan integration into the world economy.

Disproportionate offer of and demand for capital in the various parts of the global economy, the growing interdependence of national economies, and the internationalization of production have been the drivers and catalysts of the capital floating in the regional and national scale. Exports and allocation of capital in certain countries with the purpose of its accumulation is an integral part of TNCs' activities, when investment in the subsidiaries by their parent companies is an important argument for expanding the geography of production and marketing of their products. Thus, according to expert estimates, there are about USD400 billion of free capital in the modern global economy (80% of which belongs to TNCs), which, erasing national borders of countries,

move in the direction of the markets that are prospective in terms of profitability and in highly profitable industrial complexes. The vector of their direction is largely determined by the current political and economic situation in the country and the region, as well as the created favorable conditions for investors.

The following sources of operating efficiency of TNCs in the field of capital migration are considered the main ones:

- the use of the advantages of owning natural resources (or access to them), capital, and knowledge, especially the R&D results, compared to domestic firms;

- the opportunity of choosing the optimal location for their businesses in different countries, taking into account the size of their domestic markets, the economic growth rate, the price and skills of manpower, the prices and availability of other economic resources, the infrastructure development status, as well as political and legal factors;

- the opportunity of accumulating capital throughout the system of TNCs, including borrowed funds in the countries where their foreign affiliates are located, and application of the capital in the most favorable circumstances and locations for the companies;

- the use of the financial resources of the whole world for their own purposes;

- continuous awareness of the state of the commodity, currency, and financial markets in different countries, which allows quickly transferring capital flows to those states where the conditions allow for maximum profit gain, and at the same time allocate financial resources with minimal risks (including risks of national currencies fluctuations);

- rational organizational structure, which is constantly being improved;

- experience in international management, including optimal organization of production and marketing, maintaining the high reputation of the country.

In the circumstances of the global financial crises, when the dependence of countries manifests itself, the analysis of capital flows is an essential issue. The result of this analysis is the development of anti-migration measures. The issue of influence of the money market instruments on the process of capital flows in Kazakhstan in this regard requires an analysis. The foreign exchange market is represented here not by chance, since currently most transactions are conducted in Kazakhstan on this market.

Many publications have focused on the problems of movement of capital and the money market instruments. At the present stage, the publications by the following authors have been the most interesting in the study of the above named research: Loskutov, V. I. (2000); Borishpolets, K., Chernyakovskiy, S. (2012); Kurmanalieva, E. S., Vinokurov, E. Y. (2011); Plekhanov, D. A. (2009);Bernshtam, B. E. (2013); Dobychin, E. V. (2003); Iskakov, U. M., Ruzieva, E. A. (2014); Sophie Brana, Delphine Lahet (2010); Eduardo Levy Yeyati, Sergio L. Schmukler, Neeltje Van Horen (2009); Jonathan D. Ostry, Atish R. Ghosh, Marcos Chamon, Mahvash S. Qureshi (2012); Peter D. Richards, Robert J. Myers, Scott M. Swinton, Robert T. Walker (2012); Eliana A. Cardoso, Rudiger Dornbusch (1989); Можно убрать?; Khuhawar Khizer Hayat, Zeng Jianqiu (2013); Rasha Al-Sakka, Owain ap Gwilym (2010); Gisela P. Zapata (2013) ; Odongo Kodongo, Kalu Ojah (2013); Ozan Sula, Thomas D. Willett (2009).

The presented studies do not consider the Kazakhstan market, so it is necessary to study in more detail the reasons for capital migration in Kazakhstan.

The purpose of this study was to analyze the influence of money market instruments on capital flows in the Republic of Kazakhstan, based on the statistics and regression analysis, providing conclusions and recommendations on the considered issue.

2. Methodology

To determine the influence of money market instruments on the capital migration, we used the regression analysis technique. With this purpose, we collected statistics on the inflow/outflow of capital in Kazakhstan from 2007 to 2013 and determined the possible factors of influence of the money market instruments on the migration processes in Kazakhstan.

2.1 Capital Migration and the State of the External Debt in Kazakhstan

Capital migration is a process when capital leaves the economy of one country in order to earn higher income in another. A study of the impact of migration of capital is relevant because the rapid growth in recent decades in the international trade, international interbank loans, intergovernmental loans and transactions on the stock and

foreign exchange markets of various countries has been accompanied by the rapid development of the international capital market. The international movement of capital has a huge impact on the global economy. It manifests itself primarily in the fact that the international transfer of capital contributes to the global economic growth. This is due to the fact that a country having sufficient capital or capital goods can establish production abroad through investments and gain a greater economic benefit than in the result of foreign trade. It is determined by the fact that the country receiving capital may have cheaper labor, raw materials, or more favorable investment climate, such as availability of free economic zones or low environmental standards.

One of the characteristic phenomena of the modern global economy is the scaling-up of the capital migration between countries. International capital market is an important part of the economy, ensuring the movement of financial resources. Moving the production factors from countries excessively endowed with relatively inexpensive production factors to countries where they are relatively scarce and expensive results in equalizing the prices for the production factors, that is, in improvement of the welfare of the countries participating in this exchange.

Capital migration in Kazakhstan is represented by the following data. During the period from 2007 to 2013, capital inflow was observed in Kazakhstan. During the period from 2007 to 2008, the inflow reduced significantly, reaching USD 2,384 million. During the following two years, there was a tendency to reduction of the capital import. In 2010, the imports of capital amounted to USD 1,269 million. In 2013, the imports of capital amounted to USD 8,366 million. The dynamics is shown in Figure 1.
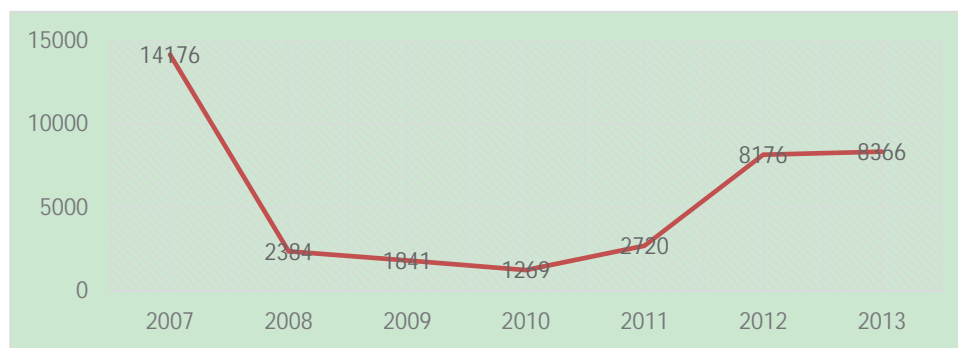
Figure 1. Net capital imports(+)/exports(-) in Kazakhstan, in million US dollars, according to (http://www.nationalbank.kz/)

2.2 The External Debt of Kazakhstan

Next, let us consider the state of the external debt of Kazakhstan. The following Figure 2 shows the downward trend in the external debt in 2010 and 2011, and then shows the growth of the external debt in 2012 and 2013. As of 2013, the external debt of Kazakhstan amounted to USD 6,156.6 million.
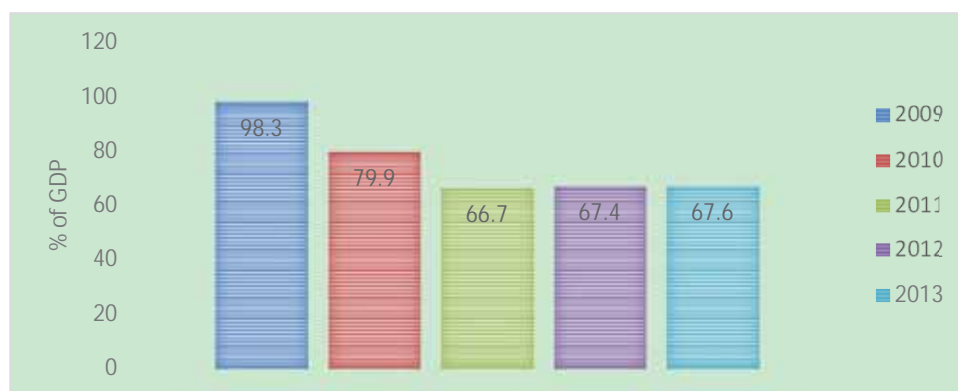
Figure 2. The external debt of Kazakhstan, % of GDP (http://www.nationalbank.kz/)

In terms of the economy sectors, a significant share of the external debt belongs to intercompany receivables and other sectors. By falling down to 72.7% and 59.2%, accordingly in 2013, banks during this period showed a decline in the share to 11.2%, while the government authorities and the central bank increased their share in the foreign debt to 5.7%.

"The increase in the external debt of the Government of the Republic of Kazakhstan mainly affects the inflow of funds in the state foreign loans, which amounted to USD 0.8 billion in 2013. Moreover, these funds were raised mainly to finance the construction of roads within the "Western Europe – Western China" project. With account of the maturity of existing external loans and foreign exchange differences in them, the foreign debt of the "public administration bodies" for the period increased by USD 0.3 billion. The external debt of the National Bank of Kazakhstan decreased by USD 73.0 million at the expense of commitments for correspondent accounts and deposits of non-residents in the National Bank of Kazakhstan (a decrease by USD 81.4 million) and exchange rate fluctuations (USD -137.5 million). The external debt of the sector in the absence of non-residents' transactions with short-term notes of the National Bank of the Republic of Kazakhstan remained stable over the last three years (about USD 0.6 billion)". (*http://www.nationalbank.kz/*)

2.3 Gross Outflow and Inflow of Direct Investments and Openness of the Economy

The gross outflow and inflow of direct investments in Kazakhstan is represented in the trend in both cases (Figure 3, 4)

Figure 3. Gross outflow of direct investments in Kazakhstan, in million US Dollars
(http://www.nationalbank.kz/)

Gross outflow of direct investments abroad from direct investors of Kazakhstan includes the increase of equity instruments, reinvested earnings, and the increase in debt instruments.
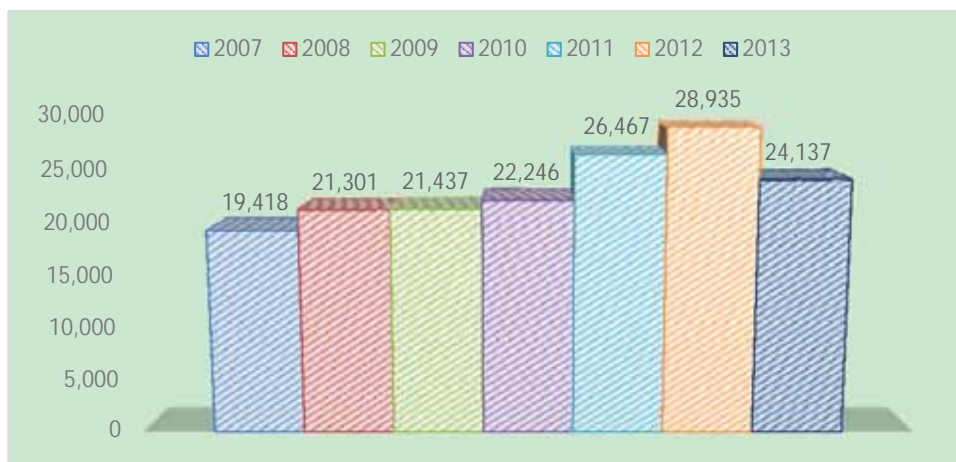
Figure 4. Gross inflow of direct investments in Kazakhstan, in million US Dollars (http://www.nationalbank.kz/)

Despite the decline in comparison with 2010, the gross inflow of foreign direct investments to the republic remains at a high level – more than USD 24 billion for the year under review. "The reduction of the gross inflow is caused by the lack of large single transactions to acquire shares in the Kazakhstani capital, which was observed in 2012, as well as with the decrease in the volume of financing of the North-Caspian project"*(http://www.nationalbank.kz/).*

Taking into account the repayment of the principal debt under mutual intercompany liabilities, the net inflow of direct investments in Kazakhstan reached USD 10.2 billion, and the net outflow abroad – USD 2.4 billion.

One of the determining factors of the flows of both the long-term and short-term capital is the openness of the country. The indicator of an economy's openness, which is calculated as the ratio of turnover to the GDP has declined in the analyzed period by 5.6% to 59.7% with a decrease in the share of exports in GDP by 5%, and the share of imports – by 0.6%. Exports and imports in 2013 were at the level of 2009, i.e. 37.5% and 22.2% respectively.

2.4 Factors of the Foreign Exchange Market Affecting the Capital Migration in Kazakhstan

The development of the Kazakhstan's foreign exchange market is determined by the impact of two main factors – firstly, the liberalization of foreign exchange transactions and increase in the degree of openness of national markets, and secondly, introduction of new foreign exchange and financial instruments and modern technologies in the foreign exchange market. The foreign exchange markets of developing countries and countries with economies in transition are currently at the stage of liberalization, which gives a great opportunity to strengthen further the role of the national economies, in the process of their integration in the global financial and foreign exchange markets.

The conditions of the emerging foreign exchange market of Kazakhstan have specific features in the currency relations, particularly the specific practice of certain foreign exchange transactions. It is also necessary to compare the experience of the monetary system of Kazakhstan with the international practice and to formulate proposals to optimize the foreign exchange market as a whole, taking into account the significant changes in the global foreign exchange market.

Currently, only a few Kazakhstani banks propose using the system of margin trading, a unique opportunity to conduct foreign exchange operations on the FOREX market. With the increase in the resource base of banks in Kazakhstan, due to the high degree of currency risks in foreign exchange transactions on the Kazakhstan exchange market, it is necessary to establish a "limit" of currency transactions or the so-called capital adequacy ratio. In this case, the positive experience of the Bank of England can be used. Kazakhstan is particularly interested not only in the experience of the Bank of England's application of capital adequacy ratios, but also in the experience of the foreign exchange market regulation. For example, the London Code of Conduct, published by the British Bankers' Association under the auspices of the Bank of England, along with the instructions of the Central Bank, plays a significant role in the regulation of foreign exchange and other transactions in the foreign exchange market. This code was compiled by the Bank of England and the BBA (the British Bankers' Association) with active market dealers, brokers and other actors of the foreign exchange market. The basic principles established by the Code have to be known by all the actors of the foreign exchange market in the UK to ensure the most effective functioning of all segments of the market.

The main subjects of the global capital market are private businesses, states, and international financial institutions (the World Bank, the International Monetary Fund).

According to the procedure established in the Republic of Kazakhstan for Financial Reporting by regulatory agencies, the financial market consists of seven markets: the Cash, Credit, Deposit, Insurance, Pension, Foreign Exchange, and Securities markets (Iskakov, Bohaev, & Ruzieva, 2005).

In Kazakhstan, a rather large number of transactions is conducted in the foreign exchange market. The actors who are involved in transactions in the foreign exchange market in Kazakhstan are the National Bank, commercial banks, firms, brokers, and households. For the National Bank, it is purchase and sale of foreign exchange, foreign exchange interventions. For commercial banks, it is foreign exchange buying/selling transactions for their customers, transactions to hedge foreign exchange risks. Firms conduct foreign trade activity and can also receive and provide loans in foreign exchange. Brokers act as intermediaries in foreign exchange and interest rate transactions. Households buy and sell foreign exchange.

The main factors that expectedly affect the migration of capital are:

1.   The volume of transactions by resident banks;

2.   Net operations by exchange offices (Foreign exchange cash);

3.   Imports/exports of foreign exchange cash by second-tier banks;

4.   The trading volume on the Kazakhstan Stock Exchange

Figure 5 presents the data on the volume of transactions by resident banks from 2007 to 2013 (millions of currency units).
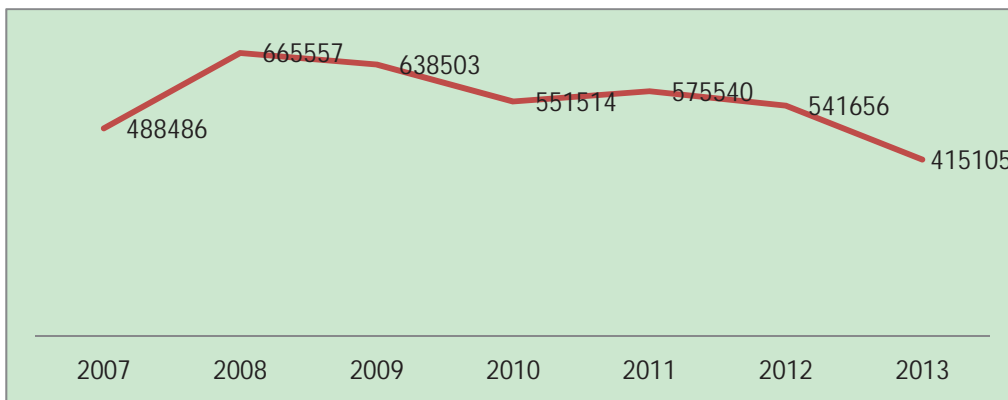
Figure 5. The volume of transactions by resident banks, *according to* (http://www.nationalbank.kz/)

Since 2008, a high value of transactions followed by a decrease in this indicator was observed. During this period, in addition to transactions committed by resident banks, the foreign exchange cash was also purchased and sold through exchange offices.
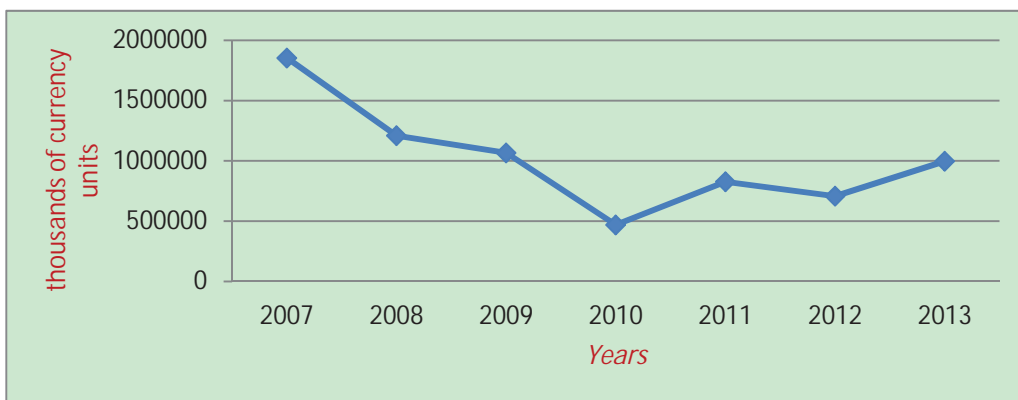
Figure 6. Net operations by exchange offices (foreign exchange cash), *according to* (http://www.nationalbank.kz/)

The following Figure 6 shows the number of net operations by foreign exchange offices, i.e. transactions with foreign exchange cash. The figure shows this indicator's decline in 2010. Analyzing the data on the presented figures, we can see the intentions to conduct transactions with foreign exchange cash in 2013. An increase in ruble transactions is especially obvious. Transactions with the foreign exchange cash of China and the UK appeared only in 2010. The possible factors of the capital migration in Kazakhstan are the imports/exports of currency by second-tier banks (Figure 7). The graph shows a decrease of transactions since 2007 and an increase in transactions since 2009.
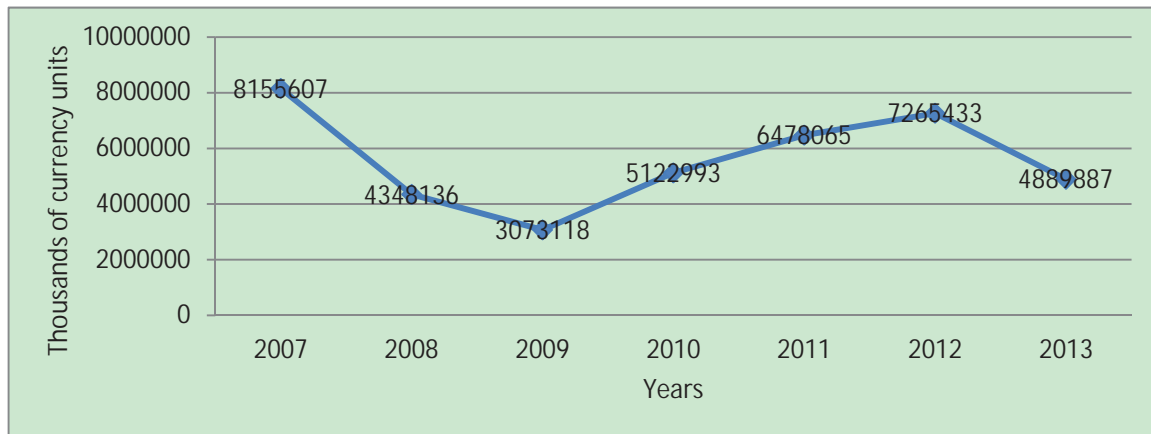
Figure 7. Imports/exports of foreign exchange cash by second-tier banks, *according to* (http://www.nationalbank.kz/)

One of the possible factors influencing on the capital migration may be the volume of foreign exchange trading on the Kazakhstan Stock Exchange. The data are provided in Figure 8.
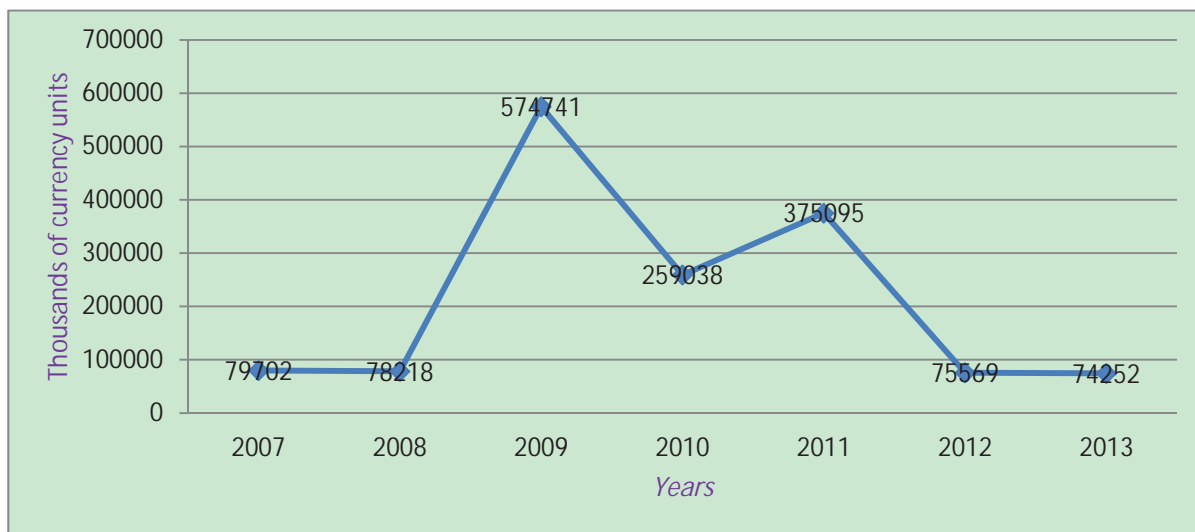
Figure 8. The volume of transactions at KASE, *according to* (http://www.nationalbank.kz/)

According to the provided data, an increase in trading volumes was observed in 2009. Further, there was a decrease in forex trading.

Considering the provided factors, we have the following data to find the coefficient of determination and the mathematical model.

Net capital imports/exports in Kazakhstan, in million US dollars: Y 1

The volume of transactions by resident banks: X 1

Net operations by exchange offices (Foreign exchange cash): X 2

Imports/exports of foreign exchange cash by second-tier banks: X 3

The trading volume on the Kazakhstan Stock Exchange: X 4

3. The Results

The coefficient of determination is equal to 0.96 or 96%, which shows a strong correlation of the above factors and the capital migration in Kazakhstan

The model looks as follows:

$$Y = 9067 - 0.02427x_1 + 0.0053\ x_2 + 0.0009\ x_3 - 0.0026x_4$$

According to the obtained model, we can draw the following conclusions:

$-0.02427x_1$ – it is the coefficient that shows the influence of the factor of the volume of transactions of resident banks within this model on the value of capital migration in Kazakhstan with the weight of -0.02427. The minus mark indicates that this effect is negative, that is, the larger number of transactions by resident banks, the larger the capital outflow from the country is;

$+0.0053\ x_2$ – it is the coefficient of influence of net operations by exchange offices (Foreign exchange cash) on the capital migration in Kazakhstan. According to the model, this effect is positive, which means that the more such deals, the larger the capital inflow is;

$+0.0009\ x_3$ – it is the coefficient of imports/exports of foreign exchange cash by second-tier banks influence on the migration of capital in Kazakhstan. The influence in this case is directly proportional.

$0.0026x_4$ – it is the coefficient that shows the weight of the influence of the factor of the trading volume at the Kazakhstan Stock Exchange on the rate of capital migration in Kazakhstan with the weight of -0.0026. The minus mark indicates that this effect is negative, that is, the more trading, the larger the capital outflow from the country is.

The resulting coefficient of determination at 96% confirms the impact of money market instruments on the capital migration in Kazakhstan. Based on the calculated model, we can conclude on the strong interrelation between capital flows and indicators such as the volume of transactions by resident banks, net operation of exchange offices (Foreign exchange cash), import/export of foreign exchange cash by second-tier banks, trading volume on the Kazakhstan Stock Exchange.

In this situation, it is necessary to determine the importance of the monetary policy, the export incentives, as well as the protection of domestic manufacturers, control over the capital exports and imports, a combination of administrative and currency control in Kazakhstan.

4. Discussion

The imports of capital increased during the period under review, which was due to the activities of the non-banking sector of the economy of Kazakhstan. The growth of the direct investment outflow is caused by the reinvested earnings and the increase in debt instruments. The decrease in the inflow of direct investments is due to one-time large transactions of acquisition of a share in the capital of Kazakhstan. Devaluation of tenge in February 2014 also showcased the instability of the national currency.

The National Bank of Kazakhstan currently pays special attention to the process of strengthening the national banking system. In this connection, it seems appropriate to perform a more detailed study of the capital adequacy ratios used in the UK, as well as the experience in regulating the foreign exchange market with the Code of Conduct, which can be applied to the banking sector in Kazakhstan.

On the other hand, to increase public investment in the economy, it is necessary to tie the volume of foreign exchange reserves to one of the macroeconomic indicators, and transfer the excess foreign currency from the foreign exchange reserves of the National Bank to the state budget. The need for such measures is dictated by the task set by the Head of State on the development of the Investment Fund for the priority use of the financial resources of the country to develop the real economy, and also is due to the fact that the foreign exchange reserves of the National Bank amounted to slightly more than USD 28 billion at the end of November 2014, i.e. below the critical value of the Reddy Criterion.

In addition, there is a need to improve the efficiency of using the foreign exchange reserves of the country. While the National Bank allocates billions of resources abroad at low interest rates, the economic entities raise funds from other countries in the form of loans at higher interest rates.

As a result, the national economy every year loses hundreds of millions of dollars just by the difference in the percentage amount, and the losses are growing steadily. The solution to this problem could be a revision of the tax policy in terms of the overstatement of tax rates.

The foreign exchange funds of the National Fund and the reserves of the National Bank need to be used for lending to the domestic economy and lending for international settlements of the residents of the country, except for their return into the economic turnover and the subsequent impact on the rate of tenge.

In this case, a stable growth in the circumstances of changes in the global environment will be ensured through the currency exchange rate.

It is necessary to develop a mechanism that would provide the necessary overall level of domestic prices with respect to the world prices, as well as broad implementation of advanced technology and equipment in the production of high-tech products by Kazakhstani producers.

Our country has not yet elaborated steps to use rationally the proceeds from the expected increase in oil exports, which may further be contributed to by further increase in foreign investment and continuing favorable global market conditions for energy and metals.

5. Conclusion

This article deals with the influence of financial instruments of the exchange market on the migration of capital in the Republic of Kazakhstan. To date, the majority of transactions are made in the foreign exchange market of Kazakhstan, which gives reason to make assumptions about the impact of the foreign exchange market on the flows of capital in Kazakhstan. The article provides statistical data for the period from 2007 to 2013, a regression analysis, conclusions, and recommendations. The resulting coefficient of determination at 96% confirms the impact of money market instruments on the capital migration in Kazakhstan. Also, this article contains the model of dependence of the presented factors on capital flows in Kazakhstan. Based on the calculated model, we can conclude on the strong interrelation between capital flows and indicators, such as the volume of transactions by resident banks, net operation of exchange offices (foreign exchange cash operations), imports/exports of foreign exchange cash by second-tier banks, trading volume on the Kazakhstan Stock Exchange. This study was conducted in the foreign exchange market of Kazakhstan. It is also necessary to study the securities market. Presumably, the lack of liquid financial instruments in the stock market of Kazakhstan also contributes to the capital outflow from the country.

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The Evaluating Methodology of Municipal Management Performance

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Abstract

This article made an attempt to analyze the urban management according to the system approach (Mescon *et al*., 1988). The examination was fulfilled by the materials of social and economic development of single-industry city Naberezhnye Chelny (Shaykhraziev, 2014), that initially creates complicated conditions for the effective management (Fattakhova, 2011). There are some ways of improving urban management to the individual components of the system such as the operation factors "input", transformation entry-action, the assessment of services as an indicator of the "exit" of the system. The core message is the necessity to apply management sophisticated technologies to the local authority too, as they are used in the operation of enterprises and organizations (Fayolle et al., 1992).

Keywords: the municipal management, efficiency, social needs, the system approach, single-industry cities, the population, the customer satisfaction, managerial technologies

1. Introduction

The social standard of living is determined by many factors including financial resources, political, geographical, religious, and so forth, determining the social standard of well-being. A municipal management quality defining a quality of life is equally important in framework development. In this paper, consideration the issue of improvement of the effectiveness the municipal management is carried out from the perspective of administrative concept. This approach is due that subjects of management activity represent the owners' interests of their capital and these subjects should meet their fullest. In business a management team usually represents by salaried employees, who know specific goals and objectives. The companies' achieved results are the measure of their fee earnings and foundation for decision making about future career in the company. Drawing a parallel with the local authorities, it is clear that capital owners are a local population and, in fact, they have their votes to determine the direction of their territory and, therefore, they should assess the degree of achievement of objectives. A political system implementing in our country is targeting to this state of things. Nowadays there is an electoral system that allows choosing management subjects, which have a maximum degree of confidence. Elections are carried out periodically, that, actually, forbid "renew" the contract with those who did not reach the goals, not justified confidence. Revisiting the remuneration of municipal employees it is difficult to apply solely market-based approach, involving at least two components: the accountant and part of the bonus (Joseph, 2010). Complexity of the implementation of this mechanism is the need creating an individual approach to each assessed the municipal manager, and in fact the basic conditions for their work initially very different. Territories have different economic base, social potential, demographics, climate and other conditions. In this case, municipal managers are not only the body which carries out the distribution of the funds accruing to the local budget, but also representatives of the government, in whose hands are concentrated the most powerful levers of urban governance in the broadest sense of the term, which implies compulsory foresight risks, their insurance and diversification (Zeldner, 2013). In this regard, multi-criteria evaluation of municipal managers (local authorities) is desirable.

The motive of this study was the economy of Naberezhnye Chelny, the main core of which is focused on urban development enterprise - JSC "KAMAZ". Nowadays, management of Naberezhnye Chelny shows not efficient

management type. Otherwise it is impossible to explain the state of the industry and urban finance, based on only one manufacturing plant, which is characterized as highly unstable and requiring a standing financial support.

Lack of motivation of local authorities in improving the efficiency of urban management is manifested in study of any local budget sections. One of the major management functions of one of the basic principles is to motivate decision-makers.

2. Method

During the operational implementation of different management techniques it is necessary to consider ways to improve the efficiency of municipal managers in the context of management theory and practice. It is important to apply the system (Maiello et al., 2011) approach for built-up social and economic development of cities. The system approach methodology consists of evaluation input factors, its processing by technologies possessing staff, which ultimately leads to the formation the final product, in this case -services.

Let's consider the basic elements analyzing the management municipal corporation. For instance, some factors input may be represented by the following list:

-      A legal framework, as a factor constraining or providing additional powers to local authorities (Federal Law, 2003);

-      Socio-economic conditions form the basis of development areas funded with employable population and sophistication industry;

-      Geographical, climatic and political factors determine the development prospects of the national economy (Zanadvorov & Zanadvorova, 2003).

Certainly the list could be continued, but the aim is to find ways to solve the problem of uneven development areas. Thus, in accordance with one of the basic principles of Henry Fayol (Fayolle et al., 1992), it is important to provide resource management and after that it allows to claim the achievement certain results.

We should evaluate the area development known as monoindustrial cities. There are lots of distinct sectors in management theory and practice such as risk management, crisis management, involving prevention and negotiation risks and crisis (Geneva, 2010).

Crisis management of enterprises occurring bankruptcy is carried out with the assistance of court-appointed trustees, as an attempt by a third party having a large competencies, to optimize the insolvent company activity (Korotkov, 2008).

Risk management as a preventive measure is also in practice of attracting outside consultants helping quickly identify the symptoms and eliminate the destructive causes.

The leadership movement from one situation to another (Raudeliūnienė & Meidutė-Kavaliauskienė, 2014) is quite justified management science, supported by practice. It is important to consider monoindustrial cities contrariwise, because they have another financial situation.

According to abovementioned point, it emphasizes that cities have uneven development, including the reason of non-equivalence of output baseline conditions (ie, input parameters), and it must be taken into account when we assess the municipal managers performance.

Administrative technologies allow to obtain a result from less high quality raw product to more high set level of quality. For instance, some cities have been able to stop being a single industry and evolved into self-contained urban areas. It indicates that the municipal managers have a managerial talent.

The appearance of single-industry cities carried out on the basis of the implementation of national policy, and it did not has a long-term development plans. Primary single-industry cities were appeared in the Industrial age of Peter I. The cloth and iron manufacture required a large number of hands. State-owned, serfs, military and convict workers were involved in factories.

Initially industrial plants were formed without a sufficient level of culture and a science-driven opportunity. Later some of them outgrow into a major industrial centers (Chelyabinsk, Tula, Chrysostom), and remainders are still represent a single-industry cities (Irbit, Asha). Thus, cities were emerged and developed, focusing in a large industrial facilities range (Fattakhova, 2011, p. 10).

For example, at the level of municipal management, in terms of management of municipal property, it is advisable to engage external managers on a competitive basis. A professional approach concept to systems management technology (serveyinga) is widespread in the world. The feasibility of a proceeding of external managers of municipal property is caused by:

- officers of a town hall machinery are far from market foundations to establish a leasehold ground rent and capital facilities, so competitive managers are able to more effectively manage municipal property;

- local authorities will have powers to select one of several applicants, as well as the right to exercise control functions to identify the effectiveness and scheduling of cooperation with external managers.

The implementation of audit function is advisable to consolidate under the local level in this field (Fattakhova, 2012, p. 133). Currently, there is a regulatory framework that allows to evaluate the municipal management activities (Decree of the President of Russia, 2008). In accordance with the Decree of President the assessment of bodies of local government in urban districts and municipal districts is carried out on 13 core indicators and 27 additional. The list is very comprehensive and it allows to identify trends in the socio-economic development of a particular locality. It includes:

1. The number of small and medium business per capita.

2. A rake off average number of employees (without external part-timer) of small and medium business in average number of employees (without external part-timer) of all businesses and organizations.

3. A rank off length of public roads which do not meet the regulatory requirements in the total length of public roads.

4. A share of population living in towns that do not have a regular bus service and (or) a railway communication with the administrative center, in the total population of the urban district.

5. A rank off land plot area that is a taxable item in the total area of the urban district (municipal district).

6 A rake off children at the age one to six years who are registered for the determination to pre-school educational institution, in the total number of children aged one to six years.

7. A rake off the municipal educational institutions graduates who have passed the unified state exam in Russian language and Math, in the total number of the municipal educational institutions graduates, who passed the unified state examination.

8. A rake off overall area per person.

9. A rake off municipal utilities realizing manufacture of goods and provision of services for water, heat, gas, electricity, sanitation, sewage treatment, and disposal (dumping) of municipal solid waste.

10. A rake off apartment blocks located on land parcel. A cadastral registration was done of them.

11. A specific quantity of the consumption of energy (electricity and heat energy, water, natural gas) in apartment blocks (based on 1 square. meter for one person).

12. A specific quantity of the consumption of energy (electricity and heat energy, water, natural gas) municipal budgetary institutions (based on 1 square. meter for one person).

13. People satisfaction of self-governing authorities activity in urban district (percentage of respondents).

These figures are a result of policies by local authorities and serve as a criteria for decision-making by higher-level authorities about amounts of financial investments from higher levels of budget system. The basic idea of carrying a monitoring is to encourage the best one.

According to the management methodology (Cohen & Amorós, 2014), it is clear that motivation as a way of encouraging productive and more productive activities is not always necessary because there are situations when the use of incentives, suggesting effects due to external stimuli are justified. Thus, we consider include not only the fact of evaluating progress of socio-economic development, but also a formulation of specific values of individual indicators, as a way to stimulate (Ministry of Economic Development Russian Federation, 2014).

The method of estimating the local authorities' efficiency, in which there is the indicator "People satisfaction of local authorities' activity of urban district (municipal district) (percentage of respondents)," a summary evaluation is formed by the following criteria:

1. People satisfaction with public transport services in the municipality (percent of respondents).

2. People satisfaction with the quality of public roads in the municipality (percent of respondents).

3. People satisfaction with housing and public utility services: the level of organization heating (fuel supply), water (drainage), electricity, gas (percent of respondents).

These criterias are certainly important in determining the level of the territory development , however, in our opinion, they are not enough exhaustive to evaluate the effectiveness of the municipal authorities.

According to the survey (Fattakhova, 2012) one of the questions concerning social needs was: "For what purpose it is necessary to direct the resources of the municipal budget at the beginning?" Of the proposed answers were chosen:

- To increase salaries, pensions and allowances - in most cases (57.3% of responses);

- to improve the medical aid degree (56.4%)

- to development of production and the creation f new jobs (42.3%).

Therefore, the list of estimated parameters should include some critical issues. For example, problems concerning lack of creating work opportunities seems to be marked by a separate indicator "number of small and medium businesses". In considering the reported data (FTS, 2014) we can see a positive trend. It must be said as in the whole of the Russian Federation. However, 932.8 thousand of self-employed entrepreneur ceased activities in 2013. It is 32.9% more than in 2012 (702.1 thousand of self-employed entrepreneurs).

Based on above as an indicator of development of the area and performance evaluation of local government seems appropriate to assess not only a number of small and medium businesses, but their share of operating more than one year.

The number of opened businesses and registered enterprises is not as revealing as their number is steadily functioning. Because federal law creates the framework conditions of business creation, and local authorities create specific conditions for their operation on the ground, so the number of stable working for small and medium businesses will evaluate the activity of self-governing authorities for the development city facilities (districts, municipalities).

A striking indicator of social standard of living is not only the magnitude of the average monthly nominal wages, but also a spending patterns (some average "bundle of goods"). Assessment of personal income from a qualitative standpoint - namely, a spending patterns, will determine the level of life quality. In this regard, we consider include not only information of wages, but a spending pattern in evaluating the performance of local government. It should not forget about the serious income differentiation, exacerbated by the division to "rich" and "poor" (Ministry of Economic Development Russian Federation, 2014).

3. Results

During survey there were some questions allowing to assess the municipal managers activities by three criteria indicated in the aforementioned Decree of the President (Fattakhova, 2012).

Citizens emphasized problems concerning public transport. Some of them are:

1. A poor technical condition (52% of responses). Unresolved situation of funding of travel privileges deprives owners of public transport part of revenues, which reduces not only the amount of working capital and does not allow to invest in the renewal of the bus fleet.

2. A deterioration of transport and the high cost of travel are almost equally cause discontent citizens (47%). This fact can be explained only by the lack of income per capita of those who use public transport.

3. In the third flight (27% response) – is insufficient quantity of vehicles. In view of the rapid growth of the city building, increasing residential development, transport infrastructure is formed with some delay and residents of new neighborhoods experiencing restrictions due to insufficient public transport vehicles.

One of the most "eloquent" certificates to ensure a quality of life is a condition of the roads in a locality. Respondents opinion were divided as follows: a decentish condition of the roads (49.8%), much less – (32.3%) assessed as poor and very poor, and only 14.4% of respondents say that roads are good (FTS, 2014).

The most pressing problems of residents of Naberezhnye Chelny were classified as follows: in the first place in order of importance (47.8%), is environment, the second (43%) – is alcoholism and drug addiction, as well as the work of medical institutions (42.6%), in the third place (41.7%) – is the work of housing and utilities infrastructure.

4. Discussion

During the survey in 2012 (Shaykhraziev 2014) some inconsistency revealed. Thus, official data have concluded that 83.7% of the population are satisfied with the activities of local governments. According to the results of an independent survey in 2011, people satisfaction of a various sphere of life in the city of Naberezhnye Chelny are different. In this case, a received results indicate the need for a significant concentration of efforts in some areas especially, for example, at least 30% of the population call a variety of problems in public transport, 50% did not

recognize a quality of roads, more than 40% of the population is not satisfied with the operation of the system Housing.

Activities to attract investment in fixed assets includes as the object of evaluation of local government performance. There is no doubt that this aspect of regional and local policies is a strategic importance, but it is necessary to assess the implementation of investment social projects, which allows realizing the mechanism of public-private partnerships. It should be noted that this implementation is more difficult due to a lack of activity of private investment.

From the perspective of private investor motivational incentives can be:

- the existence of stable and efficient source of core funding on behalf of the state;

- reduction time of "bureaucratic procedures" in solving managerial and organizational issues;

- guarantee payment of financial risks;

- improving the company's image, as the subject market-driven economy, collaborating with the state;

- provision of benefits to the rents, taxes, lending;

- the ability to operate a monopoly in a particular area.

We can distinguish general and particular risks in different sectors and scopes of activities. But, of course, a decisive factor is the guarantee of return on investment and a stable market. Successful mechanism for ensuring availability of supply is the system of public procurement, but the practice of its functioning indicates the presence of barriers to potential participants, primarily financial. Practice of successful public-private partnership shows that the state's participation in such projects significantly increases the attractiveness for private investment capital. This factor is a recurrence of financial investments and a significant risk minimization.

The second aspect of this Union will be represented by public authorities, as a rule, the representatives of the municipalities. It is assumed that the majority of municipal managers do not experience any influence of motivational and / or stimulating leverage in determining the most effective way to manage state property. Therefore, the establishment of partnerships with the private sector is not always a promising alternative to competitive strategic management of public or municipal property.

Therefore, one of evaluated indicators should be not only the index of amount of investment, but also a qualitative parameter for assessing the degree of diversification of the economy.

The problems of lack of substitute tax field instead of the main enterprise of JSC "KAMAZ" close to most citizens, because the enterprise performance directly or indirectly affects all spheres of life of the city.

In such cases, one of the potential sources of revenue performance budgeting should be a tourist activity, which is not a capital-intensive, but it has a multiplier effect (Resolution of the Government of the Russian Federation, 2011).

Tourism activity in the Russian Federation is one of the priority economy sectors (Federal Law, 2011)). In this case, tourism activity is tour operator activities and travel agency activities and other travel activities. This article focuses on some aspects of tourism activities that contribute a socio-economic development of local areas. These types of tourist activities include domestic and inbound tourism (Kabushkin, 1999). Prospects for domestic tourism less distant compared with inbound tourism to areas that are not central areas in which focused on business and industrial infrastructure of the country. For this reason, for small and monoindustrial cities, cities that do not have extensive social infrastructure, one of the main potential sources of replenishment in budget revenues are revenues from domestic tourism.

The question arises as to whether financing this type of projects in the cities with deficit-ridden budget. Therefore the role of the state is indispensable. It should be noted about the action of the Federal Target Program "Development of domestic tourism in the Russian Federation (2011-2018 years)", adopted by Resolution of the Government of the Russian Federation dated August 2, 2011 # 644. In this program, considerable attention is given to the development of tourism in the Russian Federation: "One of the main transition to innovative socially-oriented type of economic development is to create conditions for improving the quality of life of citizens of the Russian Federation, including through the development of infrastructure, recreation and tourism, as well as ensuring the quality, accessibility and competitiveness of tourist services in the Russian Federation". Therefore, tourism, especially domestic, is a factor of development of the economy and consolidation competitive position in the international tourism market.

In addition, domestic tourism is one of the ways of improvement of the nation by creating the conditions for a healthy lifestyle.

The mechanism of a multiplier effect on the development domestic tourism is quite transparent: creating more jobs, increasing employment, increases the welfare of the population. Related areas of activity, such as accommodation facilities, transportation, communications, trade, production of souvenirs and other products, food, agriculture, construction and others are involved.

Naberezhnye Chelny has tourism and recreational potential. There are natural and recreational resources (health centers, the National Park "Lower Kama") and objects of national cultural and historical heritage.

The extensive range of tourist and recreational resources allows to develop all types of tourism, including recreational, cultural, educational, business, active, health and eco-tourism, sporting and recreational fishing, rural tourism and etc.

5. Inference

Domestic tourism has significant opportunities and development prospects, but the local budget needs the initial investment. In this case there are two ways to search the financial sources: the first - a state, the second - a private. The first method is obviously limited due to a scarcity of most local budgets. The second method has a significant backlog, but we need a mechanism to minimize the risk and insurance against loss of investment by private investors.

Of course, not all of these problems can be solved within the competence of municipal managers and they require the involvement of higher authorities. However, a participation in the formation and development prospects territories through the initiative proposals should form the terms of reference and responsibilities of local authorities. So the range of questions to assess public satisfaction with local authorities' activities should be expanded and an expanded list should evaluate their work. In addition, for certain territories it is necessary to define minimum thresholds compulsory achieve certain indicators of socio-economic development.

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Methodical Approach to Evaluating the Performance of the Institutional System of Crisis Management

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Abstract

The article considers the methodological aspects of application of statistical and information modeling to assess the performance of the institutional crisis management systems; proposes institutional attributes necessary to evaluate the performance; contains a conceptual model for evaluating the quality of the institutional crisis management system; suggests methods of estimation of the performance, efficiency and sustainability indicators, and discusses the possible directions of its further application to explore the issues of institutionalization of crisis management systems.

Keywords: institutional system of crisis management, institutional attributes, conceptual model for evaluating the institutional system quality, indicators of effectiveness and efficiency, value of the system entropy, statistical analysis of the ratio and sustainability of correlations

1. Introduction

Research in the theory of artificial intelligence and information, expert systems, game theory, probability and statistical solutions, mathematical statistics, statistical recognition theory is very important for the formation of methodological basic principles at the development of methods for evaluating the performance of the institutional system of crisis management. Despite the in-depth research in the field of mathematical logic, statistical and information modeling of these studies, objective difficulties occur in the economy with regard to building algorithms and programming processes of recognition of institutional attributes of a crisis management system.

These difficulties are related primarily to the limited linear nature of formalization at building the models, as a model plausibly displays the logical connection of object attributes, their informational value, but is not capable of adequate representation of its semantic correlations.

The assumption is methodologically justified that within the framework of the processes of institutionalization everything happening within an enterprise is important for understanding how and under which laws and regulations the distribution of resources outside the enterprise takes place. This assumption extends the systemic economic content of the general institutional approach to understanding the processes of crisis management (Auzan, 2010). With this approach, the crisis directly determines crisis management as a system of activities of particular institutional forms characterized by institutional attributes and indicators that exist over time, as the temporary basis and criteria for decision-making change in the circumstances of the anti-crisis program implementation.

The methodological approaches to evaluating the effectiveness of institutional systems of crisis management proposed in this study are based on the principles of system analysis, information modeling, and statistical analysis of system performance.

2. Methodology of the research

2.1 The Main Theoretical Concepts Defining the Principles for Evaluating the Effectiveness of the Institutional System of Crisis Management

Initially, the possibility of applying certain provisions of the information theory to the valuation of the results of institutionalization in crisis management was considered (Sukharev, 2005; Kirdina, 2007). We took the

syntactical information measure as an information quantity measure. Other information measures were applied at evaluating the value of its institutional attributes (Polanyi, 1944)

The information gathered was processed using statistical methods: grouping, index and graphic plotting of time series. The results of processing were subjected to further analysis, which allowed describing the cause-and-effect relationships, on which the model of a particular crisis is based.

To construct such a predictive model, we used mainly three groups of forecasting methods complementing each other:

- Questioning, which reveals the opinion of the population or experts. This method is used in cases where the cause-and-effect relationship cannot be described analytically, i.e. using equations. Such methods, in particular, include the Delphi method, which is a series of sequential procedures for preparation and justification of a forecast, and the method of "brainstorming", when the decision is the product of collective work of experts in the course of a meeting held according to certain rules;

- Extrapolation, i.e. expectation of continuation of the future trends of processes represented in the form of time series of their indicators based on developed models of the regressive type. Extrapolation methods used are in the cases when information about the past is available in sufficient quantity and is based on the hypothesis of retention of previous tendencies;

- Analytical modeling, i.e. building a model that reflects the internal and external correlation of market factors. It is used when information about the past is scarce. However, there are some hypothetical ideas that allow developing a model and, on this basis, assessing the depth and duration of crisis phenomena (Information resources of the region: the principles of formation, organization, and specific structure, 2000)

Let us assume that there is a system of forecast states of the institutional system of crisis management, which includes n states. Then, according to the results of information processing, it is possible to determine the statistical probability of occurrence of this state of effectiveness of the institutional system R_i.

Accordingly, the uncertainty of the system of possible outcomes of operation of the institutional system will be determined by the entropy value:

$$U(R) = -\sum_i p(R_i) Log_2 p(R_i) \tag{1}$$

where:

$U(R)$ is theentropy of the institutional system performance;

$p(R_i)$ is the a priori probability of the performance of a particular institution of the system R_i;

As is known, institutional systems that combine equally probable outcomes of their activity have the maximum entropy. The entropy of such an institutional system consisting of n equally probable states can be defined as:

$$U(R) = -\sum_i p(R_i) \log_2 p(R_i) = \sum \frac{1}{n} \cdot \log_2 \frac{1}{n} = \log_2 n \tag{2}$$

For example, in the case of equally probable outcomes of operation of the institutional systems in the circumstances of a crisis and typology of economic crises, the value $n = 20$ (Information resources of the region: the principles of formation, the organization, and specific structure, 2000). The value of entropy of such an institutional system will be equal to:

$$U(R) = \log_2 n = Log_2 20 = 4.34 \tag{3}$$

The entropy of the institutional system of crisis management will decrease in the case of entry of a certain amount of new or additional information to it, of both internal and external nature. At that, the amount of incoming information is comparable to the difference between the entropy of the institutional system before and after its receipt and can be expressed as follows (Kirdina, 2007):

$$IR_i(k_i) = U(R_i) - U(R_i/k_i) \tag{4}$$

where $IR_i(k_i)$ is the amount of information introduced into the system of the performance of the institutional system R by the institutional attribute k_i;

$U(R_i)$ is the uncertainty of the performance of the institutional system prior to the entry of the information (initial entropy);

$U(R_i/k_i)$ is the uncertainty of the performance of the institutional system after receipt of the information by the attribute k_i.

Thus, elimination of uncertainty leads to more effective control action of the institutional system of crisis management.

The value of the contributed information $IR_i(k_i)$ can be considered the information value of a specific institutional attribute k_i with respect to the performance of this institution of the institutional system R_i, which reduces the entropy of the institutional system of crisis management as a whole.

The functional weight of a certain institutional attribute can be either a positive or a negative value, i.e. either reduce or increase the effectiveness of the institution and the entire institutional system of crisis management. The results of operation of one institution of crisis management, which has the highest institutional value, may be of significant importance and have high value for another institution of the system.

In accordance with the above, the total institutional value of the system by the institutional attribute can be estimated by the amount of information received as a result of monitoring the economy (Information resources of the region: the principles of formation, the organization and specific structure, 2000) The institutional weight of a simple attribute for the entire group of attributes of the institutional system is equal to:

$$IR_i(k_i) = \sum_i p(R_i) IR(k_i) \qquad (5)$$

Using this relation, we can determine the optimal choice of the number of bits of an attribute. If the number of bits is increased, the institutional value of an attribute increases, and at the same time, the sampling size grows. In other words, the amount of information is almost predetermined, and we have only to build an optimal institutional (organizational) process of its accumulation.

Analyzing the opinions of experts in the field of adaptive effectiveness of institutions (Istomin, 2011; Sukharev, 2005; 2002; 2008; Petrosyan, 2007), we have proposed the following institutional attributes of the system (Table 1), which may be adopted for evaluation of their institutional value. We need to take into account the fact that the institutional value of a certain attribute depends on its previous value, or the process dynamics.

Table 1. Institutional attributes (indicators) of the system used at evaluating their institutional value

Name of the institutional attribute	$IR_i(k_i)$
Index – the ratio of completed arbitration cases in a given period (month, quarter, year) to the number of all arbitration cases pending during the same period	I_a
Index – the ratio of restructured enterprises to bankrupt enterprises during the given period	I_b
Index – the ratio of job losses as a result of bankruptcy to the created (preserved) jobs as a result of restructuring enterprises during the given period	I_c
Index – the ratio of the volume of income (loss) resulting from restructuring (bankruptcy) of enterprises to total costs for maintaining the institutions of crisis management during the given period	I_d
Index – the rate of change (growth, reduction) of transaction costs for maintenance of crisis management institutions	I_e
Index – the growth rate of financial resources allocated for the maintenance of a certain institution of the crisis management system for a certain period	I_f
Index –the ratio of the change (increase, reduction) in tax revenues to budgets of all levels as a result of restructuring and financial recovery of economic entities to the value of the costs of the same budgets for maintenance of the crisis management institutions	I_g
Index – the rate of change (growth, reduction) in transformation costs for the maintenance of crisis management institutions for a certain period	I_h
Index –the ratio of newly established enterprises to the enterprises in bankruptcy (liquidation) for a certain period	I_t
Index –the growth rate of the balance of primary incomes of newly established business entities	I_z
Index –the growth rate of the balance of primary incomes of economic entities who have undergone restructuring	I_r
Index – the proportion of vertically subordinate structures in the total number of structures (institutions) of the crisis management system	I_m
Index – the proportion of horizontal structures in the total number of structures (institutions) of the crisis management system	I_s
Index – the change in the dynamics of labor input in the implementation of crisis management programs	I_w

Using the concept of conditional probability, the information weight of availability of the *Yth* interval of the institutional attribute k_2 for the performance of a particular institution R_i if the *jth* interval of the attribute is present k_1, can be defined as:

$$IR_i\left(k_{2Y}/k_{1Y}\right)=\log_2\frac{p(k_{2Y}/R_ik_{1Y})}{p(k_{2Y}/k_{1Y})} \tag{6}$$

Accordingly, provided the bit j of the attribute is present, k_1 taking into account all the possible outcomes of the institutional system as a whole for the attribute k_2, the information value of the attribute k_2 will be equal to:

$$IR_i\left(k_{2j}/k_{1j}\right)=-\sum p(k_{2j}/R_jk_{1j})\cdot\log_2\frac{p(k_{2Y}/R_ik_{1Y})}{p(k_{2Y}/k_{1Y})} \tag{7}$$

where: $IR_i\left(k_{2j}/k_{1j}\right)$ - quantitative expression of the information value of the attribute k_2.

In assessing the effectiveness of institutional systems, it is necessary to compare their institutional values (performance) and the amount of costs for each institutional attribute k_1. In this case, the cost value C_j is understood as a set of all types of costs for the provision of information of a particular institution of the crisis management system (Balatsky, 2007; Kiselev & Shagieva, 2011).

In accordance with this, we should take the following coefficient of efficiency by the attribute as a criterion for evaluating the effectiveness of the institutional system k_1:

$$\beta=\frac{IR(k_1)}{\sum C_j} \tag{8}$$

where:

$IR(k_i)$ - the information value of the institutional attribute;

$\sum C_j$ - the sum of the coefficients of the costs for providing a specific institution of the crisis management

system with information.

It is obvious that the coefficient of efficiency will have the maximum value if the amount of information $IR(k_i)$ is obtained at the lowest costs for its receipt.

Then, it becomes possible to compare the level of costs for collecting, archiving, processing, transmitting information through information and communication technologies in the system of crisis management institutions with the level of its effectiveness (see Figure 1).
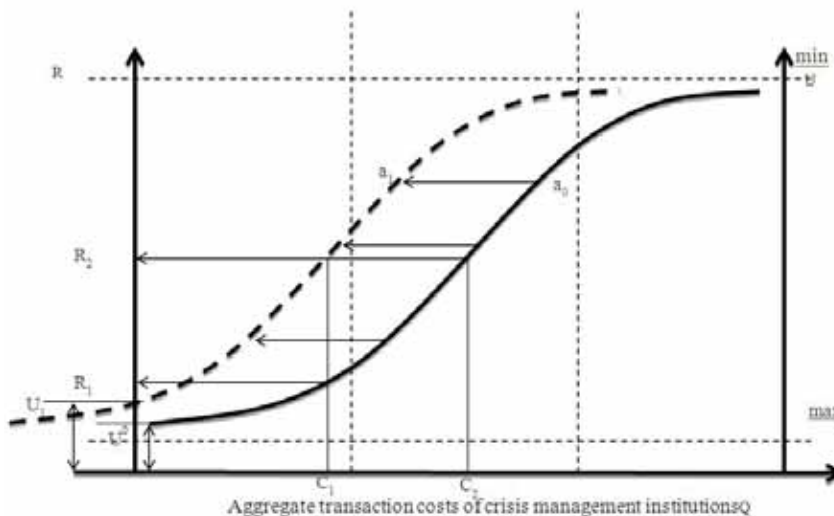
Figure 1. Dependence of the costs, the entropy, and the effectiveness of an institutional system of crisis management

On the left vertical of the proposed plot, the performance indicator of the institutional crisis management system (R) is shown over time. The right vertical represents the value of entropy of the institutional crisis management system (U).

Thus, with increasing awareness of the institutional crisis management system and the decreasing level of its entropy, the costs for its acquisition grow, and simultaneously the overall efficiency of the system improves. However, at a certain point of achievement of a certain limit of the growth of costs for obtaining information and

the minimum value of entropy, the effectiveness of the crisis management system ceases to improve and remains in a stable position. All this indicates the existence of marginal costs for reduction of the system entropy, when the growth of costs for achieving it is not justified by the absence of the dynamic improvement of the performance of individual institutions or the entire institutional system of crisis management.

2.2 Specification of the Stages of the Effectiveness Evaluation of the Institutional System of Crisis Management

The developed technique of evaluating the effectiveness of the institutional crisis management system involves the following sequence of stages of its implementation:

- identification of an object's belonging to a particular class or group of objects;
- identification of differences of the diagnosed object from the objects of its class by comparing its actual specifications to the core indicators;
- determination of permissible deviations from the core indicators;
- development of a technique of formation of institutional norms as the core indicators.

The generalization of all previously considered theoretical propositions was the decision to obtain statistical estimates of the quality of the institutional system of crisis management as a total of its following three components – effectiveness, efficiency, and sustainability (Kiselev & Shagieva 2014; Kume, 2006). The conceptual statistic model of assessment of the quality of the institutional crisis management system represented in Table 2 was developed in accordance with the existing logic of effective business process management (Skripko, 2010).

Implementation of this approach requires additional specification of institutional attributes, shown in Table 1, in terms of their conditional division into the performance and resource attributes of the institutional system of crisis management. Accordingly, the selected performance attributes were actually taken as the targets of the system operation (Table 3).

Table 2. The conceptual statistical model of quality evaluation of the institutional crisis management system

Property	Definition	The model of evaluation
1. Performance	The degree of implementation of the planned activities and achievement of the planned results	The ratio of the actual (achieved) and planned levels of targets
2. Effectiveness	The ratio between the result achieved and the resources used	The equity ratio of the achieved values of resource components of the achieved values of the targets
3. Stability	Retaining the ability to achieve a result within the established goals and resources	Equity ratio of the reached values of the development indicators of the system and its maximum values

Table 3. The matrix of indicators of the institutional crisis management system

Target indicators	Resource indicators
The ratio of closed arbitration cases in the given period (month, quarter, year) to the number of all arbitration cases pending during the same period, I_a	The growth rate of transaction costs for the maintenance of crisis management institutions, I_e
The ratio of the number of restructured enterprises to bankrupt enterprises during the given period, I_b	The growth rate of financial resources allocated for the maintenance of a certain institution of the crisis management system for a certain period, I_f
The ratio of job losses as a result of bankruptcy to the created (preserved) jobs as a result of restructuring enterprises during the given period, I_c	The rate of growth of transformation costs for the maintenance of crisis management institutions for a certain period, I_h
The ratio of the volume of income (loss) resulting from restructuring (bankruptcy) of enterprises to total costs for maintaining the institutions of crisis management during the given period, I_d	The proportion of vertically subordinate structures in the total number of structures (institutions) of the crisis management system, I_m
The ratio of the value of tax revenues to budgets of all levels as a result of restructuring and financial recovery of economic entities to the value of the costs of the same budgets for maintenance of the crisis management institutions, I_g	The proportion of horizontal structures in the total number of structures (institutions) of the crisis management system, I_s
The ratio of newly established enterprises to the enterprises in bankruptcy (liquidation) for a certain period, I_t	The growth rate of labor input in implementation of crisis management programs, I_w
The growth rate of the balance of primary incomes of newly established business entities, I_z	
The growth rate of the balance of primary incomes of economic entities who have undergone restructuring, I_r	

In accordance with the previously determined conceptual statistical model, we initially were to determine the effectiveness of the system by the ratio of the actual targets with the planned baselines:

$$I_i^R = \frac{I_i^{actual}}{I_i^{basic}} \tag{9}$$

$$\text{or} \quad I_a^R = \frac{I_a^{actual}}{I_a^{basic}} \, , \quad I_b^R = \frac{I_b^{actual}}{I_b^{basic}} \, , \quad I_c^R = \frac{I_c^{actual}}{I_c^{basic}} \quad \text{etc.}$$

The overall performance indicator of the system was represented as the geometric mean of the obtained values I_i^R:

$$I_{RES} = \sqrt[n]{\prod_i I_i^R} \, , \tag{10}$$

where n is the number of targets (in this case $n=8$).

The second component (efficiency) was expressed through the value of the difference between the standard deviations of the performance values of the resource and target attributes (by the absolute value):

$$I_{EFF} = \frac{1}{K} \sum_k (1 - |\sigma_{RES} - \sigma_k|) \, , \tag{11}$$

where k=1 to K – it is the number of consolidated groups of resource attributes of the system.

In this case, three consolidated groups were separated from the six institutional resource attributes: the financial component (the indicators – I_e, I_f and I_h), the organization and structure component (the indicators I_m and I_s), and the labor input – I_w .

The consolidated groups of resource indicators were singled out in order to identify the imbalance between the resulting states of the system and its input factors in terms of statistical evaluation of variation (scatter) (Balatsky, 2007). This statement does not exclude the possibility in future to expand the range of resource indicators by combining them in other groups of indicators characterizing the initial state of the system.

In this case, estimates of the variation in each of the three consolidated groups of institutional resource attributes were obtained:

$$\sigma_{fin} = \sqrt{\frac{1}{3}\left(\left(I_e^R - 1\right)^2 + \left(I_f^R - 1\right)^2 + \left(I_h^R - 1\right)^2 \right)} \, , \tag{12}$$

where $I_e^R = \frac{I_e^{actual}}{I_e^{basic}}$, $I_f^R = \frac{I_f^{actual}}{I_f^{basic}}$, $I_h^R = \frac{I_h^{actual}}{I_h^{basic}}$

$$\sigma_{str} = \sqrt{\frac{1}{2}\left(\left(I_m^R - 1\right)^2 + \left(I_s^R - 1\right)^2 \right)} \, , \tag{13}$$

where $I_m^R = \frac{I_m^{actual}}{I_m^{basic}}$, $I_s^R = \frac{I_s^{actual}}{I_s^{basic}}$

$$\sigma_w = \sqrt{\left(I_W^R - 1\right)^2} \quad \text{where} \quad I_w^R = \frac{I_w^{actual}}{I_w^{basic}} \, . \tag{14}$$

As a result, the overall assessment of the effectiveness of the institutional system of crisis management was expressed as:

$$I_{EFF} = \frac{1}{3} \sum_k (1 - |\sigma_{RES} - \sigma_k|) \, , \tag{15}$$

where σ_{RES} is the standard deviation value in terms of effectiveness and $\sigma_{RES} = \sqrt{\frac{1}{n}\left(\sum_i \left(I_i^R - 1\right)^2 \right)}$.

The stability property, which is the third component of the proposed conceptual statistic model of assessment of the institutional system operation quality, was suggested to express through the considered earlier characteristic of the entropy of its performance (Maslova & Mekhantseva, 2010; Aleksandrovskaya, 2014). As the maximum entropy will correspond to an institutional system, in which all the observed performance values will be distributed evenly, i.e. have equal probability values, the stability property was assessed through the entropy of the system by the observed values of the nearly maximum performance:

$$I_{ENTR} = \left(1 - \frac{U(p)}{U_{\max}(p)}\right) * 100, \tag{16}$$

where:

$U(p) = -\sum_{i=1}^{n} p_i \log_2 p_i$ is the entropy for all of the obtained values of the system performance (I_i^R) $p_i = \frac{f_i}{\sum f_i}$ is the probability of a performance value within the range of the scale of the system performance values, f_i is the frequency of occurrence of the performance indicator values,

$$\sum_i f_i = n \qquad U_{\max}(p) = -\sum_{i=1}^{n} p_i \log_2 p_i, \qquad p_1 = p_2 = ... = p_n = \frac{1}{n}.$$

Value I_{ENTR} makes it possible to evaluate the ability of the institutional system in the observed state to achieve planned results in all performance indicators. The higher value I_{ENTR}, the less stable the observed system is. A state of complete stability (a hypothetical case) will match zero value of I_{ENTR}.

In terms of practical usage, the suggested model should provide opportunities for studying the three components of the model over time.

At that, we decided to provide calculation of the first component – the performance – under the same principle, namely, as the geometric mean of all the performance indicators of the system with the only difference that the values calculation requires providing totals for the series of periods.

When calculating the second component, we can proceed to the concept of evaluating the effectiveness of relations between the target and resource indicators of the institutional system of crisis management:

$$I_{EFF} = \sqrt[L]{\prod_l \eta_l}, \tag{17}$$

where l=1 to L – it is the number of significant empirical correlation ratios η_l obtained by analysis of variance of dependencies between the observed performance indicators of the institutional system (I_i^R) and the performance characteristics of the resource attributes of the system (in this case – I_e^R, I_f^R, I_h^R, I_m^R, I_s^R, and I_w^R).

According to the standard statistical procedure, under the rule of addition of variances, the empirical correlation ratio is defined as the ratio of between-group variance (characterizing variability of the selected performance indicator of the system (I_i^R) under the influence of the chosen performance indicator of the resource attribute) to the total variance (characterizing the variability I_i^R under the influence of various factors):

$$\eta = \sqrt{\frac{\sigma_{yx}^2}{\sigma^2}}, \quad \sigma^2 = \sigma_{yx}^2 + \overline{\sigma^2}, \tag{18}$$

where σ^2 is the total variance, σ_{yx}^2 is the intergroup variance, $\overline{\sigma^2}$ is the medium of the intra-group variances (it characterizes the variance of values of the measure I_i^R under the influence of random factors).

Such an analysis requires building analytical groups, in which the all-time values of the selected indicator for the resource attribute performance are divided into groups at certain intervals, and for each resulting group the average value of the observed indicator of the system performance is calculated (I_i^R). Thus, the set of all possible combinations of the system performance attributes and effectiveness of the resource attributes are set.

Traditionally, at the practical interpretation of the values of empirical correlation ratio, the neighboring relationship is estimated by the degree of approximation of the value η to one. The closer the obtained value η to one is, the stronger the correlation ratio between the analyzed attributes is. However, the statistical significance of the importance of the correlation by the value η with account of the sampling size is determined

by Fisher's statistical test, according to which the neighboring relationship is substantial and statistically significant if the ratio of the estimated value of the Fisher criterion is greater than the critical (table) value at the set 5% level of significance (Haken, 1991; Stengers & Prigozhin, 1986).

As is well known, the calculated value by the Fisher test is defined as the ratio of intergroup and intragroup variances estimates: $F_{estimated} = \dfrac{S_1^2}{S_2^2}$.

Thus, despite the fact that the final performance indicator I_{EFF} accounts only significant correlations, and, consequently, the system efficiency will be higher if the value I_{EFF} is closer to one, the identification of minor correlations will contribute to taking appropriate corrective management decisions to improve the efficiency of using the resource components of the institutional system.

The third property of the considered system was suggested to be regarded over time as stable connection. In this case, the calculation technique using entropy values actually remains the same, but the values of entropy should be calculated with account of the communications correlations significant by their closeness:

$$I_{ENTR} = \left(1 - \frac{U(p)}{U_{\max}(p)}\right) * 100 \,, \tag{19}$$

where $U(p) = -\sum_{i=1}^{n} p_i \log_2 p_i$ is the entropy of all the obtained values of significant correlations of the performance indicators of the system I_i^R with relevant performance indicators of resources – I_e^R, I_f^R, I_h^R, I_m^R, I_s^R, and I_w^R; $p_i = \dfrac{f_i}{\sum f_i}$ is the probability of occurrence of the value η in the respective interval of their scale (for example, on a Chaddock scale), fi is the frequency of occurrence of the value η in the respective interval of their scale; $\sum_i f_i = n*M$, M is the number of resource indicators of the system, in this case $M=6$).

$$U_{\max}(p) = -\sum_{i=1}^{n} p_i \log_2 p_i \,, p_1 = p_2 = ... = p_n = \frac{1}{n*M} \,.$$

3. Results

The institutional system assumes varying the alternative projects for the company to overcome the crisis or prevent it, which requires appropriate information support that would objectively reflect the real processes in the system. Therefore, the institutional system should be treated as an institution of stable correlation between their functional content and its verified performance. Consequently, the institutional system of crisis management has a definite logic of the operation expressed in the following sequence of actions:

- if timely (A);

- reliably and with sufficient completeness of the information (B);

- the substantiated technique of its processing (C);

- anti-crisis measures are implemented (D);

- with a high degree of probability, the achievement of the assigned goal can be guaranteed, as a result of the effective operation of the institutional system of crisis management.

The implementation of a systematic approach, statistical modeling, and analysis of the correlations of the key parameters of the system is an essential condition of identifying the synergistic effects in the interaction of elements of the institutional system of crisis management (Minashkin, 2012; Shuman & Bulmer, 2004). With this approach, it is possible not only to establish what the outcome of the system is and how well it is achieved, but also to predict achievement of the result and its effectiveness in the next period through the sustainability of correlations in the system.

On the other hand, identification of significant correlation ratios will facilitate priority allocation of management efforts in regulation of exactly those correlations, which have potential synergistic effect.

Analysis of stability of the correlations can be the basis for the development of strategies of the institutional system development. The presence of stable correlations indicates the possibility of adjusting the strategy, since there is a change in the responsiveness of target states of the system depending on a particular resource component.

4. Discussion

The proposed approach to the estimation of the development quality of the institutional system of crisis management in the concept of unity of the three components – efficiency, effectiveness, and sustainability – and in view of its development over time with further transition to the analysis of the key significant correlations in the system can be implemented both globally and regionally. In the latter case, the analysis of correlations becomes even more valuable in terms of accounting the institutional singularities and the institutional originality of the regional systems at the development of adequate strategic decisions and programs for the development of meso-level institutional systems of crisis management.

It should be noted that the specification of the proposed institutional attributes of the system of crisis management could be adjusted to reflect the dynamics of institutional transformations, as the cyclical development of the institutional system of crisis management is accompanied by emergence of its new, specific qualities.

However, the implementation of the proposed approach will be possible only in dealing with the organization of statistical accounting of the aggregate institutional attributes at the relevant levels (country, region). To obtain reliable statistical estimates for the proposed model, one should have a database of dynamic rows for the suggested institutional attributes (at least for 5 years).

5. Conclusion

Thus, the identification and study of specific properties of information and its role in the process of institutionalization of crisis management, and techniques for assessing the effectiveness, efficiency, and sustainability of the institutional system of crisis management allow us to formulate certain conclusions:

- the continuous process of bankruptcy, liquidation, restructuring, and simultaneous emergence of new enterprises evidences a constant process of renewal and growth of information flows, which significantly raises the significance of the information value of the institutional attributes of the structural institutions of the institutional system of crisis management as a whole;

- the high entropy of the market macro environment of enterprises significantly reduces the manageability, the level of information monitoring of the changes in the situation development, and the probability of forecasting;

- the constant threat of crisis conditions determines the selection and amplification of prognostic, anti-crisis, warning functions of crisis management institutions in relation to the stabilization of the economic development of enterprises.

In addition, one of the most promising directions in the information support of the institutional system of crisis management is the expert assessment of the financial position of enterprises and the bankruptcy procedures, the results of which are the information-analytical framework for adaptation of the institutions of the crisis management system.

Certain generalization of the institutional theory is required in order to synthesize the diversity of approaches to assessing the role of the institutional component in the development of the financial and economic state of an enterprise, its organizational structure, and management system. This is especially important when evaluating complex objects, when you need to rely on adaptive, learning and self-learning systems.

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The Role of the Legal Culture as a Factor Determining Successful Legal Socialization of Future Specialists

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Abstract

Based on the integration of the provisions and conclusions acquired within the pedagogic science, the present article describes the relevance of formation of the legal culture of future specialists as a factor determining their successful legal socialization. The main functions, ways of development and structural components of the legal socialization have been shown.

Based on the results of the diagnostic study of legal socialization, a model of formation of legal culture, technology of formation of legal culture, criteria and tiered rates of formation of legal culture of future specialists have been provided in the present article.

Keywords: legal culture, legal socialization, components of legal culture, a model of formation of legal culture

1. Introduction

Students are the future of our country and this future depends on the social activity of the young generation, their conscious attitude to life. These are students who inherit an achieved level of social development, as well as implement the function of social reproduction. They are leading actors of the economic and political initiatives, whereby the further development of legal processes largely depends on the total level of legal culture of the youth in general and the success of their legal socialization.

Based on the analysis of many definitions of the concept of legal culture, it can be concluded that the legal culture (hereinafter – LC) can be regarded as a kind of general culture; wherein it is composed of values that are related to legal reality. At the same time LC must include only relatively progressive, socially useful and valuable components of legal phenomena. In this case, LC includes the results and methods of human activity, it manifests in the human mentality, as well as in normative standards of their behavior (Salnikov & Romashov, 2004).

LC is better defined as a qualitative state of social reality in the sphere of law, which is expressed in a certain level of improvement of legislation, law enforcement, legal awareness of society members, the level of freedom of their behavior and responsible cooperation between the state and its citizens, which has a positive impact on the development of the society and the conditions of its existence.

An individual LC as a part of the culture of a person lies in a rather high level of legal knowledge and skills, as well as in the development of those personality traits that allow to achieve the fullest realization in the legal and social-oriented spheres (Teplyashin, 2002)

At the same time, we assume that LC has a direct impact on the personality, as a leading factor in the process of legal socialization.

LC performs various functions having a direct impact on the process of successful legal socialization (hereinafter – LS) of a person. First of all, LC is the most important means of constructing a certain type of legal personality.

Legal rules developed in the community and acquired by an individual, have a direct impact on the LS process. LC constructs a model of individual legal behavior, that leads to the formation of legal awareness and legal activity, as constituting components of legal socialization of a person.

According to Tumanov V. A., LS means the participation of an individual in social life, based on the assimilation of legal culture of the society, as well as on the formation of his/her legal awareness (Tumanov, 2003).

Thus, the special significance of the LC role is that when implementing LS an individual takes his/her own social and legal role of the subject of social relations in which LS leads to the formation of motivation, providing not only lawful behavior of an individual, but also his/her social and legal activity.

In his study Agranat D. L. presented LS as a process during which, on the one hand, the formation of normative representations of the individual, his/her assimilation of legal values and norms, on the other hand, the individual develops skills of using standards of behavior legally acceptable in everyday life (Agranat, 2008).

LS of a person is one of the most important factors of stabilization of the society. Being a part in the life of each of the social groups, it not only has an impact on the mental and moral sphere of life, but also leads to strengthening of the society in political, economic and cultural spheres. In our opinion, this is a manifestation of the stabilizing function of LS.

The integrative function of LS, in its turn, is no less important, as it provides an opportunity to carry out the synthesis of LS and other social and legal phenomena, i.e. their unity and co-relation ensuring the functioning of the legal processes. And finally, the determining function of legal socialization is that the presence of a particular social doctrine of LS is an indicator of the level of legal social development (Stolyarenko, 2011).

According to Zhigulin A. A. (2012), the main ways of LS development of future specialists are as follows:

First, a passive way, which is characterized by spontaneous involvement of future specialists into the legal sphere, the LS development in the absence of specific targeted programs aimed at its formation. This leads to the gradual development of legal socialization, increasing the likelihood of a steady process, but stretching the time frame;

Second, an active way, involving the purposeful activity of future specialists on LS development.

Third, a comprehensive way, which is based on the creation of certain legal and pedagogical conditions, combined with the activity of future specialists, as well as the implementation of targeted programs in training practice.

Kulikova A. V. marked out several types of future specialists' LS:

1. *in training process* through the acquisition of general legal knowledge and mastering legal rules;

2. *through the experience* by understanding the experience of others and own mistakes and actions made;

3. *symbolic LS,* the essence of which consists in the formation of own concepts and ideas of an individual on laws, rules and their application.

The author assumes that training and symbolic socialization are most important for successful LS of future specialists. In this case, the legal knowledge is acquired on courses of legal studies provided in the vast majority of non-legal major disciplines. Consideration of basic legal concepts on these courses, as well as foundations of various law branches, being an integral part of the life of each citizen, is a prerequisite for successful legal socialization (Kulikova, 2007).

According to foreign authors, LS is formed in the process of legal education and training (Hiller, 2013). Legal education is an essential part of socialization of personality and a prerequisite for his/her successful functioning in society (Roberts, 2012). Legal knowledge leads to an increase in civil social activity, correct perception of legal phenomena, conscious following of laws. Legal knowledge also allows us to see beyond the limits and prohibitions. (Licht, 2007).

Legal education of future specialists is the process of mastering legal knowledge and skills that leads to an increase in the legal competence, and, as a consequence, an increase in the LS level.

Legal education of future specialists is a systematic activity, carried out both by the state and society as a whole, and individual citizens, aimed at formation of legal awareness and moral and legal standards ensuring adherence to legal standards and leading to the formation of active life position of an individual in the legal sphere (Bayniyazov, 1998).

In this regard, the underestimation of the importance of studying law in the process of professional training of future specialists can have negative consequences, as it makes the graduate vulnerable and complicates his/her adaptation to the future professional activity (Evdokimov & Kalandarishvili, 2006).

The period of study at the university is a turning point in the LS process. During this period, the sustainable *"I"*-image of a person and all its aspects are being developed. The development of legal consciousness of the personality and, as a consequence, – the development of legal *"I",* signifying the degree of involvement of the subject in the system of legal relations, awareness and value adoption of legal rules, law-abiding behavior, value attitude to other people and, consequently, to the person's rights are important and integral components of the self-consciousness of this period.

The high level of all these indicators can show the degree of social inclusion an individual in the process of life of the whole society. (Kaminskaya & Ratinov, 1974; Makhrova, 2012).

The main result of LC and LS is in the final formation of the legal activity of a person. In this case, both phenomena discussed above are considered as necessary and strategic components of the socio-positive behavior of an individual, since the formation and increase of LC of the society occurs when its members assimilate and maintain traditional norms and standards of behavior typical for the social and legal environment, according to which an individual has a formed set of qualities necessary for successful adaptation in the social and legal environment, as well as for the implementation of socio-positive behavior and performance of certain functions. A person, who does not have these properties, when incorporated into the legal space, often has difficulties with the ability to adapt to the requirements put forward by the society, as well as to protect their rights and effectively defend own interests in social and legal spheres of society (Zubok & Chuprov, 2006).

Thus, LS is an essential element of the overall process of inclusion of an individual in public relations. First of all, it includes the process of assimilation of the society LC, as well as the active comprehension of the existing legal reality, continuing development of legal awareness and the formation of LC of an individual. The formation of an individual having developed positive LC becomes the main content of LS process.

On the basis of this definition of LS, its structure can be divided into three main components: cognitive, behavioral, personality ones.

The cognitive component of LS includes the development of basic legal facts and concepts, law terminologies, the essence of legislation.

Behavioral component of LS is the ability to practice the learned legal knowledge, carry out own behavior in accordance with the legislation, show a legal activity under different circumstances of professional activities.

The personal component of LS demonstrates emotionally-sensual relation of an individual to the legal rules and phenomena, violation of human rights, as well as motivation to legal behavior.

2. Methods

Based on the three-component composition of LS, we have carried out a diagnostic study of LS components of future specialists. In the present study we started with the assumption that LS is a system which components are closely linked, and separating each one from the other would be rather difficult in the sense that, for example, the personal component cannot be studied in isolation from the cognitive and behavioral components, since it mediates the manifestations of other components. For example, a person's attitude is based on certain knowledge and acquired ways of behavior and, at the same time, it determines them. As for the behavioral component of LS, we know that the activities and human behavior are determined by cognitive schemes and the system of motives, roughly speaking, the activities are managed by the mind and emotions. The cognitive component also does not exist by itself, because the level of knowledge and awareness are defined in some way by a positive and value attitude to the information that comes from the environment.

The first stage of the diagnostic study was to conduct diagnostic methods of the level of knowledge of the respondents in jurisprudence (the cognitive component of LS). For this we used the tests, specially designed for the course program "Jurisprudence".

At the second stage we studied the behavioral component of LS, using a block of the tasks from the workshop on the course "Jurisprudence". The following tasks have been proposed:

"Your friend asked the legal advice centre for clarification about the possible administrative penalty, which he may incur for the offense. Should the court take into account this clarification when assigning your friend penalty for this offense? Give a reasoned response. Will something change if the administrative penalty is imposed not by the court, but by the customs authorities? "

"When meeting a citizen complained to his friend on a bad day: first, on the way to work he was fined by the traffic police for violation of the traffic rules, and then he received a reprimand for being late to work. What responsibilities were placed upon him?"

At the third stage, we studied the personality component of LS, using standardized diagnostic methods. We decided to try to investigate the attitude of the respondents to the social sphere, reflected in the level of empathy, the ability to self-control and impulsivity, considered as a trait, opposite such strong-willed qualities as ambition and insistence. For this purpose, we used the methods of diagnosing the level of empathic abilities, developed by Boyko V. V., the locus of subjective control and impulsivity by using the test-questionnaire of Losenkov V. A.

We hypothesized that the personal component is systemically important in the system of LS. When we talk about the fact that some component is systemically important, we mean its mediating character for all other system components. This means that an influence or a change in this component shall also change, or may even restructure the remaining components. Theoretical and practical studies of the problem of LS evidence in favor of this provision.

3. Results

Already being tested some respondents had problems of giving correct answers related to misunderstanding or lack of knowledge of the terms or provisions of the course "Jurisprudence". But the situations that attracted more attention, occurred when the respondent could not give the correct answer, if a certain degree of awareness and orientation in the legislation was required. We paid attention to these situations as a high level of development of the cognitive component of LS is not limited to a certain amount of knowledge.

During the study we also noticed everything the respondents said, the form of answers to the experimenter's questions about their attitude to the factors of a proposed situation.

According to the results of testing of legal knowledge and correctness of solving the legal situations, the majority of participants had an average level.

Mathematical processing of study results confirmed the presence of significant links between cognitive and behavioral components of LS, on the one hand, and the presence of empathic abilities, high internality and low impulsivity, on the other hand, provided that a rate of internality (locus of control) has the greatest impact on cognitive and behavioral components of LS. The next important factor is impulsivity of personality.

Thus, the results of our study showed the presence of a direct effect of the personal component of LS of the level of legal knowledge (cognitive component of LS) and the level of the correct solution of a legal situation (behavioral component of LS).

4. Discussion

The results of the study showed the need for more effective actions on the development of legal socialization of future specialists by way of forming their legal culture. In this connection, on the basis of previous studies (Lukash, 2011; Nemytina, 2008; Chikeeva, 1992), we developed a model of formation of the legal culture of future specialists presented in Figure 1.

The goal is to form the legal culture (LC) of future specialists

↓

LC components: cognitive, behavioral, personal components

↓

Conditions of LC formation: 1) the inclusion of LC in a complex of professionally significant qualities of future specialists and guarantee of the motivational-value attitude of future specialists to LC as a necessary component of their future professional activities;   2) an integrated approach to the formation of future specialists' LC, including the use of the potential of both humanitarian and general professional and special subjects, as well as practical and extracurricular activities;   3) the use of active forms and methods of teaching legal disciplines;   4) adequate methodological support in the study of law.

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The result is the formation of the legal culture of future specialists.

Figure 1. The model of formation of the legal culture of future specialists

This model provides the activation of promising possibilities of legal disciplines, consideration of their specific character, updating the system "teacher – student", selection of the content of the received information in order to develop mental abilities and expand the outlook of students, formation of their professional motivation, legal, moral and value principles, orientation for independent learning activities.

The model of formation of future specialists' LC consists of four units:

1) A target unit, reflecting the planned training results. The purpose of this model is to form LC as a component of professional culture of future specialists;

2) An informative unit, which includes cognitive, behavioral and personal components of LC. Formation of future specialists' LC is considered in this case as a process that is aimed at the student for the purpose of his/her development as a professional. Therefore, the content of this process should consist not only in obtaining specific knowledge in the sphere of law, but also in the formation of motivation, the development of future specialists' interest in matters of law in general, training to apply their knowledge in practice, the implementation of the value-conscious attitude to the chosen profession and its legal regulation;

3) An organization unit, which indicates the number of pedagogical conditions, through the implementation of which the efficiency of the formation of future specialists' LC gets significantly increased;

4) An effective unit, showing the effectiveness of the implementation of the process of the formation process of future specialists' LC, the results obtained in accordance with the intended purpose. An assessment of the progress in the implementation of this model is carried out by means of diagnosing the level of formation of LC components of future specialists.

In the process of the LC formation future specialists may have the difficulties connected with the following:

- a different level of training and formation of future specialists' LC;

- insufficient legal knowledge and awareness of the need for LC formation;

- the negative reaction of students to the proposed problem tasks and situations, to the mistakes made in solving them;

- the passivity of some of future specialists;

- the occurrence of interpersonal conflicts among future specialists;

- monopolization of the voting right by any of them in solving group tasks;

- difficulties in formulating conclusions and summarizing;

- disagreement of some students with the results of LC formation.

Thus, the proposed model for the formation of future specialists' LC has a certain structure, aimed at improving the legal training of future specialists and allows more clearly outline the process of training of future specialists for future professional activities and its legal regulation.

The model of the formation of future specialists' LC served as the basis for the practical formation of future specialists' LC in the educational process. Technology of formation of future specialists' LC is shown in Figure 2.

At the same time, according to Kalandarishvili Z. N. (Kalandarishvili, 2010), the personal component of LS of future specialists can be formed as a result of discussions on issues of law and law enforcement, as well as in the implementation of creative tasks in the group. The author assumes that the goal of formation of the personal component of LS is "the formation of legal opinion, ethical and legal systems", when the integration of students' acquired knowledge and personal experience occurs. Performance indicators of the formation of the personal component of LS are learning adequate legal views, opinions and attitudes, as well as the emergence of the need to actively participate in law enforcement and law-making processes.

For the formation of cognitive-behavioral component of LS the solution of problem tasks and situations, aimed at the development of adequate legal attitude, can be used. In this case, students provide an objective assessment of the current problematic situation which should be close to the realities of their future careers. As a result the experience in specific law-making and law enforcement activities of future specialists in their chosen profession shall be formed. The effectiveness of formation of the cognitive-behavioral component of LS shall be confirmed by the students' creative approach to work and making adequate legal solutions.

In general, performance indicators of formation of all LS components should be positive changes in the level of future specialists' LS, their ability to provide an adequate assessment of themselves and their group mates.

| Understanding the need to increase the LC level by a teacher and future specialists, reflection | The analysis of the leading theoretical ideas and methodological foundations of the formation of future specialists' LC |

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| Diagnostics of formation of future specialists' LC |

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| Setting goals – definition of personally important goals of formation of future specialists' LC |

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Creating the conditions for implementing the goals:
1. The increase in professional orientation in the content of legal disciplines and coordination of training programs;
2. The use of the learning process of problem-oriented situations and tasks that are relevant to the real professional activity of future specialists or close to it;
3. The optimization of formation of future specialists' legal awareness and legal activity;
4. The improvement of the quality of the legal and pedagogical training of teaching staff.

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| The organization of educational process |

| The activities of teachers in the lectures, aimed at managing the process of increasing the level of future specialists' LC | The activity of future specialists, aimed at self-organization, self-development, correction of personal attitudes and legal values and orientations |

| Diagnosis of the educational process |

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Assessment and analysis of results on the formation of future specialists' LC, the correction of results, the conclusions on the work done

Figure 2. Technology of formation of future specialists' LC

In order to assess the level of formation of future specialists' LC the following criteria and indicators of LC formation can be used (Table 1).

Table 1. Criteria and indicators of formation of future specialists' LC

Criteria of formation of future specialists' LC	Indicators of criteria of formation of future specialists LC
The success rate of solving problem tasks in the course of legal activity	Awareness of the conditions of a legal situation.
	The analysis of the legal problem and situation.
	The ability to relate the legal problem and situation with specific rules.
	The ability to give the correct legal decision of the legal problem and situation.
	An explanation presented as a logical construct a chain of arguments and counterarguments.
	The statement of personal legal position regarding the legal problem and situation.
	Forecasting the consequences of the proposed legal solution to the legal problem and situation under consideration.
Orientation when choosing tools for conducting legal activities	Application of the legal knowledge in solving legal problems.
	Selection of a rational solution of the legal problem.
	Objectivity in the assessment of legal reality.

Based on the criteria of LC formation of future specialists we can identify and justify the following five levels of LC formation: high, above average, average, below average, low.

A high level of LC can be identified by a good knowledge of legal disciplines, an interest in the study of the legal validity and legal activities, legal activity, the adequacy of the choice of legal actions in different situations. The future specialists with the above-average level of LC formation can have some gaps in the knowledge of the law basics.

Future specialists with an average level of LC are characterized by an interest in certain events of law enforcement practice, lack of knowledge on the rights and responsibilities of citizens, showing legal activity only in cases when unlawful acts invade the area of interests of the individual.

Future specialists with a below-average level of LC is characterized by passivity of their legal position, indifference to legal activity, low level of knowledge on legal disciplines, and as a result, they make incorrect or inadequate legal solutions.

A low level of LC is characterized by indifference to legal activities, passivity of one's legal position, lack of knowledge of fundamentals of legislation, making inadequate legal solutions.

5. Conclusion

Summing up the results of the study, we can say that an exhaustive analysis of the role of legal culture as a factor determining successful legal socialization of future specialists provides an opportunity to demonstrate features of these mechanisms, reveal the essential content of formation of the legal culture and legal socialization in their indissoluble unity, that is of particular importance for the modern Russian society.

As is known, one of the primary needs of an individual is to strive for associating oneself with a particular set of social values and rules in order to be able to correctly assess one's own and other people's behavior. And only a high enough level of legal culture and successful legal socialization allow a person to carry out effective orientation in social and legal environment, implement legitimate ways of one's own behavior and wait for positive law-abiding ways of activities on the part of surrounding society members.

Thus, two such fundamental public legal phenomena as legal culture and legal socialization exist in close correlation and in the course of functioning these phenomena cannot exist in modern society in the absence of one another.

Only an adequate level of legal culture enables an individual to successfully develop the necessary level of own legal socialization. At the same time, this adequate level of legal socialization shall be achieved by an individual in all three its main components: cognitive, behavioral and personal. In the case when one of the components will be formed insufficiently, the cumulative process of legal socialization can go in a wrong direction.

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Almaty (Kazakhstan) Youth's Work Values: Sociological Analysis of the Structure and Content

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Abstract

The results of Almaty youth's work values social research are represented in this article. The impact of such values like high salary, exciting work, position retention guarantee on youth's life and work which became prevailed in youth's professional career path were determined and the factors having impact on them are considered. The question in this article is in young people's opinion concerning risks and opportunities which they meet on their career path, importance of their service quality. Youth's diligence, their work firmness and aspiration are described. Evaluating the view in respect of business activity among young people, considerable opinions about its society advantages are represented. The factors which may form obstacles for young people's direction towards business activity are evaluated according to their importance. The reasons for youth's failure of starting up a new business are mentioned, weaknesses of professional mobility and professional experience are shown. The authors represented beneficial ways for young people stimulation for work, as well as divided them according to youth's opinion. Its predominance on the way towards youth's making progress is analyzed leaning on research results. They tried to determine the correlation between work and money in young people's perception. The author represents his conclusion concerning activities to be made in order to regulate work issues from the very beginning.

Keywords: work values, value, youth, young people, business activity, mobility

1. Introduction

1.1 Introduce the Problem

Different kinds of problems occurring in any society have common focus together with the values in that society. In other words, development or extinction of education, health, family institution, culture, economics, political democratization in the society comes from the system of values which is predominant in the society. For instance, if consumerism in the society, safety need, corruption tolerance, education indifference, anergic values towards family, work, morality are predominant, then regression will prevail over progression in the society. And being predominant of aiming for creative work, family happiness, honest employment, deep knowledge, morality, fairness, politeness, moral values will prevail progression versus regression. Humanity history proved that the young people are those who carried out duties of transferring and renovating these values, handing down from generation to generation. Detailed research of nowadays youth's values will give a chance to prevent possible disadvantages and to describe our future society. Currently, there are a lot of social research results giving an opportunity to understand the youth scientifically. Having relied on such results we can see that the most important of youth's values are family, health care, high financial standing, opportunity of good position. Having represented the hierarchy of work values resulting from the study made within the framework of the dissertation project, in this article we made an effort to seek answers for questions concerning importance of researches showing values for the youth, factors having impact on change of nowadays youth's values, youth's quality of work values. For instance, work values can be mentioned as the basis of employment in the society, business activities, work efficiency, work quality, human's condition and economic prosperity. Currently, it is important to pay attention to the problem of improvement of work quality in parallel with the problem of unemployment. It is easy to find a job for a person. However, the problems of high quality performance of that work are more important than the problems of unemployment. Because, unsatisfactory work (labor) is an obstacle for an institution on its way toward opening of new work places, as well as its development, it deprives the state from

large-scale tax paying capacity. In other words, even if we say that unemployment and social difficulties have found their solution, regulating (solving) of this problem in a low quality way will generate many other problems in the society. In the very near future, the fact that the basis of medium and small businesses in Almaty (and other regions) will be formed not by the ones who have higher education, but by those who graduated from the secondary specialized colleges, who have secondary-level education will possible. The reason is that the strategy in obtaining higher education is wrong. There is an opinion among most young people and their parents that the person who obtained higher education must work at one work place for a stable salary. For instance, according to the findings of "International Centre of Economic Literacy" Social Fund, 63% of RK citizens struggle living from paycheck to paycheck ("Capital" Centre of Business Information. Finance, 2014). This information shows that people with higher education try to work in public offices, large and medium-sized companies. Although, the people from the other group, alternatively, work in small businesses, with no intermission and try to earn more money. This problem is a dilemma. On one hand, young people are eager to start their career, on the other hand, young people with higher education do not want to start a business up straight after graduating from the university. This situation may enforce fear and uncertainty to go for business activity as time passes by. Consequently, non-intellectualization of medium and small businesses complicate the course of innovation and modernization. We think that all of the above-mentioned problems are connected to the work values system of nowadays public. Namely, we can say that it seems like if there is no value, there will not be humanity, if there is no satisfactory work value, there will not be reasonable, satisfactory work.

1.2 Explore Importance of the Problem

Currently, according to the data of the Committee (Agency) on Statistics of the Republic of Kazakhstan, there are 424853 young people at the ages 16-29 in the city of Almaty 195174 (46%) males and 229679 (54%) females. (Almaty population by gender and age, 2013). According to national peculiarities Kazakhs – 63.1%, Russians – 24.9%, other nations – 12% (The youth of the Republic of Kazakhstan. The result of national population census of 2009 in RK). According to The World Factbook 2009, 99.7% of people older than 15 years old can read and write in Kazakhstan. In other words, 99.8% of males and 99.7% of females are literate (Central Intelligence Agency. The World Factbook. Field Listing: Literacy). Up to date, it is a well-known fact that there are many different problems among Kazakhstani youth. Among other things, increasing crime rate among young people can be mentioned. In 2010, Kazakhstan took the third place according to death-rate among the youth in Europe (10.66 deaths per 100 000 citizens). Russia took the first place in that ranking, Albania second (Molotov Cocktail. Anatomy of Kazakhstani youth, 2014). Having considered official data, the youth at the ages 14-29 commit 50% of crimes in our country. For instance, during the primary nine months of the year of 2014 80803 crimes were committed in our country. Among them, 14-15 years old committed 583 of those, 16-17 years old – 2477, 18-20 years old – 8142, 21-29 years old – 28936 (of different levels). If these numbers show that the half of these crimes is made by young people, it will be difficult to predict how many of them stay undetermined (Information on age composition of the people committed crimes). Approximately 50 000 drug-dependent people are registered officially in Kazakhstan, unofficial data of this quantity of 500 000 make us concern of our future (Actual quantity of drug-dependent people in Kazakhstan came near to the mark of half a million people – General Prosecutor's Office, 2013). It has been established that the level of suicides is quite high among the youth. Kazakhstan takes one of the top places in the youth suicide level in the world. According to the recent data, the level of suicide among citizens at the ages 15-29 composes 30.8 per 100 000 people. For example, the level of suicide among the youth at the age of 5-14 is 3.2 per 100 000 people (Preventing suicide. A global imperative. World Health Organization 2014). That is, youth's passage from childhood into adolescence is observed with growth of suicide by 10 times. The issue of health among youth is also important. For example, according to the Bloomberg agency, Kazakhstan ranks No. 111 in Health indicator (Bloomberg Rankings. The world's healthiest countries). In our opinion, there are many reasons of these and other problems, including weakness of youth's labor values and unemployment as the reason of social problems among young people. Let us provide a vivid example which will be an evidence for our words. Currently, it is a well-known fact that there is a war of "Islamic State" terror organization going on in Syria and Iraq and that different radical groups from different places all over the world are affiliating themselves with ISIS (What is Islamic State? BBC News, Middle East, 2014). On 19.11.2014 Nurtay Abykayev the Chairman of the National Security Committee said that 300 Kazakhstanis with the name of "Kazakh community" were carrying on that war in the ranks of "Islamic State" terror organization (Kazakh community. The "Vremya" newspaper, 2014). And at the end of 2012 Johann Merkel the Deputy Prosecutor General of the Republic of Kazakhstan described terrorists' portrait in Kazakhstan on the "Antiterrorism activities in the current situation" conference. Johann Merkel: "Who is Kazakhstani terrorist? Let me answer this question relying on available statistics. Approximately 60% of terrorists are citizens at the age under 29 years old. In other words, youth representatives. Almost all of them, or more precisely, 95%

are unemployed ones. In such a manner, terrorist's portrait of Kazakhstan is youth who is trying to find a niche for themselves, in many instances, unemployed citizens with no education and perspective in future" (The Prosecutor's Office General described the portrait of Kazakhstani terrorist, 2012). We should take into account that if we pay attention to the above mentioned facts, we would see that most of the young people joined extremist (terror) organizations were unemployed young people. In our opinion, if there were great goals and ambitions, values and viewpoints, most of social problems would not occur. If young people had strong work values, they would keep on spiritual struggle without giving a way for defeat. If youth's spare time was organized well, they would not face criminal acts being able to meet competition. Because there is always an opportunity to find any kind of job from any kind of place all over the world for a person who is well-educated and has life force. As this is the problem originated from the weakness of work values and living positions among troubled young people, we consider that it is very important to analyze, evaluate the problem of values among the youth on a permanent basis.

Besides the official data, social research shows that there are different problems among the youth. For example, according to the results of survey conducted by Zhastar Research Center, problems are as follows (Kazakhstan youth – 2013. National report, 2013): There were the following results for "Name the main problems among the youth in your city / town" question put in the survey: 1. Pecuniary burdens (lack of money, high prices) – 13%; 2. Difficulty of employment, unemployment – 13%; 3. Difficulties in obtaining a higher education (high prices) – 12.3%; Housing problem – 11.2%; 4. Drug addiction, toxicomania and alcoholism – 7%; 5. Faithlessness into the future – 5%; 6. Low level of youth culture, moral insanity – 4.9%; 7. Youthful crime – 4.6%; 8. Wide expansion of smoking cigarettes by the youth – 4.1%; 9. No place for recreation – 3.5%; 10. No chance to obtain a loan easily – 3.2%; 11. Dissatisfaction in regard of the society, no discipline – 3.1%; 12. Other reasons (An attempt upon personal security, religious extremism among the youth, no ability to order personal affairs, disputes with parents / representatives of the older generation, poor health conditions, health deterioration, unavailability of high-speed internet connection, cellular communication of high quality) – 14.1%; 13. There are no problems – 0.6%; 14. No answer – 0.4%. The results of the social survey show that problems of pecuniary burdens and unemployment are the most important ones. For this reason, there are several reasons to conduct the sociological survey of Almaty young people's work values: 1. The youth are cultural, intellectual and innovational potential of the society; 2. Youth's social, including social adaptation and formation of work values gives an opportunities to determine the attitude towards a certain profession, world-view, philosophy, attitude towards work and labor, to find a right decision; 3. Young people's work value has an impact on their philosophy and life habits; 4. Young people of Almaty city are the young people who are the fastest in adaptation for new conditions among all the social groups. Accordingly, there is an issue to be mentioned that youth who are "cutting teeth in a life journey" are the first ones who come under the influence of transition period. Furthermore, the study of Almaty young people's value directions offers an opportunity to determine the work values of the entire young people population.

1.3 Describe Relevant Scholarship

Ronald Inglehart is the person who conducts researches of the values in the world in a practical manner on a permanent basis. Since 1970 R. Inglehart has been developing the theory of post-modernism. His scientific point of view has been based on the results of the research "World value survey" which is conducted on all the continents of the world since 1976. In his opinion, the publics of the Western countries could be developed only under the conditions of acceptance of individual values and transformation from material values into post-material values. That is to say, he writes that human owning economic, physical security values will be developed only if they will be changed into the values directed for independent and personal development (Inglehart, R. Changing Values among Western Publics from 1970 to 2006). Consequently, the answer for the question "Will the state be developed in the conditions of forming of independent values or due to forming of political system in the modern world?" is searched. Relying on the result of researches conducted by Inglehart throughout many years, he makes a conclusion that the state will be developed forming personal values in the society. For instance, nowadays nobody believes (many people do not believe) that proletariat revolution can stop exploitation and collisions through liquidation of private property. Industrialization will not lead automatically to democracy, because fascism and communism also occurred through industrialization. None the less, he says that economic development will bring changes in the society, culture and politics. Economic development, each stage of industrialization and modernization development will lead to changes in people's world view. Industrialization establishes conditions for bureaucratization, hierarchization and centralization and secularization of governance, as well as transformation from traditional values into extremely rational values. And post-industrial society provides predomination not for bureaucratization and centralization, but for

self-dependence and self-development of a separate person which will lead to emancipation from governance. Consequently, people will become more patient and will trust others during economic development. R. Inglehart writes that history of the country fulfills an important role in the social and economic changes of the public. Hence, he also writes that economic development has an impact on the world view formed through the heritage developed with the help of Protestantism, Catholicism, Islam, Confucianism and Communism. For instance, there are lots of Muslim countries, however, the level of economic development, education and culture is different in Malaysia and Pakistan, Kazakhstan and Afghanistan, Uzbekistan and Iraq, Indonesia and Syria, United Arab Emirates and Algeria. In a word, economic development assists to perceive in different ways the attitude towards the different issues in the society and person's growth of education. Requirements and demand of civilized people with great economic status is rather high. R. Inglehart's opinion in analyzing, interpretation of our investigations. Because, material values prevail comparing to self-dependent values in Kazakhstani society, and the fact that in the near future transformation from material values into self-dependent values will lead to what kind of changes gives an opportunity to explain mechanisms of possible scenarios in the society.

2. Method

This article is based on the results of the author's sociological survey conducted in the seventh district of Almaty city in the period from January to April of 2014. The objective of this article is to specify young people's work values directions by means of the quantitative investigation methods, search of strengths and weaknesses, analysis of opportunities and dangers. The investigation object is the youth at the ages between 16 and 29. The law of youth policy of our present-day country determines the youth as the citizen of the Republic of Kazakhstan at the age between 16 and 29 (The Law of youth policy in the Republic of Kazakhstan No. 584 of the Republic of Kazakhstan, 2004). This age interval is confirmed in the most countries all over the world. Nevertheless, we have considered the young people at the ages 16 to 29 years old in our investigation. Its main reason is 1 paragraph of 30 article of the Labor Code of the Republic of Kazakhstan (Code of the Republic of Kazakhstan, 2007) stating that a person over 16 years old is entitled to sign an employment agreement. In other words, allowance for work is granted for people over 16 years old (restrictions may apply). The other reason is the fact that 16 years old is the period when school graduates choose their professions and college students are set to study the profession that they've chosen. The third reason, economically active age starts from 16 years old.

Selection capacity is 500 respondents. Quantitative method of the research is used in order to achieve research objective. The method of quantitative research data collection: personal standard interview. Selection represents the young people of the seventh district of Almaty city in the specified age category. Statistical error does not exceed ±3.1% at the confidence interval of 95%. Investigation data were analyzed using SPSS 17.0 computer program.

Desk research or traditional documentary research. The analysis of additional information sources was conducted within the framework of the above-mentioned method. Used documents can be divided into the following groups:

(a) Statistical collection and other information of statistical character. The main source of this information is publications on the official web-site www.stat.gov.kz of the Statistics Committee, Ministry of National Economics, the Republic of Kazakhstan (Ministry of National Economics of the Republic of Kazakhstan, Committee on Statistics. www.stat.gov.kz). Such selection of related articles like "demography", "youth", "work" were used;

(b) Kazakhstani sociological organizations and research results of separate investigators. Investigations of "Zhastar" research center were used in the article preparation ("Zhastar" research center. http://youthpolicycenter.kz/ru/institucionalnaya-podsistema/nic-molodezh.html);

(c) The investigation and scientific works database of the Institute of Education Sciences – The Education Resources Information Center (ERIC) were evaluated (Institute of Education Sciences – The Education Resources Information Center (ERIC) http://eric.ed.gov/).

3. Results

The main part of our investigation is directed to determine the hierarchy of the youth's work values. Respondents were asked the question "What is important for you in your career path (at your work), evaluate?". The results of obtained answers on this question are provided in the first table.

According to the information provided in the table, "high salary" position ranks No. one for the young people among the work values. The second important value for the youth is "exciting work". The fact that the value of "having an exciting and highly-paid job" is the most important values was determined in the part directed in the

life values of our investigation. The result of the questions dedicated to determine the hierarchy of the youth's work values shows that specified values are above the other work values. "Guarantee of position retention" is the third main value for the young people. Paying attention to the most analyses, represents that values may be generated from the need. For example, we can associate the matter that the value of high salary prevails among the other work values for the modern youth with several factors. Firstly, the most of the respondents are dependent on the salary, secondly it shows that the young people face pecuniary burdens in the life start, thirdly, Almaty youth are not only local ones, and also they consist of the young people who came here to study and stayed here after graduation and who is seeking for the job from other regions. However, structure of the youth is complex, their demands are different. Exciting work for the youth is nowadays in demand. We can expect from this tendency that work's productivity and efficiency will increase, if the young people do their work with a great interest. To achieve "the results of work" is very valuable for the respondents. "Exciting work" and "to achieve the results of work" are the most needed demands of current labor market.

Table 1. Youth's work values

What is important for you in your career path (at your work), evaluate? N=500 (2416)	Answers		Control percentage
	N	Percentage	
High salary	237	9.8%	47.4%
Exciting work	224	9.3%	44.8%
Guarantee of position retention	185	7.7%	37.0%
To see the results of work	184	7.6%	36.8%
Healthy relationships with colleagues at work	168	7.0%	33.6%
Good opportunities of career development	155	6.4%	31.0%
Presence of opportunities of personal and professional development	150	6.2%	30.0%
Work's profitability for the society	137	5.7%	27.4%
Comfortable work atmosphere, provision with necessary equipment and hi-tech	131	5.4%	26.2%
Opportunity to work separately, independently	114	4.7%	22.8%
Availability of material essentialities	111	4.6%	22.2%
Opportunity to help other people	95	3.9%	19.0%
Flexible work schedule	91	3.8%	18.2%
Direction's fair attitude towards personnel	83	3.4%	16.6%
Self-security and security of relatives	81	3.4%	16.2%
Public's recognition of the labor	60	2.5%	12.0%
Availability of artistic license	52	2.2%	10.4%
Easiness and good earnings	48	2.0%	9.6%
Consideration of social aids	36	1.5%	7.2%
A lot of days-off	31	1.3%	6.2%
Opportunity to use employment-related powers	28	1.2%	5.6%
Opportunity to take a bribe	15	0.6%	3.0%
Total	2416	100.0%	483.2%

There are such values like "easiness and good earnings of work", "consideration of social aids", "a lot of days-off", "opportunity to use employment-related powers", "opportunity to take a bribe" are the least of the youth's work values list. If we pay attention to the research results, we can say that the modern youth understand that it is not easy to achieve good earnings. Easy work will never be a key for good earnings. 1.5% chose "consideration of social aids" answer. Our understanding is that this indicator may be given two reasons. On one hand, lowering of paternalistic values in the youth's nature. On the other hand, deficiency (lack) of social aids for the youth nowadays. Social aids (social packages) are very important for many people. However, in the case when the social aids are very low, people want to compensate them with high salary. Currently, there are many days-off in our country, there is such opinion that our people prefer to go on holiday. Existence of holidays in our countries is at medium level comparing to the holidays in other countries. And presence of numerous days-off is not so much important for the youth. Investigation results show that many young people are ready to work on days-off.

Social academics' opinion is significant in understanding the specified information. In 1978, Feldman and Arnold research determines that such values like high salary (earnings), self-development, competence, self-dependence, independence, responsibility and flexible work schedule plays significant role in people's work selection. They believe that great predominance of salary importance may serve as obstacles in the way of

development of important personal qualities (Feldman & Arnold, 1978). And S. Zedeck (1977) writes that potentials of personal development are possible in the conditions of high salary and work flexibility (Zedeck, 1977). And so, pecuniary burdens and problem of creative work possibility must be regulated for the purposes of personal development. S. Rynes, D. Schwab and H. Heneman (1983) write that each person has work requirements which satisfies him and which he needs. For instance, the youth who are just starting their career path may be satisfied with medium level salary (Rynes, Schwab, & Heneman, 1983). It is true that the youth are ready to work with medium salary in spite of the matter that they desire a high salary in our situation. However, S. Rynes supports the possibility that organization will not have benefit from the lack of one of person's work values salary.

We aimed to determine the youth's indicator of taking the risk with the help of the question "What conditions would you choose, if you had a right to choose?" (N=500). In concordance with the results, 39.4% of respondents chose the answer "security and stability of work, but limitation of career, creative progress", and 31.6% of respondents chose "high level of creative and professional progress, but uncertainty and danger of work" answer. In comparison, most of the youth desire their work to be secure and stable. In other words, these results also clarify the importance of "guarantee of position retention" value. We cannot say it is a low indicator that 31.6% of the young people are ready to take the risks for creative and professional progress. This indicator shows that there are the young people who are ready to take the risks. Existence of the youth who are ready to take the risks strengthen the possibility of strong changes. 29.0% of all the respondents are in the range of giving "no answer". These young people are among those who seek for a secure, stable job position with opportunities of career and creative progress. The youth of this group seem to be close to "security and stability of work, but limitation of career, creative progress". Because we have written that there are a lot of young people who desire "guarantee of position retention" in the primary questions. It is well-known that people will take the risks with difficulty, if they face challenges. This group needs stable social and economic situation in the state and their lives in order to take the risks.

Table 2. Youth's work motivation

What are the most important methods of people motivation for work? N=495	Frequency	Percentage	Valid percentage
Wage increase	127	25.4	25.7
Management's appreciation of the service	118	23.6	23.8
Career promotion	107	21.4	21.6
Assistance in obtaining the housing	65	13.0	13.1
Opportunity of knowledge advance	55	11.0	11.1
Availability of social aids	23	4.6	4.6
Total	495	99.0	100.0

Currently, there are many methods of people motivation mentioned. Remunerative incentives, creation of conditions for knowledge advance, appreciation of service are common motivators for everybody. "Wage increase", "management's appreciation of the service", "career promotion" were clarified in out investigations as the motivators for youth's work stimulation. The method of stimulation "assistance in obtaining the housing" is very important for Almaty young people. "Availability of social aids" covers a very small part of stimulation (4.6%). We can notice that "availability of social aids" does not prevail in the youth's consciousness for modern young people. We can suppose that the reason is that social aids (social packages) are not so high for today. We consider there is a belief among the young people that it is possible to achieve with the help of high salary, good position, not with the help of the aids. The investigation result shows that "opportunity of knowledge advance" does not stimulate young people at a high level. This fact can still be considered as a holdback for transmission of our public into "smart economics". The problem is not only in the youth, it lays in the system of youth motivation. For example, at the present a person's salary does not depend on his/her proper work in most of organization. An employee working properly and an employee working improperly gets equal salary. Correspondingly, people desire only high salary. And if the salary was dependent on their work results, the contribution an employee made in order to develop the organization, such values like work results, qualification, knowledge would be predominant among people.

We surveyed respondents on "Life achievements can be reached with work only, do you agree with this opinion?" matter (N=500). The significant part of the young people answered that life achievement can be reached with "work" only (69.6%). "Hesitate to answer" was 17.0%, "do not agree" – 10.2%, "no answer" was 3.2%. These numbers show that modern youth soaked up the values of capitalism (post-modernism) and understands the role of work in their lives.

We tried to determine youth's agreement (disagreement) for the question "Stable medium salary is better than unstable salary" (N=500). Investigation result determined that the young people prefer "stable medium salary rather than unstable high salary". In other words, 50.6% preferred "medium salary". And 24.6% of respondents answered that they hesitate, 22.2% answered that they "do not agree". Those who gave "no answer" were 2.6%. Exactly half young people consider that "medium salary is better than unstable high salary" nowadays. The mentioned tendency can be connected to several factors:

- Youth's preference of stable medium salary rather than unstable high salary is connected to work unsteadiness;

- Youth's striving to government-owned agencies is connected to the fact that government salaries are stable;

- Existence of such opinion among the young people like "Will I be able to find a new job, if I lose my current job position?"

- Dependence and low level of self-confidence among the young people.

We asked respondents their opinion on the statement "I would find a new job easily, if I lose my current job position" (N=500). The results of answers:

- Agree – 30.0%;
- Do not agree – 37.0%;
- Hesitate – 27.0%;
- No answer – 6.0%.

We can see that 30.0% of the answers were "I would find easily, if I search" respondents gave for the survey "I would find a new job easily, if I lose my current job position". Two-thirds of the young people hesitate. In other words, it is unknown if I can find a job or not. 37.0% of respondents said "I will not find a job, if I search for it now". In our opinion, several statements can be made for the mentioned indicators:

- This fact shows that there is a problem of finding or not finding a job among one part of the young people.

- In other words, youth's level of professional mobility is low. Low level of professional mobility forms fear and fluctuation of getting an employment, change of employment;

- We consider that it is important to take into account that there are pupils and students among those who gave an answer "I cannot find a job";

- We believe that "I will find a job easily, if I lose my current position" statement completes "stable medium salary is better than unstable high salary" question.

The results of "If I were rich, I would not work" question for the respondents (N=500) were as follows:

- Agree – 18.4%;
- Do not agree –64.0%;
- Hesitate –16.0%;
- No answer –1.6%.

It is a well-known fact that progress in any society is connected to existence of rich people and scientists. The survey was conducted in order to determine the young people's thoughts if they would or would not work, if they were rich. Those who gave "If I were rich, I would not work" answer were 18.4%. In other words, if this group was rich, the work on increase their wealth, improve their job would decelerate. Because the main goal of this group is not to grow rich through improvement of their job, but improvement of their job in order to grow rich. If they became rich, their work would not likely be significant, as though it was if they were in need of material requirements. The proportion of the group that is between this group and the group wishing to work, even if they were rich (hesitating) is 16.0%. This group's thinking border is between these two thoughts. Choosing the appropriate answer likely depends on political and economic situations in the country. The proportion of respondents who answered that they would work, even if they were rich is 64.0%. The goal of this group is to grow rich in order to improve their job. That is to say, there is a base of people who establish a goal to develop further their professional skills, achieve bigger accomplishments in their lives, even if they were rich. A big quantity of people desiring to work in spite of their healthy financial standing is important for our society to develop as we go forward. For instance, it is known that since 1960 South Korea started to progress turning toward economic freedom. In 1985, the scientist named Kim Kyong-Dong conducted a survey research concerning "Would you work, if you had enough money to live well?" question among South Korea workers. As a consequence, 96% of respondents said "we will keep on working". Meanwhile, we can notice that work is not an instrument to stay alive only, but also to show their worth and achieve high goals for Korea people (Kim, Kyong-Dong. Man and Society in Korea's Economic Growth (Seoul: Seoul National University Press, 1985). Certainly, this is the statistics conducted among the entire workers of South Korea. We want to show that there is an opportunity for progress the same way as specified country, if there was no situation when work is just an instrument of making money in the society with the help of the pointed example.

It is well-known that the one of the basic driving forces is workers in any society. Society's direction towards business activities is the factor giving an impulse to society progress. In this regards, we have asked a few questions young people in order to recognize respondents' values and convictions concerning business activities. The results of answers respondents gave to "What is your attitude towards the businessmen?" are provided in the Table 3.

Table 3. Youth's attitude towards business activities

What is your attitude towards the businessmen? N=491	Frequency	Percentage	Valid percentage
They are economics' drive forces	196	39.2	39.9
They provide with work places	149	29.8	30.3
They think of their own profit only	125	25.0	25.5
They do not generate any value for the society	21	4.2	4.3
Total	491	98.2	100.0

The majority of respondents of "What is your attitude towards the business activities?" survey consider businessmen as economics' driving force. One third of respondents believe that they provide with work places, one fourth considers that they think of their own profit only, and the rest believe businessmen generate no value for the society. According to the information provided in the table, 1/3 of the young people think negatively of businessmen. We wrote in our scientific analyses that there a greater preference of businessmen rather than public officers in the society in countries development. We believe that currently a man of action must be an ideal person for our society. Because a businessman is a citizen who generates value for our society, knows his stuff, pays taxes to the government, generates revenue, provides people with work places. Business activity is the start of innovation and modernization. It is a well-known fact that in the case if 80% of any citizens conduct small and medium businesses, the state will advance up to a point. That is why, currently we suppose that promotion of fair labor, business activities, setting an example of fair business activities is a very important problem.

The following question put to respondents targeted to determine youth's desire to "Go into my own business and work on it" (N=500). The results of the survey were as follows:

- Support – 70.0%;
- I would use such an opportunity – 18.6%;
- Do not support – 8.4%;
- No answer – 3.0%.

We can see that there are a lot of young people desiring to "go into my own business and work on it". 1/5 part of the youth said that they would use "an opportunity to carry on business". And 1/10 part of the young people do not want to "carry on business". This investigation shows that the youth desires to carry on business and they would go into their own business, if they had an opportunity. In order to learn deeper this information, we asked the youth what are the obstacles in setting up a business in their opinion. The investigation results are provided in the Table 4.

Table 4. Youth's business activities

What are the obstacles in setting up a business? N=487 (827)	Answers		Control percentage
	N	Percentage	
Lack of funds	302	36.5%	62.0%
Fear to set up a business	133	16.1%	27.3%
Lack of abilities	79	9.6%	16.2%
Corruption	69	8.3%	14.2%
Bureaucratism	67	8.1%	13.8%
Lack of business connections	63	7.6%	12.9%
I do now want to go into a business	60	7.3%	12.3%
No answer	28	3.4%	5.7%
I have my business	26	3.1%	5.3%
Total	827	100.0%	169.8%

A significant part of respondents named the problem of money lack as the main reason of "What are the obstacles in setting up a business?" question. According to respondents' answers "fear" and "lack of abilities" are the the second and the third problems. The young people named "corruption" and "bureaucratism" as one of the main problems in setting up a new business. Some youth consider "lack of business connections" as an obstacle in setting up a business. 7.3% of respondents think that "they do not want to go into a business" and 3.1% of respondents have their own business. According to research conclusion, the reasons forming obstacles for setting up new businesses may be divided into two groups.

First group:
- Lack of funds;
- Fear;
- Lack of abilities.

Second group:
- Corruption;
- Bureaucratism;
- Lack of business connections.

We cannot say that the problems in the second group generally are the absolute obstacles in setting up a new business. We think that these are the reasons which may form obstacles for existing business development. But, we believe that they cannot be the main reason of setting up a new business. Currently, neither acquainatces, nor documents, nor corruption may obstruct for any person who has striving and real eagerness in our country.

The reasons in the first group are very complicated and connected to the problem of personal quality. Lack of funds is the problem which is faced by any person, a businessman setting a new business. This problem can be solved on the part of the government with the help of credit projects taking into account the businessman's capabilities. In other words, this is the system-related problem which may be solved through "public and private" entrepreneurial partnership. The thing that stops and brakes a person who is setting up any business is "fear and uncertainty" (lack of abilities). Regulation of this problem stems from education providing to today children, labor implanting, the values learnt and soaking up to our children. And we think that modern youth's uncertainty was originated from lack of work experience, low professional mobility and insufficiency of employment training.

4. Conclusion

During the analysis of investigation results conducted among Almaty youth, the following tendencies can be emphasized concerning youth's work values:

- Material values prevail in the young people's consciousness rather than self-development (self-dependent) values;

- The indicators of such negative values like "taking a bribe", "appropriation of corporate opportunities", "easy and well-paid work" is low in the youth consciousness among young people's work values;

- Pursuance of both business activities and civil services is rather high among the youth. Establishment on civil services is connected to a stable salary, guaranteed work place and administrative resources. And the main obstacles of young people's setting up a new business are associated with such personal qualities like "lack of funds", "fear" and "lack of abilities".

- The majority of the youth who prefer a stable medium salary rather than an unstable high salary is noticed among the young people. In other words, some youth show assurance instability of the current labor market, and some other young people doubt the strength of their own personal qualities.

Analyzing the above-mentioned tendencies, the young people can be divided into the following groups:

- The group aiming to obtain well-paid job (with high salary) through professional progress;

- The group motivated to achieve high earnings using minimal resources (parents help, acquaintances' resources);

- The group motivated to work at the stable work place with stable earnings (salary);

- The group directed to set up their own business, to carry on business under all circumstances.

We have represented the hierarchy and preferences of current Almaty (Kazakhstan) youth's work values in our article. We have analyzed the main problems and perspectives. In our opinion, material values are more important rather than self-dependent values for the current youth. For instance, there are "salary-career-professional progress" values in the hierarchy of the youth's work values. Theoretically this hierarchy should look like "professional progress-career-salary" values. The formula is explained by R. Ingelhart's theory. It shows that democratic changes in the society and industrial transformation are ahead.

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Problems and Perspectives of Development and Regulation of Electronic Forms of Money in Russia

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Abstract

While the society is developing, necessity in increase of speed of information transfer is constantly growing, significance of information in all areas of mankind's life acquires real traits. Information carriers during different historical periods were elm made by Slavic people, clay plate and papyrus - by Egyptian people, skins by nomadic folks; while some of them will be more durable, another ones will be less. Information can be determined for allocation on electronic mediums. For satisfaction of need in constant receipt of info, a human creates diverse technical devices which expand ones' physiological borders of perception. In that context, we see a necessity to look at mechanisms of electronic money market regulation nowadays, to research how to provide for confidentiality electronic payments, control of electronic money circulation; what has already been done, and what must be done.

Keywords: innovations, innovative route of development, informational technologies, electronic money

1. Introduction: Development of Russian Electronic Money Market

What is around us, what we feel everyday, feel not only on material level, but even on the level of consciousness. Changes, changes and changes. They are everywhere and every day (or sometimes, every minute) we can observe a swift appearance, evolution, and after an improvement of various technologies.

Today, many countries, including Russia, take all possible steps in order to turn to innovative line of progress, or, globally, to formation of society, where knowledge would be priority. Many states have begun to develop a national innovation projects, which arsenal has systems of the sixth technological mode: nanotechnology, bioengineering, informative technologies of security systems. But does anyone have any assurance that all of these discoveries will not be used for destructive purposes, but namely for the benefit of mankind? This rhetorical question does not have to be answered.

A special place in the modern world is given for information resources. High speed data transfer creates preconditions for the expansion of the field of activity for a huge number of services that enable these processes. Information market has a tendency to develop, filling itself by new users and information sources. The establishment of information communication systems extends the information space and contributes to the exchange of information both within one country and at the international level.

The prerequisites for the further implementation of information products are not just the current state of the economy and global integration, but rather the innovative attitude of the society itself.

Every day we hear the word "innovations", it has different meanings, but if we would summarize them, from an economic and legal perspective, innovation can be thought of as a factor influencing the value, costs and benefits from the use of fundamentally new approaches to the interaction between the participants of the financial and legal operations. And new models of economic growth often have horizontal and vertical innovations. The first is associated with the increased variety of goods, while the vertical innovations are connected with the invention of radically new or better products and technologies, displacing the old ones.

In the long-term economic development for countries, the most important are vertical innovations, i.e. the improvement of existing or the full invention.

In this article, we will focus on the innovative aspect of financial transactions, such as e-money, - the product of high-speed information transfer.

What is taken to rank among this category? Rather, it is a financial liability, that was issued electronically, which takes the form of a digital record; they are on the information carrier, and most importantly, entirely controlled by the user. It is worth to clarify that a financial relationship exists at this case, and that the amount of issued electronic money will be leveled to the amount of received money from users and the obligations are accepted by third-party organizations in the form of payment. So the concept of "electronic money" is used mainly to identify innovative technologies, because their circulation takes place not somewhere and somehow, but only thanks to the interaction of the Internet, terminals, ATMs, payment cards, e-wallets and other types of payment instruments.

The Russian law "About national payment system"(Federal act of June) contains its own definition of electronic money, which are defined as funds that previously were provided by one person (the person providing the money) to another person, taking into account the size of provided funds without opening bank account (obligated person), for the enforcement of monetary obligations of the provider of funds to third parties and in respect of the person who has the right to send orders exclusively with the use of electronic means of payment. Electronic money term does not include money received by organizations carrying out professional activities on the securities market, clearing activity and (or) management of investment funds, mutual investment funds and private pension funds and registering the information on the amount of funds provided without opening a bank account in accordance with the legislation regulating the activities of these organizations (P. 18, Art. 3).

Is it possible to argue that the development of electronic payments and, in particular, electronic money helps to reduce costs for the organization of cash circulation, accelerate the pace of economic growth, the development of new sectors of the economy and e-Commerce?

The number of transactions in the countries of the world for the period 2010-2014 has increased at average rate of 4-5% per year (Figure 1) (World Payments Report 2013).
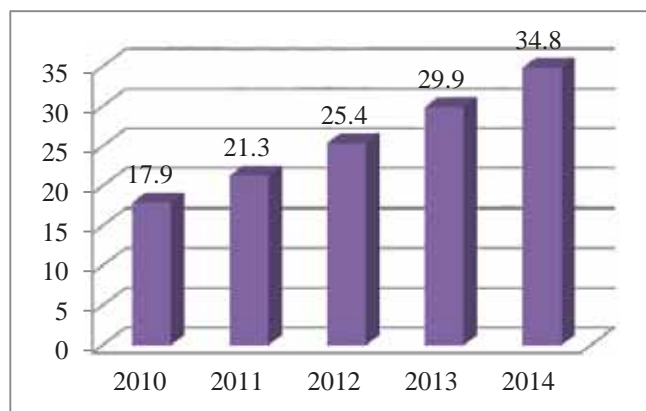
Figure 1. The number of transactions in the countries of the world (Number of transactions with the use of e-Money (billion $)

The level of development of the system of cashless payments is different in different countries due to the nature of their national economies. Thus, in Sweden the share of cashless payments is 97%, in Europe, USA and China - 91-93%, in Russia - up to 75%, suggesting a more widespread use of electronic payments in developed countries. Today electronic money function in more than 200 countries.

According to statistics of the international rating agencies (Moody's Investors Service) for the period 2008-2012 is the use of electronic payments has brought $983 billion to GDP of 56 countries of the world. This contribution to the world's GDP was the creation of a total of 1.9 million jobs. Over the last few years the growth in global e-Commerce market has averaged 20%.

The main participants of the settlement by electronic money are: the payer (has the obligation of payment), the recipient (is entitled to receive payment), the issuer (usually a bank). A simplified diagram of the calculation of the electronic money is presented in Figure 2.
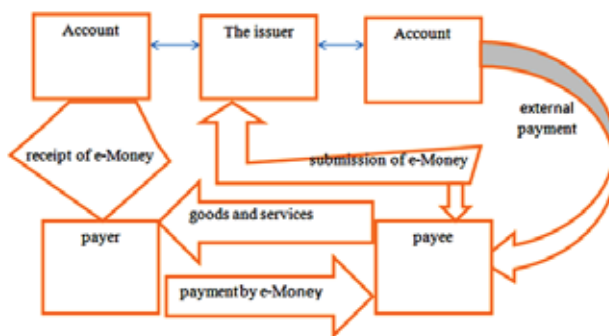
Figure 2. Scheme of the calculation of the electronic money

After analyzing the international experience of using electronic money, it should be noted for their rapid development. The global volume of electronic payments for 2011 increased by 8.8% to $ 307 billion transactions. (World Payments Report 2013) By the end of 2012 the figure rose to 333 billion transactions. In the European Union the general issue of e-money amounted to 4.7 billion euros as at 2013 (European Central Bank, 2014).

According to a report on international payments, "The World Payments Report 2013" from Capgemini and RBS, the number of international non-cash payment transactions grew by 8.8% to $ 307 billion transactions in 2011. By the end of 2012 the figure rose to 333 billion transactions (Figure 3). (World Payments Report, 2013) According to forecasts, mobile and electronic payments will grow by 58,5% and 18.1%, respectively, for 2014 (World Payments Report, 2013).
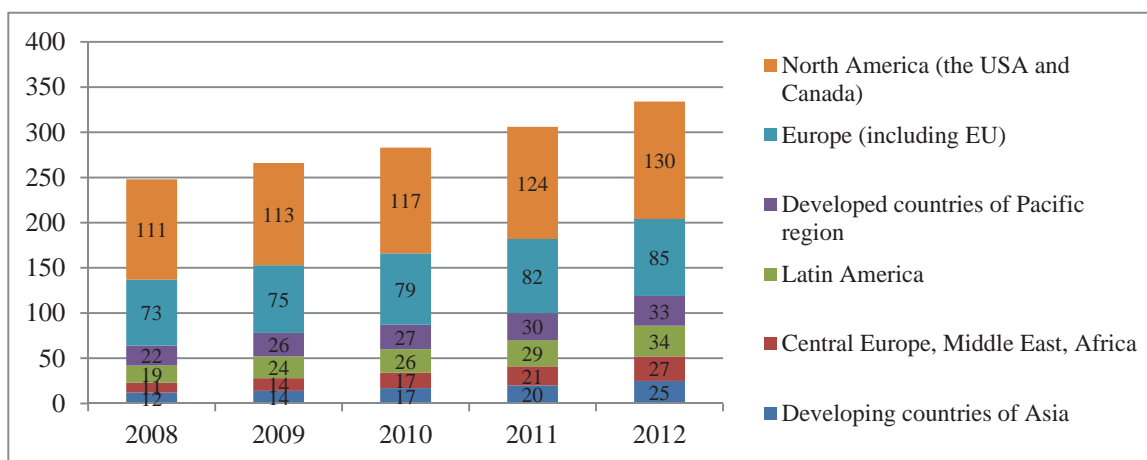
Figure 3. Number of noncash payments in the world (billion$), by region, 2008-2012

Electronic money are becoming more and more popular among Russians day by day. Russian market of electronic money in 2011 demonstrated high growth rates. According to the assessment of the Association "E-money", the number of Russians who used "electronic wallets", amounted to about 34 million people, and the total turnover of the industry exceeded 125 billion, for comparison, in 2009, these figures amounted to 20 million people and 40 billion, respectively. The growth relates not only to the absolute number of purses, but also to their activity.

Russian e-Commerce market is experiencing a phase of rapid growth, showing an average annual growth rate of 29%. The volume of e-Commerce market reached nearly 1.9 trillion RUB. In the future, experts expect a steady growth of the market at the level of 10-15% annually. Russian e-Commerce market will grow by 2017 to 3.7 trillion RUB. At the same time, comparison with other countries shows that the Russian e-Commerce market has considerable potential for further growth.

The ratio of the e-Commerce market to the total volume of trade in Russia is around 2%, while in developed markets, this figure is closer to 5%, and recognized leaders are the UK and the USA - more than 10%. In the structure of non-physical goods and services is expected that the greatest growth will grow sub-segment "digital content", the least - "cellular".

Also for the last 6 years there has been a steady increase in the share of payments made via the Internet. The growth amounted to 36.7%, and January-September 2013 the rate was 57.9% in the eneral structure of payments.

People prefer to pay with e-money for the services of mobile operators - 36%, online games, services, social networks and entertainment network - 38% of all transactions. However, the leader by the volume of payments are financial instruments (loan payments, transfers), they accounted for 57%. The share of operations with cash in the total amount of payments in Russia in the year on average reduced by about 5%. (Sokolov, 2010)

The major obstacle to more rapid development of electronic payment systems in our country is still a distrust of many users to electronic money. However, the increased use of such money is inevitable for the simple reason that, despite the number of, even sometimes significant, shortcomings, they have such undeniable advantages, such as convenience, high speed to perform financial transactions, ease of use, providing full control over the payments and their high security, anonymity, the possibility of transfer to third parties. In addition, electronic payment systems significantly expand opportunities for small organizations, whose spending on cash transactions is much higher compared to digital, including their storage and transport.

The use of the Internet now allows sellers to secure access to markets with lower costs of marketing and advertising. Savings, which the transition to electronic money provides, looks very tempting for banks, because the cost of any electronic transaction is several times lower than usual.

The future of money in Russia is switch from mass cash payments in the state the currency to e-currency through the use of new technical means - first of all, contactless payment systems.

It should be noted that the level of development of the system of cashless payments is different in different countries due to the nature of their national economies. Thus, in Sweden the share of cashless payments is 97% (Research by red word on non-cash, 2013), in Europe, USA and China - 91-93%, in Russia - up to 75% , suggesting a more widespread use of electronic payments in developed countries.

Paper money is the world's first coined Sweden. After almost 4 centuries Sweden first and abandons them. As can be seen from figure 4 the share of cash in the economy of this country is only 3 %, against 7 % in the U.S. and 9 % in the European Union. In Russia the figure is 25 %. Experts believe that in the near future banknotes will be refused by other countries (Sibileva, 2013).

In most Swedish cities you cannot even pay the bus fare by coin: tickets can be purchased via SMS. Some offices of the Bank, earning on electronic transactions, completely stopped handling cash. Even in the Swedish churches the device appears to read information from cards, allowing parishioners to donate electronically. The main plus for the country - less robberies of banks: in 2008 in Sweden, there were more than 100 robberies of banks, in 2012 - a total of 16. But there are also disadvantages in this situation - the number of Internet crimes increased from 3.3 thousand to 20 thousand.

This shows the opposite trend: the rate of increase of non-cash payments in emerging markets in 2012 amounted to 18.7%, in developed ones - 6.2%. Electronic payments in 2012 contributed 0.8% of GDP growth in developing countries and 0.3% in developed countries (Bugrov, 2012).

The main legal document regulating the handling and use of electronic money in Europe, the Directive 2009/110/EC of the European Parliament and of the Council of the EU on 16.09.2009 "About the organization, activities and prudential supervision of electronic money institutions (Directive 2009/110/EC of the European Parliament and of the Council of the EU).

According to the document, the electronic money is defined as "the monetary value, which is represented by a claim on the Issuer which is stored on an electronic device, issued on receipt of funds by the Issuer in the amount of not less made in advance is the amount of money accepted as means of payment other institutions than the Issuer" (Directive 2009/110/EC of the European Parliament). In the Preamble of the Directive States that electronic money can be considered as a surrogate for coins and banknotes, which is stored on an electronic device such as a smart card or in the computer's memory.
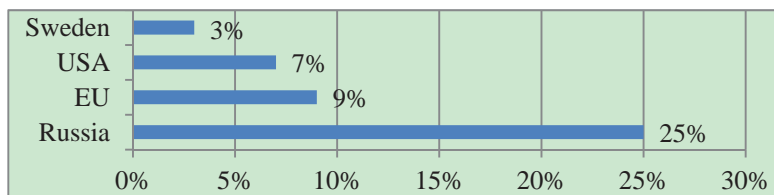
Figure 4. The share of cash in the economy

Today electronic money function in more than 200 countries. Analyzing the dynamics of market development of electronic money in the Eurozone, it should be noted relatively high growth rates (Figure 5). Thus, the total number of issued electronic money for 2006-2012 increased more than 6 times. (European Central Bank) if we estimate the number of issued electronic money in the Euro area according to their types, the majority (65%) is realized on the basis of electronic memorable devices (mainly smart card) and 35% on the Internet.
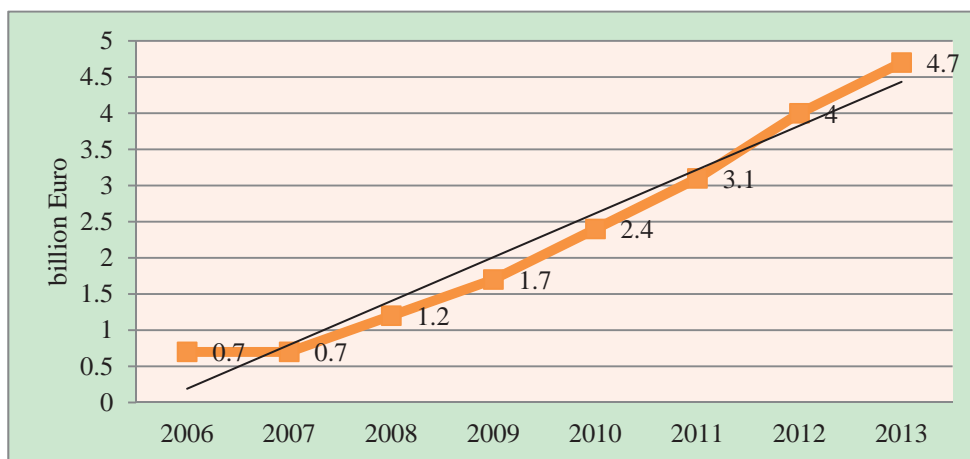
Figure 5. The total issue of electronic money in the Euro area (2006 -2013)

The level of penetration of electronic money into the economy of the EU it should be noted by the level of use in the Netherlands, where the share in the total number of transactions is 9,76%, Italy - 12,6%, Sweden 3,5%, France - 3,44%, Belgium totaling 3.04 %. In countries such as the Czech Republic, Poland, Romania, Bulgaria, the share of transactions with electronic money in the total volume of the Eurozone countries is less than 1% (European Central Bank).

Over the last decade in different countries (including in test mode) more than 200 projects of electronic payment systems were carried out. By the end of 2012, according to the European Central Bank, the EU acted 129 e-money systems. The most famous projects of electronic money on the card carriers in Europe are such as Proton, Chipknip, Geldkarte and Moneo. Among the world's most popular payment systems which issue electronic money using Internet technologies we can provide Yandex.Dengi, RuPay, Qiwi, PayPal, E-gold, WebMoney, LIQPAY, Limonex and FlashCheque.

In particular, the PayPal system now operates successfully in more than 190 countries with a total number of users about 165 million.

It can be argued that e-money – up-to-date, advanced and convenient payment tool which exerts its influence on the development of the economy as a whole.

World experience shows that in countries where there are strict norms of emission of electronic money by the banks, the national system of electronic money is missing, and on the market issuers from other countries come where the rules are more democratic. In addition, the system of electronic money is not the bank's core business and requires additional costs for integration of this system into the information system of the bank. The decisive factor in the success of e-money - the possibility of free use for all kinds of calculations with all the economic agents who wish to participate in the system. Otherwise, the turnover of electronic money in the system is minimal, the system efficiency decreases, and, therefore, offsets the potential benefits of using electronic money.

Thus we can conclude that the development of electronic payments and, in particular, electronic money helps to reduce costs for the organization of cash circulation, accelerate the pace of economic growth, the development of new sectors of the economy and e-Commerce. But there are also disadvantages of the introduction of e-money in circulation - the growth of Internet crime and fraud.

2. Methodology: The Risks of Introduction and Use of Electronic Money in Russia

Electronic money (ED) today is one of the most effective means of treatment, it can result in reduction of costs and time incurred by banks, firms and households. Accordingly, they are an attractive means of payment compared to other payment instruments. And at this point security of issue e-Money becomes relevant, the risks associated with globalization movement of goods, works, services, people and capital on the Internet.
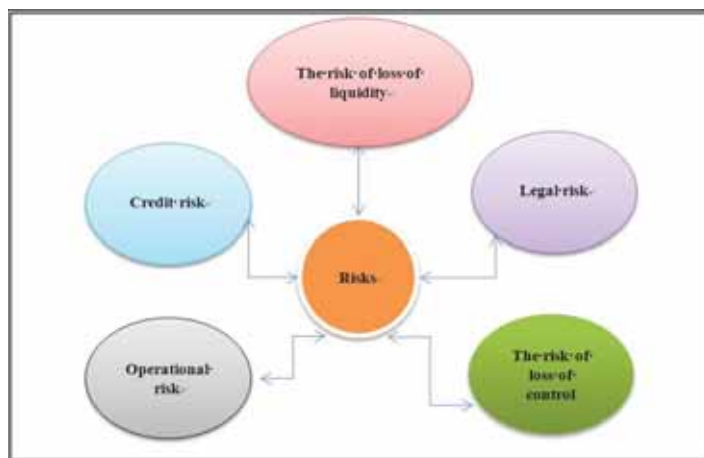
Figure 6. Risks of electronic money

The Central banks of most countries are very wary of the development of electronic money, fear of uncontrolled emissions and other possible abuses. Although e-cash can provide numerous benefits, there are many controversial issues regarding the introduction of electronic money. There are fundamentally unsolved problems of collecting taxes, ensuring the issue, the lack of standards for the issue and circulation of electronic neatnik money, concerns about the use of electronic payment systems for money laundering.

Risks of electronic money can be divided into five types (Figure 6) (Ponomarenko, 2010).

1. **The risk of loss of liquidity**, i.e. the non-fulfillment by the Issuer of its obligations resulting from the inadequacy of the size of its assets. The reasons for this risk are associated with risky assets held for redemption of electronic money, or uncontrolled emissions;

2. **Credit risk**, i.e. the risk of losses due to non-fulfillment of their obligations by third parties - banks-participants, settlement banks and other. Causes improper or untimely payment for services of the Issuer, a breach in the credit schemes;

3. **Legal risk** as a result of actions or events of a legal nature. The possible discrepancy between the rules of e-Money applicable law, in case of a violation by the Issuer or clients, as well as changes in legislation;

4. **Operational risk** is the risk of losses as a result of shortcomings in the organization of the system or abuse of persons with access to the system. This can be caused by poor implementation of the system, malicious actions of employees of the Issuer or third parties;

5. **The risk of loss of control** due to loss of management control over one of the risks listed above.

In addition to these major risks, we must mention the risk of inflation arising from the uncontrolled emission of electronic money. And according to a report prepared by the experts of the Bank for International Settlements, you can also select reputational risk, interest rate risk and market risk.

Reputational risk is the risk of losses, including the loss of current and/or potential clients, because of the negative public opinion about the system of electronic money.

It should be noted that this risk may arise as a result of actions (or inactions) of the participant of the electronic money system, and as a result of the actions of third parties. The breach of security of electronic money, as a consequence of external attacks from hackers, may undermine the credibility of the system.

In this case, reputation risk is caused by the actions of a third party. If clients are not able to make transactions with electronic money due to technical problems with communication networks, that may also undermine the credibility of the system of electronic money, in this case, the fault lies with the organisers of the system.

Interest rate risk is the risk of losses due to unfavourable to the Issuer of electronic money changes in interest rates. As a result of adverse changes in interest rates the value of the assets of the Issuer may be reduced relative to liabilities money issued in circulation.

Market risk represents the probability of financial losses and off-balance sheet operations as a result of changes in market prices, including foreign exchange rates.

According to the Basel Committee on banking supervision, the most dangerous is operational risk is "the risk of direct and indirect losses caused by inadequate internal processes or omissions with human errors or system

failures, or associated with external factors". Thus, operational risk is divided into: the risk caused by human actions and force majeure. Successful solution of the problems of operational risk requires continuous collection, processing and analysis of information.

Another classification of risks in today's electronic money allocates the risks of providing an immediate direct impact on the consumer electronic money (Figure 7).
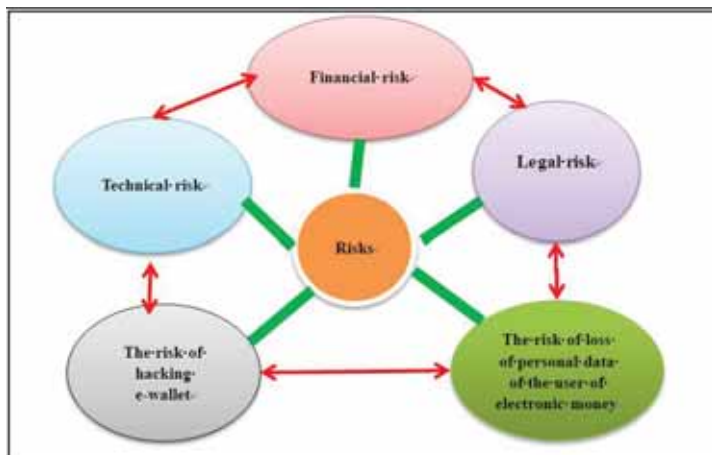
Figure 7. Risks that have a direct impact on consumer electronic money

Financial risk (a default by the Issuer of its obligations).

Legal risk.

The risk of loss of personal data of the user of electronic money (e-money are not registered, and therefore, can be stolen).

The risk of hacking e-wallet.

Technical risk (the risk of loss of data, e-money and other things because of a hardware failure of the Issuer).

Another risk associated with electronic money, is the risk of illegal use for the legalization of income obtained by criminal means. Electronic money can freely cross borders as they exist within the Internet, for which, as we know, there are no boundaries.

The technology of electronic money is constantly improving, increasing user confidence in this type of money. Therefore, it is necessary to reduce these risks through legislative regulation from the state and imposing reasonable restrictions, as well as the supervision and regulation of activities of the Issuer control of the banking authorities.

3. Results: Trends in the Use of Electronic Money in Russia

Electronic money every day becoming more and more popular among Russians. Market size of electronic payments in Russia in 2011 amounted to $ 125 billion rubles, which is almost twice the figure for 2010 (70 billion) (Figure8) (Association "Electronic money").
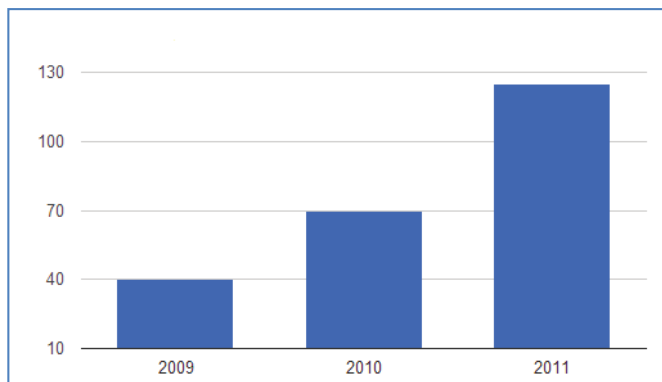
Figure 8. Volume of refill of e-wallets, billion rubles

Electronic payment systems provide an opportunity to simplify and streamline your financial operations (transactions) between buyer and seller. In addition, they contribute to the rapid development of e-Commerce, as they allow you to make transactions almost instantly.

Russian e-Commerce market is experiencing a phase of rapid growth, showing an average annual growth rate of 29% in 2008 - 2012 In 2012, the evaluation consultants J'son & Partners Consulting estimations, the e-Commerce market reached nearly 1.9 trillion. RUB In the future, the specialists expect stable growth of the market at the level of 10-15% annually. Russian e-Commerce market will grow by 2017 to 3.7 trillion. RUB (Figure 9).
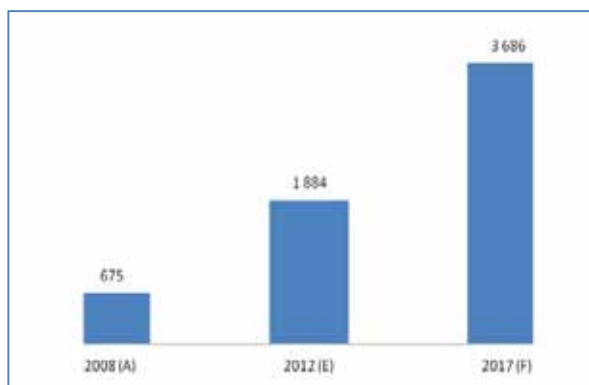
Figure 9. Russian e-Commerce market, billion rubles (J'son and Partners the e-Commerce)

Besides, the comparison with other countries shows that the Russian e-Commerce market has considerable potential for further growth. The ratio of the e-Commerce market to the total volume of trade in Russia is around 2%, while in developed markets, this figure is closer to 5%, and recognized leaders in the UK and the USA - more than 10%.
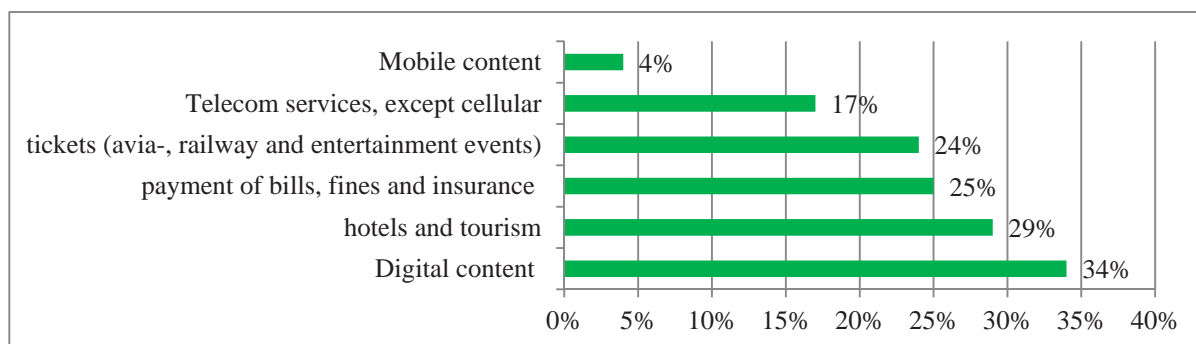
Figure 10. The average growth rate of market segments of non-physical goods e-Commerce market in Russia in 2008-2017, (J'son and Partners the e-Commerce)

In 2012, analysts J'son Partners Consulting has estimated the volume of the sector of non-physical goods and services on the e-Commerce market of the Russian Federation in the amount of 1.2 trillion RUB. The forecast for 2017 is 2.2 trillion RUB.

In the structure of non-physical goods and services is expected that the greatest growth will be in sub-segment "digital content", and the lowest - "cellular communication" (Figure 10).

In Russia payments by bank cards are common (credit and debit cards) electronic cash and SMS payments.

The study, conducted by Analytic Research Group, found that the number of payments made with credit cards, has been growing steadily. So in January-September 2013 the share of payments made 55,89% of the total payments that is 6,65% higher than values for the year 2012. Then share was 49,24%. For the last 6 years it had increased more than 2 times.

For the last 6 years there has been a steady increase in the share of payments made via the Internet. The growth amounted to 36.7%, and January-September 2013 the rate was 57.9% in the general structure of payments.

However, the increase in payment using a mobile phone is missing. The share of these payments varies from 0.3 to 1.2% (Study by The Analytic Research Group).

According to experts, in terms of the use of electronic money a big city is so far ahead of the regions. This is due to the general level of Internet penetration, however, there is the dynamics of the gap between Moscow, St. Petersburg and the regions. Most frequently pay remotely for the tickets, event tickets, network marketing, coupon services, utility payments, online games, social networks, professional Internet services. However, in small retail cash still continues to dominate - almost everywhere in small towns, slightly less than in the cities. The share of operations with cash in the total amount of payments in Russia in the year on average reduced by about 5%.

According to the Association of "Electronic Money", in 2009 there were 20 million active users of electronic payment systems. The number of registered e-wallets in 2010 continued to grow, almost exponentially, and by the end of 2010 amounted to 30 million people. However, in 2011, the growth in the number of registered e-wallets in Russia has decreased markedly and for the year amounted to 34 million people (Figure 11) (Association "Electronic money").

This is due to the requirement that every service e-money status of a credit institution in connection with the adoption in 2011 of the Federal law "On national payment system" that had an effect on the user agreements and the outflow part of the users who did not wish to undergo the verification of personal data and identification. According to the 2012 volume of the domestic market of electronic payment systems has exceeded 125 billion rubles.
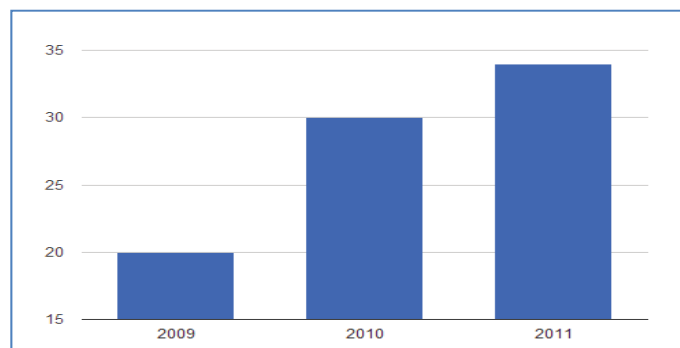
Figure 11. The number of active e-wallets, million

Users, as before, prefer to pay with e-money for the services of mobile operators - 36%, online games, services, social networks and entertainment network - 38% of all transactions. However, the leader by the volume of payments are financial instruments (loan payments, transfers), they accounted for 57% (Figure 12) (Figure 13) (Association "Electronic money").
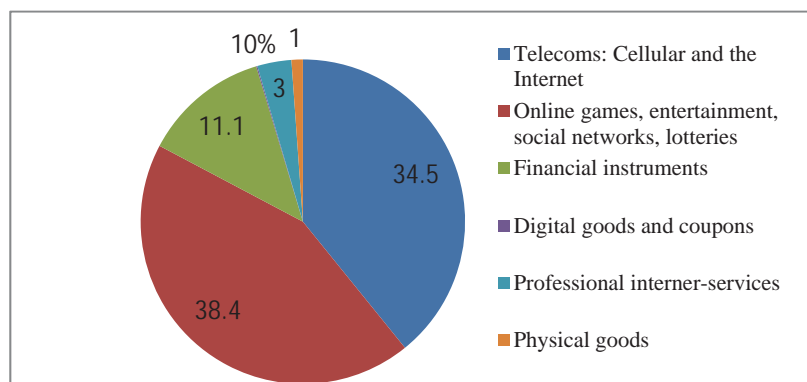
Figure 12. The main purpose of the payments, in quantitative terms

This pattern is not specific to Russia only. In the CIS, the Middle East, Asia technology of electronic money significantly enhances public access to the payment, the financial and microfinance services. All this causes a rapid growth of interest in this sector.

For the state electronic money solve several tasks:

• providing universal financial inclusion;

• reduction of cash in the money supply by transforming it into a more manageable and controlled form;

• encourage local operators, preventing the leakage of commissions and information on payments abroad.
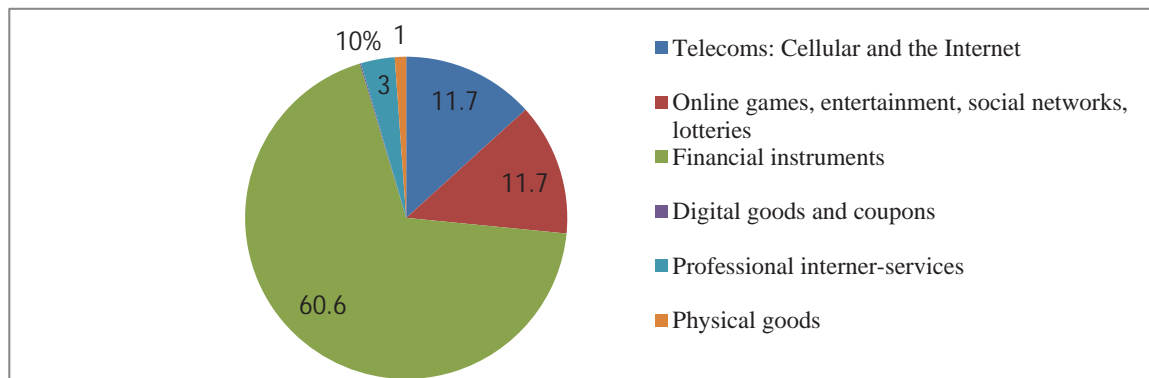
Figure 13. The main purpose of payments, the volume ratios

The main factors that have formed the basis for significant growth of electronic payments market include:

• the rapid development of IT technologies, accelerated integration projects and launching new products, providing a convenient and intuitive applications and conclusion CRM (Customer Relationship Management) to a higher level;

• the services, of course, have become more reliable, significantly increased the level of security of electronic payments, money transfers, e-wallets;

• service providers are actively increased its product line and attract new clients;

• an important factor is the growth of Internet use (Internet penetration);

• the growing popularity of smartphones and applications associated with the services from the scope of electronic Commerce: purses, etc.

Today, virtually all players in the market of electronic payments in Russia and abroad, actively experimenting with offline niches. A cup of coffee and a ride in a taxi or on the subway - it's all you can pay with electronic money. The state also does not remain aloof, connecting operators of electronic money for payment of utility bills, taxes, fines. Finally, there are new models of interaction: over the past year, thanks to electronic money the topic of crowdfunding emerged and actively developed (raising money for community initiatives). Electronic money instrument of e-Commerce become the means of payment for ordinary life.

An important disadvantage and a major obstacle to the further development of electronic payment systems and services is still mistrust of the majority of Internet users to e-money.

4. Discussion: Prospects of Application of Electronic Money in Russia

Global global financial system is developing very actively - and that seems unshakable, maybe in a few decades to be an archaism. There is a need to say that even half a century ago, most currencies were tightly pegged to the dollar, and this currency was provided the gold standard.

If no radical changes should not happen with currencies, here are ways to pay for goods and services will evolve quickly. Another two or three decades ago, it was hard to imagine what can go into any store with an empty wallet and leave with shopping, paying for them with your credit card.

In the XXI century bank cards can go out. The future of money is in the mass transition to cashless payments in normal state currencies or e-currency through the use of new technical means - first of all, contactless payment systems.

NFC (Near Field Communication) is a technology of wireless frequency communication with small radius (up to 10 cm), enabling contactless data exchange between devices located at small distances: for example, between the reading terminal and a cellular phone or a plastic smart card.

In the development and implementation of NFC today involve the leading players in the global market for high-tech products: Google, Intel, Samsung, Nokia, Visa, MasterCard, Citigroup, Barclaycard and others.(Fiscal 2011 Annual Report. Starbucks Corporation)

As "media" for NFC chip is often a mobile phone device as a mass, as an individual, and most importantly inseparable from its owner. The latest trend in the field of NFC was the parallel development of services based on smart cards and mobile devices (Figure 14).

Figure 14. NFC technology-based smart cards and mobile phones

Both options enable you to build a universal NFC ecosystem, where a smart card or cell phone with an integrated NFC chip into a multi-purpose device, acting as:

➢ the means of payment (virtual wallet);

➢ the identification of the owner;

➢ the key;

➢ the bonus card;

➢ the travel card.

NFC chip can contain large amounts of data, optionally encrypting them.

NFC technology has enormous potential applications in a variety of industries from retail to medicine and education (Figure 15):

➢ the non-cash payments;

➢ the municipal transport;

➢ the loyalty program;

➢ the system of time tracking and monitoring performance;

➢ the system identification and access control;

➢ the interactive info-stands and smart posters;

➢ the social services.

Analyzing NFC capabilities, we can confidently predict its potential relevance in the field of security and access control.

Figure 15. The use of NFC technology in various fields.

Contactless infrastructure and contactless payments are already fairly well developed in system of public transport, rather quickly appear and in other industries. Operators, mobile device manufacturers, banking and other payment systems are increasingly seeking to use contactless payments.

Maybe today is the widespread use of NFC seems futuristic, but in the very near future, this technology will be fixed in our lives - just as Wi-Fi, Bluetooth, USB.

At the moment, such a technology introduced by the Mastercard PayPass (2003) and Visa PayWave (2004).

(California Financial Code. Division)

MasterCard PayPass and **Visa PayWave** is a payment card with a new technology that allows customer to pay for purchases with a single touch! It is quick and easy. Simply touch the card to the terminal. As for shopping for the amount of 1,000 rubles don't even need to enter a PIN or sign a receipt.

These two systems differ only in the range, one operates at a distance of 10 cm, the other at a distance of 4. Principle of operation is the same.

MasterCard PayPass and Visa PayWave are convenient for both buyers and sellers. They save time

Figure 16. Saving time

• 33% (or 7 seconds) compared to the standard payment cards;

• 52% (15 seconds) in comparison with cash payments (J'son and Partners the e-Commerce);

The process of purchase with MasterCard PayPass and Visa PayWave is presented in Figure 17.

Figure 17. The process of using innovative technologies, MasterCard/Visa PayWave

Figure 18. Geography of MasterCard PayPass in the world

1. Enter the amount to be paid at the cash register / terminal. Press "TOTAL";

2. Ask the customer: "Do you have a card, MasterCard/Visa PayWave?";

3. If buyer card is MasterCard/Visa PayWave, ask him to touch the card to the terminal;

4. Beeps and lights up LEDs - paid! Complete the transaction in the usual way.

5. Ask the customer to enter a PIN or sign a receipt to confirm the operation, if the operation is over $ 1000.

PayPass cards and devices are available in 56 countries (as of 2013), contactless PayPass take about 1.2 million merchant locations worldwide (Figure 18).

As at 2013 MasterCard PayPass cards were made in 29 countries (Figure 19).

Figure 19. Geography accepting MasterCard PayPass in the world

Today, the technology Visa PayWave is distributed in more than 30 countries around the world.

Holders of cards with contactless technology, glad to see many shops and cafes/restaurants (Figure 20).

Figure 20. Reception cards with contactless technology

Contactless technology is now beyond habitual patterns and can now be embedded in phones, watches FOB from the car, etc. and open up new areas of application such as metro, parking meters, bus.

With the development of e-Commerce through the world wide web began to appear and innovations such as virtual cards. First it came up with Yandex and immediately similar service appeared in Webmoney and QIWI. (Inui So, Abaeva, Powarkov, & Plotnikov, 2011)

Virtual credit card is only for online payments. Neither to take her cash or pay in a regular store or supermarket is possible, as the material basis, which can be presented even to hold in your hands, does no exist.

Virtual card provides additional guarantees of security, without compromising the availability of the entire amount of the money stored in the normal map.

When paying for their purchases in the online shop, we sometimes have to enter a number and a special code that gives access to it. At this point we can become a victim of phishing special fraud by hacking cards when shopping online. If in the wrong hands, these data will reveal the fraudsters access to your funds. They can on your behalf make purchases in other stores than you will not even suspect.

Additional security virtual card is that the duration is specified, relatively short period of time, and also limit the amount that can be no more than a certain amount entered by you. Both disposable and reusable virtual credit cards are produced. The purpose of the manufacture of disposable cards - pay for a specific thing or services, such as mobile communication or making certain purchases. You pay by it, and it becomes invalid, that is completely useless.

Reusable card is designed to pay for goods and services on the Internet for a certain period, but from the loss of funds you will save the limit on spending. The limit can be set as to the amount of a single purchase, and the amount of purchases carried out in one day. Thus, even if you will become a victim of Internet fraud, then the loss will be insignificant.

You can make a virtual card via Internet banking or mobile phone, connecting it to my main credit card or e-wallet.

5. Conclusion: Problems of Introduction of Electronic Money

Although e-cash can provide the advantage of speed and ease of use, greater security, lower transaction fees, new business opportunities with the transfer of economic activity in the Internet, there are many controversial issues regarding the introduction of electronic money. Currently the problem of collecting taxes is not fundamentally solved, the issue ensuring, the lack of standards for the issue and circulation of electronic unfiat money, concerns about the use of electronic payment systems for money laundering.

For turnover of electronic money fairly sophisticated technology is used. And commercial banks are not always willing and able to develop new products.

The main reasons for the reluctance of banks to develop projects related to electronic money, are:

• the need to finance development, the fruits of which can be used by competitors;

• difficulties cooperation with other banks in order to share the costs of innovative development;

• absorption of already existing new banking products;

• lack of qualified specialists.

On the background of the problems with the implementation of the project "electronic money" commercial banks in the market, there are a lot of small projects, the main problems which at the moment are:

• extremely small size of the actual market "e-money";

• priority focus of the legislation in the field of payment systems in the banking industry;

• a large number of competing and poorly oriented in their consumer technologies and the lack of standards;

• the unwillingness of regulators to put on the market payment systems companies that are not banks.

So, the amendment to the draft law "On national payment system", introduced in early February 2010 by the Association of Russian banks and securing an article about the exclusive right of banks to issue e-money, shows that the view of electronic money as a claim against the Issuer has become fundamental. (Inui So, Abaeva, Powarkov, & Plotnikov, 2011)

Therefore, the obligation on electronic documents a credit institution can only carry. It follows that the market regulator will be the Bank of Russia, which will be able to make claims on banks - issuers of money and to the agents, which will be presented on the market of payment systems. However, it is to be feared that the focus on banks would increase the cost of transactions with electronic money almost doubled, and that the imposition of Russian issuers limits larger than in the rest of the world, can lead to the displacement of Russian players foreign payment systems.

It is obvious that the problems of the new market "e-money" can be solved in a long evolutionary path either through large infrastructure projects initiated by the States (for example, Russian national payment system cards).

In conclusion, we note that the Russian market of electronic payments is making its first steps into account world experience in building the legal framework of electronic money.

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The Technology for the Development of the Officers' Conflictological Competence

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Abstract

The present article is devoted to the essence of the problem of development of the conflictological competence of a modern officer. The authors have considered understanding of the conflict, conflictological competence of an officer, its constituent components, studied the causes of conflicts in military formations. The place and role of the conflictological competence in the structure of professional competence of an officer, as well as its impact on the effectiveness of administrative functions implemented by military leaders, have been determined. The article provides an overview of the results of the survey carried out among the officers in order to determine the extent of development of their conflictological competence. The content and mechanism of implementation of the technology for the development of the conflictological competence of military leaders have been provided.

Keywords: conflictological competence, professional competence, management activities, technology, problem-project approach.

1. Introduction

1.1 Introduction to the Problem

Successful modernization of the Armed Forces, other troops and military formations of the Republic of Kazakhstan is largely dependent on the competence of officers with high intellectual potential, competent and qualified specialists who know their business well. The military readiness and the fate of changes entirely depend on the officer corps, which is the golden fund of the Army (Military Doctrine of the Republic of Kazakhstan, 2011).

In Kazakhstan the system of planning of the officers' career, providing for the rotation of the service out of the command duty in the Armed Forces and into the post in the staff headquarters and out of the staff headquarters into the command duty, the rotation of troops, which provides an opportunity for officers to develop multi-faceted skills, as well as to prevent "stagnation" of military staff, has already been established. Since 2012 officers have been appointed to senior posts on a competitive basis, which is a fundamental difference from the previously operating system. Officers, listed in the officers reserve for nomination to the posts, can be considered as candidates for appointment. The certification of officers is held every three years. On the basis of the certification the reserve list of officers for nomination to senior posts and training assignments are made (News as of 23.10.2013).

1.2 Updating the Issue of Development of the Officers' Conflictological Competence

Given the specificity of military service, the suddenness and unpredictability of the situation, it can be stated that the officers' management activities are difficulty-combining ones and have an extreme character. The effectiveness of the service and army activities of the military organization as a whole depends on the productivity of the management of military leaders at all hierarchical levels.

It should be noted that the activities in the "man-man" system requires leaders' compliance of certain duties aimed at adjustment of the processes of professional interaction between the subjects of military service,

resolution and transformation of conflicts of different levels of complexity. Tragic events entailing the loss of personnel (events happened on the post "Arkankergen", etc.), necessitate taking a new look at the problem of professional military leader, as well as reconsidering currently cultivated approaches to officers' training in this direction. The main research efforts in the psychology of management are focused on optimizing staffing activities, resolving problems that can occur during the professional interaction between military leaders and subordinates, positive regulation of intra-group interpersonal relations and enhancement of professionalism in the work of the management staff. In this regard, the present article shall consider the state of the problem and features of the technology for development of the officers' conflictological competence.

1.3 What Is a Conflict in Our Understanding?

The definition of a conflict includes any situation in which people have incompatible interests, goals, principles and feelings. Conflicts often arise in organizational contexts where there are interdependent relationships (Runde & Flanagan, 2010; Fick-Cooper & Baker, 2011).

In some studies, a conflict is characterized as a socio-psychological phenomenon and it is emphasized that it can be not only a destructive factor, but it can also act as a factor of changes, a source of innovations and an impetus for rethinking life scenarios (Boulding, Giddens, et al.). Kozer L. considers a conflict as a "fight for the values and aspirations for a certain status, power and resources, in which the aims of the opponent are to neutralize, damage or remove the opponent". Accordingly, this author assumes that a conflict is an essential element of social interaction that contributes to strengthening or destruction of social ties (Coser, 2000).

We consider the conflict from the point of view of management, i.e. the importance of converting the negative, destructive consequences of the conflict into constructive possibilities. The conflict in the most general terms means specifically organized activities in which the contradiction is held in the process of its resolution.

1.4 An Impact of the Conflict on the Quality of Management Activities

A number of authors who have studied an impact of the conflict on the process of management activities, state the following:

- One of the main criteria for assessing the ability of a manager to implement management activities is his/her willingness to deal effectively with non-standard problematic situations, bearing the controversial nature (Kudryashova, 1983);

- For the effective management in unusual situations it is important to have the skills of constructive communication during acute conflicts (Derkach & Scherbina, 1998);

- The ability to act in conflict situations is an important professional skill of a manager (Perminova, 1997);

- In most cases conflicts have a negative impact on the entire organization, as they can adversely affect the emotional state of managers (Chervony, 2013);

- A negative impact of conflicts on the organization's activities is a significant diversion of the manager's efforts from the solution of the main administrative tasks, as they require additional resources for resolution of conflict situations.

1.5 On the Conflictological Competence

The implementation of professional functions occurs in three interrelated processes: interaction, communication, relationship. The concept of interaction suggests the presence of different interacting parties and the actions between these parties should be inter-directed and interdependent, i.e. parties should regulate the process of the conflict (Grishina, 2000).

John Raven refers the ability to resolve conflicts and mitigate differences to the main competencies of a person (Raven, 2002).

Zazykin V. G., Bogdanov E. N. indicate that the lack of conflictological competence is one of the most important psychological causes of the conflict (Zazykin & Bogdanov, 2004).

Shepel V. M., considering the activity of managers in special circumstances, highlights "managerial communication skills in an acute situation" of a technical and organizational type that reduce the aggressiveness of the parties and the creation of conditions for a constructive dialogue (Shepel, 1984).

The conflictological competence is regarded as a kind of the social-psychological competence (Antsupov & Shipilov, 1999, p. 491). Hasan B. I. expanded the concept of the conflictological competence, considering it as one of the leading characteristics of a person and an important part of the overall communicative competence,

which is a level of awareness of the range of possible strategies of behavior in a conflict and skills to implement these strategies in specific situations (Hasan, 2003).

1.6 Comparison of the Concepts of "Conflict" and "Conflictological" Competence

The comparative content analysis of the concepts of "conflict" and "conflictological" competence allows to safely assume that between them there are no fundamental differences, there are only minor differences on some components (Khudayeva, 2007).

At the "special" level in the content of the conflictological competence the following differences from the conflict competence can be indicated:

- Greater focus on the anticipation of opponents actions in conflict situations;

- There is a willingness to comply with ethical norms and follow the requirements of professional management culture in the process of conflict management;

- The presence of motivational affirmation of management subjects on the desire to improve one's conflictological preparedness, promoting the conflict-free organization of professional activities.

In general, the conflictological competence can be considered on two levels. The first level involves the ability to recognize the signs of the conflict occurred, its registration in order to keep the contradiction containing in this conflict and possession of regulation methods for its resolution.

The second level provides the ability to design some conflicts necessary to achieve certain results and construct them in situations of interaction; it is necessary to possess the ways of organizing productively oriented conflict behavior of participants and parties of the interaction.

2. Methods

2.1 Conflicts in Military Units

It should be noted that the number of conflicts in military units is relatively non-public information, and the available data are approximate and based on open sources and expert assessments.

Kalyuzhny A. S., exploring features of conflicts in Russian military units, has distinguished three types of conflicts: the conflict that arises between individual soldiers is an interpersonal conflict; a "vertical" conflict occurs between the subordinate and the supervisor; intergroup conflicts occur when groups of individual soldiers act as the warring parties, not individual soldiers. A typical intergroup conflict in the unit is a conflict between two groups of soldiers of different years of military conscription or conflicts arising on ethnic grounds. Moreover, studies carried out by Kalyuzhny A. S. in 2003-2004, namely the analysis of 250 conflicts in the Army and Air Defense Forces, show that the most frequent conflicts between officers in relations "subordinate – immediate commander" amount to 48% of all conflicts occurred. Another 30% of conflicts occur in relations "subordinate – direct commander". 19% of the total number of conflicts occur between the officers who are not linked by relations of subordination, while 3% – between temporarily subordinates. This implies that the typical conflict for officers in the unit is a conflict with their subordinates or commanders. The analysis of a large number of real conflicts showed that approximately 70% of conflicts were initiated by a soldier (Kalyuzhniy, 2004).

2.2 The Author's Understanding of the Nature and Structure of the Officers' Conflictological Competence

We consider the conflictological competence of an officer as a integrative property of officer's personality with a set of theoretical knowledge and practical skills in the sphere of conflict resolution, corresponding to the requirements of professional qualifications and contributing to internal mindset on conflict-free and expedient actions in different conditions of interpersonal interaction, defined by a high conflictogenic potential of the working environment.

The structural components of the conflictological competence of an officer are as follows:

- Gnostic component (knowledge on the reasons for the conflicts occurrence, features of their development, opponents' behavior, mental states, etc.);

- Regulatory component (the ability to provide a constructive impact on the assessment, motives and attitudes of the opponents; manage the conflict at all stages of its deployment; mediation);

- Projecting component (the ability to anticipate the actions of one's opponents in conflict situations);

- Communicative component (the ability to carry out effective communication with due regard to personal characteristics and emotional states of the opponents);

- Reflexive-status component (an adequate response to the contradictions occurring in the course of interpersonal interaction, the ability to gain self-knowledge);

- Normative component (knowledge on the regulatory and moral regulators of behavior in conflict situations, the possession of professional management culture, a willingness to comply with ethical requirements);

- Motivational component (willingness to develop and improve one's conflictological knowledge and skills).

2.3 Research Tool

For the analysis of the real state and the practice of development of officers' conflictological competence the survey was conducted among active duty officers and reserve officers. The active duty officers were given a questionnaire consisting of 25 confidential questions by three blocks: the assessment of officers' knowledge on the conflict and the ways of its resolution; the nature of the most frequently occurring conflicts; conditionality of the management quality as far as the officer's conflictological competence is concerned. The reserve officers were given a questionnaire consisting of 21 confidential and open questions by the following blocks: the assessment of the development of the officers' conflictological competence in the Army and military units; proposals for the development of the conflictological competence.

The test on determining the dominant strategies of conflict behavior (metaphorical version) has also been conducted. The task was to assess the degree of using the proposed sayings in one's behavioral practice. In accordance with the ratio of two dominant goals reflecting the commitment to "oneself" and "interaction with others", metaphorical strategies of conflict behavior can be indicated.

3. Results

The total number of the study participants amounted to 100 officers and 20 reserve officers. The study participants were men (88%) and women (12%). The age of participants varied from over 45 years old – 17%; 36-45 years old – 30%; 26-35 years old – 31%; 18-25 years old – 22%. Work experience included more than 10 years – 16%; from 1 to 3 years – 19%; from 3 to 7 years – 28%; 7-10 years – 19%, up to a year of work experience – 18%. All participants had a higher education.

3.1 Active Duty Officers Questioning

Almost 94% of the officers noted that these or other conflicts in the course of management activities of the officers were practically inevitable, while 65% assumed that conflicts had a negative impact on the effectiveness of management activities of the officers and morale of the military staff. As typical consequences of management conflicts they distinguished the following: bias and formalism in relations between the military staff; subordinates artificially create problems connected with service and social life; extremely hindered interpersonal communication.

In the result of ranking causes of conflicts between managers and subordinate officers we put the excess of the official authority on the first place; the humiliation of honor and dignity of subordinates appeared on the second place; giving illegal orders appeared on the third place.

According to the respondents, the majority of conflicts occur at the level of "officer-officer" and "officer-commander – contract serviceman (non-management soldiers, etc.)" (59% of the respondents). 63% of the officers offer targeted training and improvement of the level of the officers' conflictological competence as a means of conflicts prevention. While 83% of respondents noted the need to develop a constructive component of conflictological competence (skills in conflict management at all stages, especially the settlement and constructive resolution of conflicts).

3.2 Reserve Officers Questioning

These results are also confirmed by the results of the survey of reserve officers. 67% of reserve officers evaluated the level of conflictological competence as an average one. 46% of respondents assume that the main cause of the conflicts is that administrative officers adhere to the following position: the organization and control are the main factors while the human factor is a secondary one.

Respondents noted that the low conflictological competence was accompanied by rigidity, formalism of relations, low emotional stability, low communicative culture, low self-esteem of an officer. As possible effects of low-level conflictological competence of the officers 33% of respondents noted a decrease in staff morale, 27% of respondents noted a decrease in the authority of an officer and its impact on subordinates and 27% of respondents noted a decrease in the management efficiency and the quality of the work of subordinates.

All respondents noted the need to include conflictological discipline in the curriculum of post-graduate students training and advanced officers training.

3.3 Survey Results

Processing of the survey results has shown that most of active duty officers (54%) assume that conflicts are resolved only when one of the parties wins, while the second one loses, 8% of managers assume that relationships are important and they can sacrifice the goals; 13% of respondents are willing to give up any part of the goals to maintain the relationships, and only 25% of respondents assume that it is necessary to work together to achieve the goals, seek to find solutions that can satisfy all the parties.

Table 1. Characteristics of the survey results

Strategy	Characteristics	A number of respondents (of 100)
"Turtle"	The strategy of going under one's shell	-
"Shark"	Force strategy	54
"Bear's cub"	Strategy of accommodation of conflicting situations	8
"Fox"	Strategy of compromises	13
"Owl"	Strategy of direct and honest confrontation	25

4. Discussion

4.1 Discussion of the Most Frequent Factors of Conflicts Occurrence

Thus, the survey results allow to identify the most common objective and subjective causes of conflicts. The objective causes are as follows: 1) the majority of conflicts are connected with the violation of the system of interpersonal relationships that occur as a result of the transfer to the reserve, and different level of commanders' insistence on implementation of the service in general and combat training; 2) young newcomers-commanders have conflicts with subordinates 3 times more often, and most often these conflicts occur in the first 3-4 months of working on a new position; 3) low elaboration of legal and other regulatory procedures for resolution of interpersonal conflicts that arise in relations between service members. Subjective causes of conflicts are as follows: 1) bias, low communication skills and lack of knowledge how to resolve conflicts; 2) the desire to assert his own authority at any cost; 3) high self-esteem of a service member, etc.

4.2 Discussion of the Survey Results

The practice of military activities shows that it is impossible, relying only on the directive and administrative postulates, to improve the quality of management over military units. Military staff is a living organism that exists according to certain laws and regulations that are often not spelled out in the training literature. Managers do not have sufficient administrative and life experiences, they experience serious difficulties in the process of building relationships with subordinates, especially with contract servicemen serving on positions of soldiers and sergeants. Prolonged emotional stress affects the moral and psychological atmosphere of units, conflicts on the background of such stress significantly disrupts the activities of the military organization.

The results of the survey show that in extreme situations most of managers are not able to effectively cope with emotional stress, in this connection, the administrative impact is usually carried out in a fit of emotions, superficially and with lack of judgment. Stereotypes of the actions in conflict situations, enshrined in the informal rules of behavior, make less experienced managers to commit rash acts that sometimes end in negative consequences.

4.3 Discussion of the Existing Models of the Conflictological Competence

Craig E. Runde, while studying an individual model of the conflictological competence, provides that people are able to calm down, manage their emotions, slowly go out and think about what is going on, and then interact constructively with others to solve this problem (Runde, 2014). The phase of calming down allows people to regain composure. Without this balance, it becomes too difficult to manage one's behavior, the situation is stirred up and this causes a negative reaction of another person.

It is therefore proposed to study the Conflict Dynamics Profile (CDP), this is a tool to assess behavioral patterns that people use in conflict situations. CDP measures are the frequency with which people use seven constructive responses (perspective of making decisions, creating solutions, expression of emotions, drawing, reflective thinking, delayed responses to requests and adaptation) and eight signs of destructive behavior (win at all costs,

expressing anger, humiliation of others, retribution, avoidance, compromise, hiding emotions and self-criticism) (Capobianco, Davis, & Kraus, 2001). Knowing these behavioral patterns can influence and effectively manage conflicts.

4.4 Problem-Project Technology of Development of the Officers' Conflictological Competence

Development of the technology that combines problematicity and practical activities of students, allows to significantly increase the degree of assimilation of training material, as in the search for solutions of the problematic tasks the students' intellectual activity is being activated, with maximum mobilization of their intellectual abilities (Bulatbaeva, 2009). Internalizing the information received during the training process, the trainees have the opportunity to externalize this knowledge into practical skills, bringing them in practice to a significant level of development.

The content of the technology determines the sequence of trainees' actions on solving the problematic situational and practical tasks in a professional context. This technology represents a theoretical and practical training course consisting of 15 hours (1 credit) and covers the following sections: a) conflict prediction; b) conflict prevention; c) conflict promotion; g) conflict resolution; e) conflict settlement.

The technology provides for the phased implementation of the project tasks, with further defense of the developed algorithms for the actions of military leaders in various interpersonal situations having a potentially conflictogenic orientation.

4.5 Description of the Course Aimed at the Development of the Conflictological Competence

The content of the special course is aimed at the development of the causes of interpersonal conflicts and conflict situations between the military; features of human nonverbal behavior and interpretation of his/her signals; methods for forming up constructive communication in the process of interaction with opponents and influencing their behavior; the analysis of existing types of conflicting personalities and their individual psychological characteristics, etc.

As an information support the trainees are offered materials that allow the students to implement the adaptation of their behavior and the behavior of suspected opponents in pre-conflict and conflict situations, as well as to manage their behavior in a dynamically growing conflict.

4.6 Characteristics of Stages of Development of the Conflictological Competence

A preliminary or motivational stage involves conducting communication training, as well as the solution of various cognitive tests and crosswords. The content of these tasks is the theoretical thesis from the sphere of conflict resolution, revealing the key provisions and relating to a particular lesson. The main purpose of this stage is the creation of a positive motivational setting of trainees.

The main stage, in its turn, is subdivided into sub-stages: analytical and practical ones. Analytical sub-stage is aimed at identification of contradictions in the situation under consideration, the formation of the problem, hypothesis and assignment of tasks. Students' independent work on identification of existing contradictions in the situation and the formation of the problem are the essence of this stage and meets the requirements of high problematicity. Practical sub-stage provides independent project activity of the students in groups of 3 persons, followed by defense of the developed algorithms that reveal the process of solving a problematic situation.

The content of the final stage is aimed at summarizing results of the lesson, evaluating the results of the trainees, the formulation of the basic principles of managers in similar situations.

5. Conclusion

Conflicts in the military professional environment divert significant moral, psychological and material resources, violate internal emotional background, disrupt the activities of the staff, subject its employees to a negative psychological impact. In this regard, the officers' possession of competence in the sphere of conflict management, optimizes interpersonal interactions and creates the preconditions for the growth of efficiency of administrative processes. Given the focus of the conflictological competence on maintenance of the optimal interaction between people, building constructive relationships and overcoming barriers in interpersonal communication, this competence can be confidently attributed to one of the main components of the professional competence of an officer.

In our opinion, the developed technology can provide sufficient motivation of students to assimilate the content of the training material as it affects important aspects of their professional activities and meets their cognitive interests. Students' theoretical understanding and independent practical solution of complex situational tasks taken directly from the experience of the professional activity, and perhaps not quite wisely solved by them in

the past professional activity, can strengthen their cognitive activity, thereby increasing the level of assimilation of theoretical and practical parts of the training material.

5.1 Recommendations

In conclusion, we would like to make the following recommendations for the development of the officers' conflictological competence:

1. The purposeful work on education of the officer personnel before the appointment to positions shall be organized; development of the officers' conflictological competence through the technology based on the problem-project training, helps to optimize the management activities of the military leaders.

2. The optimal area of application of the problem-project technology in the development of the conflictological competence is the process of attending advanced officer courses by military leaders, professional training of the officers, as well as optional training courses of senior cadets studying in military universities.

5.2 Prospects

Due to the departmental subordination and the privacy of some military units and formations, we failed to make a more ambitious evaluation procedure of the level of the officers' conflictological competence and test the developed technology.

In prospect we would like to make a comparative analysis of the level of formation of the officers' conflictological competence in various military formations, identify the most general and specific conflictogenic components in military-professional environment and develop a series of training programs to enhance the conflictological competence of future officers.

Acknowledgement

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"The War of Conferences" in Russia and Turkey: The Circassian Dimension

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Abstract

The term "war of conferences" was offered by Abraham Shmulevich to describe research events activity on the edge of the Sochi 2014 Winter Olympics. Using this term as basic, we focused on the research events activity on the Circassian problematics in Russia and Turkey in 2010-2014. The study includes 26 Russian and 37 Turkish activities. We have analyzed their geographical and time-frequency localization, format, scope, participants and organizers, informative content. Research results demonstrated fundamental differences, caused by the format, composition of participants and organizers, as well as historiographical traditions of Russia and Turkey. Taken as a whole it provoked polarity of opinions and views. Terminological and historiographical gap is grounded not only on local traditions, but also on the tasks that the expert communities are facing.

Keywords: Caucasus, Turkey, Russia, War of Conferences, Circassian History, Circassian Question

1. Introduction

The term "war of conferences" first appeared in the article "War of conferences around the Caucasus, and again the Jews are to blame ..." (Shmulevich, 2010) of a known politologist, rabbi, founder of Hyper-Zionism Ideology and the president of the "Institute of Eastern Partnership" (Israel) Abraham Shmulevich. In this way the author of scandalous feature articles on the Caucasus and Circassians described the research events activity on the edge of the Sochi 2014 Winter Olympics. The term has gained popularity among researchers, but without mentioning the original source. For example, Sufian Zhemukhov disguised Shmulevich, calling him "one observer" (Zhemukhov, 2010), and Lars Funch Hansen used the expression "the so-called 'war of conferences'" (Hansen, 2012).

The starting point of the "war of conferences" is a politicized event "Hidden Nations, Enduring Crimes: The Circassians & the Peoples of the North Caucasus Between Past and Future", organized in March 2010 in Georgia by the Jamestown Foundation and the Ilia State University's International School for Caucasus Studies. On the conference a request to the Georgian President and the Parliament on the recognition of the Circassian genocide had been prepared, and a year later the Parliament of Georgia adopted a respective resolution. As noted by Tiago Ferreira Lopes, from this moment "The word Circassia is back to the minds and concerns of the Kremlin politicians, and for a moment was even able to shape Georgian domestic and regional policies" (Lopes, 2013).

Georgia became the first and only country that has officially recognized the Circassian genocide. This step of the Georgian authorities demonstrated their attitude to the Circassian question – the complex of demands made by the Circassian activists, including the following main points:

-    recognition of the Caucasian war events and resettlement of the Circassians to the Ottoman Empire as genocide and deportation;

-    repatriation of Circassians to their homeland;

-    reconstruction of the Circassia on the territory of Adygea, Kabardino-Balkaria, Karachay-Cherkessia, Krasnodar and Stavropol regions.

Herewith, the radical part ("nationalists" according to the classification of Zhemukhov (Zhemukhov, 2012)) requires full and unconditional independence of Circassia, moderate ("sovereigntists" and "centrists" (Ibid)) – the sovereign status within the Russian Federation. As the Turkish representative of the "Patriots of Circassia"

Bülent Bırs points out, "public recognition of expulsion and genocide, repatriation and nation-building are the three inseparable and mutually reinforcing responsibilities of the Circassian (Adyghe) people. Failure of any of them is the failure of others" (Bırs, 2013).

Although such conferences were held in the past too (Note 1), only the Georgian initiative was percepted in Russia as the opening of the "Circassian front" (Dvali, 2010). After the Georgian conference a number of similar events took place. The participants and organizers also called for the recognition of the Circassian genocide and a boycott of the Sochi Olympics. The roundtable "'Circassian Issue'. Who Benefits from Falsifying the History of the Caucasian War?" was held by RIA Novosti news agency in May, 2010 as a Russian response. This roundtable was followed by other activities that can also be regarded in the context of the "war of conferences".

2. Materials and Methods

A number of researchers preceded by Abraham Shmulevich have focused on the political aspect of this confrontation. The form and content of the ongoing showdown of various historical schools and approaches proved to be out of investigation. Taking this in consideration, we undertook a comparative study of research events activity on the Circassian problematics in two countries – Russia and Turkey. The Russian Federation comprises territory of Circassia, and the world's largest Circassian diaspora resides in Turkey. These geographical frames also reflect the division on Homeland and Diaspora accepted among Circassians themselves.

The chronological framework embraces the period 2010-2014. In accordance with the thesis of Abraham Shmulevich, taken as a basic one, congresses, conferences, roundtables, seminars and other research event activities on Circassian problematics were subjected to the analysis. The study includes 26 Russian and 37 Turkish activities. We have analyzed their geographical and time-frequency localization, format, scope, participants and organizers, informative content. Carrying out our research we used the open sources in Russian, Turkish and English languages: published programs, final statements, resolutions, charters, books of reports, speech copies, participants' statements and videos, as well as media coverage and personal outlook of the author as the participant observer.

3. Results

The first event was held in May, 2010, the latest at the moment of completion of the study – in May, 2014 (Figure 1). Throughout this period the positive dynamics of activity remained, and as the Sochi Olympics and the 150th anniversary of the end of the Caucasian War approached, the interest to the marked problematics was constantly increasing. Although it is still too early to sum up the results of 2014, however according to the half-year period data it is already possible to predict the peak values of activity in Russia and Turkey.

	2010	2011	2012	2013	2014
Turkey	3	4	7	12	11
Russia	1	5	5	6	9
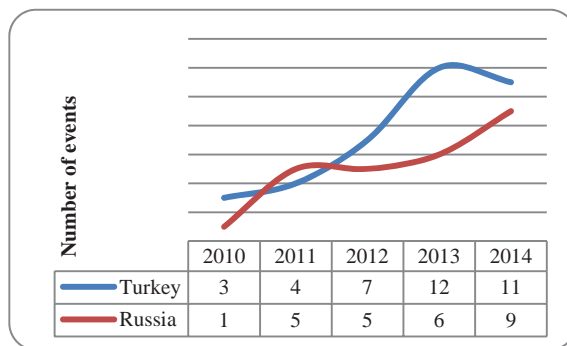
Figure 1. Research events activity

Geography of the research events activity (Figure 2) also allows to draw several conclusions. First of all, it is obvious that the Circassian subject in Russia didn't widespread and remained localized within the southern region and Moscow. This makes clear a considerable amount of research activities in Rostov-on-Don, city, traditionally playing the role of the gate of the North Caucasus, as well as their total absence in such a significant research center as St. Petersburg.

The situation in Turkey is quite different. The foremost in research events activity is Istanbul, followed with a considerable breakaway by the country's capital, Ankara. Sporadic events are held in various cities of Turkey. This situation may indicate the importance of the Circassian problematics across the country, as well as the impact of the Circassian diaspora in Turkey's largest cities.
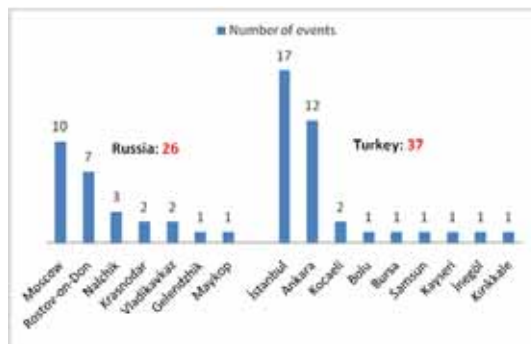
Figure 2. The number of events

With significant disparity in number of activities in favor of Turkey, still Russia possesses the first place in number of speeches and outstrips Turkey in this aspect two times as many (Figure 3). Such a result is connected with the activities' scale that is especially noticeable in the cities with single events. Nevertheless, it is worth noting that due to the absence of relevant statistics it is problematic to estimate the attendance of an event. Report of one person could attract a large audience, and on the contrary, the event with a lot of contributors could comprise only the speakers. As a rule, the Turkish events belonged to the first type, and Russian – to the second.
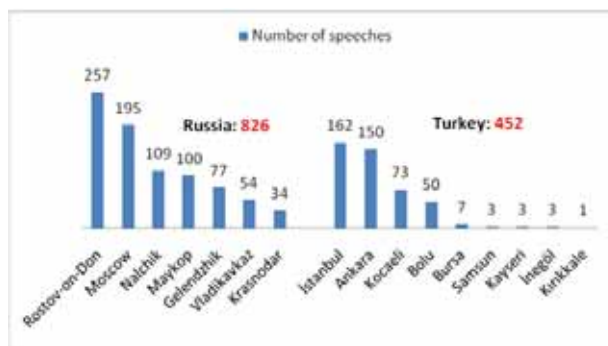
Figure 3. The number of speeches

The number of speeches clearly shows the differences in the format of research events in Russia and Turkey. Large international conferences, forums and roundtables with a great number of speakers were typical for Russia (Figure 4). Seminars with one or two speakers and roundtables with two or three participants took place only in Moscow. However, thanks to the well-known organizers and extensive media coverage these events have had a great public response. The Moscow three roundtables deserve special mention: two of them have been in the Public Chamber of the Russian Federation, the third one – in the online mode of the information resource "Kavkazskiy Uzel". In addition, a number of the research and practice conferences with the elaboration of recommendations for the government can be considered a noticeable peculiarity.
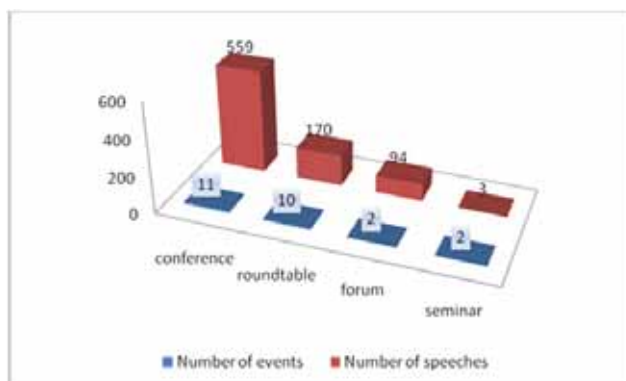
Figure 4. The format of events in Russia

Quite a different picture is observed in Turkey (Figure 5). First of all, notwithstanding a great amount of conferences, only three of them can be called multiple (35, 17 and 16 persons). All the other numbered several participants, and in four cases the conference was a lecture of a single speaker. Half of research meetings on Circassian problematics were presented only by a few speakers. For panel discussions the average number of participants was five. One of the two symposiums was attended only by ten participants at all. All lectures except the Ankara lecture in 2011 were carried out by one speaker.
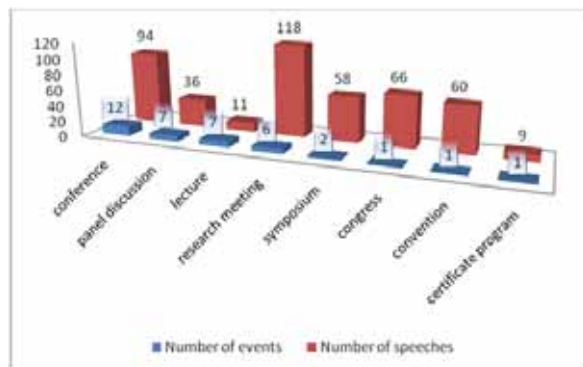
Figure 5. The format of events in Turkey

In this case, the reason for diversity in format of activities was not so much a local tradition as the specifics of the organizers. In general, the weight of higher education institutions and research organizations working on Circassian problematics was significantly lower in Turkey (Figure 6). This niche was occupied by public associations and religious foundations, namely, Circassian or Caucasian cultural associations and Islamic waqfs. Among them the Federation of Caucasian Associations (Kafkas Dernekleri Federasyonu), Circassian Association (Çerkes Derneği), Istanbul Caucasian Cultural Association (İstanbul Kafkas Kültür Derneği) have been particularly active.

In Russia, the Circassian problematics had been mostly developed in Russian Institute of Strategic Studies (RISS) and in the Southern Federal University (SFEDU). The information agency RIA-Novosti monopoly was challenged only by the "Kavkazskiy Uzel" Internet resource. Among the organizers of research events on this topic there was not a single religious foundation.
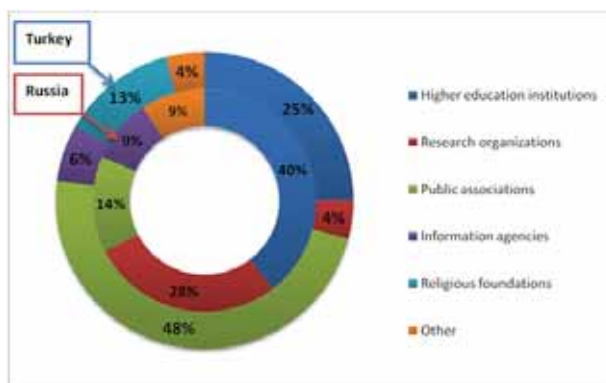
Figure 6. The organizers of the events

The composition of participants of Russian and Turkish events differed a lot. For example, in Russia the absence of Western scholars was typical, but in Turkey they used to play a very prominent role. German scholar İrma Kreiten, known for her commitment to the idea of the Circassian genocide, participated in two panel discussions, conference and certificate program. A report on the panel discussion "Circassian Genocide, the Sochi 2014 and the Growing Circassian Opposition" ("Çerkes Soykırımı, Soçi 2014 ve Yükselen Çerkes Muhalefeti") was delivered by an American researcher Walter Richmond. Director of the Ethnographic Museum of Hamburg Wulf Köpke participated in two Turkish conferences and British historian Norman Stone presented a report at the symposium. Lectures on the Circassian movement were held by Lars Funch Hansen (Denmark) and John Colarusso (Canada).

Researchers from Russia took part in only two of the thirty-seven events. At the Ankara Symposium in 2011 "Circassians in the 21st Century: Problems and Opportunities" ("21. Yüzyılda Çerkesler: Sorunlar ve Olanaklar") almost half of the reports was delivered in Russian. In addition, several reports of researchers from Russia were made in English (e.g. Khatko Samir). This symposium was also attended by researchers from Georgia and the Middle East. The second event "Turkish-Russian Relations between Realpolitik and Historical Memory: Partnership and Rivalry in the Caucasus from the XIX Century to the Present Day" ("Reelpolitik ve Tarihi Hafıza Arasında Türk-Rus İlişkileri: 19.yy'dan Günümüze Kafkaslarda İşbirliği ve Rekabet") was organized in 2013 by the Moscow State University (MSU) together with the University of Economics and Technology (TOBB ETÜ) in Ankara, and there were a great number of Russian researchers.

In other research events certain activists, religious leaders and representatives of the administration of Adygea and Kabardino-Balkaria took part. The researchers from Abkhazia, Georgia, Azerbaijan, Bulgaria, Belgium, the USA, Israel, Jordan and Qatar delivered single reports. Russian events attracted participants from USA, Turkey, Jordan, Syria, Iran, Ukraine, Abkhazia and Georgia. However, the share of foreign researchers among the speakers was extremely small, and participants from Turkey – a rare exception, that is not a result of privacy of the events. For example, many Turkish researchers of the Circassian problematics were invited to the conference "Metamorphosis vs. Transformation. A Multidisciplinary Approach to the Study of the History of the Circassians in the XIX-XXI Centuries", held in Rostov-on-Don in 2013, but only one person could come.

The representatives of Adyghe and Abkhaz world were a feature of Russian events. At the same time, the local Circassian researchers and activists played a leading role in Turkey. Russian event speakers often represented academic institutions, universities and government institutions, while Turkish speakers were presented by Circassian associations and Information Resources. In Turkey well-known researchers, writers, journalists and Circassian activists were endowed with the same expert competence. For example, "Radical" newspaper journalist Fehim Taştekin, who in 2013 was deprived from entry to Russia for five years, delivered lectures on Circassian problematics side by side with famous Western researchers. The conference "Multiculturalism, Identity and Circassian Culture in EU-Turkey Relations" ("AB-Türkiye İlişkilerinde Kültürel Çeşitlilik, Kimlik ve Çerkes Kültürü") attracted to discussion the experts on international relations, engineering and health care.

Such heterogeneity was distinctive feature of some Russian events as well, mostly organized by news agencies. For example, the virtual roundtable "Circassian Question: Prospects after the Winter Olympics" held by "Kavkazskit Uzel" brought together representatives of Circassian organizations, researchers, activists, and they were joined by a lawyer and an engineer. At the RIA Novosti roundtable "The Circassians in Contemporary Russia and Abroad: the Faces of State Policy" Circassian activists, students and post-graduates of Kabardino-Balkarian State University (KBGU) participated in discussion together with the museum's director and the deputy head of the Rossotrudnichestvo (Note 2). The meetings in the Public Chamber of the Russian Federation were also of a mixed character.

Contributions to the discussion on Circassian problematics of caucasiologists, historians, politologists, specialists in Oriental and Islamic studies, ethnologists and sociologists can be considered a feature of Russian events. In a short space of time they have formed a special group of experts. Thus, Professor V. V. Chernous (SFEDU) and A. V. Baranov (Kuban State University, KubSU) participated in 5 of the events; senior research fellows N.A. Neflyasheva (Institute for African Studies, IAS) and N. Y. Silaev (Moscow State Institute of International Relations, MSIIR), Assistant Professors V. A. Matveev and R. F. Pateev (SFEDU) as well as E. A. Popov (RISS) took part in 4 events. In this case, it is impossible to agree with the statement of only Circassian researcher from this list Naima Neflyasheva that conference participants and authors of articles on Circassian problematics lack "knowledge of the historical background, have no competence to work in archives and expert interviews, nor they have 'field', or organized networks at the local level. Unfortunately, anyone but lazy rollicked on the Circassian theme" (Shmulevich, 2014).

At the same time, Turkey's main experts were Circassian activists and researchers of Circassian origin, who built their career on the Circassian problematics. This can be explained by the fact that the subject did not attract Turkish historians and "could not find a place in the historical education at university level, or at the level of secondary education" (Hacısalihoğlu, 2013a).

The board member of the Circassian Association and the Federation of Caucasian Associations Erdoğan Boz took part in 5 events in Turkey, Professor of the Marmara University Ergün Özgür and Japanese researcher Keisuke Wakizaka of Yildiz Technical University – in 4 events. If to sum up the number of participants on Circassian problematic, who delivered from 2 to 5 reports, one will get 37 in Russia and 33 in Turkey. Thus, formed in Russia and Turkey expert communities are comparable in volume.

Analysis of the informative component of the events demonstrated fundamental differences caused by the format, composition of participants and organizers, as well as historiographical traditions of Russia and Turkey. Taken as a whole it provoked polarity of opinions and views, although it should be noted that the representatives of the Adyghe historiographical schools on the one hand, and Turkish historians on the other hand, have broken this black and white picture.

The first major difference is evident in the attitude to the politicization of the Circassian issues. The participants of all Russian events insisted on the depolitization of Circassian problematics. Their attempts to give to the discussion an academic character were reflected in reports and final conclusions. Participants of the Turkish events, in turn, undertook the opposite task and tried to influence the international agenda. Moreover, at the activities organized by the Federation of Caucasian Associations it was offered to politicize Circassian cultural associations and fill ethnonym "Circassian" with a political content. In such a way it was supposed to escape contradictions, generated in Turkey by historically formed unification of representatives of various Caucasian ethnic groups (from the Circassians to the Chechens) under the common name "Circassian" (Tsibenko, 2014). At the same time, at the research events in Russia only Adyghes were regarded as Circassians.

The polar attitude manifested itself toward the Circassian question. If in Turkey it was presented as a fundamental one, requiring immediate solution by means of the research activity, in Russia, on the contrary, its very existence was placed in question. The term was used either in quotes or preceded by the words "the so-called" to denote biased nature of the subject and its belongings to the sphere of politics. The activities undertaken by "Kavkazskiy Uzel" and the Carnegie Moscow Center can be called exceptions – their content was generally more close to Turkish ones.

Naturally, the approach to the requirements, put forward in the framework of the Circassian question, also varied. At Turkish activities the recognition of the genocide was presented as a guarantee of the reconstruction of Circassia and obstruction to futher assimilation. At Russian activities an emphasis was made on the political background of the attempts to recognize the Circassian genocide and on the inapplicability of the term to the historical realities of the XIX century. Events of the Caucasian war were called a tragedy and a voluntary exodus. Participants of Russian events did not see the proper conditions for the mass repatriation of Circassians, considering it unlikely in the foreseeable future. Turkish activities' participants believed repatriation to be the main purpose at the moment, because monoethnicity is needed for the recreation of historical Circassia. The struggle for independence of Circassia was considered as the beginning of liberation of the peoples of the Caucasus, while participants at Russian events perceived it as a separatism.

Significant differences appeared in the description of historical events. At Russian activities the term "Caucasian war" was admitted to be obsolete because of its generalizing nature, though an adequate replacement has not been found. At Turkish activities the designations "Russian-Caucasian" and "Russian-Circassian" were used to nominate the war, as well as an extensive "Caucasian-Russian wars". Chronology also did not coincide: the lower boundary of dating accepted in Russia (1817) shifted to the 1783, 1763, 1759 and even earlier time at Turkish activities. Discrepancies were found in counting the number of immigrants (from several hundred thousands up to 1 million) and evaluation of the number of the Circassian Diaspora (from several hundred thousands up to 7-8 million). Furthermore, the participants of Turkish activities appealed to the Ottoman archival sources as the final instance, and Russian participants used in the majority of cases only the Russian archives.

In general, the approach of the participants of Turkish events differed by greater emotionality, references to the historical memory and national consciousness. For example, the Olympic Games in Sochi were characterized as a "merrymaking on the bones" of Circassian ancestors. Emotional perception of history carried a unifying function, it contributed to ethnic mobilization and politicization (Hansen, 2013), though the emotional background was successfully combined with pragmatism. The Sochi Olympics were supposed to bring to Circassians, little-known globally, "their fifteen minutes of fame" (Petersson & Vamling, 2013). The Circassian Diaspora treated the opportunities provided by the upcoming sporting event as the very chance for the manifestation of their right for the territory of Circassia to the international community. Admitting that the Circassians were only a bargaining chip in the geopolitical rivalry between the main actors, they were calling to benefit from this situation, defending their interests by means of maneuvering between competing "imperialist powers".

The major attention was given to the Olympics and the genocide, but such painful for Diaspora questions as assimilation, the loss of national identity and language were also raised. History of the Circassians within Russia considered through the prism of colonial subjugation, oppression and orientalism. This conglomerate of ideas was formed under the influence of western scholars. A prominent role also played soviet stereotypes inherited by

the Turkish researchers of Circassian origin from the very influential in Turkey before the collapse of the Soviet Union left movement, especially popular among the country's ethnic minorities. In addition, the focus on the events of the Caucasian War and the small acquaintance of the Circassian emigrants' descendants with the realities of the North Caucasus as part of Imperial and Soviet Russia led to a disregard of more than a century of Circassian history.

At Russian activities the Circassians were also observed as an object of manipulation for political purposes. A special role in this process was assigned to the Internet, promoting ethnic mobilization and radicalization of young Circassians. To counteract the collapse of the Russian cultural and political space it was offered to debunk historical myths and combat the perversion of history, taking as basic the principle of objectivity. Speakers regularly returned to the historical context of the events of the XIX century, analyzed the historical memory in the political perspective and studied the various interpretations of the past.

History of Adyghes as an integral part of Russian history was discussed in the sense of cultural exchange, social and cultural progress, mutual rapprochement and common development. As the professor of KubSU Temyr Hagurov noted at one of the Russian roundtables: "We through the example of a close to us country – Ukraine – see how the mistakenly understood past can now explode the present. And so it is important for all of us to get away from extremism, stop focusing on the division of peoples using dirty methods. It was a painful, difficult, often tragic, but in many ways the great process of the formation of the Russian state. Where through difficulties, ambiguity and with time, as members of one Russian peoples family entered the peoples of the Caucasus, including the Circassians" (Husht, 2014).

However, as it was already noted, the expert communities were not monolithic in relation to the Circassian problematics. Although researchers of Circassian origin in Turkey had Turkish names, they could be easily distinguished by the themes and content of their reports, as well as by the greater involvement into the Circassian problematics and self-perception as the subject of the current processes. Turkish researchers strove for greater distance and applied the term "migration" instead of "exile" or "expulsion". In accordance with Turkish historiographical tradition the relocation from the Caucasus to the Ottoman Empire was considered only as one of many migration processes on the imperial territories of XIX-XX centuries. This was clearly demonstrated during the conference "The Caucasian Migration of 1864: War and Exile" ("1864 Kafkas Göçü - Savaş ve Sürgün") in Yildiz Technical University in 2010 in Istanbul. Organizers of the event have not only failed to get any financial support from the Circassian associations and religious foundations because of the title of the event (Hacısalihoğlu, 2013b), but were attacked by "the daughters and sons of the people, who in 1864 suffered of genocide and deportiert from their motherland" (Yıldız Teknik Üniversitesi..., 2010). The latter suggested that the use of the term "migration" could save the perpetrators of genocide from the responsibility. The Circassian activists attended the event and gave the participants a map of historical Circassia, telling about genocide and exile ("146. Yılında 1864 Kafkas…, 2010).

The other Turkish event – "International Conference of the Caucasus" ("Uluslararası Kafkasya Konferansı") – showed another trend, namely the merger of the Circassian problematics with the common Caucasian and Islamic issues. There were calls for holy war against Russia, glorification of Imam Shamil, Sheikh Mansur and Doku Umarov. The events of 1864, 1944 and 1994 (Note 3) were integrated, i.e. the Circassian and Chechen agenda were brought together. Characteristically, the report on the genocide of Circassians was delivered by a researcher from Georgia and one speaker was representing at the same time Kabardians, Balkars and Karachays. Although the conference sparked an official protest of the Russian Foreign Ministry as anti-Russian, two years later, on the 21st of May, the "II. International Conference of the Caucasus" ("II. Uluslararası Kafkasya Konferansı"), dealing with similar themes was arranged and held in Islamic and anti-Russian way. It began with the reading of the Qur'an and a video film about the exile of the people of the Caucasus in 1864.

In Russia the representatives of national historiographical schools frequently advocated ideas close to those that were heard at the Turkish events. Tangible impact of diasporic agenda on the Circassians of Russia was exerted through activities of Circassian organizations (in particular, the International Circassian Association). They were continuously actualizing the issue of repatriation and voicing the requirements of the Circassian genocide recognition.

Nevertheless, one should not exaggerate the degree of similarity. Discursive gap between the Circassian researchers in Russia and Turkey, due to language barrier as well (Bram, 2008), clearly manifested itself at the Ankara symposium "Circassians in the 21st Century: Problems and Opportunities". As envisioned by the organizers of the religious Caucasian Research Culture and Solidarity Foundation (Kafkas Araştırma Kültür ve

Dayanışma Vakfı), the event was intended to bring together the Circassians from different areas of the humanities and to create a single research field.

Most Turkish reports were focused on the tragic past and the present aroused interest only from the point of view of the revival of traditions, strengthening ethnic identity and promotion of the Circassian activism. Russian reports on the modernization of the North Caucasus and innovation in traditional societies were met with incomprehension. In addition, if for the Turkish Circassians it was significant to justify mass migration and the lack of choice in XIX century, then for the Russian Circassians it was important to prove their autochthonous to the Caucasus.

As a result, some reporters were searching for evidence of the genocide and repression, while others were finding the traces of the existence of ethnic Circassians 5 thousand years B.C. and determining the national writing system of the Circassian ancestors on the results of deciphering of the Hittite hieroglyphic tablets. As noted by one of the witnesses of what was happening Sevda Alankuş, "During this three-day symposium in Ankara, we were looking for pieces of the puzzle, which inevitably will never be assembled" (Alankuş, 2012).

4. Discussion

Observed research events activity and the intensity of the debate can be explained by the political environment and by such significant events as the Olympic Games in Sochi and the 150th anniversary of the end of the Caucasian War. All together provoked increased interest to the Northwest Caucasus over this period. Nevertheless, in Russia the Circassian problematics did not become a leading topic and remained localized in the capital and the southern part of the country.

Differences of forms of the events on the Circassian problematics were determined by the traditions and conditions of the country, as well as by the organizers' various purposes. If in Turkey, it was important to convey the "question" formulated by the Circassian activists to the widest possible audience, then in Russia a large number of experts were attracted in order to find an adequate "response". This explains the holding of lectures and seminars in Turkey, and research and practice conferences in Russia. The consequences were the emotional presentation of the material and the politicization from one side as opposed to the pursuit of objectivity and avoiding of politics on the other.

In addition, the leading role of universities in Russia made debates academic, while in Turkey the organizational activity of public associations and religious foundations gave more political and educational rather than research character. With considerable involvement of the Turkish research community into Western discourse, the Russian appeared to be restricted.

The role and competence of the experts involved was not similar, however, the formed expert groups were comparable in volume. In Turkey diaspora was engaged into the Circassian problematics, and in Russia the issue was studied by experts from various fields of knowledge. And if at the Turkish activities there were calls for the creation of a special research field – "Circassianology", then at Russian ones the participants agreed on the need to create a collective fundamental encyclopedic work on the history of the Caucasus and the Caucasian War, which would put an end to political disputes.

5. Conclusion

At the considered events there were presented opposite and mutually exclusive views, versions and interpretations of the history of the Caucasus of XIX-XXI centuries. The causes of the terminological and historiographical gap can be founded not only in the differences of traditions, but also in the features of tasks that the expert communities of two countries are facing.

For the Circassian diaspora in Turkey the determining motive was an expanding of its influence, possible for a given luck. The increase of its weight within the country and on the world stage became for it both a guarantee of survival in the conditions of assimilation and an assertion of its rights for the future as well. The recognition of the genocide and repatriation became the main tactical goals, as they subsequently had to lead to the recreation of Circassia. Desire to restore its rights and return to the Caucasus took place in logic of revenge. These reflected in the content of activities on the Circassian problematics and emotional involvement of participants.

There was another task for the Russian expert community – to develop a consolidated position on issues of concern, being actualized by the Circassian activists of Diaspora and Russia. For this purpose it was necessary to overcome the crisis of disunity, which resulted from the destruction of the Soviet system and the subsequent flourishing of competing national schools of historiography with their mythologized versions of ethnohistory. A deep restructuring process of the Russian Caucasus studies was launched, that followed by the search for a

unifying approach, rethinking of the research criteria, changing of the outdated terminology, introducing of new sources and creating of own concepts relevant to modern conditions. At Russian events the calls to end the "Caucasian War of historiography" and cease the "wars of memory" were constantly voiced. Thus, if to go back to the allegory of Abraham Shmulevich, then in the "war of conferences" one of the parties persistently sought peace.

Acknowledgments

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Notes

Note 1. For example, in 2007 in Washington, DC the Jamestown Foundation and the Circassian Cultural Institute held a conference "The Circassians: Past, Present and Future". In 2008 Harvard hosted a conference "Russia and the Circassians: An Internal Problem or an International Matter?". In the same year in New Jersey at the William Paterson University was made a conference "Embracing Circassia, Building Our Future".

Note 2. Federal Agency for CIS Affairs, Compatriots Living Abroad and International Humanitarian Cooperation.

Note 3. The end of Caucasian War (1864), expulsion of Chechens and Ingushs from North Caucasus (1944), the beginning of the First Chechen War (1994).

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Dynamics of Resettlement of the Population in the Area of the Semirechensk Territory in the Beginning of XIX – XX Century

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Abstract

The aim of this article is to reveal the stages of migration movement of Russian peasants in Turkestan, particularlyto the area of Semirechensk from the European Russia: from the West Siberian provinces, Tomsk, Tobolsk, Akmola, Semipalatinsk and other regions. The article reveals the activities of the government and the State Council of Russia on the organization of resettlement within the Semirechensk region: reorganization and association of the Resettlement Department to the General Administration of Lands and Agriculture, the creation of a special party for the formation of temporary resettlement sites in the Semirechensk area; causes for register the resettlement sites. It is pointed out that since the beginning of the XX century, the huge rate of migration has been observed in the Semirechie, so by the end of 1911,15,963 immigrant families have arrived here, for a total of about 100,000 persons of both sexes. The data are provided on how many land sites have been prepared for the immigrated peasants, of which square they were, the quantity of land sites per capita, information about the educated Russian settlements and settlers in the Semirechie in the beginning of XX century, according to the annual report data of the military governors in the Semirechensk region from 1906 to 1915. It is concluded that after the October Revolution, the new Soviet government did not pay much attention to the Russian peasants, and in this area the old colonial policy would have been continued.

Keywords: Semirechensk region, agricultural policy, tsarism resettlement policy, Russian peasant migrants, resettlement areas

1. Introduction

In Russia, peasantry constituted the overwhelming majority of the population, providing a huge impact on all areas of social and economic, social and political life of the country. After the reform of 1861, which marked the turn of Russiato the path of capitalist development, agrarian problem in all its aspects – the land, the peasant, social, agricultural – arose in the unprecedented actuality.

Studying the history of the peasantry, the agrarian peasant issues in general leads to a more in-depth and wide clarification of a number of fundamental problems of Russian history in the pre-revolutionary period, the definition of the specific contribution of masses in the economic, social and cultural development of society.

As the numerous years of experience in researches in the Soviet and post-Soviet historical science, one of the main forms of agricultural research is the development of its regional analysis, which allows to reveal general patterns as well as the specific features of the history of the peasantry due to natural geographical, historical, ethnic and other factors.

Turkestan, and in Semirechie in particular, in the historical, geographical, cultural, demographic and economic aspects – was an inseparable part of the Russian state. Together with the entire country, after annexing to Russia, they started to develop in the common economic direction. Its historical development is determined by the laws common to Russia as a whole.

At the same time, some factors were in use that determined the differences in the agricultural development of these regions. Unlike the European Russia, being the long ago populated region and relatively economically developed center, Turkestan in the second half of XIX – early XX century, was marginal, being not populated by the Russian peasantry, not quite involved in the farming culture of Russia.

In the center of the country, capitalism developed in depth, growing and improving within sufficiently settled and developed territory. In Turkestan, and in the Semerichie in particular, capitalist relations developed mainly in breadth, as the process of establishing the capitalist relations in the newly developed areas by Russian settlers continued.

2. Methodology

Understanding the regional processes in the context of Russia's imperial policy and interaction of the Kazakh and Kyrgyz peoples with Russian immigrants poses a number of challenges that must be addressed using a set of theoretical and methodological principles and approaches that can give a general characteristic of the resettlement process in the Semirechie, identify local variants, the degree of mutual influence peoples living in the region. It is important to use the method of historical and typological generalizations, comparative historical approach. The analysis of sources of Moscow, St. Petersburg, Tashkent archives was provided, as well as statistical data published before the revolution were analyzed, in particular, "The Materials of Commission ..." by P. P. Rumyantsev. The methods of systematic analysis and the method and historical reconstruction were applied.

3. Results

One of the major tasks of Russian policy in Turkestan was its colonization by the Russian population. The government wanted it to be not only a military, Cossack, colonization, but also civil, peasant. It took a number of measures to resettle peasants in the Asian part of Russia within the period of XIX – early XX century. The Land Code of 1891 terribly limited Kazakh land tenure and in the next two decades, hundreds of thousands of immigrants flocked from European Russia to Kazakhstan and Turkestan.

Even in 1895 Semirechensk area was closed for the resettlement of peasants in relation to the need to resolve the Cossack colonization issues in this area. However, unrestricted and unregistered relocation was observed, which lasted until 1904. In1902, a large number of immigrants came to Semirechie, mainly from the West Siberian provinces and regions (Tomsk, Tobolsk, Akmola and Semipalatinsk) – 2,228 families of 11,687 people. Of these, only 6.8% failed to rank in rural communities and receive areas of land, 25.7% spent a winter in flats in the hope to receive land areas in the next spring. However, the greater part of immigrants (67.4% of arrived) went back, believing that the Land-tax Commission will not be able to give them land (Russian State Historical Archive of the Russian Federation. F. 391. Op. 3. D.487. pp. 6, 46).

For the resettlement of a huge number of immigrants, large amounts of land were needed in Semirechie. But there was no free land and there was no place to take it, except for two sources: resettle nomads, providing stricter borders in their land where they spent the winters and check their agricultural lands; construction of irrigation facilities and irrigation of new lands specifically for resettlement. The total land area in Turkestan, which was about to get irrigated was 300 thousand acres. In addition, 1 million acres of land was drafted for irrigation. The entire administration of the region – from district chiefs to Governor-General – believed that irrigation of free land is the only way to create the resettlement land fund. In opinion of the permanent representatives of Turkestan administration, in Turkestan there is not enough available land, so they were suspected in nomand support trends. These officials were fired from the Turkestan resettlement organization, the aim of which was to create the land fund for immigrants.

The new direction in the resettlement policy in the country has been issued by the laws of 12 March 1903 and 6 June 1904 that outlined the planned organization of resettlements out of European Russia and thereby necessitated the opening of the land survey work in Turkestan. During the revolution of 1905-1907, the Government dramatically changed the agricultural policy and attitude towards migration movement. From then, the immigration policy was an integral part of the Stolypin agrarian policy.

In January 1904, at the Ministry of Agriculture and State Property of the State Council of Russia, a special party was formed to create the temporary resettlement sites in Semirechensk area. The sum of 109,090 rubles was allocated to provide the land survey work, as by that time, about16 thousand free will settlers lived there without having the registered land areas (Russian State Military History Archive. F. 400. Op.1. D.3243. pp. 7a, 21). The titular counselor O. A. Shkapsky, the former Syr-Darya regional board official on agricultural policy was appointed the head of the party that was about to create the sites for resettlements in the area of Semirechensk (RSHA F.400.Op.1. D.3243. p. 210). The government's decision on the establishment of resettlement sites was due, firstly, the need to register free will settlers from European Russia fast, and secondly, the fear of possible crop failures in Siberia that promised a huge influx of immigrants to Semirechie again, attracted by the abundance of bread and empty spaces with rich agricultural land (RSHA F.400. Op.1. D.3243. p. 21), and thirdly,

political considerations, for the consolidation of Russian power in the region" because it was located close to China and to fanatically inspired population of Fergana" (RSHA F.400.Op.1. D.3158. p. 5).

In 1905, followed by a reorganization and Resettlement Department accession to the General Administration of Land Management and Agriculture (Bekmakhanov, 1986) the Semirechensk resettlement Party was created, the aims of which were to identify the rules of the land policy to ensure the Kyrgyz economy, the definition of land "surplus", resulting from the vesting of land nomads that after distributing the colonization policy in the region by peasants immigrants. In 1906, in Semirechie, the colonization era opened the road to a temporary resettlement Party, which was engaged in helping immigrants.

Land survey work in the Semirechie from 1906 to 1909 was not as systematic. However, despite this, the settlers did not stop arriving in the Semirechie. And, if by January 1, 1908, in the Semirechie, according to registry data, there were – 28493 men and 24400 women, but only 52 893 people, by the end of 1911 were added to this number; 15,963 moved families with 48,747 men, for a total of about 100,000 both sexes, indicating the tremendous pace of resettlement area (RSHA F. 391. Op. 3. D.487. pp. 6, 46).

What were the Russian immigrants in the early XX century? These were mostly well-off peasants, fearing ruin of homeland because of the economic crisis, the revolution of 1905-1907. They were also poor smallholder farmers, uneducated, illiterate, religious, with a limited horizon. Until 1910, Semirechensk area was officially closed for relocation, and peasants who came later were self-willed persons. P. P. Rumyantsev, the head for the statistical work in the field of Semirechensk, pointed out, in comparison with the Cossacks and peasants in the old times, self willed immigrants were more energetic and adventurous elements, as they came to new places without any benefits from the government, but with their energy and wish for enterprise. In most cases, this only affected the ability to capture the "ready made lands ofKirghizs" (Rumyantsev, 1911). Naturally, in this way many farmers went bankrupt. 36.7% of families who migrated to Turkistan from 1906 to 1913, had no profits without any property, and 60.9% – were left with no money, so in the early years of residence in Semirechensk, peasants had to work hard, being engaged as laborers with Russian settlers (Sapelkin, 1977).

The peasants came to the Semirechensk region in the hope of a better life, for the purchase of large areas of land. But it turned out in fact, that it was worth the same problem as in European Russia –lack of land, the land belongs to the nomads, "natives." Deceived Russian peasantry, destroyed and disseminated, led the way to Turkestan without being already able to return to their homeland, was forced to make every effort to survive: arbitrarily they seized and plowed the land of nomads, worked out temporary and then permanent buildings, rented land from the Kazakhs and Kyrgyzs, bribed "native" stewards for sentences of Kyrgyz companies to lease land, or bribed officials resettlement organizations to highlight convenient and fertile land.

After used to live in Russia in mostly mono-ethnic provinces – Voronezh, Kursk, Penza, Poltava, Ekaterinoslav et al. – settlers could not understand and accept another culture, unfamiliar customs and prejudices of local residents. All this compelled the new arrivals to mobilize all their energy to establish themselves among the environment alien to him and live in a closed society. Different levels of socio-economic development policy of the government, including confiscation the land from the nomads, economic and political powerlessness in the past caused the situation that all these immigrants have shaped the psychology of the privileged nation, promoted contempt for the local population up to the "negation of the individual in the natives" (Miymanbaeva, 1997) .

According to the developed program of resettlement of peasants in the Asian part of Russia since 1907, the government has allocated a loan in the amount of $ 100 to each family that came to Semirechie. In addition to personal loans, the government provided loans to peasant society to provide everything necessary to construct villages, barns, mills, brick factories, providing expenses to establish the well-being for immigrants, building schools and churches, ensuring the delivery of timber from state forests and forest roads repaired (RSHA F. 391. Op.3. D. 867. pp. 2-3.). The government also provided food aid to displaced persons, aid in the organization of state-owned warehouse tools and seeds, where settlers could buy agricultural machinery and various equipment (RSHA F. 391. Op.3. D. 790. p. 1.).

The head of colonization affairs in Semirechensk S. N. Veletsky in 1906 reported that colonization processes were typicalas for three sub-regions that he divided Semirechensk region into: 1) Pishpek, 2) Lepsinsk; 3)Kopal. In 1906, it was found out that inPishpek, there were 6 volosts; in Verny– 3 volosts; in 1907, 8 volosts were inLepsinskand one volost in Kopal. In 1908, Kopal district was reported for 6 volostsin Przhevalsky and Dzharkentsky region, there were 6 volosts in each (RSHA F. 391. Op.3. D. 1354. F. 1 vol.).

Due to the large influx of peasant settlers in 1908, the military governor announced Semirechye andSemirechensk area closed to the resettlement area, "Semirechenskaya area is currently closed for relocation, since spare resettlement sites for immediate removal are not available, so all going in the Semirechye will be

convicted as self-will immigrants; they must remember that this field they can not capture, or withdraw it by superiority, otherwise this will lead them to be prosecuted seriously and generally in a lot of grief and misery, both for migrants and their families (RSHA F.391. Op.3. D.487. pp. 6,10). This message has been sent to all the provinces, from which people usually went in the Semirechensk as settlers, particularly in Poltava, Voronezh, Tambov, because until 1912 the majority of immigrants were originated from these provinces (Central State Archive of the Kyrgyz Republic F.1. Op.1. D.1.Ll.15,16; F.1. Op.1. E.6. p.1).

The head of resettlements issues affairs in Semirechye area S.N.Veletsky, reported on the status of the resettlement case, pointing out that from 1906 to 1910 the harvested land area of 454 1456080 acres was taken by immigrants in 318 land areas. 1,018,182 acres to 82,689 persons were distributed for other needs –to Cossacks, Kyrgyzs, into state tax needs; the spare areas in the forest cottages and other were measured in 136 plots with the area 43,899 acres.

The data on land for the needs of settlers by volosts in the Semirechensk was as follows:

Verny County   -   30 areas of square of   87961 acresfor 8531 persons

Pishpek County   -   71 areas   -«-   261687 acresfor 17197   -« -

Przhevalsk County   -   47 areas   -« -   145100 acresfor 13014   - « -

Jarckent County   -   20 areas   - « -   91697 acresfor 6288   - « -

Kopalsk County   -   61 areas   - « -   117050 acresfor 13248   - « -

Lepsinks County   -   89 areas- « -314667 acresfor 24416   - « -

In Semirechye, in the period from 1907 to 1913 214 villages and 26 hamlets were established; 21603 families got ready made living areas; 13,826 families were enrolled. The Table 1 shows that the largest number of educated villages accounts for 1911 and 1912, when the area was closed to immigrants. Most new villages were opened in Kopalsk County- 36; in Lepsinsk– 32; in Przhevalsk County – 21; in the Jarckent County, as the most remote and mountainous – only 7 villages. In the war years, there was a large number of unsettled peasant families who had gone back – in 1553 to their families for three years.

In a way, many farmers went bankrupt. 36.7% of families who migrated to Turkistan from 1906 to 1913, got no profits without any property, and 60.9% – with no money, so in the early years of residence in the Semirechye, peasants had to work very hard (Miymanbaeva, 1997).

Ruined and desperate on the way to Turkestan and not having already able to return to their homeland, the peasantry, who found no earnings here, was forced to make every effort to survive: immigrants illegally seized and plowed land of nomads, built temporary and then permanent structures, rented land from the nomads, migrants organization bribed officials to highlight convenient and fertile land. Corruption, fraud, resourcefulness rose to the widest scale.

Table 1. Information about the educated Russian settlements and settlers in the Semirechye in the beginning of XX century

Years	Pishpek		Przhevalsk		Verny		Kopalsk		Lepsinsk		Jarckent		In overall		Settled out		Registered		Not settled	
	villages	farms	villages	farms	villages	farms	villages	farms	villages	farms	villages	farms	families	persons	families	men	families	persons
1906																		15040
1907	10												10	1022	3357 male sex 2967 female sex			8403	28493 male sex 24400 female sex
1909	1		3		4		-		9		1		18	1531	4794				
1910	2		8		6		1		4		2		23	4081	22565				
1911	5		12		14		5		12		16	2	52	14	3906	12403		11453		
1912	9	2	9		10		8		24		16	5	71	12	3978	12583	5423	19143		

1913	3		5			10	2	4	24		2344	7465	3901	13546	3000	
1914	7		3			4	2		16		2767	8466	3235	10531	4405	16603
1915											1974	5977	1262	3693	3222	11606
Total	37	2	40	24	23	51	49	14	214	26	21603	67610	13821	57366	19030	

Based on the annual reports of the military governor of the area of Semirechensk (Basedon: RSHA.F.400.Op.1. D.3485.p.27ob., 36, 37ob. F.400. Op.1. D.3891. p. 21 ob.; F.400.Op.1.D.4094. p.3 ob.; F.400.Op.1.D.4164. p.5; F.400. Op.1. D.4295. p.3 ob.; F.400. Op.1. D.4370. p.4 ob.; F.400.Op.1.D.4493. p.5 ob., 6; F.400. Op.1. D.4578. p.7 ob.,8)

After moving to the Urals, particularly to Turkestan, in Semirechye, farmers who settled on confiscated from local nomadic population, despite the fact that there were people from different provinces of Russia, provided land management in their villages, maintaining control by electing agriculture headman, who solved many administrative matters – matters of tax collection, building churches, schools, hospitals or medical assistant's point, public works, etc., the decisions is attached to a village meeting.

In the first five years of life in Semerichye, peasants were free of all taxes. Within five years, they had to pay only 50% taxes and only 10 years after the settlement they had to pay all the taxes. In Turkestan, men older than 15 years at the time of relocation had the right to postpone military service for six years.

Immigrants, feeling care from government about land issues, started to bring claims to administration to obtain equal rights with the nomads, justifying it this way: "As we are involved in military services, unlike Kyrgyzs, so we, Russians, have more rights to land than the Kyrgyzs. " It does not consider that this historical land of the Kazakhs and Kyrgyzs, as it was theirs for thousands of years in which they had their traditional economy and for centuries maintained the ecological balance. The arbitrariness of immigrants came to the point that they make demands on removal according to the Russian settees desires to have land, as "the administration took under arable farming the land, which they point" (Central State Archive of the Republic of Uzbekistan. F.1. Op.17. D. 811.p.37, and 38 vol.). The Government's commitment to adopt Russian immigrants after the Andijan uprising in 1898 contributed to an increase in armed attacks on the Kazakhs and Kyrgyz, allegedly in self-defense.

  February revolution and changes of monarchy to republic have not changed the issues of Russian "aliens." After the 1916 uprising, the government created major misunderstandings between Russian and Kyrgyz, ordered to hold nomads temporarily in areas where there are no Russian population, for example, in the mountains, deserts and semi-deserts. The remaining free Kyrgyz land, the Land Committee rented out to everyone at a set price, and the money went, allegedly in favor of the Kirghizs (State Archive of Almaty region. F.136. Op.1. D.21. L. 53, 54, 54)

Having heard about these liberated lands, attracted farmers from neighboring counties and even regions, especially from the southern part of the Jarckent County and Syr-Darya region tried to move here. Thus, the internal colonization area, relocating to the eastern part of the Przewalski County without permission of the Land Committee started. The Land Committee and The Land Commission had to take all measures to prevent this, but, because of the general devastation, the fight was unsuccessful, the number of new resettlement villages increased.

4. Discussion

The problem of the dynamics of Russian peasant resettlement in the Semirechenks was discussed in historiography to solve the problem of socio-economic status of Russian immigrants by known historians P. G. Galuzo, A. A. Sapelkinym, N. E. Bekmahanovoyup to the end of XIX – XX century. There were no researches on this issue in the post-October period. In Soviet times, historians have paid more attention to national history and the problem was actively developed.

5. Conclusion

The October Revolution revived the peasant faith in the saving of space and hope to expand the land from other nationalities. Moved the community was closed in thickness, absorbing almost a precinct-homestead land-use as a rival and annoying example. Community, with its charge chrome mechanism revived. Stolypin reforms was a measure of the peasant community. In 1917-1918, in the Semirechye, 7 villages of self-will settled persons were formed (RSHA F.136. Op.1. d.6. l. 103 vol.). It should be pointed out that also that such impunity free settled land seizures led to the resettlement as for the pre-resettled villages. For instance, from the Preobrazhenskyvillage, 70 yards moved, but according to the list for resettlement there were still 300 yards

(RSHA F.136. Op.1. D.21.l. and 58 vol.). The Head of Naryn County Rabkrin pointed out that the period of 1918 and 1919 were the "years of Russian national dominance", all the Soviet construction "followed the path of proprietary satisfying of appetites and interests of the Russian population" (Archive of the President of the Republic of Kazakhstan. F. 666. Op. 1 . D. 198. p. 26).

Between 1918 and 1919, in the territory of Semirechye, the number of Russian towns increased. In general, if we talk about the policy of Soviet power in relation to Russian peasant settlers in the Semirechensk, we can say that in the first stage after the fulfillment of the October Revolution, the new government, busy setting it on the ground, did not pay more attention to the names of Russian peasants and locals of how to continue the previous colonial policy, and with the beginning of the policy of "war communism" to the peasants, themore stringent measures were adopted, due to the requirements of the general policy of the country to the peasantry.

Russian peasants in many districts and villages, especially the villages Steppe, Balta, Stavropolka et al., have repeatedly complained that they are victims of separate raids Kazakh horse gangs who are forcibly drove by and secretly owned by farmers and young working cattle directly from arable land and pasture, and then traveling alone, and peasants resisting were beaten half to death, and after the raid, they were robbed by peasants and offered their services to the tracing of stolen cattle for a fee.

The Regional Office of Agriculture in May 1925, made review of Land Management. The work of 14 counties of Pishpek, Karakol and Naryn regions was analyzed, while 333 community land areas were found, of which 180 with the composition of households of 36225 Russian emigrant population, and 53 with the composition of 14036 households of the indigenous population, but only 50 251 farms that were granted 1,204,773 tithes in the main plots and 142,661 acres were revealed to stay in general use. On the issue of land use and ownership of land, the Regional Courtreviewed and aapproved 33 cassation appeals of 32 land communities and four cases in the regional commission on land and water disputes were resolved.

Provincial Department of Agriculture and land committees were under the land reform to bring to the attention of the population that the land is state property, in the essence of socialization of the land; it ensured that farmers should not commit acts of sale of land; monitor the timeliness of the peasants of winter crops and autumn tillage; and organize public assistance household with no working cattle and agricultural machinery; deliver the list of grass grown lands to the Military Revolutionary Committee, detailing what areas are and how many there are and what harvest is expected to collect from one of tithing. Lists were required to collect fodder at a certain rate.

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Development of Methodical Approach on Identification of Cluster Forms of the Organization of Economy of the Traditional and Agrarian Region

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Abstract

The spatial organization of economy of the Russian regions endures a certain crisis of the existing schemes of territorial localization and functioning of the leading sectors of economy and their enterprises. The accruing fragmentation of economic space and social and economic differentiation is a result of lack of effective counteraction to this crisis. Regions with agrarian orientated economy are more sensitive to processes of uneven development of economic space because they are more dependent on natural and geographical regularities, and the focused development of separate zones leads to synchronous formation of depressive territories with the low level of the key social and economic parameters, despite the available resource potential. Therefore, formation of new approaches to the organization of economic space of the agrarian oriented regions has to coordinate with identification of all leading sectors of economy, zone and polar forms of economic growth and leads to the introduction of different types of cluster innovations on the basis of stimulation of the relevant initiatives. Exactly potential of the cluster forms of the organization of economic space is capable to extend on extensive adjacent territories, forming network designs with the mode of active social and economic development.

According to this, an object of this research is development of theoretical and methodical provisions and conceptual approaches and recommendations about improvement of management of development of the agrarian oriented region on the basis of using cluster approach. As a result of the solution of the objective it is offered, based on selection and the analysis of quantitative indicators, methodical approach on identification of potential of clustering in the leading branches of economy of the agrarian oriented region. Also basic elements of the concept of management of the region on the basis of using cluster approach were specified with using the scenario of stage-by-stage development of a cluster in a key branch of economy and the scenario of a polybranch clustering of economy with creation of clusters in several leading branches.

Keywords: regional economy, clusters, regional management, potential of formation of a cluster

1. Introduction

Large-scale geopolitical, social and economic transformations in Russia and unstable, multidirectional nature of processes of regional economic dynamics define a need of searching original and innovative approaches to organise economic space at the level of subjects (Gerasimov, Gromov, & Skripnichenko, 2014; Erlander, 1980).Specifics of spatial and economic regularities of development of the agrarian oriented regions as classification group of territorial subjects, define a need of the appeal to the potential of cluster forms of economic space organization. Further prospects of effective strategic management of the region on the basis of cluster approach substantially depend on a choice of a rational methodological basis of formation of the corresponding concept taking into account the leading branches which has a potential to format clusters. It has to consider not only priorities of a territorial order, but also social and economic aspects of activity of territories where problems of ensuring economic growth, maintenance of a worthy level of living of the population, development of infrastructure and others are particularly acute. The situation is complicated by inertial nature of

post-crisis dynamics of development of agrarian sector of economy, which negative consequences might be redused or compensated with using new spatial and economic constractions (Trukhachev, Kostyukova, Gromov, & Gerasimov, 2014; Garretsen & Martin, 2010).

Multilateral development of theoretical aspects, methodical recommendations, and also organizational and economic approaches, methods, mechanisms and instruments of strategic management of the clustering in the agrarian oriented region will allow to increase quality of management of regional social and economic systems, to prepare its economic space for a macroeconomic setization with development of new properties and characteristics of its components.

2. Methodology

Basic and applied researches of domestic and foreign scientists in the field of the organization of economic space and the clustering of economy, program and strategic documents of regional planning, federal and regional regulations, reports, applied, instructive and reference materials on the problem of management of regional social and economic systems with use of potential of cluster approach, materials of scientific conferences and seminars, sources of encyclopedic character, thematic publications in periodicals formed a theoretical and methodological basis of research.

The research is executed on the basis of system approach application. Depending on objectives, methods of the analysis and synthesis, induction and deduction, receptions of the statistical, logical, semantic, retrospective, comparative and structural analysis, and also graphic, calculated and constructive, monographic, expert methods were used.

Information base of the research was formed by using official data of Federal State Statistics Service, its regional divisions, materials of departmental reports, and also results of monographic researches of domestic and foreign scientists. Information bases for a formulation of the main conclusions and recommendations of the research were subfederal empirical and factual data, and also the relevant information received by collecting, processing of representative data with the use of analytical and heuristic potential of the corresponding methods and receptions.

3. Results

3.1 Statement of the Problem of Development of Methods for an Assessment of Clustering Potential

Existing technological logic and branch approach of traditional industrial policy of the region need to be transformed and replaced with territorial and spatial. The development of effective system of the interconnected actions of federal, regional and municipal power institutes, which is focused on development of initiatives of power and enterprise structures with the purpose of realization of clear competitive advantages of the territory, has to be the main objective of the cluster policy (Hanson, 2005; Edwards, 2007).

Important task in the context of the research is developing such approach which would differentiate intrinsic aspects of identification of cluster capacity of the territory and already created cluster as a full-fledged institute of spatial economics. Talking about Stavropol region of Russian Federation, which is a model in the research, it is still difficult to speak about the created clusters, there are only some prerequisites of them   and also the leading branches possess rather the clustering potential, than attributes of the created cluster. In this regard the developed methodology has to be focused on a comparison of potential of various sectors of regional economy from the point of clustering prospects.

There is a set of approaches to the identification of clusters in the modern theory and practice of regional economy:

1. Approach within the theory of competitive advantages of the territory (Head & Mayer, 2004; Fujita, Krugman, & Venables, 1999). It assumes an assessment the developed determinant of cluster development (local competitive advantages) and estimates the resource capacity of the territory, the characteristics of the related and serving branches, condition of demand for the made production, existence of common vision of development of the cluster and maintenance of the principles of the competition and cooperation.

2. Approach within the institutional theory (Capello, 2006; Ersoy & Taylor, 2012). Prospects of formation of special institutes supporting effective interaction of all participants of a cluster and power structures are estimated within this approach.

3. Approach within the evolutionary theory. It assumes an identification of life cycle stages of a cluster, an assessment of an area of distribution of the cluster, in the context of studying of features of placement of productive forces, and also identification of small and innovative enterprise structures in the cluster.

4. Approach "from top to down" assumes identification of a cluster by means of quantitative methods of the analysis of the tables "expenses-release". Usually, such approach is applied to already developed clusters.

5. Approach "from top to down" assumes identification of clusters on the basis of interviewing, questioning and other oral forms of research, so this is the qualitative analysis of a cluster which allows to reveal internal vertical and horizontal links between enterprises of the cluster.

6. Micro-level methods and methods of the interindustry cluster analysis. The tools of these methods are based on application of a method the main components and the factorial analysis, the multidimensional statistical cluster analysis, the theory of counts, etc.

Thus, all variety of the existing approaches to identification of clusters in regional economy is come down to use of a number of analytical tools (Bobryshev, Uryadova, Lyubenkova, Yakovenko, & Alekseeva, 2014; Bobryshev, Golchenko, & Kazakov, 2014). Application of each tool has both advantages and disadvantages. Examples of such tools:

− 	expert polls;

− 	calculation of special indicators (coefficients);

− 	data analysis of interindustry balance;

− 	network analysis.

We made a start from a hypothesis in the research that only the combination of several methods can lead to obtaining relevant information concerning clustering prospects in the region (Brakman, Garretsen, Gorter, Horst, & Schramm, 2005; Baldwin, Forslid, Martin, Ottaviano, & Robert-Nicoud, 2005). We will relate calculation of special indicators (coefficients) and informal (qualitative) analysis to such methods. Each of these approaches demands justification of indicators of clustering in a region, the only difference is that in the first case it will be quantitative indicators, and in the second – qualitative. It should be noticed that the methodology should not be "overloaded" with a large number of the low-informative and duplicated indicators. So such analysis should not be consolidated to statistical research of a huge number of data that will complicate unambiguous interpretation of the situation in the region which was occurred in the context of clustering prospects. Besides, an important methodical task is an integrated assessment of quantitative and qualitative parameters of functioning of leading branches in a region that finally will allow to interpret the received results linguistically.

3.2 Development of the System of Indicators for a Quantitative Assessment of Clustering Potential

Following logic of the research, we will move to the description of the selected quantitative indicators of clustering prospects in regional economy.

1. Production localization coefficient:

$$К_Л = \frac{O_p}{П_p} * 100 / \frac{O_c}{П_c} * 100,$$

where O_p – branch of the area;

O_c – branch of the country;

$П_p$ – production total volume size in the region

$П_c$ – production total volume size in the country (GDP).

Calculating this indicator, we will use the size of a gross regional product as production total volume in the country and respectively for the country – GDP.

2. The coefficient on per capita production is calculated as the ratio the share of a branch of economy of the area in the relevant structure of the branch of the country to the share of the population of the region in the population of the country (Combes, Mayer, & Thisse, 2009; Davis & Weinstein, 1999):

$$К_{дп} = \frac{O_p}{Н_p} * 100 / \frac{O_c}{Н_c} * 100,$$

where $Н_p$ – economically active population of the region, thousand people

$Н_c$ – economically active population of the country, thousand people.

Thus, we used instead of the total number of the population of the region (country), the number of economically active population to calculate this indicator. This indicator, in fact, characterizes comparative productivity in the branch of the region and is quite relevant in the context of objectives of the developed methodology.

3. The coefficient of regional marketability is calculated as the ratio of export of goods from the territory to its regional production (Note 1):

$$К_{рг} = \frac{Вс}{Пр},$$

where Вс – the volume of export of goods from the region;

Пр – volume of production.

In case, if the actual value of the above-stated indicators exceeds 1, data of the branch can be considered as bases of market specialization of the region.

4. Ballas's index (index of the revealed comparative advantages (RCA)).

Proceeding from an assumption that one of the main identification signs of a cluster is that fact that the territory earns on export of the products, this indicator in the context of the research is rather informative. According to this index, the region can be identified as specializing on export of some product or service if its market share for this type of goods is higher, than an average value about the country:

$$RCA_{ij} = ((x_{ij} \div X_i)) / (x_{aj} \div X_a)$$

where, RCAij – coefficient of the revealed comparative advantages;

xij – export of a product j from the country i;

Xi – total exports from the country i;

xaj – total exports of a product j from the region a;

Xa – total exports from the region a.

In case, the region in a certain branch value of the indicator exceeds 1, it means that export surpassed expectations on the basis of data on its demand in a total amount of export of this region.

5. Cluster focus (according to M. Porter) (Delgado, Porter, & Stern, 2010) (S) is calculated as the ratio of quantity of occupied population in i sector in the region j to total amount of occupied population in the region j:

$$S = H_o / H_p,$$

where, Ho – the number of occupied population in i sector in the region j;

Hp, – the total number of occupied population in the region j.

In fact this indicator is one of kinds of an indicator of localization. According to M. Porter it characterizes the amount of agglomeration, so when the value of the indicator is higher, then the agglomeration is bigger.

6. The density of economic space in sector i of region. This indicator is the spatial characteristic of functioning of a potential cluster. It is calculated as the ratio of the enterprises of branch to territory size, so the number of the enterprises are located on 1 sq.km of the territory of the region is bigger, then the density of economic space is higher, respectively there are more than opportunities for interaction and cooperation.

7. The indicator of economic prosperity of a branch characterizes the ratio of a salary of a worker in the branch to an average annual salary in the region:

$$Э = З_o / З_p,$$

where, Зo – The average monthly nominal salary of employees of organizations of the branch i in the region j;

Hp, – the Average monthly nominal salary of employees of organizations in the region j.

This indicator can be interpreted as if highly paid workplaces increase in a branch or they are more highly paid in the branch, than in other sectors of economy is observed, this branch can be considered as prospering.

3.3 Results of the Computational Experiment

We will use the following auxiliary data about branches of Stavropol region in 2013 to calculate the above described coefficients (Table 1).

Table 1. Indicators for calculation of coefficients of localization in branches-carriers of clustering potential of Stavropol region (data for 2011)

Indicators	Potential cluster-forming sectors		
	Tourism and recreation	Processing productions	Agricultural industry
Average annual number of employed in the industry in Stavropol region, thousand people	24,9	146,4	216,7
Average annual number of employed in the industry in Russia, thousand people	1217,6	10281	6730,4
Volume of industry production in the region, million rubles	11728,1	161181	103470
Volume of industry production in Russia, million rubles	373985,201	22802348	3261695
The branch cost of fixed assets in economy of the region, million rubles	-	70614	87337
The branch cost of fixed assets in economy of Russia, million rubles	-	8876602	3127209
Export of main types of the made goods million rubles (the average US dollar exchange rate for 2011)	42	23862	7470
The average monthly nominal salary of employees of organizations	10210	14685	12693

Calculation will require some generalized data about economy of Stavropol region and the Russian Federation.

Table 2. The generalized data about economy of Stavropol region and the Russian Federation for calculation of indicators for an assessment of the clustering potential in the region

Indicator	Russian Federation	Stavropol region
Gross product, million rubles	37398520,1	316888,9
Total number of economically active population, thousand people	75752	1373
Total cost of fixed assets in economy, million rubles	30736997	360357
Average annual number of employed in the economy, thousand people	67727,2	1245,3
The average monthly nominal salary of employees of organizations	23369,2	15588,7

Generally, it should be noted that proceeding from the assessment of indicators of localization, 2 branches – agricultural industry, that is a potential agro-industrial cluster and tourism and a recreation are allocated. The highest value of coefficient of localization on the number of the employed people is noted in agricultural industry – 1,78 (Table 3).

Table 3. Calculation of indicators of localization in branches-carriers of the clustering potential

№	Indicators	Potential cluster-forming sectors		
		Tourism and recreation	Processing productions	Agricultural industry
		Indicator value / place		
1	Localization coefficient of the volume of the made goods, works, services	3,7010 II	0,8342 III	3,7439 I
2	Localization coefficient of the number of the employed people	1,1282 II	0,7857 III	1,7764 I
3	Localization coefficient of the cost of fixed assets	0,4342 III	0,6785 II	2,3822 I
4	Coefficient of per capita production	1,7302 II	0,3999 III	1,7502 I
5	Coefficient of regional merchantability	0,0036 III	0,1480 I	0,0722 II
6	Index of the revealed comparative advantages (RCA)	0,0012 III	0,1854 I	0,1353 II
7	Index of cluster focus	0,0200 III	0,1176 II	0,1740 I
8	Density of economic space in sector i of the region (the enterprises on 1 thousand sq.km of the territory)	21,1 III	59,1 II	205,1 I
9	Indicator of economic prosperity	0,6550 III	0,9420 I	0,8142 II
10	**Sum of places**	**24**	**18**	**12**

The criteria indicator of the indicator of per capita production (1) is not exceeded only in sector of the processing productions (0,399) while the maximum value of the coefficient of regional merchantability is in this branch. This fact confirms the value of the index of the revealed comparative advantages that maximum value is the share of the processing productions (0,19), and practically all export potential of the branch is provided by chemical branch. The relation between the made goods and the exported goods is much lower in the sphere of agricultural industry.

The cluster focus indicator should be considered as one more clear indicator of strong economic incentive to the clustering processes. Proceeding from its value, the largest potential cluster in Stavropol region is the agricultural industry (0,17). Thus the most dense economic space is observed in agricultural industry that also creates additional incentives for cooperation and more profound interaction (205,1 enterprises on 1 thousand sq.m of the territory).

Based on the indicator of economic prosperity of branch it is can be judged which type of economic activity provides highly paid workplaces and the extent of such providing that finally testifies to development of a potential cluster. From calculations we made, it is seen that none of the studied industries is more significant in comparison with regional average.

Generally, results of the research do not contradict data of similar works in this field (Gerasimov, Gromov, & Levchenko, 2014; Gerasimov, Gromov, & Levchenko, 2014; Bobryshev & Kazakov, 2013).

3.4 Total Interpretation of Results of the Quantitative Analysis

It is necessary to range values of the calculated indicators of three industries in their size to interpret the data obtained as a result of the analysis. It will allow to apply the methodology of a complex rating assessment of separate types of economic activity in the context of clustering prospects by method of the sum of places. According to it, than less there will be a sum of places on concrete industry, then more perspective from the point of view of realization of cluster initiatives this industry is.

Considering that the methodology involved 9 indicators that were calculated for the three industries, the maximum sum of places will be equal to 27, minimum is 9. According to the accounting of allocation of three typological groups of industries, we will get the size of an interval step between each of them equal to 6. Thus, as a result of the quantitative analysis of clustering prospects in the leading industries of Stavropol region the following results (Table 4) were received.

Table 4. Distribution of branches of Stavropol region on the typological groups characterizing prospects of clusters formation

Typological group	Interval value	Branch of the region	Actual sum of places
The biggest prospects of clustering	9-15	Agricultural industry	12
Average prospects of clustering	15-21	Processing productions	18
The least prospects of clustering	21-27	Tourism and recreation	24

3.5 Development of a System of Indicators for the Qualitative Assessment of Clustering Potential

This methodology would be not complete if we made the quantitative assessment of prospects of clustering because the process of the comparative analysis of different branches is not objective enough. Finally imposed results of the quantitative analysis on results qualitative, we will be able to estimate clustering prospects in the leading sectors of economy of Stavropol region fully.

These criteria were estimated in the expert path, as a result of poll of representatives of the science and power structures of the region, focus group. Based on the offered system of qualitative indicators, each of experts estimated 3 sectors of economy of Stavropol region regarding clustering prospects. We interrogated 20 experts in total. Each of them ranged branches regarding compliance to qualitative parameters therefore the matrix of points according to qualitative indicators of clustering prospects (Table 5) was made.

Questions for experts were formulated so that each expert estimated criterion according to a scale of the standard importance from 1 to 3 points where are 1 the best position of branch in aspect of clustering, 3 – the worst. Thus the expert could put to several branches an equal number of points as to estimate some aspects of clustering is rather difficult, without being the expert in this branch, at the same time, when the expert is sure that by this criterion the branch is the most perspective, he/she can put to it 1 point, and to other branches - 3 points. Than the number of points is less, then clustering prospects in this branch are higher.

Table 5. Results of clustering prospects in industries of Stavropol region based on the expert poll

The qualitative assessment criteria	Tourism and recreation	Processing productions	Agricultural industry
	Experts points		
1. Existence of the industry's "core cluster" or pronounced leaders around which the cluster formation may occur in the future	54	29	49
Extent of development of intra-industry integration based on the principles of competition and cooperation	22	37	52
3. Image of a branch	36	49	28
4. Existence of uniform strategy	28	44	52
5. In which branch an approach to increase of competitiveness of production is most applied	39	53	47
6. In which branch the competition among suppliers of raw materials, the materials completing and others is higher	58	47	38
7. Which industry has developed more sustainable chain of enterprises operating on the principles of cooperation	31	53	42
8. In which branch the role of the serving and supporting sectors is higher	24	46	28
9. Consumers' impact on the competitiveness of made products, services (quality demand, it means that consumers in which industry are more demanding)	24	45	33
10. Influence of the state on branch (a positive role from the point of clustering prospects)	22	41	28
11. In which branch influence of negative random events on development of clusters is lower (1 – the lowest influence, 3 – the highest influence)	34	27	38
12. The similarity of resource use between large groups of enterprises	41	36	22
13. The closeness of connections in the sector on the labour market and goods (1 is the most close, 3 - least close)	36	42	38
14. Prospects of increase in number of large (significant) participants of a potential cluster (1 – the greatest prospects of expansion; 3 – the smallest)	38	52	24
15. The prospects for increasing the export potential	58	25	33
16. The role of branch in formation the general brand of the region (1 - highest, 3 - lowest)	31	56	30
17. Prospects of expansion of the range of products and deepening of system of labor division	41	53	34
18. Prospects of copying and introduction of advanced technologies	24	35	46
19. Activity of sector in exhibition activity	33	51	25
20. The leading role of the sector in the integration around a large number of subjects of small business	27	34	48
Total amount of points	**701**	**855**	**735**

As a result of the conducted expert survey sectors of economy of Stavropol region were divided on typological groups as follows (Table 6).

Table 6. Distribution of branches of the Stavropol region on typological groups, characterizing the formation of clusters according to the results of the qualitative assessment

Typological group	Interval sum of points	Branch of the region	Actual sum of points
The biggest prospects of clustering	267-534	no	-
Average prospects of clustering	534-801	Tourism and retail trade	701
		Agricultural industry	735
The smallest prospects of clustering	801-1068	Service industry (chemical and petrochemical industry)	855

3.6 Discussion

As a result, we imposed the results of the quantitative and qualitative assessment of the prospects of the cluster formation in the leading sectors of Stavropol region and gave their characteristics (Table 7). It allowed us to estimate the clustering prospects in three basic branches of Stavropol region.

Table 7. Characteristic of potential clusters of Stavropol region

Feature	Sector of potential clustering					
	Tourism and Recreation		Processing Productions		Agricultural Industry	
Clustering prospects according to methodology of the quantitative assessment	The lowest	24	Average	18	The highest	12
Clustering prospects according to methodology of the qualitative assessment	Average	701	The lowest	855	Average	735

As a result, we allocated the following:

(1). Tourist and recreational cluster is characterized by the following features: the nuclear-free cluster of tourist and recreational type that has unique natural and resource base and had already formed a well-known brand that is extrapolated to the entire territory. The limiting factor is a small influence and a low localization in relation to the regional economy. It provides significant incentives for the development of supporting and accompanying branches of the local economy particularly for small businesses, but its export potential is low. Its more effective development is possible to reach by using interregional interaction and creation of a cluster of higher order.

(2). The cluster of industrial and production type in the sphere of chemical and petrochemical production. In separate branches of this cluster the leading enterprises ("a cluster core") are clearly looked through, but extent of integration round them is low. It is the main carrier of the export potential of the entire regional, social and economic system. The cluster is capable to function without intervention from the state in its development, but its share in structure of the regional economy is small. It is not the system-forming cluster from the point of an employment and its role for the local economy is low, in order to position branch as a full-fledged cluster. An important prospect of further development is deepening of integration communications with adjacent sectors of economy. Serving production can become a link between several clusters in the region.

(3). The agricultural cluster. It is the production nuclear-free cluster that plays an important social and economic role for development of the local economy. The weakest characteristic features are insufficient for full development of the cluster internal communications between the companies that is shown in the absence of an optimal balance of "trust", "competition" and, especially, "cooperation". It is characterized with the high density of economic space and sufficient extent of localization, but it's innovative and export potential is weak. Further development is connected with the influence of uncontrollable factors in many respects. It is highly influenced by the state as the system-forming sector in the region.

4. Conclusion

The research on strategic management problems of the clustering of economy of the agrarian oriented region showed that, despite their importance for the economy of the region in general, questions of clusters formation have the fragmentary methodical base, which does not meet the requirements and imperatives of a post-industrial paradigm of development.

Currently, there are many unresolved questions that remain in a system of scientific support processes of clustering of economy. On the basis of the conducted research it is possible to make a number of the theoretical and practical conclusions and suggestions, answering a part of them. During the research there was established a need to identify opportunities and prerequisites of clustering with further justification of administrative decisions on spatial localization of clusters in a system of the territorial organization of economy. Thus the hypothesis was made according to which in the agrarian oriented region, besides agricultural branch, it is necessary to carry out a search of other propulsive sectors of economy to create a full-fledged multi-profile cluster structure. For these purposes we developed the methodological support for detection of prerequisites of clustering in propulsive sectors of economy including not only the analysis of quantitative indicators, but also attributive criteria. Results of its use with regard to empirical and factual material of Stavropol region as a typical representative of agrarian oriented regions showed that branches of agricultural industry, tourism and recreation and processing productions (industry) possess the greatest prospects of clustering.

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Note

Note 1. Regional economy: the textbook for higher education institutions / Under the editorship of Morozova. – 3rd prod., reslave. and additional – M.: UNITY, 2004.

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State Controlling as an Efficient Management Tool of the Republic of Kazakhstan Economy

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Abstract

This article defines the principal directions for the improvement of the state controlling over the application of public funds. It is a transition from the cost budgeting method to the result-oriented budgeting (ROB) and improvement of financial control by means of introduction of the performance audit tools.

Keywords: economic development, financial resources, budget and fiscal policy, state control, controlling over the application of public funds, fiscal audit, performance audit

1. Introduction

The present-day stage of social and economic development of the Republic of Kazakhstan is characterized by instability of the world financial system, by continuing crisis of the global economy and by intensification of grand challenges connected to the advance of geopolitical dangers. The author mentions that an efficient development of the Republic of Kazakhstan economy requires a transition to a more active budget and fiscal policy, oriented first of all on the achievement of the results and not on the costs. Controlling over the application of public funds aimed at the improvement of the public financial resources management plays a significant part in this process.

The existing system of the public financial control has a primary aim of detection cases of rules violation and of improper use of the budget resources by means of multiple inspections conducted in order to punish violators.

The problems of a system phased approach to the restructuring of the existing system of the public financial control are being actively discussed today in the Republic of Kazakhstan. Regulatory framework is being formed and developed in accordance with international standards and best practices; the unified methodological and procedural frameworks are being created; organizational system of the public financial control is being improved.

The main outcome of the conducted work is supposed to be the switch of the public financial control to international audit standards, the creation of institutional and methodological framework of government control over the application of public funds, and also the raise of efficiency and transparency of controlling and analytical activity of government authorities.

However, regardless the implemented measures, the problem of creation of the public financial control system that would be unified, plainly structured in status, functions and competencies and the problem of its improvement are still topical.

2. Methods

Public financial control is subdivided into external and internal.

An internal public audit is aimed at the control over the achievement of final results of public authorities' activity, over the accuracy and authenticity of financial accounting, over the efficiency of public institutions, over the abidance by budget legislation. In the narrow sense internal audit predetermines the practical inspection of the process program of managing public funds, human, physical and other resources by every executive.

The major purpose of external audit is to control that national resources are efficiently used for the improvement of the population life quality and for the maintenance of national security. Broadly defined the external audit covers the legal power of the country's government to control and to estimate the implementation of the national budget.

Control activities are held in the form of inspections and monitoring which could be integrated or subject, total or selective, field or office (applicable only for monitoring).

Inspection is an integrated (complete or selective) study of primary accounting documents. It does not include studying of supplemental materials: other reports about financial and operating activities, indirect data about the subject under examination (up to the information from media or the Internet), interviews with representatives of the subject under examination and with invited experts. But these very methods start to play the more important part in the activity of supervisory authorities. It is important not only to elicit and to record the particular violations, but also to understand their reasons and to formulate the guidelines for their correction.

Monitoring is a less strict form of a control activity that allow introduction of supplementary information into the research.

The more modern method of financial control is being used lately, it is audit. It includes more analytical work and has some significant distinctions from the inspection and from the monitoring as well. The organization and processes of application of public funds, results of their application, activity of the institutions that use public funds are subjected to the examination and analysis during the performance audit.

3. Results

The level of life has increased due to the fast economic growth of the last years that relies on high oil prices and its production volume. However the present-day international situation characterized by intensification of grand challenges connected to the advance of geopolitical dangers, continuing crisis of the global economy and instability of the world financial system has a negative influence on the economic growth of the Republic of Kazakhstan.

Economic growth slowdown from 6.0% in 2013 to 4.7% in 2014 is predicted because of the decrease of internal and external demand especially in Russia, China and Europe, of continuing tension in the region and because of the reduction of oil prices (Table 1).

Table 1. Individual economic indexes, 2011–2015

Index	2011	2012	2013	2014	2015
Growth of real GDP	7.5	5	6	4.7	4.8
Budget balance of National Administration Sector, % to GDP	5.9	4.5	5.2	4.3	4.1
Debt of National Administration Sector, % to GDP	10.4	12.4	13.3	13.6	14.3
Trade balance, in % to GDP	23.8	18.7	15	15.7	13.2
External debt, in % to GDP	66.6	67.3	66.3	73	74.3
Consumer-price inflation	8.3	5.1	5.8	6.9	6.1

The decrease of the total budget balance from 5.2% GDP in 2013 to 4.3% GDP in 2014 and 4.1% GDP in 2015 is expected. The reason is an economic growth slowdown and significant buffer funds.

It is also worth mentioning that despite some increase of national and external debt in the forecast period these indexes remain at the safe level that affirms quite stable debt situation of the region.

Exacerbation of the Russia-Ukraine crisis and further reinforcement of sanctions against Russia give rise to external dangers of progressive economic advance of the Republic of Kazakhstan in the short-run. Kazakhstan is quite vulnerable because of the close relations with Russia (especially in the Customs Union) and also because of potential secondary effects in Europe caused by gas export from Russia.

As for the domestic market the basic dangers here is a retraction or a delay of implementation of structural reforms aimed at the encouragement of economic growth and in particular of the reforms ensuring the market stability including reforms that concern enterprises management and competitive capacity of universities.

The excessive inflationary pressure is expected in the region and according to the forecasts the inflation will rise from 5.8% in 2013 to 6.9% in 2014, mainly because of the decline in nominal exchange rate/depreciation of currency and advance of food supplies prices. If the inflationary pressure remains the same the nation's leadership will have to take measures for strengthening and modernization of monetary policy. For that purpose it is necessary to control monetary market operations and liquidity more effectively. It is also necessary to possess clearly defined directory rate, to intensify macroeconomic analysis and forecasting and to increase the quality of regular informational reports about the policy direction.

Nursultan Nazarbaev the President of Kazakhstan has declared about the beginning of an extensive economic program in his message to the people of the republic in November 2014. The National Fund is going to allocate up to 3 billion dollars annually for the period from 2015 to 2017 for the economy development and for realization of structural reforms.

In the nearest 3-5 years the National Fund and multilateral development banks could provide up to 7% of GDP budgetary support. This support is expected to increase the economy potential by means of infrastructure modernization, encouragement of the private sector and activating of financial sector.

The country's government has to ensure accurate and concerted work, efficient application of the resources allocated by the National Fund for the economy development. A commission specially appointed by the president will exercise control over the efficient application of these resources.

The qualitative state management should become one of the supporting factors of the sustainable economy development, of the population life quality improvement and of the advance of the country's competitive capacity in general.

Gradual integration into the world community requires the advance of competitive capacity of the government authorities. In this regard the upholding of national interests requires more efficient budget funds management and reinforcement of the financial and executive disciplines in the country.

Efficiency of the state financial control could be ensured only in case if it is represented by effectively functioning bodies. The main function of the financial sphere is imposed on the Counting Committee of the Republic of Kazakhstan that conducts the audit of the budget funds expenditure.

The Law of the Republic of Kazakhstan "about the introduction of changes and additions to some legislative acts of the Republic of Kazakhstan concerning the questions of improvement of the external state financial control" was passed at the end of June 2011.

According to provisions of the law there were created audit committees as independent state institutions in regions and cities Astana and Almaty. These committees report to maslikhats of the corresponding administrative-territorial entities and conduct external state financial control at a local level.

This law is aimed at the improvement of the efficiency and quality of the held control activities, at the involvement of professionally trained and highly-skilled specialists, at the elimination of the direct dependence of audit committees from the local authorities, at the optimization of national revenues, at the increase of efficiency of reporting to maslikhats and finally at the improvement of local financial discipline.

The draft law "about public audit and financial control" was introduced to the Parliament of the Republic of Kazakhstan in December, 2013. This law covers the questions of cooperation between public audit bodies and public financial control bodies that include:

- creation of the common material database for public audit and public financial control;

- creation of the risk management system based on the unified principles and approaches;

- information distribution by means of the informational system of legislative statistics bodies regarding the inspections of public audit bodies and public financial control bodies;

- mutual recognition of audit reports.

However it is worth mentioning that the existing system of public control is far from perfect and does not completely correspond to the needs of a management process. For example, the existing control system does not include preventive measures of violations in the budget process and of the inefficient use of budget funds.

Traditional public financial control over the budget implementation by public financial control external authorities in the Republic of Kazakhstan is exercised by methods of the financial audit.

However according to the experience of the developed countries the conduction of the financial audit is not an effective method of control over the efficiency of budget funds. This method does not give the opportunity to evaluate the application of public funds and the efficiency of budget funds application by the executive authorities in the long time lag.

Financial audit conducted by the Counting committee of the Republic of Kazakhstan indicates that the country's economy suffers significant losses because of the low financial and budget discipline. There are some data characterizing this process in the Table 2.

Government authorities make systemic violations of the requirements of the budget and other legislations, they also fail to achieve some indexes of strategic and policy documents.

Absence of the appropriate coordination of efforts of primary government authorities and of local executive boards to the fulfillment of the strategic plan results in inefficient application of allocated transfers. For example, in the year 2013 43.2 billon tenge of the nation budget remained undrawn, 62.6 billion tenge from the budget were not used by the subjects of the so-called public sector, 26 billion tenge of allocated transfers were returned in the revenue of the national budget.

Table 2. Indexes of the detected financial violations in the Republic of Kazakhstan during the 3rd quarter of 2013-2014

Index	3 quarter of 2013	3 quarter of 2014	dev. in %, times
Volume of funds under control	495 716.4	410 467.6	- 17.2%
Total amount of the detected violations, among them:	79 545.9	167 559.8	+2.1 times
- financial violations	51 569.6	133 627.4	+2.6 times
- procedural violations	27 976.3	33 932.4	+ 21.3%
Number of the detected procedural violations,	53	221	+4.1 times
Sum of the detected financial violations per 1 object (without violations at objects under moratorium and without procedural violations)	613.9	2 905.0	+4.7 times

4. Discussion

Today in the Republic of Kazakhstan there are no uniform approaches to the organization of the activity and to the recording of received results there is no integral system of the public control authorities. This results in the growth of an administrative load on the subjects under control and in the intensification of duplication elements followed by the fail to drastically increase the efficiency of budget funds application in the country. Little attention is paid to finding reasons for financial violations, to the studying of problems during planning and application of the budget.

Besides there is a lack of the statistical information required for the objective and comprehensive diagnostics of the financial and economic situation in the country. The most problematic spheres are: the Republic of Kazakhstan balance of payment statistics, money and credit statistics, budget statistics scope and also national accounts. Official statistics of Kazakhstan as well as of many other countries does not include the important parts of the public sector. Budget accounts of the Kazakh government include transactions of the national government and of local authorities but does not include non-budgetary funds (RKNF as well) and transactions of NP sector.

At the same time official authorities take into consideration the necessity of the accurate monitoring of some quasi-fiscal operations. In this context recently there were two important political changes. First of all it is the introduction of monitoring facilities over the upper limits of an external debt of the bigger public sector. Secondly it is the foundation of "Bayterek" (national development group with total assets for about 6 percents of GDP) for the purpose of separation of quasi-fiscal and commercial operations in the NP sector. Despite these improvements the increase of budget scale is of primary importance for the conduction of fiscal policy based on the complete information.

The new administrative model requires the comparison of financial resources application vector with the permitted deviation from the desired course of transformations. This model is embodied in the controlling concept or in other words in the integrating and coordinating administrative system that provide methodological and tool support of the decision making.

The creation of the controlling system of public funds is conditioned by the present political and economic reforms that are aimed at the significant improvement of the population life quality and at the control of corruption in the sphere of budget funds application.

Controlling is a scientific discipline studying the development of theoretical and methodological basis for the technologies of control over social and economic systems.

The object of the controlling study are methods, techniques and tools of the economy, planning, recording and accounting, control, analysis and formulation of administrative decisions.

The subject of controlling is theory, methods and tools of measurement in social and economic systems for administrative purposes (Measurement aspects: resources, functional areas, processes, administration system elements).

Experience of the controlling system implementation at the micro level proves that controlling facilitates the solving of problems common for all administrative spheres – at the enterprises, in regions, at the industrial level, on the national economy scale. Therefore the task is to define the directions of the controlling method adaptation to the conditions of national administration of economy.

In the context of national administration this notion has the following definition: controlling is a complex system of analysis and evaluation of the efficiency of public funds application based on the computer data accumulation and processing that promotes administrative decision making.

Controlling over the application of public funds aimed at the increase of efficiency of public financial funds administration is of primary importance in the modern conditions of the Republic of Kazakhstan economic development.

The primary goals of the controlling over the application of public funds in the Republic of Kazakhstan are:

–   Optimization of public funds management process;

–   Enhancement of the role of public finances in the management system of economic and social processes;

–   Rise of the authority's responsibility for the results of its activity.

The basic functions of the controlling over the application of public funds are:

–   Expert and analytical – studying of interaction between social and economic processes and public finances management;

–   Controlling and analytical – internal and external control over the programs implementation;

–   Synthetic – formulation of recommendations according to the results of activities held.

Introduction of the controlling system over the application of public funds is aimed at increase of budget expenses efficiency. Principal directions for the improvement of the Republic of Kazakhstan controlling system should be the following:

1)   Transition from the cost method of budget formation to result-oriented budgeting (ROB).

Adoption of the plan of the Republic of Kazakhstan strategic development before the year 2020, introduction of the result-oriented budgeting and transition of the national authorities to International standards of financial accounting in the public sector needs the improvement of the activity of the public financial control authorities, including the implementation of international audit standards and of a more extensive use of the advanced international experience. These conditions impose the biggest importance on the efficient activity of the public financial control authorities on the analysis and evaluation of the correctness and efficiency of application of the budget funds and national assets.

ROB model presupposes an objective approach to the budget preparation. Management by objectives is one of the most efficient methods of public finances management and of handling the systemic problems of the society. Provided that the opportunities for budget revenues growth are limited it is impossible to constantly increase the budget expenses. That is why while preparing the budget it is necessary to take measures for the increase of budget expenses efficiency.

Transition to the preparation and implementation of the "objective budget" is included in the Concept of the new budget policy of the Republic of Kazakhstan, accepted in June 2013. The legal basis for the transition to the result-oriented budgeting was laid in the new Budget Code of the Republic of Kazakhstan that was accepted in 2008.

Today the necessary regulatory and legal framework is still in the process of development, it is being approbated in order to introduce changes to some managerial processes. The disadvantage of this variant is an increasing volume of work caused by two forms of budget preparation – traditional and objective. The objective budget has a new planning tool in its basis that is national programs (NP).

Taking into account the transition to objective budget the Republic of Kazakhstan Counting Committee, Financial Control Committee of the Republic of Kazakhstan Treasury Department give preferences to the conduction of the performance audit using such methods of public financial control as monitoring and efficiency evaluation.

In general we can make a conclusion that objective budgeting and transition to the development and implementation of NP is a reasonable continuation of the undertakings for the budget expenses efficiency increase and promotes the ideas of ROB. NP favors the competition for budget funds and increases the government responsibility for their implementation.

2) Improvement of the public financial control system.

The result-oriented budgeting (ROB) conditions the necessity to step outside the bounds of control over the distribution and accounting of budget funds (fiscal audit), because it is not enough anymore for the effective state management. Budget expenses control priorities shift from the control over the targeted use of funds to the control over the implementation of target indexes of social and economic efficiency.

The performance audit which is popular in economically developed countries is one of the methods aimed at the improvement of administrative authorities' activity, increase of their efficiency and quality of work. Financial control over the efficiency of expenditure of budget funds and public property that is called "performance audit" began its development in the public financial control of the developed countries in the 70th of the last century.

The performance audit has a purpose to check the efficiency and productivity of the national policy. Its primary task is not so much the revealing of financial violations as the determination of a significant result from the use of public funds and the formulation of recommendations for the improvement of the budget process and the existing legislation.

The performance audit provides objective, transparent and reliable information about work of public authorities, it gives opportunity to formulate the useful recommendations regarding the increase in efficiency of public finances management.

The performance audit includes economy, productivity and efficiency audit: economy is related to the cost minimization, productivity is related to gaining the maximum volume of production/services with the given resources, and efficiency is related to the achievement of set tasks and goals.

Introduction of the efficient systems of financial control and audit in the Republic of Kazakhstan will become a hindrance for the expansion of bribery; will increase the level of the society awareness about anti-corruption measures. The performance audit will give opportunity not only to register corruption incidents but will also help to prevent them. That is why the large-scale implementation of the performance audit as a powerful anti-corruption and management tool is of great significance for the development of the federal anti-corruption strategy in the Republic of Kazakhstan.

In order to achieve this result it is necessary to improve the regulatory control over the performance audit and to exclude contradictions between regulatory and legal documents and methodology of its conduction on national and regional levels.

Today the conduction of the performance audit is inevitably connected to a number of legal difficulties and also to problems conditioned by the existing practice of the public and municipal financial management in the Republic of Kazakhstan. It is necessary to make a detailed regulatory and legal framework, detect and remove defects of the existing legislation and also to conduct anti-corruption examination of the corresponding documents if required.

5. Conclusion

According to the global experience controlling over the application of public funds is an effective tool of the state management of the country's economic development. Efficient controlling over the application of public funds ensures the protection of the society financial interests and provides the citizens' welfare and stability of the government.

In order to solve the long-standing problems of the social and economic development of the Republic of Kazakhstan, to enter a new high-quality level of the development it is necessary to perform a transition to a more active budget and fiscal policy to a policy that is oriented on the result first of all and not on costs. Controlling plays an important part in this process. It is based on the set of measures of a controlling character and also on informational, methodological, expert and analytical support of the state management that ensures an intergovernmental coordination of the implementation of national programs and projects.

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Conceptual Approaches to Organizational and Methodological Support Systems and Certification of Qualifications

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Abstract

The problems of legal and organizational-methodical providing of functioning of the national system of assessment and certification of qualifications. The proposals for amending the legislation. Justified the use of standardization for the unification of the content of fundamental organizational and methodical documents of the system of assessment and certification, enhance transparency of the rules and procedures of certification of qualifications. Proposed list of standards for the formation of the national system of assessment and certification of qualifications.

Keywords: certification of qualifications, national standard, organizational-methodical maintenance of certification, professional standard, the national system of qualifications, learning outcomes, standardization

1. Introduction

To provide the innovative economic development, Russia needs for new personnel in terms of skill level, information technologies handling and adaptability to economic activity in market conditions. According to monitoring data of the Centre of Market Research (Kopylov et al., 2013) of the Institute of Statistical Research and Economics of Knowledge of the National Research University "Higher School of Economics", about 22-24 percent of executives experienced difficulties in 2013 and 2014 due to lack of qualified workers in industry, and 21-19 percent – in the service sector.

Training of labour force of a new quality is under the constant attention of authorities. Special attention is paid to training of personnel for high-tech sectors. The concept of long-term social-economic development of the Russian Federation for a period up to 2020 (Delovoy, 2014) and a number of other documents passed by the Government of Russia provide for the creation of a modern system of continuous education, training and retraining of staff. The necessity of personnel policy improving in Russia is confirmed in Economic Survey of the Russian Federation (Development of professional standards: the lessons of history), prepared in the context of consideration of the question of the accidence of the Russian Federation to the OECD.

Since 1999, marked by the signing by 29 European countries of the document -The Bologna Declaration (Economic surveys OECD Russian Federation), active development of national qualification systems, aimed to regulating of existing diversity of forms of education and training is taking place. The purpose of national qualification systems is to provide the opportunity of forming of multiple ways of learning, leading to the specific qualifications and qualification upgrade as well as clear procedures of the official recognition of qualifications. One of the elements of the national qualifications system is the qualifications certification system, which is the most developed in such counties as: Belgium, Denmark, Estonia, Finland, France, Ireland, the Netherlands, Norway, Portugal, Romania, Slovenia, Spain, Great Britain.

The aim of our research is rationale of conceptual directions in the part of legal, methodical and organizational execution of the system of certification of qualifications.

2. Methods

The operation of the qualification certification system includes development of requirements for the object of certification, legal, organizational and methodological support, the structure of which is the main subject of the

essay. The research is conducted on the basis of analysis and comparing of Russian and international systems of personnel certification and of analysis of the Russian legislation in terms of establishing of qualification requirements and introduction of qualification certification.

The research covers the following issues: concepts apparatus, objectives and legal basis of formation of qualifications certification system, the role of professional standards and methodical support for the professional standards development, methodical support and experience in the development and functioning of qualifications certification systems, the possibility of unification of methodical documents by applying standardization, creation and discussion of the results, formulating of conclusions and proposals.

The research has allowed not only to formulate basic rules of the system of standards for designing of the qualifications certification system, but also to found directions for further work on the formation of the national qualifications system.

In the research empirical research methods (comparison, description) as well as logical methods and techniques of research (analysis, synthesis, system approach) were used.

3. Results

3.1 Professional Standards as the Basis for a System of Certification of Qualifications

External independent assessment – certification of professional qualifications for the assessment of the results of both formal and informal education was proposed in 2009 by the Russian Union of Industrialists and Entrepreneurs. Main purpose of the system of the assessment and qualification certification is objective, independent, recognized by all the professional community assessment of compliance of competences staff, graduates and other categories of population, trained in various forms (hereinafter - worker), confirmation of the worker's ability to perform specific forms of labour activity regardless to the place, time and method of obtaining qualifications. Qualification certificate must confirm mastering by the applicant of certain competencies for performing specific work.

The key factor in every certification system is identification (and, in the future, following) of requirements to the object of certification, in this case – requirements to the qualification of worker, i.e. to the quality of training, his(her) knowledge, skills, abilities, applicable to a particular position (profession). That first needs to develop professional standards, compliance with which must include independent assessment of qualifications – certification, and eventually national system of qualification certification must be formed, as a part of national system of qualification certification (Final report on the results of the expert work on actual problems of socio-economic strategy of Russia for the period till 2020). In Russia professional standards are actively being developed with the regulation of this process by the state. The term "Professional standard" is containing in the Labour Code, rules of development, adoption and application (GOST R 52807- 2007) of professional standard established by the Government of Russia (GOST R 53697-2009) and guidelines for their development (GOST R 54795-2011/ISO/DIS 9712) are approved by the Ministry of Labour of Russia. It follows that Russia's system of government documents established legal and methodological framework of development and application of professional standards.

The organizational structure for development of the professional standards is being formed and concrete steps are made. The development of professional standards is under the control of the President of the Russia, so the President of Russian Federation created a social structure – National Council for professional qualifications (The decree of the President of the Russian Federation from 16.04.2014 # 249). The Council is consultative body formed to consider matters relating to the establishment and development of the system of professional qualifications in Russia. Its responsibilities include expertise, development, preparation of proposals on improvement of professional standards. It is assumed that professional standards will replace qualifying characteristics and tariff-qualification characteristics of professions and positions, i.e. the formed in the Soviet era system of the regulating documents on labour is changing its format and content. For the organizing of the activity Councils for professional qualifications are being formed in the sectors. One of their functions is development, updating and organizing of application of professional standards.

3.2 The Legal Basis of the System of Certification of Qualifications

For many spheres of economic activity, where have been already developed and approved professional standards, the basis for implementing of assessment and qualification certification systems is established. There is some lagging of regulatory process of creating of assessment and certification systems from the process of development of professional standards.

Analysis of Russian and international experience of creation and functioning of qualification certification systems in the field of tourism and service showed that in this area we can distinguish four main approaches to the forming of assessment and qualification certification systems. The systems can be based on purely corporate mechanisms and procedures, on strict government regulation, on state-private partnership, on voluntary establishing of personnel certification systems according to the rules and regulation of the law (Kopylov, 2013)

Creating of the national qualification certification system as an integral part of the National qualification system requires legislative regulation. Today the starting point of forming of qualification certification system in Russia is the regulation dated 2009 on assessment and qualification certification of graduates, educational institutions of professional education and other categories of citizens, who took professional education in different forms (GOST R ISO 11484-2014). The regulation is proposed by the Russian Union of Industrialists and Entrepreneurs and the Ministry of Education and Science of Russia. In the document are proposed approaches to organizational building of qualifications certification system as a single national one, for which legal status of the document is not sufficient. According to the Russian legislation, the legal status of the qualifications certification system is validated: by a Federal law of Russian Federation, if in relation to regulated professions, which are very important for society involving activity related with execution of works and rendering of services, which may affect the health and safety of citizens, national security, etc., qualifications certification will be required; or by the document of the regulator which coordinates activity of qualifications certification in Russia. But in any case main provisions of qualifications certification should be legislated.

3.3 Legal Confirmation of the Conceptual Apparatus

Absence of a common conceptual apparatus at the legislative level has led to appearance of regional qualifications certification systems, voluntary personnel certification systems (Ogneva & Kopylov, 2013), with their own professional standards, rules and procedures. One of the tasks solved by formation of national qualifications system is the legal recognition of general definitions such as qualifications certification, qualification certificate, center of assessment and qualifications certification, national, regional, sectoral agency of qualifications development, assessment and qualifications certification expert etc.

In this direction two approaches can be proposed: adoption of the Federal law, devoted to the issue of qualifications certification and/or adopting of amendments to the Labour Code (Shchur, 2012).

3.4 Normative-Methodical Maintenance of Certification Qualifications

Creating of general rules of qualifications certification is the next task, solving which will allow to develop sectoral certification systems with their own characteristics in questions of assessment. This task can be solved by creating of the complex of national standards: SSQA - system of standards of qualifications assessment. The necessity of development of the complex of standards was claimed in an article published in 2013 (Ogneva & Kopylov, 2013).

This system may include all the provisions from terminology to the rules of sectoral systems, especially as a precedent of development of national standards in the sphere of qualification certification already exists in the field of non-destructive testing and project management, for example:

- GOST R 54795-2011 "Non-destructive testing. Qualification and certification of personnel. General principles" sets requirements for the qualification and the order of certification of the personnel, participating in non-destructive testing;

- GOST R 53697-2009 (ISO/TS 181173:2005) Non-destructive testing. General terms and definitions;

- GOST R 52807-2007 Guidance for assessment of project management personnel competency sets requirements for the project managers' competence and requirements for personnel conducting assessment, i.e. provides basis of the professional compliance. The standard is developed with due regard for the requirements of the standard "Global Performance Based Standards for Project Management Personnel. Performance Based Competency Standards for Global Level 1 and 2 Project Managers" (GPBSPMP);

- GOST R ISO 11484-2014 Steel products. System of estimation the employer of qualification of the personnel which is carrying out nondestructive control. This standard is identical to the international standard ISO 11484: 2009 Steel products - Employer's qualification system for nondestructive testing (NDT) personnel.

The fundamental system of standards of assessment and qualification certification may include the following standards:

Terms and definitions

General rules of the assessment and certification of qualifications

Requirements for assessment and qualifications certification experts

Rules of payment for assessment work and qualifications certification work.

Requirements for assessment and qualifications certification organs and the order of their accreditation.

Requirements for expert-methodological center

Qualification assessment methods

Rules of conducting of the registry of qualifications certification system

Requirements for qualification certificate

Requirements for the formation and organization of the activity of appeals commissions

Requirements to the regional agencies of qualifications development

Control of activity of the assessment and qualifications certification organs

Next, in the form of national standards, specification of general requirements at sectoral level – level of type of labour activity, can be made. This is not interfere with participation in realization of assessment and qualifications certification system of different parties including ministries and other government structures, unions of employers and educational system. For example, "Tourism services. Rules of assessment and qualifications certification. General requirements" etc.

Creation of the system of standards in the field of assessment and qualifications certification will allow to form documentally national system of assessment of qualifications, thus facilitating its implementation both as a mandatory system for certain types of activities, and as a voluntary one. Organizing of development of national standards can be provided by Technical Standardization Committee "Assessment and certification of qualifications" at the Ministry of Labour and Social Protection of Russian Federation or by Research Institute of Labour and Social Insurance of Ministry of Labour of Russian Federation, creating of which would allow to regulate activities for development of documents of assessment and qualifications certification system.

4. Discussion

The beginning of development of personnel certification, which later evolved into a qualifications certification, the emergence of the terms "personnel certification" and "professional standard" were related with the adoption of the program of social reforms in Russian Federation for the period 1996-2000. (Resolution of the Government of the Russian Federation from 26.02.97 # 222). Personnel certification was developed as a voluntary procedure. With the establishment in Russia of the obligatory certification of products and services a separate line stood up – certification of experts. The experts certification system was methodically elaborated in terms of its organization, procedure and other processes. Requirements for the competence of experts are stated in internal documents of the system. A similar approach existed in other certification systems. And only now these requirements are being tried to state in professional standards.

A fundamentally new approach to qualification certification was proposed by the Russian Union of Industrial and Entrepreneurs (RSPP), which was supported by the Ministry of education and science of the Russian Federation. Both structures have signed on 27 June 2007 agreement on cooperation in implementation of the following works: development of the national system of qualifications, establishment of professional standards, establishment of state standards of the professional education, establishment of an independent system of education quality assessment and qualifications certification, development of modern innovative educational programs. The initiators of the agreement were RSPP as representative of business interests in improvement of quality of human resources, and the Ministry of education and science as a regulator of the training of human resources for the national economy.

RSPP in 2009 has initiated the establishment with the approval of the Ministry of education and science of a system of independent assessment of quality of professional education (24, The regulations on the formation of a system of independent quality assessment of vocational education, 2009), differing from the previous one, which had been implemented by the Ministry of education and science, with its comprehensive approach. RSPP was also the initiator of establishment of the National Agency of the Development of Qualifications (NARK). Functions of this organization are broad and aimed at establishing of the National system of qualifications. First of all it was necessary to create modern regulatory requirements for professions – professional standards. From 2007 to 2013 the structure coordinated the development of professional standards. The history of the development of professional standards is well described in several publications (Shchur & Shur-Truchanowicz, 2012), (Shur-Truchanowicz & Shur, 2010). It can be found on the website of Center for research in Economics

and law. Professional standards were considered and accepted at meetings of the public State council, which had been formed of representatives of business and educational system, because the standards are developed by the business and their requirements to competences are the basis for the state educational standards and educational programs. At the same time the system of the assessment and certification of qualifications of graduates, educational institutions of professional education, other categories of citizens, who had professional training in various forms, was being established. On a competitive basis within the framework of the Federal Program of Development of Education for 2011-2015 (Regulation of the RF Government dated 07.02.2011 # 61) a development of sectoral systems of assessment and certification had been conducted, the systems were approbated. Were elaborated: organizational structure of the systems, documentary, material, methodical and informational support.

It is offered on the ongoing system of evaluation and certification that all functions might be assigned for the next participants: Public-state council, the base organization (NARK), expert-methodical centers, centers of assessment and certification, with functioning Appeal committees and applicants attached to them. Public-state council coordinates the activity of the system, determines the directions of organizational development, approve the organizational and methodical documents and monitors its activities. Basic organization creates organizational and technical support of activities of the Public-state council and the whole system. In fact, the basic organization is the technical organizer of the system of assessment and qualifications certification. The functions of other participants are obvious from the names. The analysis of sectoral systems shows that organizationally systems differ and not always follow the recommendations of the RSPP and NARK. The situation is understandable and predictable. Russia with its vast territory, with specific character of businesses allocation, still remaining from Soviet times, requires approaches that along with centralization, would give regional and sectoral freedom in the establishment of certification systems.

The Ministry of Labour of Russia proposed a variant of the system in which priority is given to the organizers of the independent qualification assessment: all-Russian associations of employers, all-Russian industrial association of employers, Professional non-profit organizations, national and interregional trade unions, their associations. For now this is only a variant discussed with all concerned parties. This situation has led us to the results presented in this article. The essence of these proposals is in increasing of the level of adoption of normative and methodical documents regulating the activities of the certification system, from branch and departmental level to the Federal level, from methodical recommendations and regulations to national standards. Undoubtedly, a separate working papers, assessment tests can be developed in the certification system, but the basic documents of the system of assessment and certification must be approved at the Federal level in the form of national standards. For efficient functioning of the system in our opinion a set of standards - a System of standards of assessment and qualifications certification - SSOC must be developed.

5. Conclusion

This study shows the necessity of legal support of qualification certification, thus, at this stage of its formation it is enough to make amendments to the Labour Code and to define of legislative list of regulated professions. The whole system of organizational-methodological provision of assessment and certification system can be standardized. In the study practicability of establishing of system of national standards in sphere of assessment and qualification certification is proved. The proposed set of documents is preliminary and must be corrected at a deeper filling of content of proposed system of standards. A standardized approach to the forming of assessment and qualification certification systems lets us to organize assessing and certifying activity, to unify the system of organizational-methodological documents, to improve transparency of rules and procedures of certification, to make them accessible for all categories of workers, to create conditions for recognition of procedures and results of the assessment by the world, and primarily by the European community.

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State Policy on Institutionalization of Trusteeship in the Educational Sphere

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Abstract

The objective of the article is to consider the historical experience of formation and successful functioning of the institution of trusteeship in the educational sphere of the Russian empire in the nineteenth – beginning of the twentieth centuries. Historically Russia faced the necessity to speed up the paces of developing and raising the quality of public education. With this purpose the system of 15 educational districts headed by trustees was formed, which comprised 14 university complexes with composite educational infrastructure.

The principles of historicism and dialectic materialism, objectivity, scientific reliability and chronological sequence are the methodological base of the research. The method of interdisciplinary integration, use of knowledge of such sciences as sociology, psychology, pedagogy, political science and law has also been efficient. The following sources have been used: legislative acts, reference and statistical materials as well as materials of periodical press have been used.

The necessity of reviving the institution of trusteeship and educational districts headed by trustees at the beginning of the nineteenth century as a governmental initiative in solving the state policy in the conditions of reforms in the educational sphere has been substantiated. The significance of a state official – Trustee of an educational district, who had legal status, has been shown. It allowed to reform the educational sphere in a short period of time. All the above mentioned was the power and force of the state system of administrating educational institutions both in central and regional systems.

Keywords: educational reforms, state educational policy, the institute of trusteeship, an educational district, a trustee of an educational district

1. Introduction

Nowadays in the conditions of transformation crises in Russia the urgent task of increasing competitiveness of the Russian educational system arises. To attain this task the research of ways and mechanisms of its entering the world ratings is necessary. The revival of the institute of trusteeship in public education may become one of such regulators, as it successfully functioned in the Russian empire in the nineteenth – the beginning of the twentieth centuries. Historically Russia faced the necessity to speed up the pace of forming and improvement of quality of public education. For this purpose the system of 15 educational districts headed by trustees, which included 14 universities with unique educational infrastructures, was created. At present more than ever understanding and the right assessment of the historic experience and measured applying of the experience of the past in the interests of development and modernization of the national educational sphere is required. The urgency of the problem researched is corroborated by the fact that modern Russian system of education is facing the task of optimization of university and educational systems of the regions and improvement of graduating students' quality at all the levels of training.

The present situation in Russia more than ever is ready for the revival of the institution of trusteeship. The fundamental scientific works by historians, teachers and economists devoted to the research of the practice of the past testify this and the ways of applying them in the Russian system of education are shown (Galiullina, 2010, pp. 241-244, Galiullina, 2012; Yakusheva, 2009). Also, establishing of educational districts in the form of

non-commercial organizations and associations has been begun. For example, the Association "Orenburg university (educational) district" (Orenburg) (Orenburg University (education) district, 2014) and "Kazan university educational district" (Kazan Federal University, 2014) has been formed. They have their own Regulations, in which the system of management of educational districts and the activity of the council of trustees or the meeting of the members of the council are detailed. The Association "University educational district" (Moscow) (University district, 2014) and University municipal psychological and pedagogical university (Novikov, 2012) have been created as well.

The modern system of education in foreign countries has been developed conformable to the experience of the Russian empire on the legislative basis which is formed by the state. For example, in the United States of America, France, China, Iran, Zimbabwe there is a system of school districts. It allows the federal state to provide control and supervision, but the main thing, to influence financing of educational institutions. The government supports districts with a low level of income by investment and stimulates educational districts with a high level of income by taxation laws. Such a way of financing is considered to be the most progressive one (Loeb & Socias, 2004, pp. 85-94). In the state of New York the educational system consists of five big municipal school districts. Management is realized by the councils of trustees of these districts (Downes, 2000, pp. 417-429).

In Western China school districts in rural areas are assigned managing functions in the sector of education. It gives to the central bodies of management an opportunity to consider the peculiarities of outlying districts in realizing the educational policy (Quarshie & Oyedele, 2011, pp. 1236-1243; Liu, Murphy, Tao & An, 2009, pp. 463-473).

Educational districts in Canada are considered to be an instrument of public participation in managing educational institutions. Structurally the Canadian education consists of twelve independent educational systems (educational districts), which represent ten provinces and two northern territories. Each district has its councils of trustees headed by a trustee (Lucas & Lusthaus, 1981, pp. 53-79).

2. Method

The principles of historicism and dialectical materialism, objective character, scientific authenticity and chronological sequence are the methodological base of the research. The method of interdisciplinary integration, usage of knowledge of such sciences as sociology, psychology, pedagogy, political science and law was also efficient. The versatile character of the problem under consideration concerning the revival of the system of trusteeship requires its examining on the basis of extensive base of sources: legislative acts, reference and statistical materials as well as materials of periodical press.

In the English language the phrase A trustee of an educational districts means "An administrator of an educational district". The term Administrator in the dictionary by S. I. Ozhegov is interpreted as an official, who manages something, is responsible for something, manager (Ozhegov, 2003, p. 21). In the dictionary "The ecclesiastical Slavic and Russian language" the term charge is used in the meaning care, zeal, endeavor of somebody or something (Encyclopedic dictionary, 1992, p. 382). A trustee - in the first meaning: a person who takes care of somebody or something (A trustee of an educational district). In the second meaning: "a person, appointed by the government, who is in charge of problems of orphans and people who are under guardianship" (Dictionary of Church Slavonic and Russian language, 1847, pp. 382-383).

3. Results & Discussion

The beginning of the reign of Alexander I is characterized by the continuation of educating traditions of Catherine II, this fact in a great extent was made conditional on the economic development of the country, which required a great number of educated people. Among the state reforms by Alexander I there was restructuring of the national educational system.

In accordance with the decree by Emperor Alexander I on January 24, 1803 "On establishing educational districts, with allocating certain provinces to each" (Full collection of laws of the Russian empire, 1830) the whole territory of the empire and all the educational institutions situated on it were divided into 6 "zones", which subsequently were called educational districts according to the number of being available or planned to be opened universities, which were assigned primary importance in educational districts. By this Decree the first six educational districts were established (Note 1): Saint Petersburg, Moscow, Kharkov, Kazan, Vilen, Derpt.

In 1824 a new division took place according to the same 6 districts, conformable to the dividing of provinces into okrugs of governor-general administration.

By 1867 the educational space of Russia had been represented by 12 educational districts (The code of laws of the Russian Empire, 1893), one krai and two governor-general provinces. The system of education in Irkutsk, Yenisei provinces and Yakutsk region, as well as Turkestan region and other territories had been under the authority of the bodies, which had been called "The main administrations of public educational institutions" of the corresponding territorial unit. In 1874 Orenburg educational district was established. In 1885 – West – Siberian educational district

By the end of the twentieth century there had been 15 districts (Statistical Yearbook of Russia, 1916, pp. 29-30). An educational district had comprised all the educational institutions of provinces and regions.

12 educational districts were administrated by Trustees. In three educational districts the administration of educational institutions was realized through the main administrations of public educational institutions – special structural units of the General Governments personnel: Turkestan, East – Siberian, Priamursk. The centers of the educational districts from 1803 to 1835 were universities, which along with scientific and educational tasks had administrative and organization functions. They were to administrate all the educational institutions of a region, in connection with this fact under the university boards specialized schools were set up and university professors, who were called visitators, were to fulfill the functions of inspectors. The trustees of educational districts were to inspect the districts entrusted to them at least one time in two years, to manage rectors, staying the rest of the time in Saint Petersburg. Each trustee was given 10 000 rubles to pay for journeys to educational districts with the aim to examine them (The collection of resolutions of the Ministry of National Education, 1864, p. 2).

All the educational institutions were in close connections with each other and strict administrative dependence of lower levels of the system of public education on the higher ones was set up.

In 1883 with the accession to power as the Minister of Public Education S. S. Uvarov, the institution of trusteeship was improved and the authority of the Trustees of educational districts was widened. By that time Count Uvarov had been the Trustee of Saint Petersburg educational district for 10 years. He more than once informed the Emperor of the grievous state of universities.

Enjoying the Emperor's great confidence, S. S. Uvarov persuaded him of the necessity to make additions to the previous university regulations. In this connection in 1835 new university Regulations were approved, according to which universities were deprived of the right to administrate middle and low schools and set up scientific societies, and administration of educational institutions was handed over to the direct authority of the Trustees of educational districts. The rector of a university became a representative of a Trustee at a university. A trustee was assigned the central role in university hierarchy and in administrating educational institutions of a district. With delegation of powers over all educational institutions of a district to a Trustee, strengthening of governmental supervision over the provision of security check with the aim of preventing western liberal political ideas took place. The main objective in state reforming was in further approval of the paradigm "nationality, orthodoxy, autocracy", which were national priorities. The significance of an administrative vertical also grew, the scheme of administrating educational institutions was considerably simplified and their financial base was improved.

On June 25, 1835 with adopting new Regulations on educational districts the authority of a Trustee was strengthened, and his power was widened. His official duty was administrating all educational institutions of a district. A trustee and the Council under him were in charge of the state of middle and low educational institutions. In accordance with the law, a Trustee was to live on the territory of an educational district entrusted to him.

Subsequently depending on political conditions and further improvement of educational system, new Regulations were adopted in 1863 and 1884. In the Regulations of 1863 the regulations on a Trustee were limited, but his status remained unchanged. The new regulations remained a trustee's extraordinary authority, leaving him the right of veto in solving important, first of all personnel, issues of administrating.

In accordance with the Regulations of 1884 normative changes in administrating universities took place. A trustee's authority and his leading role remained unchanged. At the same time the status of a rector was raised, though he was still elected by a university board as a collegiate body.

Since 1881 for efficient functioning of educational districts the government provided state support in the form of assigning banknotes to educational districts:

23 750 rubles for Saint Petersburg, for Moscow - 26 550 rubles, for Kazan - 19 600 rubles, for Kharkov - 21 350 rubles, for Kiev - 23 850 rubles, for Odessa - 20 100 rubles, for Vilensk - 22 940 rubles, for Derptsk - 17 750 rubles, for Orenburg - 18 250 rubles (Encyclopedic dictionary, 1993, p. 105).

Having assigned state banknotes, the government took care for enhancement of supervision over educational institutions. As far back as in 1803 the aim of optimization of administrating an Educational district as well as for collective nature of making decisions concerning educational and economic matters, the Council of a Trustee and the Office of a district, which at the same time was the Office of a trustee, were established.

In Regulation norms a whole chapter "On Trustees of educational districts, their assistants and okrug inspectors" was devoted to a Trustee, administrating an Educational district and his official duties were defined. It is necessary to mention that since 1803 till 1835 a Trustee of an educational district was simultaneously a trustee of a university. By the Regulations of 1835 he "was made an absolute supervisor of all educational institutions of an okrug" (Encyclopedic dictionary, 1992, p. 546).

The activity of a Trustee of an educational district was state and public in its nature and by the Regulation norms he was granted authority of administrative character in managing, leading and organizing educational process as well as financial activity of educational institutions of an okrug.

Regarding administration, a Trustee was to realize executive and administrative activity with a view to solving tasks concerning realizing and executing normative and legal base of educational institutions: all governmental orders, directions, Statues and Regulations.

A Trustee solved problems concerning personnel policy in educational institutions of an okrug, the main directions of which were formation of the system of administrating personnel and developing its strategy, planning of personnel work, employment, selection and hiring of personnel, educating, career administrating and promotion. In his office he was granted the right to appoint to a post and fire a Trustee's assistant, an Okrug inspector and the Head of the office of an okrug.

It is necessary to mention that a Trustee's duties included tracking of teachers' educational qualification, for example, to be a teacher of the German and French languages, one had to graduate from university general course. A Trustee of an educational district was authorized to appoint religious teachers, teachers, teachers' assistants, clerks, accountants and housekeepers. As for the candidates to the position of Honorable trustees of gymnasiums, he made a nomination to the Minister of Public Education (The code of laws of the Russian Empire, 1893, p. 68, 229, 324).

Under the authority of a trustee of an educational district there were matters connected with raising the level of professional and teaching staff and administrative and managing personnel's skills and their vacations.

With respect to educational activity, a Trustee was granted the right to approve curricula, study programs, the norms of teaching load, to assigned the volume of load for students and teachers, to define forms and methods of control of subjects, to organize supplementary courses in middle and low educational institutions, taking into account the requirements of a particular locality, to assign the number of classes for departments. A Trustee closely collaborated with local authorities, for example, the Governor's agreement; he organized national readings in the towns of a province. The head of an okrug realized social and partnership ties with public and charitable organizations, trade representatives, the petty bourgeois and merchants of the territory of an educational district. Also, he considered public opinion, the students' parents, their representatives: "having that view that an educational institution as an establishment existing for satisfaction of the need in being educated on the part of the society, first of all must be organized in such a way that the society fully trusts it… closer relations of an educational institution with the society is absolute necessity" (Report of Trustee of the Kazan educational district state Councilor of Stender for review of educational institutions entrusted to his management district from June to October 1863, p. 36, 49).

A Trustee's duty was to watch over students' equitable testing. He approved the regulations of entrance examinations, assessment of academic progress, instructions and Regulations on granting scholarship, the number of budgetary vacancies, work of the library, buying textbooks, appointing librarians. He defined the time and place for public events outside and inside educational institutions. The decisions of the Board of a university and resolutions of the Board of an administration, the Teachers' meeting and the Executive committee were also approved by a Trustee. All the journals of the Board of a university and the records of the Board had to be regularly submitted to a Trustee.

Significant role was assigned to a Trustee in close supervision over moral and patriotic education: "love to the one's closest circle and respect to the elders, devotion to the Throne, reverential gratitude to the Emperor and the ardent love to the motherland and by all means to support in them affection and obedience to their parents and to those people who act as their parents" (The code of laws of the Russian Empire, 1893, p. 179). He sanctioned the

rules of wearing uniform in educational institutions. So, a Trustee was entrusted with the responsibility for introduction and approval of national ideas in the youth environment.

In financial activity according to the law a Trustee was supposed to receive a certain fund, which he might annually distribute in accordance with the budget of Educational institutions. This budget was carefully checked and analyzed by a Trustee, and then he approved and controlled the expenses and income. Educational institutions, receiving certain sums for their maintenance, in their term, were responsible for their integrity and distribution in accordance with the staff list, contracts and distribution.

As for the order of receiving, storage and spending (accounting and accountability) of monetary funds, coming to educational institutions, a trustee followed the rules of the General Counting Regulations of the Ministry of Public Education and additions, which were detailed in the Statutes and Regulations of educational institutions.

A Trustee also had the right to extend credits on petitions of Inspectors and Directors of educational institutions for their needs as well as to take decisions on their shift within one and the same paragraph of the financial estimate. A trustee was granted the right to appoint the Housekeeper, a person, responsible for economic security of a university.

A Trustee straight took part in attracting additional sources of income and private donations for the needs of education. This fact emphasizes one more important social and economic function of a Trustee of an educational district, which was realized when awarding with nominal scholarship. By law educational institutions were allowed to accept charitable contributions. For this a Trustee, on the basis of petitions of the founders of educational institutions or other people, who wanted to provide pecuniary aid, took a positive decision in those cases when the contributions were ensured with cash, or securities, but only that sum, annual interest on which corresponded the sum of the scholarship established. These sums should have been deposited in the State bank or its branches (offices) or in accordance with the order which was in force in particular offices. In those areas of the Russian Empire, where mortgage system was in effect, the sums were allowed to be deposited in property in land (The code of laws of the Russian Empire, 1893, p. 63).

Under each Trustee of an educational district there was a Council of trustees as a consultative body, in which, under his chairmanship, a Trustee's assistant, okrug inspectors, directors of educational institutions, university professors and teachers (on special invitation) were in session. In case of a Trustee's illness or absence his duties were executed by one of Okrug Inspectors.

Matters of administrative and educational character, defined by a Trustee, were subject to consideration of the Council of trustees. Besides in state specialized schools of an educational district a Trustee approved the structure of their Councils of trustees. Concerning municipal, land and class educational institutions, the supervision over their Councils of trustees was entrusted to one of the members of the Council of trustees of an educational district. The personal staff of the Councils of trustees of specialized schools comprised an honourable trustee, the head of a specialized school and two members of the Pedagogical committee.

The head of the okrug exercised direct control over educational institutions of an okrug in the form of personal inspection of educational institutions (at least one time in two years), or by means of officials (a trustee's assistant, an inspector of government specialized schools, visitators from the number of professors). Subsequently a Trustee represented the interests of educational institutions in the Ministry. For a Trustee's consideration with further reporting to the Minister of Public Education the matters were submitted, which concerned the elections of professors, teachers, honorable members and correspondents on the competitive base as well as diploma issuance.

According to the statuary norms a trustee did not get a salary for his trustee activity, he was supposed to get some money depending on his rank. A Trustee of an educational district had the IV rank in the Table of ranks. The members of the Council of trustees had the right to wear uniform of the VI rank of the Ministry of Public Education, in this way the state supported their high status.

4. Conclusion

So, a Trustee of an educational district was entrusted with wide powers. And as he had a direct access to the Emperor, his influence on the course of university life and educational institutions of an okrug was not inferior but even exceeded the power of the Minister.

Thus, at the beginning of XIX century on the Emperor's initiative educational districts were formed and the position of a Trustee of an educational district was set up, who became the central figure of the educational policy of the Russian Empire with forming the administrative and economic bodies under it. A Trustee was a state official and had a legal status. Also he was entrusted with executive power. The key functions of a trustee

were enrichment of the substantial activity of the educational system, executive, administrating social and economic. All this was the power and force of the state system of administrating educational institutions both in central and regional systems. All this was a decisive condition in historical success of the national educational system of that period.

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Note

Note 1. Departmental okrug in the Russian empire – a territorial administrative structure, subordinated to a state institution (department). Okrug – an administrative territorial unit, established for a particular sector of management.

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Russian as Native, Non-native, one of Natives and Foreign Languages: Questions of Terminology and Measurement of Levels of Proficiency

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Abstract

The 21st century has brought globalization of people's lives and education. Dramatic economical, political and natural cataclysms has made our planet's population mobile and that concerns not only highly developed countries but also so called the third world countries. While moving and changing their places of residence people bring with them their native language, their culture, knowledge and experience. They also bring to their new county of residence their own perception about communication, both an inner communication and an intercultural one. Bulat Okudzhava said in one of his poems, "To understand each other is a sacred science", and today this approach to communication becomes a vital necessity in everyday life, in the sphere of science and education, in real space as well as in the virtual one. While people actively learn foreign languages with approved status, minor languages become suppressed in spite of the fact that the population - bearers of these minor languages are quite numerous and these bearers should be taken into consideration. But this problem is likely to be referred to politics. In the frames of practical educational activities we deal with various problems. One of them quite often causes obstacles not only in organizing of the methodically correct educational process but also in its monitoring process. Its impact on marking the final results, on achieving targeted competences - all these are the subjects of correct terminology. To be more precise – correlation of terminology that is accepted in Russian Federation and in the world (in the first place in Europe, the USA, Israel).

Keywords: language as native, language as non-native (one of native), family language, the foreign language, natural two-and multilingualism, national component, migration, global educational space

1. Introduction

Hundreds of dissertations, textbooks, and scientific articles have been dedicated to the study of Russian as a foreign language. (For example, we remember the textbook written in the 1960s specially for Americans by Alexander Lipson and Stephen J. Molinsky).

We have written earlier about differentiation of the terms "Russian as non-native" (RAN), "as one of native (another native)"(RAAN) and "Russian as foreign" (RAF) (Berseneva & Kudryavtseva, 2013) earlier. Here we will revise once again only the key moments: 1) Is terminological division on the basis of exclusively territorial sign (geographical distribution of Russian) possible? It is unlikely, as in that case we can and have to speak about RAN and RAAN on the territory of the former Soviet republics practically as about the synonymous phenomena opposed to RAF (which is gradually taking place of RANN and RAAN) and Russian as native.

In the national districts of the Russian Federation where Russian is the state language, we traditionally speak about "Russian as native" (RAN) though, actually, its even subjectively perceived position (the number of communications occurring in life and used in mass media not in Russian, but in local national languages and in Russian too as well as in other languages) RAANin Tatarstan, the Yamalo-Nenets Autonomous Area and in Udmurtia is various (taking into consideration a position of the Tatar, Nenets and Udmurt languages respectively) and the attitude of representatives of indigenous peoples towards him is various.

Migrants – from the Russian Federation who move to foreign countries and from the CIS countries and the former republics of the USSR who move to the Russian Federation - turn out to be in a "grey" field, in other words in a gap caused by "territorial" partitioning.

In accordance with the Russian educational system all children of migrants living in the Russian Federation have to get their education in Russian and an ultimate goal for them is to pass Unified State Examination. Therefore, requirements to them after finishing school are the same as to the RAN carrier, without taking into account their national languages and cultures (according to Federal State Educational Standard (FSES) – "ethnocomponent"). And that has a crucial impact on educational process. When they enter the educational system, they sometimes face the conditions, that are considered to be functioning as propaedeutic courses or introduction courses of RAF (for example, "Schools of Russian" in Moscow).

The former USSR and the CIS children who migrate with their parents to other parts of the world often continue to be taught in the centers of additional/supplementary education where RAN is based on materials and reduced programs of Russian schools. The reduction reaches two thirds of the entire amount of the material (up to 40 hours per year), despite the fact that their educational needs (Russian school-leaving certificate, Unified State Exam**,** etc.), the level of their communication in Russian and the level of proficiency in Russian differ significantly from their Russian peers. At the same time those teenagers with Russian as their mother tongue (2L1), i.e. "heritagers" (heritage language) become so-called "early recessive bilinguals" i.e., they have become bilinguals since childhood, but one of the languages regresses (the process of "fossilization" / "Fossilisierung" by S. Montrul). Can that happen with the native language? With a foreign one as non-native – yes, that can happen. As far as the native language is concerned, the problem is complex. Scholars' and researchers' opinions in this respect are divergent (Montrul, 2008).

At last, **the concept of "a native language" depends on temporary and legal parameters** in different countries of the world (the opinion of carriers, and also their level of proficiency in the language aren't taken into consideration.). For example, at university of St. Gallen (Switzerland) the native language is considered to be the one in which the student received the school-leaving certificate. If a learner studied in different countries, the native language is considered to be that one in which the learner studied at least for 8 years.

2) Another way of learners' division into categories of RAN, RAF, RANN, RAAN is the way of **an assessment of their lexical, grammatical, auditional, reading and speaking competences**. This method is time-tested, and working for many languages in many countries of the world (Testing Russian As Foreign (TRAF) is based on levels of the European language portfolio and actually is Unicertili TOEFL of "the Russian sample").

2. Methodology
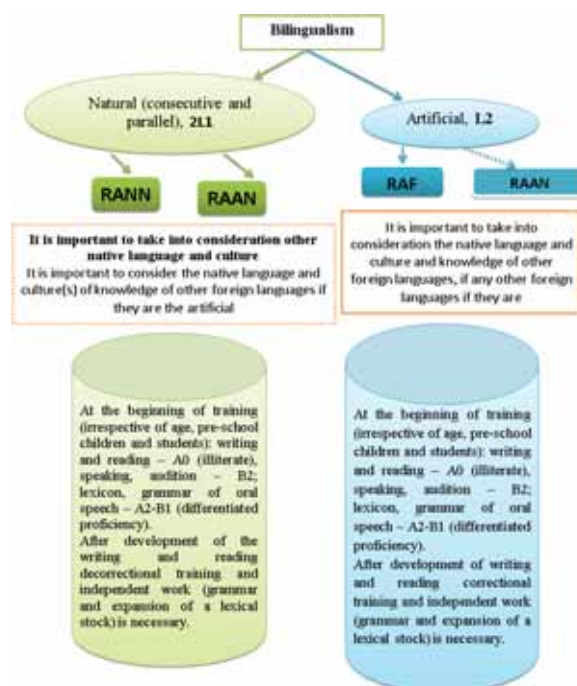
Figure 1. Realization of bilingualism in educational process.

Let's look how levels of the **European language portfolio** are corresponding to the concepts necessary for a choice of a technique, finding so called "key" to each learner and choosing of an individual training and educational process : RAN, RAF, RAAN, RANN.

Concerning RANN carriers (Chechens, Georgians and Abkhazians, migrants from the republics of Central Asia) with the same basic experience (except for one – the personal relation to the language and its carriers inherited from the senior, previous generations), – the similar accelerated growth of communicative competence in Russian wasn't observed.1 It's important to notice that we mean communicative competence with all its components, if to take into consideration the five "key competences" accepted in 1996 in Bern (Hutmacher, 1996, p. 38) and defined as bridges between knowledge and ability to use it.

Thus 2L1 = 2 native languages (two "first languages" - the term accepted in the world for a natural bilingualism; division into non-native and another native or one and another native languages does not exist). To illustrate that we can give examples when RAAN carriers (for example, "Russian Germans" who speak Russian at home to family members, but are not competent neither in writing, nor in reading in Russian), after having studied for 2 semesters at the course for beginners (A0, with further aim of A1), continued at the advanced courses (B1 and even B2) and successfully passed examination in the end. All that was achievable on the following conditions: an individual approach during the training and educational process from a teacher's side (the correctional, "filling in" training) and purposeful self-education.
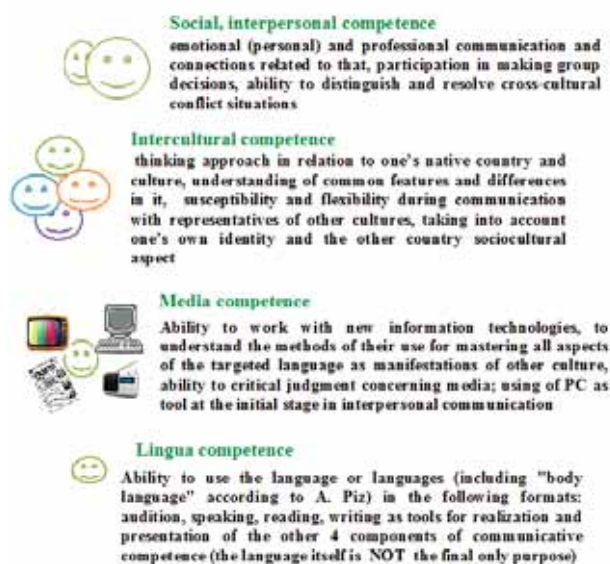
Figure 2. Components of communicative competence (the terminology accepted in the Russian Federation like "linguamultimedia competence" shows only one part of this structure and leads to a wrong understanding of its functioning)

Variants of realization of the abilities described above, opportunities and readiness (desire) to master (RANN / RAAN) and to acquire (RAF) Russian, – are non-limited. In our gained experience it is easy to find situations when the RAF carrier is at the level of A1 (linguistic competence), but at the same time the knowledge of Russia, its history, culture, life was much more profound and extensive than of those who were the carriers of Russian as native and were at the same age category. In the audience there was also so-called "the Russian foreigner" knowing Russian as non-native at the level of B2 (linguistic competence), but due to specific private circumstances not using it in daily communication and didn't seek for obtaining information in Russian from original Russian sources. Such examples are well demonstrated in the article "The Russian Language in Ireland: the Dialogue of Cultures" (Snigireva, 2013, p. 136).

Therefore, the level of proficiency of communicative competence (A1-C2) of the linguistic component does not demonstrate the general level of communicative competence and cannot be considered as the only ground for its assessment.

Based on of the Figures provided above, we could see that all components of communicative competence have a direct connection with the identity of the learner. We also saw that while defining the differences between RAF

and RAON we incline towards the personal relation between a learner / speaker and the language as a generated concentration of the national consciousness / world perception and the carrier of ethnocultural content. In the end all the components of communicative competences will be shown to you, while a learner/speaker is introducing himself. It could be either, "Hi, I am Daniel", or "Good afternoon, my name is Daniel Vilfridovich", or even "My name is Daniel. I am very pleased to meet you" …

4. Discussion

Many scientists were engaged in problems of relationship between ethnic culture and the language itself. The ideas of A.v. Humboldt gained the greatest fame. "Studying of the language opens for us, besides of its use as such, analogy between the person and the world in general and between each nation which is definitely expressing itself in the language" (Gumboldt, 1964, p. 348). According to Humboldt's ideas, any language is a heritage storage of national spirit, culture, it is "the joined integrated spiritual national energy, wonderfully imprinted in certain sounds" "neither any concept can exist without a language, nor any subject can be taken by us to our insights without it"(Gumboldt, 1964, p. 349). "There is a unique world observation in each language. A human being lives surrounded by subjects, can feel them the way the language describes them. Each language makes a circle around the nation to which it belongs, and to leave that circle is possible when a person enters a circle of another language" (Gumboldt, 1964, p. 80), therefore "the differences between languages represent something bigger, than simply signs' variations. In fact, different languages in their essence and influence on knowledge and feelings, are actually various worldviews" (Gumboldt, 1964, p. 370). This issue was further researched in its development in Russia in the XIX century, and especially during the last decades both in the Russian and foreign linguistics. According to Rafieyan et al., "familiarity with and awareness of the cultural features of the targeted language community and the awareness of the differences between source language and targeted language cultural features really facilitates learners' understanding of the targeted language" (Rafieyan et al., 2013, p. 131).In other words, "language, defining the type of consciousness, predetermines the learner's attitude (we take a situation when Russian is language of communication of the older generation)" (Berseneva & Kudryavtseva, 2013, p. 182). "As an immigrant…. familiarity with the official language, that immensely valuable and essential tool of communication, has been a determining factor in the process of acculturation" (Imberti, 2007, p. 71):

If to show the mentioned above in a table, we get the following:

Table 1. The levels of the European language portfolio for the native speakers as a foreign language: A1 - C2 and the levels distinguished according to the subjective relation of the native speaker to the language: RAAN, RANN (RAN and RAF usually become objective corresponding to the individual biography of the native speaker)

The levels of the European language portfolio for the native speakers as a foreign language: A1 - C2	The levels distinguished according to the subjective relation of the native speaker to the language: RAAN, RANN (RAN and RAF usually become objective corresponding to the individual biography of the native speaker)
First of all, the levels of the linguistic component of communicative competence are required; the other components are not taken into consideration while testing	The levels of socio-cultural, ethno-cultural and I-component of communicative competence are taken into consideration
Knowledge of the language rules and speech standards	Skills of situational use of the language in the context of the native speakers' culture.
Training and self-training. Learning of the language using models/ patterns, standards	Education (self-education) and/or training. Familiarization or/and learning of the language samples/ patterns
External environmental motivation (study, work, status, etc).	Internal and external motivation.
Evaluation /marking of the vocabulary, grammar, writing, reading, listening, speaking skills. Possible division into components and their evaluation/marking	Assessment or complex indivisible attitude to the language through a deep knowledge of the culture (the process of objectification takes place through the assessment tasks, the course and results of communication with all participants in a particular situation)
Knowledge of the language norms is primary	Feeling of the language is primary
Language as a purpose	Language as a tool
Objective assessments	Subjective self-assessment
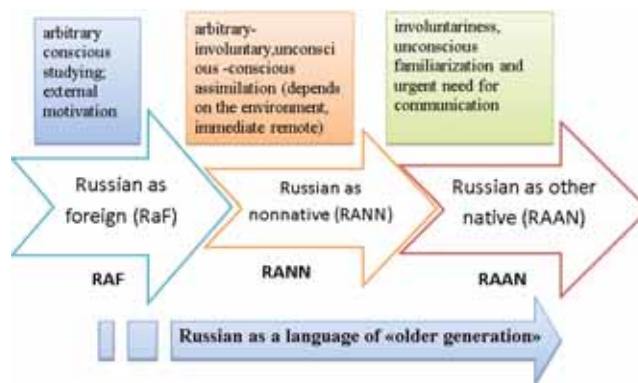
Figure 3. Types of bilingual relations/attitudes to the Russian language ("linguistic self-identification" and "Every language contains its own naïve picture of the world including its own ethnopsychology" (Apresjan, 1974,5-32) and "doubleness" experienced by bilinguals : "that of a neither/nor identity, rather than a both/and identity, which had also been referenced as " outsider-ness" in each of her contexts."(Burck, 2004, 323) and "cultural borderlands" (Rosaldo, 1989, p. 19)

Language teaching methodology should be based on the sum of all these components, and therefore should use the methods and techniques of ethno-cultural content in the most active way. For example, using the method of online tandems (Kudryavtseva, 2013a; Kudryavtseva, 2013b).

In verbal communication differences between RAAS and RANN carriers appear more clearly than in writing that is restricted by standards and norms. For RAAN it is characteristic to accept the language and culture as integral parts of a speaker. They can be either his/her own or acquired. The following issues can be taken as characteristic: 1) the richness and variety of forms (corresponding to the level of proficiency and in accordance with the European Language Portfolio); 2) the willingness to continue the dialogue / monologue, even if there are difficulties (if necessary in such cases repeated requests for clarification, assistance in finding lexemes is asked for); 3) positive emotional attitude; 4) active position (offer / request for information / action); 5) creation of new words; 6) suppression or absence of "fear of communication" with native speakers and some others.

Whereas in the case of the perception of the language (and culture of its carriers) as "non-native / externally imposed" (alien) the following issues are present: 1) so-called "blockage", first of all, of the spoken language; the wish to stop the conversation as soon as possible or to find a different language that could help; 2) occurrence of negative emotional condition, even the state of depression   in case when communication goes on using the non-native language; 3) "fear of communication" with native speakers; 4) passive position (short answers, avoiding them); 5) the use of "body language"(A. Pease & B. Pease, 2015) to demonstrate the lack of interest in the conversation; 6) unwillingness to create/invent words, the use of learned cliches and memorized phrases.

Clarification of the child's attitude to the language (s) at an early age (for example, using the program "RoadMapBilingual") and the objectification of this attitude through the family history and the "RoadMapBilingual" contributes to: a) individualization of approach to keeping / learning each of the languages of the child concerned; b) prevention of the recession of the language or complete rejection of communication using one particular language; c) defining of the family importance role and of an educational institution in each case separately, and correction of their interaction with the child and with each other.

What is to be done for testing of natural bilinguals? Is it advisable to test only one of the two (2L1 or native and non-native / the term and description of the shown situation in the European and American literature does not exist) languages? How detailed and realistic is the concept referring to being a bilingual, that can be derived from the test of his knowledge existing in his mind only due to one national culture? Take, for example, testing of the active and passive vocabulary (keeping in mind that the language is just a tool to reflect the extra-linguistic reality). Cards with pictures, divided into thematic groups are offered for the tested. The tester gives the tested a word stimuli. The task of the tested is to select and to pick up the appropriate definition and to present it to the examiner.

Example: http://images.pearsonclinical.com/images/Products/PPVT-IV/ppvt4.pdf

For testing RAF, RAN, RANN, RAAN (unifying principle for all test - Russian)
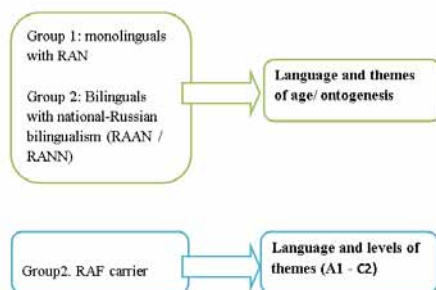
Figure 4. What is checked during testing RAF /RAN /RAAN (unifying principle for all test - Russian)

In the first case (Figure 4), it makes sense to compare the results of the test only in the first two groups of tested (to determine whether the language bilingual averaged typed-level language development of children / toddlers); since the topics corresponding to age division and topics of RAF levels are not the same.

In the second case (Figure 5) it is possible to juxtapose all the three groups tested for identification of the proficiency level of natural bilinguals by each native language in accordance with the same indicators of the native speakers as the only native ones.

The topics are selected correspondingly:

1) "home" topics (for example, furniture, kitchen utensils)

2) "neutral" topics which are shown in the conversation indoors and outdoors (for example, toys and clothes, food)

3) "outdoors" (kindergarten, school)" topics (e.g., school accessories, names of the subjects that are being studied).

The "family" language, used for communication at home (passively and actively) gets its own niche for estimation of the level, in comparison with the social language of the host country, "external social environment". Besides that, we get the opportunity to identify languages interaction (for example, we observe more frequent interference in the topics from the second group).
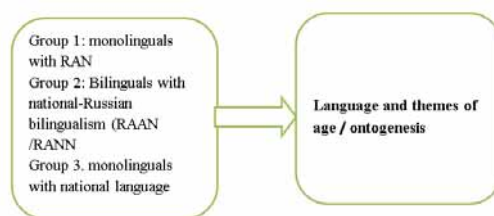
Figure 5. What is checked during testing proficiency in each of the languages of the bilingual (unifying principle - the age limit test)

Table 2. The main results. Consequently, we can view the following comparison Figure of RAN, RANN, RAAN, RAF (Montrul, 2008)

Juxtaposition parameters	RAN (including national districts of Russia)	RAAN (the Russian-speaking diaspora in the countries of the its scattering)	RANN (migrants of the 2nd generation in the Russian Federation, citizens from the former republics of the USSR)	RAF (including foreigners learning Russian in the RF)
Language sources (by whom "the entry"is introduced)	The country's society and family	Family	Family and/or society (the part of the society)	Educational organisation (for the learners of the RAF in the RF, society as well)
The way of "the entry" and communication at the	Oral	Oral	Oral or oral and written	Oral and written

initial stage

The age of the entry into a language	Listening to the language from the birth	Listening to the language from the birth	Various	Depending on the country - usually from the age of 9 years old (at a specialized school where RAF is taught) and older
The purpose of entering into the language	Communication in all spheres of life, self-expression	Communication with the family member and acquaitances (home, domestic), self-expression	Communication with the family members (home and domestic) and / or society/part of the society (educational or professional	Communication with carriers of RAN (in the majority - professional or educational area; for all who study in the RF - also domestic)
Norm-setting and spontaneity of entering the language	Spontaneity of the original, at pre-school and at school – normalization of spontaneous material already received	Spontaneity, often without the following normalization (the language is studied neither at school, nor and higher institution)	Spontaneity from the very beginning, at pre-school and school – normalization and deepening of already spontaneously received material(on the condition that the language is studied at pre-school and school of the region	Initial language learning with the help of models and taking into account the standards (for students in Russian Federation – with the presence of a natural spontaneous component)
What caused the selection of the topics (age / ontogeny, level of knowledge)	Age / ontogeny, topics corresponding to this particular age	Age / ontogeny and the situation /communication sphere (home, domestic)	Age / ontogeny and the situation / communication sphere	Levels of proficiency
Type of entry (mastering / development / learning)	The development, (spontaneous) and mastering (in accordance with norm-setting)	The development (natural) and mastering (in accordance with norm-setting, with further following studies, if any)	The development of (natural) and assimilation (rationing in subsequent studies, if any)	Studying

The presence of natural language environment	Yes, without any restrictions	Yes, at home and in the diaspora	Yes, at home and/or in the society	No (for those who study in Russian Federation - yes)
Levels of proficiency	Native language	Speaking and auding in the domestic environment - similar to the native language carriers (though the richness and variability of lexical structure is behind); writing, reading - from A1 to B2 (RAF) with specific errors (due to the interference and rusophonia)	Close to RAAN	A1-C1 (C2 is achieved seldom); professional modules – up to B2, C1 are rarely met
The probability of loss (fossilization)	Only in the case of mental or physical illness	Complete loss usually is impossible (except deliberate suppression of the language from the early age); in case of termination of a regular language contacts with native speakers - partial fossilization or lack of development	Complete loss is usually associated with the suppression of (deliberate) non-status language from an early age by the carrier as well as by environmental conditions in case of termination of contacts with native speakers - partial fossilization or lack of development	Total loss is possible when there is no regular language communication (no language environment existing, no using of media and etc.)
The quality of the language	Not limited by the context of familiar situations, constantly expanding	Restricted by the context of domestic situations, if no work is being done to expand domestic context	Limited by the context (family) or educational (public) situations, if no aimed work is being done to expand domestic context	Limited by the context of studied/familiar situations
The scope and nature of the language practice (situations)	Wide range of aspects in different types of situations and areas of	The practice of family communication and communication inside of diaspora (when visiting the Russian Federation the	Practice is limited by carriers of the Russian language as non-native in the family and /or society	Practice is limited (if education takes place outside of the Russian Federation) by educational context and by a standard

	communication and also in numerous varieties of social activities	practice widens), the main social role is of a junior member in the family		set of offered situations.
The scope and nature of difficulties	Possible lack of vocabulary (due to ontogeny and environmental social conditions), the nature of difficulties is also defined by the specifics of ontogenesis	The scope and nature of the language practice define in the majority of cases the scope and nature of difficulties in language learning: keeping by the teachers and parents the ruling principle: 1 person - 1 language, consistency in the use of languages, increasing of situational contexts, etc. The main problems are associated with "code switching" (linguistic and behavioral), the so-called interference at all levels	Similar to RAAN	The scope and nature of difficulties are associated with the volume and nature of the language input into the Russian language and with the formation of the communicative competence in the mother-tongue, and other foreign languages of a learner
The reasons for difficulties (absence of developed norms, interference)	Unformed standards/ norms	Unformed standards/norms and interference	Unformed standards/norms and more rarely - interference	Unformed standards/norms and interference
The presence and nature of word creation in the language (languages, between languages)	Creation of words is based on the deliberate violation of linguistic norms of the native language (it lasts throughout the life	Creation of words, (mostly in the pre-school years) is based on the juxtaposition of languages; at an older age it is also possible on the same grounds	Minimum amount of word creation; may be based on violation of the norms of one language, and the juxtaposition of languages	Creation of words in Russian or with the use of the Russian language is practically absent
The presence and depth of ethno-cultural context (that is necessary for understanding of a subtext as well)	Present, the depth depends on the level of general education, availability of media competence, etc.	Present for each of the cultures; for Russian - to the extent that it is passed by the older generation and mastered independently then (usually it is much lower than the native speakers' level)	Present, approximately on the same basis/grounds as that for RAAN	Minimum due to the impossibility of studying "ethnosemantics" which is received only as a result of regular, permanent contacts with native speakers
Availability of language competition	No	Yes	Yes	No

5. Conclusion

We think that time has come, when it became necessary to rank levels of language competences for different groups of population in various countries. For example, in bilingual Tatarstan, in which representatives of the Tatar, Russian and other native speakers of the world live, (due to functioning of free economic zones) teaching Russian and other languages (native, non-native, foreign) becomes very vital. That is why the precise definition of the criteria of competences formation becomes an actual issue.

It is possible to achieve significant results only following the described way: using a profound and accurate differentiation system for language proficiency levels and setting up of a proper educational training. Daniya Salimova and Hope Johnson definitely confirm that, "In any case, we can confidently assert that the bilingual and multilingual community of the twenty-first century, and specifically in connection to the intensifying momentum of the opening of borders and mobilization of culture and ethnicity, it is possible for an already advanced student to achieve fluent bilingualism even with domination of the native language (English) in a relatively short time: 100-120 hours of one-on-one lessons built on complex methodology rich with modern elements ". (Salimova & Hope, 2014, p. 223)

And we would like to join the opinion: "Sometimes the acquisition of a new language can provide a person with the "right expression" for a particular sentiment, and thus can be used as a coping mechanism to express emotionally loaded experiences. ...a second language served as a vehicle to become more self regulated by finding ways to verbalize feelings that were once censored or restricted by external forces" (Imberti, 2007, 71). We would like to invite the readers also for helping and showing initiative - within the scope of our researches. (Peters & Koudrjavtseva, 2014; Koudrjavtseva & Volkova, 2014).

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Improving the Methodology of Disposition of State Support Funds for Agriculture under the WTO Rules

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Abstract

The author considers the current financial status and the efficiency of agriculture in Russia, evidenced from the Novosibirsk Region, as one of the leading food producers in Siberia. The basic disadvantages in the system of indicators to assess the effectiveness of state-run programs and the use of state support for the agricultural industry development are identified. The author has proposed the indicators enabling one to objectively reflect the current status of agricultural producers. These indicators can be used by the state when creating favorable conditions for expanded and innovative reproduction. They were used to determine deficiency of the state funding of the agricultural industry at different types of reproduction.

Keywords: agriculture, government regulation, technological progress, reproductive processes

1. Introduction

Ensuring food security of the country was of particular importance in the policy of any state at all times. Today, Russia needs it most urgently. Agriculture can be considered the second most important industry after oil and gas production.

One of the major problems of agriculture in Russia is a violation of various parameters of reproduction in the agricultural sector. These parameters help to improve the efficiency of agricultural production (e.g., significant technical and technological backwardness of agriculture, resulting from a violation of the reproduction process of primary factors of production).

Features of agriculture have a significant, predominantly negative impact on the reproduction process that necessitates identifying options and scenario forecasting of its development to support corrective package plan (Sidorov, 2012). The main condition for capital reconstruction is the availability of sufficient financial resources in enterprises. The sources of these resources can be both internal and external. Therefore, ensuring the effective management of this process requires monitoring and careful predictive studies of required investment resources in agriculture. This will give the opportunity to develop a policy in terms of reproduction, involving the use of amortization, profit, borrowed funds and other financial means (Menyaykin et al., 2014).

Provided adverse climatic conditions of Siberia and inability to cover the costs of gross production, as well as preserve farmland and ensure socio-cultural development of rural areas by the revenues from the agricultural organizations, regional agriculture needs state financial support.

Study of the works of leading scientists, dealing with the problem of state regulation of agriculture and making a significant contribution to the development of theory and practice, made it possible to determine the two main vectors of the research: first, improving the legal framework and increasing amounts of state support (Tyu, 2003; Emelyanov et al., 2009; Kolesnikov et al., 2014; Bistrov et al., 2014; Shishoff et al., 2013; Neshchadin, 2010; Bulanava, 2006; Sviridov and Petrenko, 2010; Koshelev and Danilova, 2008); second, financial recovery of the agricultural producers and improvement of credit and financial system providing the industry with financial resources (Urbanskaya, 2005; Yunyaeva, 2009; Proskurina, 2010; Voitleva, 2011; Charykova et al., 2012). Particular attention is paid to the state regulation of the availability of borrowed funds for agriculture and its investment attractiveness to private and foreign investors, both at the regional and federal level.

2. Methodology

The methodology used in the current research included abstract and logical approach, monographic, economic and statistic techniques, as well as settlement and constructive method. Monitoring of targeted programs, methodologies and approaches to evaluate the effectiveness of state support for agriculture revealed their significant drawbacks. Thus, the existing system of indicators to assess the efficiency of agricultural production and its subsidization was supplemented applying abstract logical method.

Using the statistical research technique, the analytical grouping was conducted, which helped to identify the effect of state support on production efficiency of the agricultural organizations in the Novosibirsk Region and to develop the distribution map of agricultural enterprises of the Novosibirsk Region in terms of their level of profitability and economic return. The use of settlement and constructive method allowed author to define standards for budget support of agricultural enterprises in the Novosibirsk Region on the basis of the proposed methodological approach, taking into account the level of reproduction.

Conducted correlation and regression analysis revealed a relationship between the level of subsidization of agricultural production and accounts payable of agricultural enterprises.

3. Results

As part of the study, the analysis of today's financial status of agriculture in Russia was carried out. This revealed certain negative trends in its development, such as an increase in accounts payable that has a negative impact on financial stability and independence of agricultural producers. Another negative trend is associated with slowdown in the technical re-equipment of the agricultural industry, which was provided mainly due to the active involvement of borrowed funds.

The author proposed a scoring system that allows not only more objective evaluation of the agricultural organizations effectiveness, but also the use of the state financial support. The use of proposed indicators when monitoring the implementation of government programs will allow early identification of deviation from the intended course and making timely adjustment of the main activities aimed at developing the agricultural industry and improving the investment climate.

4. Discussion

During the years of Russian agricultural economic reforms in 90s, as well as in the whole economy, one could observe the decline in production, reduction in fixed assets, as well as a massive outflow of skilled labor and investment capital. Just in 2006 the government approved the priority national project "Development of Agriculture Sector" for the period from 2006 to 2007, which allowed formation of the main development vectors of rural areas in the country. Also, as part of this statute, a substantial increase in state support for agricultural producers was provided (Table 1). In the future, this project served a basis for the development of the State Program "Development of Agriculture and Regulation of Agricultural Commodities Markets, Raw Materials and Food for 2008-2012".

The highest growth of the state support was observed during the first years of program implementation. In subsequent years its increase was not more than 10% per year. In the funding dynamics the greatest changes were observed in the livestock farming, where the growth for the analyzed period amounted for 132.8 billion rubles (almost 4 times). Support of crop farming was provided on more stable basis (Table 1).

Table 1. Dynamics of the state investments into the fixed capital in agriculture, billion rubles

Indicators / years	2005	2006	2007	2008	2011	2012
The total amount of state investments into the fixed capital in agriculture. including:	78.8	140.0	211.8	236.5	259.3	281.3
- crop farming	33.7	53.2	78.2	93.7	84.4	87.8
- livestock farming	44.5	84.3	130.1	136.5	165.9	177.3

However, the level of financial flows into the agricultural production is still low. In 2006, investment intothe industry fixed capital amounted to about 3% of the total volume of the country's economy. This is mainly due to the fact that agriculture, as a sector of economy, is exposed to more risks than industry or services, and is not able to provide a stable competitive return on invested capital (Menyaykin et al., 2014).

The main lines of state support for agriculture in the period from 2006 to 2012 included the construction of buildings and industrial facilities, as well as updating the machine and tractor fleet. The amount of funding for these purposeshas increased by 8.4 and 2.4 times, respectively (Table 2).

Table 2. Structure of state investments from the federal budget into the fixed capital in agriculture, billion rubles

Indicators / years	2005	2006	2007	2008	2011	2012
The total amount of state investments into the fixed capital in agriculture. including:	78.8	236.5	198.0	203.7	259.3	281.3
- dwellings	0.5	1.0	1.2	0.9	1.4	1.2
- buildings (except residential) and structures	13.2	83.7	81.5	87.9	101.9	111.3
- machinery, equipment, and vehicles	43.5	116.2	75.6	74.3	105.3	110.6
- other	21.6	35.6	39.7	40.6	50.7	58.2

Russia's accession to the World Trade Organization (WTO) required adjustment of the state support lines and amount of financing that were reflected in the State Program "Development of Agriculture and Regulation of Agricultural Commodities Markets, Raw Materials and Food for 2008-2012". The Programwas to provide the following:

1.   The country's food sovereignty within the parameters specified by Food Security Doctrine of the Russian Federation.

2.   Reproduction and enhancement of efficient use of agricultural land and other natural resources, as well as green production.

3.   Sustainable development of rural areas.

4.   Improving the competitiveness of Russian agricultural products in domestic and foreign markets based on innovative development of agribusiness, creating an enabling environment for entrepreneurial development, and increasing the investment attractiveness of the industry.

5.   Ensure the financial sustainability of agribusiness industry producers (RF Government Resolution of July 14, 2012, №717).

In 2014, the largest share in the structure of expenditure under the State Program occurs on the development of the livestock farming, as well as processing and sale of industry products that amounts for 92.3 billion rubles (36.3%). To support crop farming, processing and crop product sales, as well as elite seed farming, 43.4 and 13.9 billion rubles were allocated, respectively. State investments in technical and technological modernization and innovative development throughout the whole period of Program implementation will be an average of 3.58 billion rubles annually.

An effective mechanism for encouraging investments is subsidizing of credit interest rates of agricultural producers. In a number of the Russian Federation entities, the amount of funding under this cost item is up to 60-70% of the total funds allocated from the federal budget. Currently, the total debt on obligations of agricultural organizations in the Russian Federation is about 1.43 trillion rubles that is 3 times more than that in 2007. The amount of the debts on bank credits increased by 5 times and amounted for 1.0832 trillion rubles. Such level of debt load in the context of high-risk and low production efficiency has negative impact on the financial status of many commercial farm units.

Starting from 2013, the basic statutory instrument, determining the development of agriculture in Russia, is the State Program "Development of Agriculture and Regulation of Agricultural Commodities Markets, Raw Materials and Food for 2013-2020". Prognosis nits implementation is based on the achievement of number of indicators, as well as specific indices showing the implementation of the subprograms and federal target programs, included into the State Program.

As part of the State Program's main indicators, the following economic prognosis is expected:

1. The index of agricultural production in all categories of farms by 2020 compared to 2012 will amount for 120.8%, including crop production (121.2%) and livestock production (120.2%);

2. The index of food production, including beverages by 2020 compared to 2012 will reach 135%;

3. The index of physical quantity of investments into the fixed capital in agriculture in 2020 compared to 2012 will be 142%;

4. The level of profitability throughout the whole economic activity of the agricultural organizations by 2020 will be at least 10-15% (including subsidies);

5. The proportion of wages in the agricultural organizations and the average wage in the national economy by 2020 will reach 55% (Government Resolution of July 14, 2012, №717).

We see that the key performance indicator of agricultural enterprises is the level of profitability assessed throughout all economic activities.

Table 3. Classification of agricultural enterprises of the Novosibirsk Region in terms of output profitability inclusive the subsidies for 2013

№	Organizations zoning depending on their efficiency	Criterion	Number of organizations		Relative variationin 2013 as compared to 2012, %	Persentage in total amount, %	
			2013	2012		2013	2012
1	Highly profitable (green zone)	$R_{output} \geq 40\%$,	45	40	112.5	10.4	9.7
2	Commercially viable (blue zone)	$0\% \leq R_{output} < 40\%$	270	304	88.8	62.4	74.2
3	Marginal (purple zone)	$R_{output} \leq 0\%$	118	65	181.5	27.2	16.1
	Total		433	409	-	100	100

Analysis findings of agricultural enterprises in the Novosibirsk Region showed a noticeable predominance of the second group of organizations, which includes the economies with the level of production profitability ranged from 0 to 40%. This pattern characterizes a favorable situation in the regional agriculture, since more than 60% of organizations are commercially viable (Table 3). In 2012, the proportion of profitable farms was 70% out of the total number. During the year, the number of commercially viable organizations decreased by 10% (according to the accounting statements of agricultural producers of the Novosibirsk Region in 2013).

On average, in the Novosibirsk Region, the level of profitability, taking into account the state support, is 32.7%. The highest profitability in 2013 was achieved in the Bagan (39.5%) and the Kuibyshev (39.1%) districts. In Kochkovsky and Maslyaninsky districts the aggregate agricultural production proved unprofitable, the loss ratio was -2.5% and -5.2%, respectively.

In our opinion, the indicator on "profitability level" of agricultural organization, unlike other performance indicators, not reliably assesses the agricultural production effectiveness. This is a biased indicator of the effectiveness of agricultural organization, because it takes into account only the cost of products sold, rather than the gross output; it does not reflect the efficiency of the whole agricultural production, as only part of produced goods is a commodity, and the rest is used within the agricultural organization.

In addition, the level of profitability distorts the real pattern of the production efficiency, calculated at the end of the current year, because it can take into account the profit derived from the sale of products, produced in the past calendar year.

Based on the "profitability level" indicator, public authorities become hostages of well-being appearance in agricultural industry and do not take into account the actual situation when determining the amount of funding the agricultural production and the disposition of state funds (Shelkovnikov, 2010).

Therefore, for a comprehensive analysis and planning of the agricultural production efficiency it is necessary to supplement the existing system of performance indicators by the coefficients suggested by Professor Shelkovnikov. This would allow us to objectively evaluate the multiple factors and conditions in agriculture, make reliable conclusions about the main development lines of agricultural production. These coefficients include:

The rate of recoupment of expenses on core production (RRE_{actual}) reflects how the revenue from the sale of products (B) covers the costs incurred by the agricultural enterprises on the core production (C), and is calculated as follows:

$$RRE_{actual} = B/C \qquad (1)$$

1.   The accounts receivable (AR), available in the agricultural enterprises, as part of the revenue, according to the accounting rules, is, in fact, its lost part, and can be accounted by the coefficient of actual recoupment of expenses (CRE_{actual}), based on production of agricultural organization:

$$CRE_{actual} = (B - AR)/C \qquad (2)$$

2.   Adjusting CRE_{actual} in terms of the subsidies on core production (Sub_{core}) we get the actual rate of recoupment of expenses, taking into account the cost of subsidies for core production ($CRE_{actual,sub.}$):

$$CRE_{actual,\ sub.} = ((B - AR) + Sub_{core})/C \tag{3}$$

From mentioned above it can be concluded that for more objective assessment of the efficiency of agricultural producers, the analysis of their activity, based on the assessment of their profitability level, should be supplemented by the proposed coefficients of expenses recoupment, which are calculated using the gross output production costs and overall costs of the organization. This allows one to fully take into account the specificity of agricultural production. These coefficients reflect the actual situation in the agriculture and can be used as indicators to develop conditions that should be provided by the state to enable expanded innovative reproduction of the agricultural organization (Shelkovnikov, 2010).

Let compare the results, obtained by the assessment of the agricultural production efficiency based on the profitability and the rate of recoupment of expenses, and let analyze agricultural enterprises of the Novosibirsk Region using the actual rate of recoupment with due consideration of the state financial support.

Table 4. Classification of agricultural enterprises of the Novosibirsk Region based on actual rate of recoupment, inclusive of the budget subsidies for 2013

№	Organizations zoning depending on their efficiency	Criterion	Number of organizations		Relative variation in 2013 as compared to 2012, %	Persentage in total amount, %	
			2013	2012		2013	2012
1	Organizations with expanded reproduction	$CRE_{actual,sub.} \geq 1.3$	11	11	100	2.6	2.7
2	Organizations with a simple production	$1 \leq CRE_{actual,sub.} < 1.3$	30	46	65.2	6.9	11.3
3	Sunk organizations	$0 \leq CRE_{actual,sub.} < 1$	392	352	111.4	90.5	86
	Total		433	409	-	100	100

The analysis shows that 90% of all agricultural organizations in the Novosibirsk Region are operating beyond the recoupment of expenses that causes the critical situation in the field of regional agriculture. Farms are not able to cover the costs of core production even with the budget subsidies to provide simple reproduction (Table 4). In 2012, the share of such organizations was equal to 82.2%. During the year the number of such organizations was increased by 7.8%. Many farms have gone bankrupt. This is due to the large accumulation of accounts payable of agricultural organizations and their inability to pay debts.

As follows from the analysis based on the actual rate of expenses recoupment, with due account for the budget subsidies, it was revealed that in the Novosibirsk Region 6.9% of organizations are those with a simple reproduction (vs. 62.4%, if calculated based on the level of production profitability).

Author also calculated the regulatory standards for state support of farms of the Novosibirsk Region to provide a simple, expanded and innovative reproduction (reproduction option, when organizations are able not only to expand production, but also to implement new technologies and innovations, thereby increasing productivity).

Table 5. The regulatory standards for state support of agricultural organizations of the Novosibirsk Region (million rubles)

Indicators	Reproduction patterns		
	Simple reproduction ($CRE_{actual,sub.} = 1$)	Expanded reproduction ($CRE_{actual,sub.} = 1.3$)	Innovative reproduction ($CRE_{actual,sub.} = 1.5$)
The regulatory standard for subsidies, million rubles	6585.6	17561.2	24878.3
Additional demand for subsidies, million rubles	3240.4	14216.0	21533.1

To ensure simple reproduction, the agricultural organizations of the Novosibirsk Region required in 2013 additional 3.24 billion rubles, i.e. 2 times more than the state budget allocations. At that, the expanded reproduction would require fivefold increase in state funding, whereas innovative reproduction would demand sevenfold increase.

Thus, 90.5% of the agricultural organizations in the Novosibirsk Region are unable to provide even simple reproduction. The problem consists in the lack of financial resources to ensure the regular reproductive processes.

The drought of 2012 and the rains of 2013, Russia's accession to the World Trade Organization, the rise in energy prices and instability in purchase prices for agricultural products have led to a high level of accounts payable in agriculture. After a crop failure in 2012, many organizations borrowed funds against the harvest of 2013, which also turned out to be quite poor. This was the main impetus for the increase in accounts payable of farms. Currently about 30% of the farms in the Novosibirsk Region cannot service their loans and are on the verge of bankruptcy. Whereas in 2012 and 2013, banks made advances and were ready for refinancing of agricultural organizations that saved the situation, in 2014 they blocked such a possibility in connection with a high level of accounts payable of agricultural organizations. Presently, only large agricultural producers, who are still able to discharge their obligations, can afford themselves to take credits. In this situation, it makes no sense to talk about any development of the industry; everything evidences on the disappearance of small and medium-sized farms (and, consequently, entire villages and rural communities), and the market monopolization.

According to the Ministry of Agriculture of the Novosibirsk Region, as of April 1, 2014, the amount of credits granted to Novosibirsk farmers was 113.1 million rubles (172.2 million rubles as of April 1, 2013). Also, at the end of 2013, 32 agricultural organizations in the region underwent the various bankruptcy procedures. Among them 8 organizations completed bankruptcy proceedings, while3 organizations terminated such proceedings: two terminations resulted from the conclusion of amicable agreement, and one termination was due to the refusal of the claim by the bankruptcy creditor.

Financial recovery program is being carried out in 119 organizations of the agro-industrial complex of the Novosibirsk Region. The Russian Federation government pursues an aggressive policy in improving credit availability and ease of payment. In 2014, 44 billion rubles are allocated to subsidies from the federal budget to reimburse part of the interest rate on investment loans. However, this type of support "lies" in the yellow basket of the WTO, which has limitations on funding and is subject to reduction. In addition, the Ministry of Agriculture along with the Ministry of Finance propose to reallocate funds within the State Program on agriculture development, to be received by the enterprises most in need. In the current year, to finance the State Program, 170 billion rubles were allocated from the federal budget.

In agriculture, in addition to a variety of external factors (drought, rain, Russia's accession to the WTO) the amount of accounts payable of agriculture organizations also is affected by the amount of subsidies from the federal and regional budgets. Let consider the trend and the correlation ratio of this relationship using correlation and regression analysis, and derive the regression equation.

Let take the difference between total amount of the state support for agricultural organizations in the reporting period and that of prior period ΔSub as an indication factor. Let take a similar change in accounts payable ΔAP as resultant variable. To build the model we take the data from the financial statements of agricultural enterprises of the Novosibirsk Region for 2012-2013.

The regression equation is as follows:

- $y = -12.8x + 19344$.

- The correlation coefficient is -0.72.

- The equation is significant with a probability of 95%, a change in the resultant variable by 52% is due to the change in the indication factor.

Thus, there is a strong inversely proportional correlation between ΔSub and ΔAP.

That is, an increase in ΔSub leads to reduction in ΔAP (i.e. increase in the amount of state support in the reporting year leads to a decrease in accounts payable of agricultural enterprises in the reporting year as compared to that in the previous year).

Now let carry out correlation and regression analysis between the amount of subsidies from the federal and regional budgets (Sub), and the accounts payable in a reporting financial year (AP).

The regression equation is as follows:

- $y = 0.04x + 4903.8$

- The correlation coefficient is 0.4;

- The equation is significant with a probability of 95%.

In this case, there is a moderate direct correlation between the studied parameters, i.e. the greater the amounts of state support for agricultural organizations, the greater the accounts payable.

Thus, based on the results of the two models, we can conclude that when comparing ΔSub and ΔAPindicators in terms of time, increasing the amount of state support in the reporting period leads to a decrease in accounts payable of agricultural producers in the same period compared to the previous period. However, the larger the amount of subsidies received by the organization from the federal and regional budgets, the greater the amount of its liabilities. The amount of these subsidies depends on various target indicators of the organization, i.e. the larger and the efficient the agricultural production, the more subsidies it receives. In such farms, the subsidies received from the budget, usually are spent for the purchase of agricultural machinery, agricultural modernization etc. that certainly leads to accrued accounts payable, though with increasing amounts of subsidies in the following year the debt will be reduced (Stadnyk et al., 2014) .

5. Conclusion

From the abovementioned, it can be concluded that in transition economies the most effective method of agricultural management is a market-indicative method. It is based on the definition of the various performance indicators of agricultural production efficiency. For a more objective assessment, the existing system to determine the effectiveness of the agricultural organizations must be supplemented by the expenses recoupment coefficients, which are calculated using the costs of the gross output production and overall costs of agricultural producers, enabling fuller accounting for the specificity of agricultural production. These coefficients reflect the real situation in agriculture and can be used by the state as indicators to provide the conditions, enabling expanded innovative reproduction.

Market-indicative control method can be used both at the federal and regional levels. However, at the federal level, this method is not efficient enough, because performance indicators of agricultural production are based on average indicators for the whole Russia. This is not enough to reflect the actual situation in the industry due to the essential differences in climatic-environmental conditions in the country regions. However, at the regional and municipal levels, as well as within the particular agricultural organization, this technique is quite effective.

The rates of expenses recoupment should be the major indicators during the disposition of state support funds and assessment of its effectiveness.

State support has a significant effect on agricultural activity. As shown by correlation and regression analysis, increasing the amount of subsidies leads to a decrease in accounts payable, and solves thereby the pressing problem of a high level of accounts payable of agriculture.

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Efficiency Estimation Criteria of Agro-Industrial Systems in Post-Industrial Economy

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Abstract

The article reveals theoretical, methodological approaches to the selection of efficiency estimation criteria of agro-industrial systems under the conditions of post-industrial economy. Based on the provisions of system-based analysis and mechanism specialties and results of the agro-industrial production results under scientific and technological progress, the authors base primary efficiency estimation criteria selection provisions of agro-industrial systems. It has been proven, that efficiency estimation criteria of agro-industrial systems have to be developed based on such development principles as dynamics, probability, adaptability, manageability etc. The article determines and reveals basic and specific types of activities of major elements of agro-industrial systems (agriculture, stock farming, storage, processing, transportation and distribution). The article estimates the agro-industrial activity results under the conditions of postindustrial economy and particularities of their calculation. According to the authors, such results can be considered functional, economic, innovative-informational, social and ecological among others. Based on this the article studies methodological approaches to the selection of efficiency estimation criteria of agro-industrial production. This system of criteria includes basic and specific criteria, enabling to estimate its functional, economic, innovative-informational, social and ecological results.

Keywords: efficiency, criteria, agro-industrial systems, system-function analysis, functional efficiency, economic efficiency, innovative-information efficiency, social efficiency, ecological efficiency

1. Introduction

Up until this day the issues of efficiency estimation criteria of agro-industrial systems under the conditions of post-industrial economy have not been independently and deeply researched. Moreover there is no conclusive answer to the question what the modern agro-industrial systems efficiency is. Agribusiness system in terms of "complicating" the external economic relations can become a serious tool for Russia to develop the economy mills, as agro-system - the actual direction to diversify the economy monoterritory Russia (Kryukova et al., 2013; Kryukova et al., 2013; Kryukova et al., 2015).

There are several methodological approaches for estimating the efficiency of agro-industrial systems.

One group of authors view this category as performance of agro-industrial systems. Another points out the complexity of the category underlining the fact that it embraces various stages of production, various components as a whole and in particular. The third group of authors doesn't use the term "agro-industrial systems efficiency" independently but restricts itself to assessing the economic efficiency of agricultural production (Boev, 1990).

Some authors think that agro-industrial systems efficiency should be defined based on the level of achievement of set goals, where total interests from these goals should exceed total expenditures. Some economists have a one-sided view of efficiency stating that it is estimated only in physical units or units of currency.

The major part of researchers use indices that describe the economic efficiency of agricultural production in order to assets the efficiency of agro-industrial systems. The most important of these indices are: output of main agriculture and stock farming produce in physical units, gross yield, marketable output in units of currency calculated for 100 ha, for one man-hour or one employee; labor costs on production of main groups of agricultural produce, cost of production, rate of return. At the same time it is easy to notice that such an

efficiency estimation of agro-industrial systems concept based on the aforementioned indices is limited to assessment of economic efficiency of agricultural production (Curtzev, 1986).

The Russian research institute of agriculture proposed in the last 25 years the method of comprehensive efficiency assessment of agro-industrial systems which was based on three criteria: production and technological efficiency, production and economic efficiency and social-economic efficiency. (Radcliff-Braun, 2001) This method allowed to take into account not only economic efficiency but also the influence of innovative processes and their impact on development efficiency of agro-industrial systems (Hawken, 1999).

A variety of authors based the formation of comprehensive efficiency estimation criteria of agro-industrial systems on the project-based approach, which is founded on system-based methodology.

It is obvious that under the condition of agro-industrial systems in postindustrial economy, characterized by the usage of innovative technologies in agriculture, processing, transportation, storage and distribution of agricultural goods, assessment of efficiency of agro-industrial systems based on goal-achievement criteria and economic efficiency is no longer compatible with the demands of the contemporary world (Altukhov, 2010; Economika Regiona, 2008; Zaycev, 2012).

The goal of this article is to develop theoretical and methodological provisions of selection of efficiency estimation criteria of agro-industrial systems.

2. Methodology

The foundation of methodology for substantiating the efficiency criteria of agro-industrial production is in systems-functional analysis which was developed in the works of G. Spencer (Kon, 1979; Durkheim, 1938; Malinovskiy, 2005; Radcliff-Brown, 2001; Merton, 2006). The systems-functional analysis allows to take into account specialties and particularities of agro-industrial production under the conditions of post-industrial market economy. The systems-functional analysis reveals cooperation results between single elements of agro-industrial systems (production, processing, transportation, storage, distribution of agricultural produce), but also to determine their mutual impact and actual results of their interaction within agro-industrial systems (Savina & Stepanov, 2013).

Based on the goals of the research the authors used systems-function analysis methods (scenario method, collective ideas generation method, Delphi method). The Objectives Tree method was extensively used, which helped determine and specify goals, results and effects of modern agro-industrial systems functioning (Project Management Institute, 2000).

During the usage of the aforementioned methods of analysis, selection of agro-industrial systems efficiency criteria we considered the particularities of agricultural production and related industries. It was presumed that such particularities are determined by the need to implement quality efficiency assessment of agro-industrial systems and that significant difficulties brought about by agro-climatic, biological, economic and social processes make it more difficult to make conclusive qualitative estimates.

The development of hypothesis of comprehensive efficiency estimation criteria formation of agro-industrial systems demands solving of the three following objectives: specification of essence and scope of "agro-industrial systems efficiency" and substantiation of methodology of selection of efficiency estimation criteria of agro-industrial systems.

Meeting of these objectives based on the systems-function analysis was made in three main stages:

Stage I. Specification of contemporary agro-industrial systems models, their industry composition and particularities of technological, organizational and social-economic mechanisms;

Stage II. Development of the term "agro-industrial systems efficiency" and major results of their functioning based on systems-function analysis;

Stage III. Substantiation of major and specific efficiency estimation criteria of agro-industrial systems under the condition s of post-industrial economy; development of a systems of indices and instruments, specification of data-collecting forms and methods to analyze the agro-industrial production efficiency.

3. Results

3.1 Definition of Agro-Industrial Systems Efficiency

What is the notion of agro-industrial systems efficiency? It is known that the notion of "efficiency" is one of the basic economic notions which to this day does not have a unified generally accepted definition. In general approach it is characterized as performance of some process or event.

Based on this definition agro-industrial systems efficiency can be characterized as performance from implementation of technical, technological, organizational, economic and social measures directed to satisfaction of social needs in agricultural produce. However this definition does not allow to reveal neither the internal scope, not the agro-industrial systems efficiency formation mechanisms.

However, do not forget when you use this method of statistical disparities perception data that can complicate vocpriyatie information, we note that in this context to use the Russian units (Kaurova et al., 2013, Kaurova et al., 2014; Maloletko et al., 2015).

Agro-industrial systems efficiency is one of the more elaborate manifestations of efficiency, compared to its other types is a generalized definition taking in a whole range of separate and independent notions of efficiency. Only this systems-function approach to the notion will to some extent allow to reveal its scope. We also have to keep in mind that agro-industrial systems efficiency is determined not only by its internal characteristics as often erroneously perceived by researchers, but also the characteristics of its impact on the external environment. Thus, efficiency should be viewed not only as an internal but also as an external characteristic of agro-industrial system.

We understand agro-industrial systems efficiency as their performance. Scope analysis of agro-industrial systems efficiency demands to reveal major specific results of their functioning.

3.2 Essence of Criteria and Principles of Agro-Industrial Systems Efficiency Estimation

The substantiation of agro-industrial systems efficiency estimation is one of the central methodology issues. The selection of criteria is of crucial importance for the substantiation of the efficiency indices system of agro-industrial systems. Only after solving this issue can preconditions exist to maintain a single methodological and methodical foundation, provide mutual cohesion of agro-industrial systems efficiency indices both as a whole and its elements.

The criterion is usually understood as trait of principle that bases estimation, comparison, classification of objects or events. In general sense it should give the opportunity to come up with a generalized measure of development of the process in question, record its performance, reflect the scope of the process and be a standard of congruence between our perception and objective reality. It should reflect the goals of the phenomenon researched and ways of meeting them. Criterion of efficiency should have stimuli for development of research, for increasing its performance. This brings us to a crucial methodological conclusion that the efficiency criterion selection must be based on the essence of the economic category that reflects the phenomenon in question and not chosen at random.

Based on everything previously stated agro-industrial systems efficiency can be defined as maximization of solving the problem of satisfying the needs of population in agricultural produce, and processing in agricultural industry under set resources or optimal costs of resources while preserving the environment, solving the problems of social development and increasing the level of innovative-informational development systems of agro-industrial production. This criterion of efficiency would provide a general notion of efficiency in technical, technological, organizational, social, economic, innovative-informational and ecological processes in agro-industrial systems that produced qualitative and quantitative changes, that took place in agro-industrial system at a specific period in time (Merton, 2006).

Agro-industrial systems efficiency criterion is one of the most elaborate forms of notion of efficiency, in relation to its other forms being the most generalized category creating within a whole range of independent definitions of efficiency. Only this system-functional approach to the category allows, to a degree, reveal its scope. We have to bear in mind that agro-industrial systems efficiency is determined not only by its internal characteristics, as often perceived by many researchers but also external environment impact characteristics. So the efficiency should be viewed not only as internal but also as external characteristic of agro-industrial systems functioning.

As agro-industrial systems efficiency criteria provides a generalized characterization of final results, then they pose as unified standard for all levels of hierarchy of agro-industrial systems (federal, regional, production level). However it is immensely difficult to estimate the social-economic development efficiency by one synthetic criterion, for the agro-industrial system contain a multitude of components. This requires a system of corresponding criteria which reflect many sides of agro-industrial systems efficiency.

The research shows, that development of agro-industrial systems efficiency criteria under current conditions should be based on the following methodological principles:

- Inclusion of agro-industrial systems specific functions;

- Commercialization and self-supporting, according to which production of agro-industrial systems must be based on market mechanisms, establishing self-financing and self-supporting;

- System-based approach to assessment of agro-industrial systems efficiency.

The principle of inclusion of agro-industrial systems specific functions. The essence and major goals of agro-industrial systems objectively determines the need to use the functional approach while selecting efficiency assessment criteria.

In our research function is understood as the role carried out by the object in a particular field of activity under certain rules.

Thus, according to the systems-function approach the major goal of agro-industrial systems functioning is satisfaction of social needs, primarily societies' needs in agricultural produce and processing industry in raw materials.

The principle of commercialization and self-support of agro-industrial systems. During development of agro-industrial systems efficiency estimation criteria one has to consider specifics of their functioning determined by the duality and contradiction of the functioning mechanism: as an economic system supplying common good and market economic system acting upon commercial stimuli.

The principle of system-based approach to agro-industrial systems result estimation.

In accordance with this principle agro-industrial systems are an accumulation of interlinked lines of business (profit and non-profit) during which specific results appear – functional, economic, innovative-informational social, ecological etc. (Stepanov, 2014).

3.3 Algorithm and Results of Substantiation of Agro-Industrial Systems Efficiency Criteria Assessment

Substantiation of agro-industrial systems efficiency estimation criteria was made based on the Objectives Tree method. This method allowed to determine the whole system of interlinked agro-industrial production results. Construction of Objectives Tree was founded on inclusion of objective laws of development of agro-industrial systems in post-industrial economies.

Objectives Tree construction procedure was carried out by a group of trained experts (specialists and scientists) from agro-industrial field, well versed in the problems of organization, economy, management, particularities of implementation of technology in contemporary agro-industrial complex.

Step-by-step division of goals and results of agro-industrial systems allowed to model a comprehensive system of links, interconnections between results and effects that form during agro-industrial systems functioning.

However Objectives Tree construction does not end with determination of results of agro-industrial systems functioning under the conditions of post-industrial economy. The choice of significance and priority of results and consequences in agro-industrial production may be viewed differently. There lies the problem of choice within the Objectives tree the most significant results of agro-industrial systems functioning in post-industrial economy.

This problem is solved by performing a comparative analysis of all the agro-industrial systems functioning results and choosing the most significant and viable.

The assessment of relative significance of agro-industrial systems functioning results was made based on intermediate decisions on all the levels and elements of the Objectives Tree taking into account their importance for the elements of the higher hierarchy.

Based on the methods used such assessments are given as unit fractions so that the sum of all elements will equal one.

Such expert assessments of the level of functioning results significance both of singular elements and agro-industrial systems as a whole were carried out by groups of experts in several rounds.

In the first round they estimated and specified industry goals, goals and results of agro-industrial systems functioning. The primary assessment was given here to the specific results of agro-industrial systems functioning on all levels of the Objectives Tree. This work was carried out by experts individually as a result of which each could eliminate a result on the grounds of insignificance or could add some more viable results.

The second round proposed a collective discussion of experts' opinions on the list major agro-industrial systems' functioning results with the following individual quantitative assessment of their relative significance. If after the second round the experts did not arrive at a unanimous decision and there were differences between the experts'

assessments then the procedure of defining agro-industrial systems' functioning results would carry on in the next round until the experts arrive at a relatively unified decision on the problem in question. After the assessment of relative significance took place the experts determined methodological approaches to assessments of positive or negative consequences of obtained results.

The final selection of agro-industrial production efficiency criteria was made based on a comparative estimation of relative significance of agro-industrial systems' functioning results provided by the group of highly qualified experts (Rutzkoy & Kozitskiy, 1988).

The research indicated that under the conditions of industrial revolution and ongoing development of post-industrial society, information economy the criteria complex of agro-industrial systems efficiency estimation should take into consideration all actual consequences of agro-industrial systems functioning and primarily functional, economic, social, ecological results (Hawken, 1999).

The criteria system founded on the principles of system-function approach allows to account for and assess external effects and their influence on the stability of agro-industrial systems activity. This assessment without a doubt should be carried out on all hierarchy levels, by specific agro-industrial systems activity results, by major elements' functioning results (Van den Bergh Jeroen, 2010).

Research results performed based on the system-function analysis approach pointed out all of the specific agro-industrial systems functioning results: functional, economic, innovative-informational, social, ecological (Miller, 2009).

Functional result of the agro-industrial systems activity is reaching a stable growth of production, sustainable satisfaction of the societies' needs in agricultural produce and raw materials. Such results reflect the level of realization of main strategies of agro-industrial production development as consequent to the realization of the national agro-industrial policy (Altukhov, 2008).

Economic results of the agro-industrial systems activity is realized through its ability during the functioning process produce economic effect. Economic results are attributed directly to the process of production of agricultural produce and is one of the main indices of agro-industrial systems efficiency.

Along with functional and economic results there are other forms of agro-industrial systems' performance. One of them is effective development of agro-industrial systems based on stable growth (Alekseeva, 2013).

Under the conditions of information and postindustrial economy there are other agro-industrial systems' functioning results. Their particularity is determined by specific character of obtained results during the course of functioning. Such results include innovative-informational, social and ecological results.

Innovative-informational results characterize the level of usage fruits of scientific-technological progress and highly-effective information technologies during the course of agro-industrial systems' functioning.
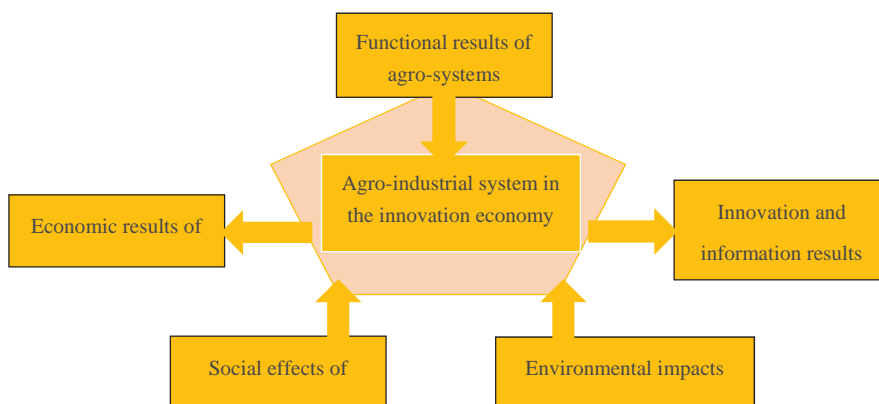
Figure 1. The main results of the functioning of agro-systems in the innovation economy

Social results of agro-industrial systems' activity are reflected in working conditions, standard of living of producers of agricultural goods and also of workers employed in servicing agricultural production, level of development of such non-producing subsystems as culture, healthcare, services etc. these results may have a significant impact as they, in the end, determine the attitude of people towards each other, their labor activity and

effective production development in agricultural production and serve to provide the agricultural industry with new workforce.

Ecological results are a natural result of social-economic systems' activity under the conditions globalization of industrializing economy. They appear as a direct impact of agro-industrial systems' activity on the condition of the environment, its preservation and rational usage levels, rate of pollution of agricultural produce with nitrates and other harmful elements (Patrick ten Brink, 2011).

The main results of the functioning of agro-systems in the innovation economy shown in the Figure 1.

4. Discussion

Agro-industrial systems efficiency criteria must take into consideration country's social-economic and social-politic situation. Today the reformation of the agricultural production in Russian Federation is carried out on the principles of re-orientation of agro-industrial complex towards self-sustaining and import substitution (Stepanov & Zotova, 2012).

Thus during the research the authors were able to determine basic and specific agro-industrial systems efficiency estimation criteria.

Basic agro-industrial systems efficiency criteria can be defined as maximization of solving the problem of satisfaction of societies' needs in producing high-quality agricultural produce with set resources or optimal labor and funds expenditure, while maintaining the environment and solving the problems of rural social development. Such efficiency criteria provides a unified definition of agro-industrial system production measure, recording results of its activity.

Based on this provision other specific agro-industrial systems' efficiency estimation criteria under the conditions of formation of innovation economy are:

a) Agro-industrial systems functional efficiency criterion, describing the level of achievement of agro-industrial system's functioning goals;

b) Economic efficiency criterion, characterizing the level of resource expenditure on agro-industrial systems' single unit production;

c) Innovative-informational criterion is devoted to reflect the level of innovations used in agro-industrial production, technology and above all information technology;

d) Social efficiency criterion describing how the level of agro-industrial systems' production development allows to solve the problems of creating the needed conditions and workplace safety, increasing the standard of living of agro-industrial systems workers;

e) Ecological efficiency criterion characterizes how agro-industrial systems' functioning sustains the environment.

Agro-industrial systems' efficiency under the conditions of innovation economy – is the effectiveness of their performance which allows to create a new type of agro-industrial systems' – cumulative synergy effect.

Agro-industrial systems' synergy efficiency is the major summarizing result. Such efficiency takes place in cumulative effect significantly exceeding total results of singular types of efficiency (functional, economic, social, ecologic). Synergy effect is reached by combining the aforementioned results.

5. Conclusion

It is obvious that the next stage of agro-industrial systems efficiency criteria substantiation problem development will be substantiation of actual possibilities and viable boundaries of various indices usage, describing functional, economic, innovative-informational, social and ecological efficiency.

Practical importance of agro-industrial systems efficiency criteria selection is very significant and encompasses the possibility of their direct usage defining and substantiating efficiency of agro-industrial systems on different hierarchy levels and assessing the viability and efficiency of making managerial decisions.

As agro-industrial systems' efficiency criteria provide a generalized expression of the final functioning goal they are practically sole criteria for all hierarchy levels and all subsystems. At the same time it is clear that agro-industrial systems efficiency assessment is quite to carry out with just one synthetic criterion for the system consists of a multitude of components. On this basis one needs a set of criteria, reflecting various sides of agro-industrial systems' efficiency.

When justifying the agro-industrial systems' efficiency assessment indices, we propose that their usage should provide:

Interconnection of criteria with all of the totality of indices; achievement of interrelation of general and particular efficiency indices;

Reflection of major characteristics of agro-industrial systems functioning results;

Compatibility and thorough agro-industrial systems' efficiency estimation on different hierarchy levels (region-enterprise);

Calculation of functioning efficiency of all subsystems (agriculture system, cattle farming system, social subsystems etc.);

Comparative assessment of single-type agro-industrial systems' efficiency, functioning in similar climatic and economic conditions;

Determination of the most rational variants of scientifically developed systems;

Detection and assessment of impact from introduction of complex of measures to increase agro-industrial systems efficiency.

As the prevailing majority of efficiency indices are determined by the sum of effect of its ratio to the expenditure, the primary value is given to solving the problem of what indices describing the effect and expenditure should be the foundation of assessment and should determine possibilities of using these indices to solve the problem.

Development of the set of agro-industrial systems' efficiency estimation indices based on the aforementioned principles is an elaborate and labor intensive problem.

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Evaluation of the Competitive Potential of the Economic Development of the Country: Theoretical Aspects and Russian Practice

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Abstract

The article presents the methodology of evaluation of the competitive potential of the regions, including the three main stages of research, which has been tested during the analysis of competitiveness of Russian regions. During each stage it is calculated the main indexes, and the Integral Index of regional competitiveness, which provide the opportunity to present a complex view of competitive advantages of the regions of the country. As the result of this research it was presented the whole calculation of the development of Russian regions on the basis of competitive ability (2010, 2012 years). Based on the calculations it was identified the main problems of Russian regional industrial development - the obsolescence of the capital assets, insufficient level of investments, the low level of innovation activity of enterprises, etc. The obvious way for solving these problems is the governmental planning system of industrial development (industrial policy). During this research it became obvious that presented methodology allows making a comprehensive analysis of the competitiveness of the regions of the country.

Keywords: competitive potential of the economy, competitiveness of the region, Integral Index of regional competitiveness, methodology of the economic development's evaluation, planning of the economy

1. Introduction

Nowadays, in conditions of globalization and integration of world economy, the role of governmental policy in the development process of the competitive advantages in the global arena increased.

The problem of improving the competitiveness of the economy, including a reflection of this fact in the global rankings, is on the agenda not only in Russian Federation, but also in the other countries worldwide.

The competitiveness of any region should be examined not only in terms of competition between regions, but also in terms of their cooperation. The presence of a new technology, new products, or a new idea in one region is a testament to its competitiveness. At the same time, the great importance is the ability of a region to construct the relationships with other regions of the country and at the international level.

The factors, which ensuring the regional growth of competitiveness, were considered by modern scholars and experts from three points of views: the cluster approach, the creation of innovation system and the progressive development of entrepreneurship.

In accordance with the cluster concept the competitiveness of one region depends on the presence of a cluster of related industries in this region. Definitely, it is a cluster which creates the critical mass which is necessary for competitive success in certain industries. Therefore, one of the tasks in the system of increasing the competitiveness of the regional potential is the estimation of the possibilities of cluster process (Porter & Ketels, 2009).

The second point of view based on the binding of the regional competitiveness with the presence of the innovation system in the region. The accumulation of knowledge and the creation of institutions, conducive the innovation, increases the vitality of the regions. The third group of factors related to the conditions and rates of development of the entrepreneurship in the country.

All of the above mentioned factors affect the competitiveness of the country. The impact of these factors is a contentious issue of a great number of debates. However, there is even more controversial issue - possible ways of assessing the competitiveness of the country.

2. Methods

Table 1. Summary of indicators for evaluation of the regional competitiveness (Gelvanovsky, 1999; Chainikova, 2008; Greenberg, 2008)

	Index of current competitiveness of a region (R1)
1	GDP per capita, rubles
2	Industrial output per capita, thousand rubles
3	Investments in fixed capital per capita, thousand rubles
4	The share of unprofitable organizations, % (to total amount)
5	Total unemployment, % (to the economically active population)
6	Agricultural production per capita, thousand rubles
7	Retail trade turnover per capita, rubles
8	Cash income per capita, on average per month, thousand rubles
	Index of industrial competitiveness of a region (R2)
	Extraction of minerals (Section C, Russian National Classifier of Economic Activities, (RNCEA)
1	Coefficient of localization of industries in the region *(K_l)*
2	Coefficient of industrial production per capita in the region (K_d)
3	Depreciation of capital assets of the industry in the region, %
4	Cost of new capital assets in the industry, thousand rubles
5	Cost of capital assets at the end of the year in the industry, thousand rubles
6	Coefficient of renewal of capital assets, %
7	Number of people employed in the industry of the region, thousand people
	Manufacturing industries (Section D, RNCEA)
1	Coefficient of localization of industries in the region *(K_l)*
2	Coefficient of industrial production per capita in the region (K_d)
3	Depreciation of capital assets of the industry in the region, %
4	Cost of new capital assets in the industry, thousand rubles
5	Cost of capital assets at the end of the year in the industry, thousand rubles
6	Coefficient of renewal of capital assets, %
7	Number of people employed in the industry of the region, thousand people
	Production and distribution of electricity, gas and water resources (Section D, RNCEA)
1	Coefficient of localization of industries in the region *(K_l)*
2	Coefficient of industrial production per capita in the region (K_d)
3	Depreciation of capital assets of the industry in the region, %
4	Cost of new capital assets in the industry, thousand rubles
5	Cost of capital assets at the end of the year in the industry, thousand rubles
6	Coefficient of renewal of capital assets, %
7	Number of people employed in the industry of the region, thousand people
	Index of infrastructure development and communications (R3)
1	Density of public railways, km of railways per 10 thousand square km of territory
2	Density of public roads with hard surface, km of roads per thousand square km of territory
3	Number of registered mobile cellular subscribers, thousand people
4	Number of Internet users, thousand people
	Index of innovative regional development (R4)
1	Amount of organizations engaged in research and development, units
2	Number of personnel engaged in research and development, persons
3	Population, thousand people
4	Number of postgraduate students, persons
5	Number of universities students per 10 thousand people of population, persons
6	Volume of innovative products in the total volume of products,%
7	Number of registered patents, units
	Index of foreign economic activities (R5)
1	Volume of foreign investments per capita, USD
2	Foreign trade turnover per capita, USD
3	Export, USD
4	Import, USD
5	Balance of foreign trade turnover per capita, USD
6	Number of companies with foreign capital, units
7	Volume of production of companies with foreign capital per capita, thousand rubles

The methodological basis of the study are also traditional methods specific to the researching objects of the world economy, such as method of multidimensional comparative analysis, based on the specific empirical data for examining the common features of the economic development of the regions; systematic method, which shows the rate of development of the regions as a certain evolving system, highlighting its basic elements.

During the development of reseaching issues were used a combination of mathematical and statistical methods for researching the economic relationships, such as a method of standardization, which uses for comparing two or more heterogeneous totality on some basis, in this case it is constructed the matrix of standardized coefficients; another method - rating of analysis indexes carried out for the construction of the researching groups; and a method for constructing the integral index, by which it can be examined the degree of distributed competitiveness of the regions (leaders regions, outsiders regions).

During our research, we propose to evaluate the competitive potential of economic development of the country based on the methods consists of three main stages. Firstly, we define the indicators required to calculate a number of Indexes (R1 - R5): Index of current competitiveness of a region (R1); Index of industrial competitiveness of a region (R2); Index of infrastructure development and communications (R3); Index of innovative regional development (R4); Index of foreign economic activities (R5). We formed a matrix of initial data for all five indexes (Table 1).

During the calculation of Index of industrial competitiveness of a region (R2) we selected the data from three types of economic activities (Russian National Classifier of Economic Activities (RNCEA): Section C - Extraction of minerals; Section D – Manufacturing industries; Section E - Production and distribution of electricity, gas and water resources, which are the most vividly expressed of regional competitive power.

The coefficient of localization of industries in the region (K_l) was calculated separately, in additional calculations.

The coefficient of localization of industries in the region (K_l) consists of a ratio of the share of some industry in the structure of production to the inheritance weight proportion of the same industry in the country. It is calculated on the basis of gross market production, the main industrial funds and the number of industrial production personnel (Formula 1).

$$Кl = (Or \div Pr \ \times 100) \div (Oc \div Pc \ \times 100) \qquad (1)$$

where, O_r – the industry of the region; O_c – the industry of the country; P_r – the whole amount of industrial production of the region; P_c - the whole amount of production of the country.

The coefficient of industrial production per capita of the region (K_d) calculated as a correlation of specific gravity of the regional production in the volume of national production and the population of the region in the population of the country (Formula 2).

$$Kd = (Or \div Oc) + (Hr \div Hc) \qquad (2)$$

where, O_r – the industry of the region; O_c – the industry of the country; H_r – the population of the region; H_c – the population of the country.

During the second stage of this research we calculated above mentioned Indexes (R1-R5) by the method of multidimensional comparative analysis. These indexes represent the combined rating of the region. It is calculated on the basis of the indicators actually achieved by the regions of the country, using the method of multidimensional comparative analysis. In addition, for each indicator it is determined the best value (maximum or minimum), which is taken as one. Further, the indicators for each region compared with the value of the best indicator. Then, all elements of the graph are divided by the maximum element of the model region.

The specific choice of unifying transformation depends on the type of analyzing indicators:

1) If the basis indicator x is associated with the analyzing integral attribute of monotonically increasing dependence (i.e. the greater is the value of x, the better is the economical development of the region), the value of the standardized variable Y was calculated by the following formula (Formula 3):

$$Y = \ (X - Xmin) \ / \ (Xmax - Xmin) \qquad (3)$$

where, X_{min} – the lowest (the worst) value of basis indicator; X_{max} - the highest (the best) value of basis indicator.

2) If the basis indicator x is associated with the analyzing integral attribute of monotonically decreasing dependence (i.e. the greater is the value of x, the worse is the economical development of the region), the value of the standardized variable Y was calculated by the following formula (Formula 4):

$$Y = (Xmax - X) / (Xmax - Xmin) \tag{4}$$

The rating index (R) is calculated by the following formula of weighted arithmetic mean (Formula 5):

$$R = \sum Ki\, Xi / \sum Ki \tag{5}$$

The theoretical basis of this research was approved by the practical calculations of Russian economic development.

According to this research, we have five ratings of Indexes (R1-R5) for the regions of Russian Federation in 2010 and 2012 years (Table 2).

During the third stage of this research we calculated Integral Index and grouped the regions depending on competitiveness.

We cannot use here the grouping method, because it based on only one grouping feature which ignores other important features. We took the values in a scale from 0 to 1, and calculated the Integral Index. It is obvious how the entities distributed according the level of competitiveness (leaders regions, outsiders regions), and it also possible to use the cartographic modeling.

The Integral Index was calculated using the following formula (Formula 6):

$$II = \sum w_i x_j \tag{6}$$

where, W – weight of indicator R (in our research it is 5); X – criteria for private entities, measured in standardized scale from 0 to 1.

Based on the calculated data we grouped the regions with rating scores. On the basis of the distribution of ratings it is possible to make conclusions about the degree of competitiveness of the country and its regions.

By calculating the Integral Index (2010 and 2012 years) using the grouping method we define the groups of competitive regions. For this we construct the interval variation series and determine the number of groups.

When constructing the interval variation series we should select the optimal number of groups (intervals) and set the length of the interval. The number of groups is chosen for reflecting the diversity of characteristic values in the research.

The number of groups can be calculated using the following formula (Formula 7):

$$k = 1 + 3,322 \lg N \tag{7}$$

The length of the interval can be identified by formula (Formula 8):

$$h = \frac{Xmax - Xmin}{k} \tag{8}$$

where, k – the number of groups; N - the aggregate number of complex (the number of regions).

In our research: N = 80 (because we have 80 researching regions); k = 7;

$$h = 0,6892 - 0,0990 / 7 = 0,084$$

3. Results

In this research we evaluated the existing competitive potential of the national economy of Russian Federation. The evaluation of the competitiveness of the Russian regions was based on the method which was described above. It consists of three main stages of evaluation. The main indicators and Indexes (R1-R5) of the competitiveness of the Russian regions were calculated on the basis of Formulas 1 – 8. During our analysis we

The number of groups is 7. The scale of variation is 0,084.

Thus, after calculations we have 7 groups of regions, which formed in terms of indicators of regional competitiveness:

I – developed regions (0,603 – and higher)

II – temperately-developed regions (0,519 – 0,603)

III – lagging regions (0,435 – 0,519)

IV – temperately-lagging regions (0,351 – 0,435)

V – limited developing regions (0,267 – 0,351)

VI – depression regions (0,183 – 0,267)

VII – undeveloped regions (0,099 – 0,183)

Table 2. Summary of calculating Indexes (R1-R5) and Integral Index of Russian regions, 2012

Regions	R1	R2	R3	R4	R5	Integral Index
Belgorod Region	0.524	0.223	0.472	0.116	0.090	**0.285**
Bryansk Region	0.308	0.172	0.369	0.113	0.066	**0.205**
Vladimir Region	0.330	0.224	0.393	0.110	0.081	**0.228**
Voronezh Region	0.419	0.216	0.407	0.168	0.084	**0.259**
Ivanovo Region	0.242	0.193	0.333	0.106	0.050	**0.185**
Kaluga Region	0.402	0.266	0.407	0.083	0.176	**0.267**
Kostroma Region	0.263	0.150	0.242	0.072	0.049	**0.155**
Kursk Region	0.388	0.189	0.412	0.112	0.057	**0.231**
Lipetsk Region	0.426	0.251	0.433	0.096	0.095	**0.260**
Moscow Region	0.420	0.400	0.910	0.276	0.224	**0.446**
Orel Region	0.358	0.166	0.385	0.125	0.049	**0.216**
Ryazan Region	0.375	0.187	0.328	0.106	0.052	**0.210**
Smolensk Region	0.323	0.223	0.380	0.087	0.085	**0.220**
Tambov Region	0.387	0.207	0.313	0.099	0.047	**0.211**
Tver Region	0.294	0.285	0.356	0.096	0.066	**0.219**
Tula Region	0.331	0.275	0.459	0.109	0.081	**0.251**
Yaroslavl Region	0.321	0.227	0.359	0.129	0.074	**0.222**
Moscow City	0.592	0.488	0.790	0.873	0.722	**0.693**
Republic of Karelia	0.261	0.189	0.254	0.067	0.065	**0.167**
Komi Republic	0.476	0.229	0.208	0.095	0.083	**0.218**
Arkhangelsk Region	0.355	0.221	0.226	0.097	0.114	**0.203**
Vologda Region	0.363	0.283	0.256	0.087	0.086	**0.215**
Kaliningrad Region	0.308	0.220	0.551	0.077	0.227	**0.277**
Leningrad Region	0.425	0.388	0.508	0.042	0.179	**0.308**
Murmansk Region	0.355	0.180	0.286	0.065	0.062	**0.190**
Novgorod Region	0.336	0.222	0.349	0.067	0.064	**0.208**
Pskov Region	0.273	0.203	0.309	0.072	0.057	**0.183**
St. Petersburg City	0.449	0.361	0.448	0.429	0.239	**0.385**
Republic of Adygeya	0.334	0.147	0.308	0.104	0.053	**0.189**
Republic of Kalmykia	0.265	0.149	0.122	0.074	0.036	**0.129**
Krasnodar Territory	0.431	0.294	0.548	0.149	0.140	**0.312**
Astrakhan Region	0.307	0.196	0.255	0.089	0.055	**0.180**
Volgograd Region	0.328	0.269	0.326	0.121	0.090	**0.227**
Rostov Region	0.379	0.262	0.372	0.208	0.118	**0.268**
Republic of Daghestan	0.260	0.164	0.184	0.115	0.065	**0.158**
Republic of Ingushetia	0.038	0.152	0.272	0.058	0.037	**0.111**
Kabardino-Balkarian Republic	0.254	0.172	0.281	0.066	0.043	**0.163**
Karachayevo-Circassian Republic	0.276	0.202	0.155	0.071	0.040	**0.149**
Republic of North Ossetia - Alania	0.258	0.166	0.368	0.095	0.041	**0.186**
Chechen Republic	0.100	0.202	0.250	0.067	0.047	**0.133**
Stavropol Territory	0.369	0.306	0.291	0.147	0.074	**0.238**
Republic of Bashkortostan	0.419	0.285	0.397	0.172	0.117	**0.278**
Republic of Mari El	0.307	0.157	0.214	0.073	0.050	**0.160**
Republic of Mordovia	0.340	0.205	0.288	0.159	0.046	**0.208**
Republic of Tatarstan	0.478	0.353	0.556	0.235	0.166	**0.358**
Udmurtian Republic	0.326	0.197	0.323	0.122	0.065	**0.207**
Chuvash Republic	0.290	0.193	0.389	0.162	0.051	**0.217**
Perm Territory	0.412	0.310	0.259	0.142	0.099	**0.244**
Kirov Region	0.305	0.188	0.233	0.101	0.059	**0.177**
Nizhny Novgorod Region	0.376	0.326	0.462	0.216	0.103	**0.297**
Orenburg Region	0.373	0.232	0.298	0.103	0.074	**0.216**
Penza Region	0.303	0.190	0.339	0.126	0.055	**0.203**
Samara Region	0.424	0.296	0.521	0.224	0.108	**0.315**
Saratov Region	0.335	0.244	0.381	0.150	0.081	**0.238**
Ulyanovsk Region	0.313	0.226	0.321	0.128	0.056	**0.209**
Kurgan Region	0.275	0.160	0.208	0.084	0.049	**0.155**
Sverdlovsk Region	0.435	0.375	0.456	0.190	0.120	**0.315**
Tyumen Region	0.744	0.572	0.368	0.143	0.295	**0.424**
Chelyabinsk Region	0.357	0.333	0.421	0.178	0.098	**0.277**
Republic of Altai	0.287	0.160	0.074	0.049	0.036	**0.121**
Republic of Buryatia	0.288	0.233	0.101	0.120	0.054	**0.159**
Republic of Tuva	0.204	0.264	0.065	0.042	0.037	**0.122**
Republic of Khakassia	0.295	0.199	0.220	0.056	0.065	**0.167**
Altai Territory	0.333	0.217	0.240	0.112	0.065	**0.193**
Trans-Baikal Territory	0.266	0.205	0.092	0.120	0.061	**0.149**

Regions	R1	R2	R3	R4	R5	**Integral Index**
Krasnoyarsk Territory	0.426	0.365	0.292	0.143	0.108	**0.267**
Irkutsk Region	0.347	0.247	0.224	0.141	0.092	**0.210**
Kemerovo Region	0.331	0.279	0.342	0.092	0.110	**0.231**
Novosibirsk Region	0.358	0.221	0.397	0.204	0.095	**0.255**
Omsk Region	0.367	0.247	0.266	0.142	0.073	**0.219**
Tomsk Region	0.361	0.227	0.164	0.186	0.064	**0.201**
Republic of Sakha (Yakutia)	0.463	0.279	0.081	0.093	0.084	**0.200**
Kamchatka Territory	0.383	0.173	0.168	0.085	0.053	**0.172**
Primorye Territory	0.350	0.188	0.285	0.128	0.107	**0.212**
Khabarovsk Territory	0.386	0.280	0.207	0.151	0.065	**0.218**
Amur Region	0.383	0.238	0.172	0.079	0.054	**0.185**
Magadan Region	0.445	0.209	0.175	0.105	0.063	**0.200**
Sakhalin Region	0.688	0.224	0.153	0.191	0.439	**0.339**
Jewish Autonomous Region	0.288	0.151	0.140	0.074	0.040	**0.139**
Chukotka Autonomous Area	0.596	0.212	0.058	0.003	0.064	**0.187**

Retrieved from: (Official Handbook 'Regions of Russia', 2010, 2012, 2013; Official Handbook 'Regions of Russia', 2010; Official Handbook 'Industries of Russia', 2010; The Ministry of economic development of Russian Federation, 2014; Rigby, 2009; Indicators. The World Bank; Econ Stats: Economic Statistics and Indicators by Country and Region; Trade and investment. Central Intelligence agency, 2014)

During this research we identified the groups of development of Russian regions. The distribution of the regions submitted below (Table 3).

Table 3. Distribution of Russian regions according to the results of calculations

Groups of regions	Interval values of the Integral Index	Regions of Russian Federation	
		2010 year	**2012 year**
I – developed regions	0.603 – and higher	Moscow City	Moscow City
II - temperately-developed regions	0.519 – 0.603	-	-
III - lagging regions	0.435 – 0.519	Moscow Region	Moscow Region
IV – temperately-lagging regions	0.351 – 0.435	St. Petersburg City Tyumen Region	St. Petersburg City Republic of Tatarstan Tyumen Region
V - limited developing regions	0.267 – 0.351	Krasnodar Territory Rostov Region Republic of Bashkortostan Republic of Tatarstan Nizhny Novgorod Region Samara Region Sverdlovsk Region Chelyabinsk Region Sakhalin Region	Belgorod Region Kaluga Region Kaliningrad Region Leningrad Region Krasnodar Territory Rostov Region Republic of Bashkortostan Nizhny Novgorod Region Samara Region Sverdlovsk Region Chelyabinsk Region Krasnoyarsk Territory Sakhalin Region
VI - depression regions	0.183 – 0.267	Belgorod Region Bryansk Region Vladimir Region Voronezh Region Kursk Region Lipetsk Region Orel Region Ryazan Region Smolensk Region Tambov Region Tver Region Tula Region Yaroslavl Region Komi Republic Arkhangelsk Region Vologda Region Kaliningrad Region Leningrad Region Murmansk Region Novgorod Region	Bryansk Region Vladimir Region Voronezh Region Ivanovo Region Kursk Region Lipetsk Region Orel Region Ryazan Region Smolensk Region Tambov Region Tver Region Tula Region Yaroslavl Region Komi Republic Arkhangelsk Region Vologda Region Murmansk Region Novgorod Region Republic of Adygeya Volgograd Region

		Astrakhan Region	Republic of North Ossetia - Alania
		Volgograd Region	Stavropol Territory
		Stavropol Territory	Republic of Mordovia
		Republic of Mordovia	Udmurtian Republic
		Udmurtian Republic	Chuvash Republic
		Chuvash Republic	Perm Territory
		Perm Territory	Orenburg Region
		Saratov Region	Penza Region
		Ulyanovsk Region	Saratov Region
		Republic of Khakassia	Ulyanovsk Region
		Altai Territory	Altai Territory
		Krasnoyarsk Territory	Irkutsk Region
		Irkutsk Region	Kemerovo Region
		Kemerovo Region	Novosibirsk Region
		Novosibirsk Region	Omsk Region
		Omsk Region	Tomsk Region
		Republic of Sakha (Yakutia)	Republic of Sakha (Yakutia)
		Primorye Territory	Primorye Territory
		Khabarovsk Territory	Khabarovsk Territory
			Amur Region
			Magadan Region
			Chukotka Autonomous Area
VII – undeveloped regions	0.099 – 0.183	Ivanovo Region	Kostroma Region
		Kostroma Region	Republic of Karelia
		Republic of Karelia	Pskov Region
		Pskov Region	Republic of Kalmykia
		Republic of Adygeya	Republic of Daghestan
		Republic of Kalmykia	Republic of Ingushetia
		Republic of Daghestan	Kabardino-Balkarian
		Republic of Ingushetia	Republic
		Kabardino-Balkarian	Karachayevo-Circassian
		Republic	Republic
		Karachayevo-Circassian Republic	Chechen Republic
		Republic of North Ossetia - Alania	Republic of Mari El
		Chechen Republic	Kirov Region
		Republic of Mari El	Kurgan Region
		Kirov Region	Republic of Altai
		Penza Region	Republic of Buryatia
		Kurgan Region	Republic of Tuva
		Republic of Altai	Republic of Khakassia
		Republic of Buryatia	Trans-Baikal Territory
		Republic of Tuva	Kamchatka Territory
		Trans-Baikal Territory	Jewish Autonomous Region
		Tomsk Region	
		Kamchatka Territory	
		Amur Region	
		Magadan Region	
		Jewish Autonomous Region	
		Chukotka Autonomous Area	

The economic development of Russia in 2001-2012 years was characterized by the increasing trends with the annual rate of 4.7%, but it was extremely irregular. Conditionally, we can distinguish the following three periods.

The first is the period of 2001 - 2008 years. It was a period of the economic recovery after the transformational crisis and recovery of fiscal crisis in 1998. The average GDP growth rate during this period was 6.6%, which made it possible by 2006, according the size of the economy, to achieve the level of 1991, and by the end of this period increase this rate over 18%. The favorable external economic environment has resulted in strong positivity in the balance of payments, and gives a good chance to accumulate foreign exchange reserves. The system of government finances has moved from deficit, insolvency, dependence on foreign loans and huge public debt to surplus, significant amount of reserve funds, and achieved a one of the world's lowest level of governmental debt.

The extremely favorable external conditions provided a significant impulse for economic growth. The world economy after the slowdown in 2001 showed a very dynamic development in almost all regions. The high level

of global liquidity provides the low cost loans, capital flows to emerging markets and rising prices for commodities. The price of oil during this period increased from 23 USD per barrel in 2001 to more than 130 USD per barrel in the middle of 2008. It was a cause of a significant strengthening of the position of payment balance and the Russian budget.

Constantly growing export revenues became a cause of the growth of public finances. The federal budget surplus in the period of 2001-2008 in average was about 4% of GDP. It became possible to reduce quickly the amount of public debt (143% of GDP in 1998 to 6.5% at the end of 2008) and formulate the budget savings. In 2004 it was created the Stabilization Fund of Russia, which was transformed into the National Welfare Fund and the Reserve Fund in late 2007. In 2008, these funds were collectively accounted for about 16% of GDP.

Such factors, as the high export revenues and the growth of credit availability have successfully transformed into the growth in domestic demand. The average annual growth of investment in the period of 2001-2008 was amounted to more than 12%, which promote to make a modernization of the domestic production. The most rapidly growing production was recorded in the industries of non-tradable sectors (construction, trade, services).

Thus, in the period of 2001-2008 in Russia it was made the impressive progress in almost all areas of social and economic development. At the same time, it was managed to construct a whole functional system of institutions of market economy, including tax and budget legislation, regulation of property (including the intellectual property), corporate, land and labor relations.

The second is the period of 2009 - 2011 years. It was the period of the global crisis and the renewal of the post-crisis economy which was completed by the end of 2011.

During the global economic crisis, Russian economy demonstrated the greatest degree of cyclical feature of the developed countries' economies. By the middle of 2009 GDP decreased by 10.2% in comparison of the peak which was reached in the middle of 2008, as a result of the decline of the investment demand by more than 20% and a great reduction of the investment in stocks. Such great change of the economic dynamics confirmed the continuing dependence on the oil prices, which decreased from more than 130 USD per barrel in the middle of 2008 to less than 40 USD per barrel by the end of the year.

The crisis period was characterized as the tightening of monetary conditions, despite of the active policy of the Bank of Russia for the empowerment of the liquidity of banks. It also began to decline the credit process: the total loan portfolio of non-financial enterprises and households decreased by 2.5% for 2009 (including such part which addressed to the population - by almost 11% in the absence of changes in non-financial institutions).

During the conditions of the global financial crisis it has almost stopped the access to the financial resources in the foreign markets. Moreover, the investors massively withdraw funds from developing markets. From August 2008 to March 2009 the net outflow of capital from Russia exceeded 200 billion USD. For preserving the stability of the exchanging rates the Bank of Russia spent about 170 billion USD during this period, which helped the banks and enterprises with significant negative foreign exchange position and the citizens to adapt for changes of the exchange rate. The non-government external debt was significantly reduced: from 505 billion USD (October 1, 2008) to 416 billion USD (April 1, 2009). The real exchange rate of ruble has fallen by 11 % for the period of the crisis phase.

The economic recession in Russia stopped by the middle of 2009, the cause of this also include the improving of the situation in the world markets of raw materials and fuel. The growth of oil prices have resumed in the second quarter of 2009, it was also observed the growth of the demand for Russian raw products in the foreign markets.

The period of 2009-2010 can be characterized as a refusal process of acceptance of the pre-crisis fiscal measures and the formation of the federal budget deficit (6% of GDP in 2009 and 4% of GDP in 2010) due to the decrease of budget revenues, and the overall increase in costs associated with the implementation of anti-crisis plan. The budget deficit was based on the usage of public savings. During this period, it was spent more than half of all oil and gas funds, it is about 8.3% of GDP.

By the end of 2011, almost all of the macroeconomic indicators have reached or exceeded the maximum pre-crisis value.

The recovery of high oil prices led to a depletion of the deficit of the federal budget and resume strengthening of the exchange rate of ruble. The credit activity growths and the main causes are refinancing operations of Central Bank. The money supply continued its growth. The private external debt began to grow with improve of the access to the international capital markets. At the same time the ability of external borrowings has been limited by the main companies of petroleum industry.

During the period of 2009 – 2011 we observed the structural changes in Russian Economy. From the side of demand the share of household consumption increased while it was the reducing of the share of gross fixed capital formation. In the production sphere, the share of services (with domination of government administration, health, education) has increased by reducing the weight of manufacturing industries, as well as trade.

In 2012 Russian economy has moved to a new phase of growth, which has a number of features, such as a slowdown of both investment and consumer demand with the weakness of the external demand.

The one of the key factors in post-crisis growth in 2010 – 2011 was the recovery of the demand for production and commodity stocks. In 2012 it was completely exhausted. At the same time the period of 2012 year was characterized by negative trends in the global economy and unfavorable weather conditions which led to the loss of the part of the harvest and the increasing in food prices. The dynamics of the most economic indicators began to slowdown in the second half of 2012. The growth of industrial production, investment, construction and retail trade slowed significantly, which led to a slowdown in overall economic dynamics to 3.4% from 4.3% in 2011.

One of the new factors of growth in 2012, which provided a relatively strong growth in consumer spending, was the reducing of the acceleration rate of household savings and wages growth, especially in the public sector. The real wage growth accelerated from 2.8% in 2011 to 8.4% in 2012, mainly due to a significant increase of the wages in military sphere and the employees in education and health sectors. The savings rate has decreased from the average amount of 12% in 2011 to less than 9% in the second half of 2012. It was largely due to a significant acceleration in crediting to households, the increase of which was in general 39.4% for the year 2012.

At the same time in 2012 it was the recovery of tightening of monetary policy. In September, the Bank of Russia raised the refinancing rate and interest rates on its operations by 0.25 percentage points, and the rate of M2 growth declined from 22.3% in 2011 to 11.9% in 2012. It predetermined the rapid slowdown in crediting of the non-financial institutions about 12.7%. The increase of the loans cost started to influence on the dynamics of investment in the second half of last year.

Another new factor of 2012 year was a sharp slowdown of the import and the stronger orientation of the domestic demand for national products. The import growth slowed to 3.6% versus 29-30% in 2010-2011, despite of the decreasing of the part of import tariffs. This reduction of the import was connected not only with slowdown of the domestic demand from 9.1% in 2011 to 4.9% in 2012, but with a significant change in the structure of demand.

Thus, 2012 was generally characterized by the transition to a new, lower economic growth trajectory while maintaining high export revenues and stimulating fiscal policy - factors that can be exhausted in the near future.

4. Discussion

The problems of evaluation of the competitive potential of the country are debatable. A lot of Russian and foreign economic researchers argue about the different techniques, elaborated for making a number of research for estimation the competitive advantages of the economic development.

The research of methodological tools assessing the competitiveness of regions shows that the currently elaborating methodology for assessing the competitiveness of regions is still under development.

It is remarkable that the concept of "competitive potential of the region" is complicated. It has a complex structure and controversial interpretation of its substance, and approaches of its estimation. There is no consensus in the interpretation of this concept in the scientific literature. There are various controversial approaches of its definition and evaluation.

Thus, some researchers (Chernaya, 2009; Komarova, 2007; Andreev, 2011) identify the existence of three points of view about this issue. The first one examined the competitive potential of the region on the basis of the factors' approach, the second one - on the basis of the expert method, and the third one - this concept is interpreted as identical socio-economic (economic) potential issue. This potential is formed at the expense of specific potentials of common economic agents on the basis of the synergistic effect and it considered as the most representative point of view. Furthermore, every approach has its own advantages and limitations.

Based on the approach of integration and sustainable development of any region, some researchers (Neimushin, 2009) propose the following interpretation of the concept of competitive potential which include seven particular types of potential: natural resources, human, investment, production, export, innovation and organizational potentials. This structure is determined by logic of the competitive development of the region, which based on the development of competitive potential as a combination of competitive resources and advantages. In this case, natural resources, human and investment potentials are characterized by some advantages, created on the basis of

availability of the resources and usage of the basic factors of production. Production, export and innovation potentials are determined by the operating from resource-based benefits which ensure the technological advance of the region from the competitors. Organizational capacity determined by strategic competitive advantage as a result of the usage of company's resources.

Scientists, who investigate the strategic competitiveness of the country, have not completed a list of factors that influence the level of regional strategic competitiveness. In our opinion, evaluation of strategic competitiveness of the region is always associated with the prediction of its parameters. It confirms that the competitiveness of the region is a complex integrated category which determine by a great number of factors.

The competitive potential of the region identified as a possibility of the subject of territorial development at the expense of the available set of particular competitive advantage to attract and retain potential "consumers" of the territory. Competitive potential of the region in economic policy is the basis of competitive advantage. The comparison with its competitive advantages in other regions provides us facts for future developing of the competitive advantages.

From the other side, the competitive advantages of the region dependent on the quality of its human resources and the amount of investment in human capital. For improving the competitiveness of the regional society, firstly, it is necessary to improve the level and quality of life in the region, to raise a level of motivation for self-realization in the career of this region. Human development can be considered as a factor for developing the competitive advantages and the competitive potential of regional society.

Nowadays, it is a great number of the model and methodology which evaluate the regional competitiveness and competitive potential.

Russian economist R. A. Fathudinov (2005) elaborated the approach to the separation of the competitiveness of the region - the factual and the strategic competitiveness. However, he believes that the set of strategic competitiveness indicators should be separate from the overall set of the actual indicators of competitiveness, because its purpose is to form long-term competitiveness.

He determined a number of indicators of strategic competitiveness: effectiveness of government institutions; investment attractiveness; innovative activity and reproduction; quality of the competitive environment and competition; competitiveness of education and healthcare.

Based on the analysis of existing models of evaluation of the national and regional competitiveness, we identified the most important of these models.

Model of the International Institute of Management Development (IMD) (International Institute of Management Development. Access on: http://www.imd.org). This model based on the factors of competitiveness (four main factors): economic development, effectiveness of public administration, effectiveness of entrepreneurship, infrastructure). It includes more than 300 indicators, and the majority of it is the evaluations of the experts. In this model we can find the effort to evaluate the effectiveness of government and entrepreneurship. There are a number of disadvantages of this model, such as a great number of subjective assessments and evaluations, which cannot provide a clear understanding of the concrete situation in the region.

Model of Investment consulting company AV (AV Regions Competition Index) (Investment consulting company AV. Access on: http://www.av-group.ru). This model based on the factors of competitiveness (eight main factors): institutional, real, financial, human, natural, informational, technological capital and market. The evaluation based on 100 indicators and questionnaires. We identify a number of original approaches to the evaluation of the institutional and communications potentials. However, there are some disadvantages of this model - a huge number of indicators and factors which reduces the impact of strategically important one.

Model of the Institute for Strategy and Competitiveness Harvard Business School (Institute for Strategy and Competitiveness Harvard Business School. Access on: http://www.isc.hbs.edu). There are some factors of competitiveness (three main factors): institutional environment, market structure and economic policy. The evaluation of this model based on the statistical indicators and surveys of executives. We highlight that this model includes the evaluation of the factors of market structure and economic policy, which is not obvious for many other foreign models. However, the disadvantage of this model is the ignorance of social factors of the regions.

Thus, during the analysis of existing models and methodologies of evaluation of the national and regional competitive potential, we have identified a wide range of contradictory opinions of selected indicators for the comprehensive analysis of the competitiveness.

During the analysis of the competitive potential of Russian national economy, we explored the researchers of famous Russian and foreign economists. The most important for this analysis are the authors, such as: Gelvanovsky, M. I. (1999); Greenberg, R. (2008); Mau, B. (2003); Minakir, P. A. (2012); Mikheeva N. N. (2008); Smirnitsky, E. K. (1989); Yasin, E., Yakovlev, A. (2004); Krugman, P. R. (1991); Schumpeter, J. (Schumpeter, 1982); Fujita, M., Krugman, P. (1995); Fukuyama, F. (2006), and others.

5. Conclusion

During this research it was developed the methodology, allowing to evaluate the competitiveness of the country's regions, including the analysis of many components of competitiveness (the current competitiveness of the region, the competitiveness of the industry in the region, the development of infrastructure and communications, the innovative development of the region, the development of foreign economic activity in the region of the country). Consequently, after calculations we received a vividly expressed view of regional development in the context of competitiveness.

During the calculations it was identified that the majority of Russian regions were grouped into the category of depressed and undeveloped regions. Therefore, we can speak about the negative development of Russian economy, the almost fully shortage of development in the manufacturing industries, the absence of one strategy for planning of the national industrial policy.

Nowadays, when the share of the direct influence of the state is getting smaller, the necessity of its extent becomes evident. It is completely clear in the situation of elimination of the negative impacts of external effects. It includes the redistribution of income in the state budget, and the administrative prohibition of the usage of hazard technologies, etc. The adjustment of the state of the market mechanism can eliminate the negative effects of market forces.

The reserves of increasing the efficiency of the industry on the basis of the usage of extensive factors were exhausted. It is vitally necessary to provide the reorientation of industry on the intensive, which include the necessity of solving the complex of interrelated issues in the legislative, regulatory, financial, economic, educational, and other spheres. The problems which specific to the Russian industries in the late 1990s and the 2000s remain unsolved: the obsolescence of the capital assets, insufficient level of attraction of investments, the low level of innovation activity of enterprises, and other problems.

Acknowledgement

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Place of Private Pension Funds in the Financial Market

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Abstract

Contemporary Russian pension system was influenced by the social, economic and demographic factors, as typical in most developed countries and only our country. Development of the pension system only within the state pension insurance for 20 years has shown its failure, in connection with what has recently acquired great importance to private pension funds, the impetus for the development of which was the delegation of functions to manage pension funds and legislative approval of government guarantees repayment of funds insured persons Private pension funds, taking into account potential investment opportunities can take a significant niche in the Russian financial market in solving a number of currently available economic and socio-political problems.

Keywords: pension fund, the Central Bank of the Russian Federation, the funded part of the pension insurance funds, pension funds

1 Introduction

1.1 Introduction to the Problem

The question of financing pension funds acutely manifested with the transition of the Russian economy on the market structure. For over 20 years, this problem is solved by the reigning structures with a certain success. However, the amount of pensions in Russia does not allow citizens to replace income at retirement based on paid their premiums

1.2 Disclosure of the Importance of the Problem

At present a strategy for the development of the pension system in Russia, which focuses on the formation of the funded part of the pension under the private pension insurance, in connection with which the key participants in the Russian pension system become non-state pension funds.

1.3 Description of Research in this Area

In Russia, the issue of financing pension funds on the basis of private pension funds is only beginning to be studied, whereas in Western countries have long existed different financing systems pension savings in the public and voluntary pension insurance based on private pension funds. However, given the significant features of the Russian economy and society blindly following Western models of financing pension funds is inefficient and leads to significant economic losses

2. Methodology

2.1 Definition of the Object of Research

As the recent administrative decisions, saying that pension reform is nearing completion too early, and in the conditions of budget problems likely to see more innovations in this segment of the economy. The more important for many people in recent days was the opportunity to fix at least some status quo, and choose the NPF, while remained such an opportunity. In connection with the development of non-state pension insurance in the Russian Federation, the most important object of study are non-state pension funds, taking into account the characteristics of the formation of pension reserves, their placement and investment funded part of citizens pensions, as well as the further development of non-state pension funds. In this connection, the object of study of this article has been selected private pension inurance system, and the role of non-state pension insurance in the financial market of the Russian Federation.

2.2 Determination of Its Main Characteristics

The article examines the characteristics of private pension funds as investment yield pension funds, insurance reserves, the number of insured persons, the number of participants, novation pension schemes for co-financing and other characteristics.

2.3 The Choice of Research Method

In the process of writing the article used the following research methods: the historical method - in order to study the process of development of private pension insurance in Russia; functional analysis; analysis and synthesis of the main characteristics of the pension system in Russia, the method of abstraction - in order to cleanse the test subject from the particular separating the typical and essential features and characteristics.

3. Results

3.1 Set of Analyzed Data

In order to obtain reliable results, the study authors of this paper analyzed the statistics relating (Kaurova et al., 2013, Kaurova et al., 2014) to the activities of non-state pension funds in the dynamics of a few years, shown on the official website of the Central Bank of the Russian Federation, the Federal State Statistics Service, as well as analyzes of financial regulators, the media, scientific works of modern economists in the field of social and pension insurance, the demographic situation in the country and in the international arena in the field of economics.

3.2 The Initial Data

Analyzed the initial data are sufficiently verified relevant, since it is mainly represented by the legislation of the Russian Federation, the static data of official government agencies. Analyzed on the basis of the performance of private pension funds over the past 20 years have been made about the role of non-state pension funds as in the dynamics of a few years, and in the present.

3.3 Statistics and Data Analysis

The formation of the study results significantly influenced by static analysis of data non-state pension funds in statics and dynamics over the last 20 years, some of which is presented in an article in the form of conclusions about the change in the situation on the market of non-state pension insurance. These figures indicate a growing interest of citizens in shaping their pensions.

4. Discussion

4.1 The Main Problems of Financing of Pension Insurance

Beginning of the XXI century in many countries around the world marked the pension reforms. First of all, they are caused by demographic changes. The demographic situation in the context of the formation of the pension system is unfavorable in the Russian Federation. But mostly due to the pension reform objectives to improve the quality and standard of living of pensioners and the need to change the role of financial and social institutions in the society. Thus, the main purpose of the changes in the pension insurance is adequate compensation earnings lost in the events defined by the legislation, such as: the achievement of a certain age, the onset of disability, loss of breadwinner, etc. Successful solution of these problems in the pension system intends to achieve long-term financial balance and providing a socially acceptable level of maintenance (Egorov, 2008). In a planned economy and a relatively favorable demographic distribution system worked reliably and effectively enough, but since the 90s due to the influence of a number of economic and demographic factors, the pension system is no longer meet modern requirements. Replacement rate in 2014 is 37%, with an average wage in the Russian Federation 30.0 ths. ("Business Life", 2014), and the average retirement pension 11, 144 ths. (Informational and analytical portal Azzeros, 2014). At the same time we should not forget that the higher the income the employee, the replacement rate below (large proportion of workers it is below 10-15%) (Antonov, 2009; The official site of the Federal State Statistics Service, 2014; United Nations, 2007).

In the search for new methods of generating the financial resources necessary to ensure the financial sustainability of the pension system as part of the pension reform was suggested formation of private pension funds (NPF). Regarding the mandatory pension insurance, pension funds had to form part of the retirement savings of insurance premiums; additional insurance premiums; employer contributions paid for the benefit of the insured person (in accordance with the Federal Law "On Additional contributions to the funded part of labor pension and state support pension savings"); contributions received in the framework of the co-financing of pension savings; as well as the investment performance of pension funds.

4.2 Genesis of Non-State Pension Insurance in Russia

As part of the APF for the non-state pension insurance pension reserves are formed, as a collection of assets owned by pension funds and intended for performance of APF obligations to participants in accordance with the pension agreement. Currently, private pension funds are taking a more prominent place in the financial market of the Russian Federation. In 2013, the Pension Fund of Russia had to be transferred to the account of non-state pension funds funded part of labor pensions of 3,721,198, 031 million Rubles. (The official website of Bank of Russia, 2014). Private pension insurance since the adoption of the Federal Law of 08.04.1998 75-FZ "On Private Pension Funds" developed in the Russian Federation slowly (Soloviev, 2005).

Such rates of private pension insurance due to the following reasons: - The corporate nature of private pension insurance. Private pension funds to transfer its functions to the accumulation and disposal of the funded part of pensions of citizens in the state pension insurance in 2004 and the introduction of compulsory government licensing to operate within the framework of compulsory pension insurance existed mainly in the format of closed corporate non-state funds. They carried out supplementary pension insurance due to corporate deductions from profits of the employer. Since 2004, due to the emergence of a new source of financing in the framework of compulsory pension insurance, a license to operate in the field of compulsory pension insurance was 81 pension fund. In 2007 the number had risen to 252 NPF, however, only the 91-th of them managed to enter into contracts for mandatory pension insurance. 50 NPF concluded less than 5,000 contracts, of which 34 NPF concluded less than 1,000 contracts, indicating that the immature market retirement life insurance in Russia (official website Wikipedia, 2014); financial illiteracy of the population (Andryushchenko, 2011). In most developed Western countries the basis of pension savings is formed by the insured (the insured person) pension under the private pension insurance (Nor-Arevyan, 2010), (Orlanyuk-Malitskaya, 2010). Command-administrative system of the Soviet Union formed the population opinion on the State's obligation to provide citizens with a decent level of pension at the expense of public funds. However, in a market economy, ensuring that this dogma at the expense of the state budget is impossible. In the Russian Federation premiums in favor of the insured by the employer. Employees often do not show interest in the formation of the pension insurance system and do not know much about it (Eruslanova et al., 2008); Numerous reforms of the pension system did not contribute to the strengthening of public confidence in the Pension Fund of the Russian Federation and especially to non-state pension funds (Pavlyuchenko, 2007). Lack of up to 2014 legislation guaranteeing the insured returns of pension savings in the event of bankruptcy of private pension fund, the difficult economic situation in the country, the lack of a developed financial market and profitable financial instruments for investment, low return on investments of public and private pension funds in the aggregate caused the stagnation of the market of non-state pension insurance (Ermasov, 2011; Roik, 2007).

4.3 Policy of Non-State Pension Insurance

It should be in the context of the above commend the adoption of the 2014 Federal Law of 28.12.2013 422-FZ "On guaranteeing the rights of the insured in the statutory pension insurance of the Russian Federation in the formation and investment of pension funds, the establishment and implementation of payments by pension funds" (hereinafter - the Federal Law 422-FZ), as well as a planned activity on moving the funded part of the pension of the insured persons in private pension funds.

The Federal Law 422-FZ establishes the basic principles of the system to guarantee the rights of the insured persons, which include: the protection of the rights and legitimate interests of the insured upon the occurrence of a warranty case; mandatory participation of insurers in the system to guarantee the rights of the insured persons; cumulative formation of a fund to guarantee pension savings.

Law stipulated warranty cases in which the occurrence of warranty payments and procedure for its implementation. Data bases include lack of pension savings funds of the parent capital for investing accumulated funds and for the payment of pension / maternity capital to the insured person, and, in the case of his death, and under certain conditions of the insurance contract, his successor.

Deposit Insurance Agency pays cash in case of a lack of pension savings in the personal accounts of the insured person at the time of the payment of the pension benefit NPF, as well as in the event of revocation of APF and (or) the recognition of the fund bankrupt party and the opening of the fund in respect of party bankruptcy proceedings. Covered by warranty in respect of the provision of the Pension Fund of Russia (PFR) for mandatory pension insurance reduction in the amount of provision is recognized FIU for mandatory pension insurance is below the minimum size.

Pension Fund of Russia determines the minimum size of the reserve each year until April 1 of the current year at the level of at least 0.5% of the amount of the pension savings of insured persons, formed by the Fund and held

in trust as at 31 December of the year, including funds and reserve funds Paymaster pension savings of insured persons who obtained special pension payment, as well as funds not transferred to the trust, except for pension funds paid to the successor of the deceased insured person's funds to pay for services for the delivery of insured persons funded pensions, and other income to the reserve pension Fund of Russia (Magazine Kommersant.ru, 2014).

Provision of the Pension Fund of Russia for mandatory pension insurance can be invested in government securities of the Russian Federation, municipal bonds, shares of Russian companies established in the form of joint stock companies, shares, shares of index funds, placing funds in government securities of foreign States, bonds and shares of other foreign issuers.

Impairment, based on the amount of pension savings of insured persons will create a kind of "safety net" to ensure that the obligations FIU, as well as additional investment base for the development of the national economy (Andryushchenko et al., 2011).

Table 1. Number of insured persons for 2005-2013

	Number of insured persons, a million people								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
TOTAL including	55,5	59,4	62,7	67,7	68,7	69,4	74,1	76,1	78,8
State management company, only one	54,5	57,6	60,0	63,2	62,5	60,6	61,5	58,9	56,1
Advanced investment portfolio	Portfolio does not form a				62,5	60,5	61,3	58,8	55,9
Investment portfolio of government securities					0,2	0,1	0,2	0,2	0,2
Private management companies	0,3	0,8	0,9	0,9	0,9	0,7	0,6	0,6	0,5
Private pension funds	0,7	0,9	1,9	3,6	5,3	8,1	11,9	16,6	22,2

Source: Official website of the Pension Fund of Russia www.pfr.ru and the Bank of Russia www.cbr.ru

4.4 Supervision of the Activities of Non-State Pension Funds

It should be noted that in the autumn of 2013 had established a comprehensive supervisory authority on the basis of the Bank of Russia, which is to implement an effective, comprehensive oversight of the financial markets of the Russian Federation through the establishment of procedures for the oversight activities of its participants, evaluate the effectiveness of non-state pension funds and resolving the many problems of monitoring and supervision over the activities of financial market participants.

The expected effect from the transfer functions of supervisory authority to the Bank of Russia in the sphere of private pension insurance is to increase the confidence of depositors in private pension funds as the Bank of Russia has a huge positive experience in the implementation and oversight of the state regulation of commercial organizations.

Oversight activities megasuperviser is a collection of measures to control the execution subject of supervision of quantitative and qualitative indicators demonstrate their financial stability, taking into account the risks specific to the subject of supervision (risk-based supervision) (Chernoff, 2010). However, in a broad sense, oversight - a kind of control, which is dominated supervisory functions.

Subject to the supervision of the private pension funds is the Bank of Russia, actors - state pension funds.

The Bank of Russia oversees both at the stage of registration of private pension fund (changing the legal status / form extensions of the entity, the replacement heads, etc.), And at the stage subsequent supervision.

At the stage of registration of the licensing activities of the entity, the approval of candidates to fill important positions of non-state pension fund, the establishment of correspondence performance requirements of the Agency NPF deposit insurance system and regulations of the Bank of Russia.

Subsequent supervision can be remote (documentary) and inspection. In identifying the activities in APFs violations, they can be applied interventions (including sent written recommendations, requirements, imposing a fine, imposed restrictions on the activities of the subject).

In addition, as a special supervisory tool can be considered the development of regulations, internal procedures and regulations of the Bank of Russia, regulatory oversight activities mega:

• rulemaking segment senior (at the central office of the Bank of Russia), to develop basic regulations sharing;

• rulemaking segment, to develop internal regulations, guidelines on the implementation of surveillance activities in the Bank of Russia (performed at the level GIKO, the central office of the Bank of Russia).

Thus, on the basis of regulations and internal regulations of the Bank of Russia formed a multi-level structure of supervision:

• licensing of operating the central office of the Bank of Russia;

• Remote (documentary) supervision is carried out at the central office of the Bank of Russia;

• inspection activities, including the processing of the results of inspections of surveillance carried out on the level GIKO.

The existing structure of supervision in some of its variations (subject to minor changes to centralize supervision) positively proven in the supervisory activities of the Bank of Russia for credit institutions. It allows you to effectively monitor compliance with the requirements of credit institutions to the deposit insurance system, and, therefore, can provide effective supervision and for the non-state pension funds, taking into account features of the supervisory activities of the private pension funds.

Improve the effectiveness of the oversight activities of the Bank of Russia for state pension funds promotes the process of corporatization for mandatory registration and licensing of their activities with the establishment of the minimum authorized capital for NPF at around 120 million. Rubles. Until 2020, is intended to increase the authorized capital of each NPF 150 million. Rubles. Such a measure would lead to the consolidation of the participants wound, increase the current and long-term financial stability, and will reduce the risk of non-pension savings. (World demographic trends, 2007).

In addition, in conjunction with the process of corporatization of private pension funds by the Bank of Russia are designed to comply with the rules of mandatory standards, transparency of the funds, which also contributes to the financial stability of the NPF, increase public confidence in the private pension funds (in the establishment of statutory state guarantees on return accumulated funds) and, consequently, the market expansion of private pension insurance, raise its competitiveness to foreign investors and enhance the impact on the economy.

4.5 Performance Analysis of Non-State Pension Funds

Thus, the factors contributing to the development of the sphere of private pension insurance are:

- Increase public confidence in the private pension insurance at the expense of the state program for the transfer of the funded part of the pension;

- Establishment of monitoring the activities of non-state pension funds mega-regulator - the Central Bank of the Russian Federation;

- A substantial revision of the legislative framework in the field of non-state pension insurance;

- Economic growth of key performance indicators of the state and the welfare of citizens (Soloviev, 2008);

- Increasing social responsibility and financial literacy of the population.

The dynamics of development of the sphere of private pension insurance in 2013 was characterized by the following indicators: As of 01.10.2013 the amount of own funds of private pension funds amounted to 1 901.3 billion. Rubles, the amount of pension reserves - 800.9 billion. Rubles of pension savings at book value - 986400000000. rubles (at market value - 976.5 billion. rubles). As of 01.10.2013 the number of insured persons was 21,063,329 persons, including receiving a pension for mandatory pension insurance - 262,961 people; number of participants in private pension funds - 6,666,918 people, including receiving a pension - 1,526,086 people (official website of Bank of Russia, 2014).

However, according to the Bank of Russia, with the approval of a new system for regulating the pension market in 2013, in particular the mandatory incorporation of non-state pension funds (NPF), significantly reduced the number of market participants (126 funds as of 1 July 2013 to 1 118 April 2014). Reduction in the number of non-state pension funds did not affect the growth of the aggregate share of the assets of private pension funds, which as a result of non-state pension funds 01.10.2013 increased by 22.4%. Source of growth in investments of private pension funds were pension reserves and pension funds.

Greater share in the investments of private pension funds are investments in securities, including as of 01.10.2013 the majority of investments were in the banking sector - 35.6% of total assets ratio (including 27.4% of NPF assets - in deposits of credit institutions, 6.6% - in debt securities, 1.6% - in the equity securities of credit

institutions), to other financial institutions accounted for 32.3%, non-financial sector - 22.1% on investments in government securities - 6.2% (official website of Bank of Russia, 2014).

Such a structure of investments of private pension funds is related mainly to the restrictions dictated by conservative investment policy of the state in the field of pension insurance, enshrined in the Federal Law of 24.07.2002 111-FZ "On investment funds to finance the funded part of pensions in the Russian Federation."

Limitation of the list of possible assets to invest pension funds due to the lack of development of financial markets in Russia (the lack of financial instruments that are common abroad); using a conservative policy of investing pension savings (use of assets with low risk and low returns); underdeveloped sphere of private pension insurance (including actuarial techniques); the presence of a number of problems in the economy (high inflation, low yields on government securities) (Chetyrkin, 2009).

Total assets of private pension insurance market by the end of 2013 was equal to 1.9 trillion. rubles (growth for the year was 34.5%), 30.5% are in cash and deposits.

Pension savings for this period exceeded $ 1 trillion. rubles (growth for the year to 62.4%), pension reserves - 831.6 billion. rubles (9.7%). To save a significant amount of pension savings and customer base (the number of insured persons reached 22.2 million. Persons) 35 funds have already started the procedure of incorporation. As of 01.01.2014, this requirement met 64 fund.

It should be noted that at high concentrations (in the 20 largest non-state pension funds account for about 86% of the pension savings market) withdrawal from the market of small parties that do not meet the requirements of the Bank of Russia to carry out activities in the field of private pension insurance, will not have a significant impact on him.

4.6 Analysis of the Factors Contributing to the Development of Private Pension Insurance

According to the Bank of Russia for private pension insurance market is characterized by a steady decline in the relations of property to ensure the authorized activity (hereinafter - IOUD) to the value of the liabilities, which is associated with a slight increase IOUD (in 2013 it amounted to an increase of 16%) and a significant increase in pension liabilities (34.7%). At the same time, on the eve of the new pension reform of private pension funds in advance IOUD increased, which led to an increase in the financial adequacy of funds for the whole market to 6.59% (for the III quarter of 2013, the figure was 6.05%). As a result, on January 1, 2014 the total volume of IOUD reached 127.5 billion. Rubles (official website of Bank of Russia, 2014).

According to the new requirements of the Bank of Russia for the occurrence of non-state pension fund guarantee system in the Deposit Insurance Agency NPF must meet not only the requirements set out in respect of the amount of own funds (capital) of APF, but also higher quality requirements of internal control, risk management and the investment activities.

However, given the increasing complexity of the economic situation in the country, coupled with the introduction of more and more sanctions against Russia by Western countries and responses of the Government of the Russian Federation, increases the load on the pension system.

With the decision on the moratorium on the transfer of the funded part of the pension to private pension funds to the state in 2015 tripled the financial burden on the state pension funds:

- Due to the shortfall of the funded part of the pension for the period from 2013 to 2015, state pension funds was lost income from the investment of these savings;

- In connection with an increase in the key rate of the Bank Russian credit organizations will increase the cost of credit, which has a negative impact on the financial stability of the state pension funds;

- In connection with the possible exception of large Russian companies to place issues of securities in excess of 90 days on the major Western markets, elimination of returns from global indices performance data quoted securities, the increasing complexity of the geopolitical situation affecting the outflow of foreign capital, the investment portfolios of private pension funds will need to substantially revised.

In this regard, experts predict many private pension funds may face problems to ensure the current liquidity, as well as reluctance to continue to do business in this area.

However, private pension funds is a very important instrument for investing pension funds in the Russian economy is accelerating the development of the financial system of the state, to increase its financial stability, financial market development, the preservation of the domestic money supply, promotion of a healthy economic climate in the country, enhancing the stability of and return on investment of private pension funds, and as a

result, improve the living standards of the population and the formation of an independent foreign investors volume of investment resources.

5. Conclusion

The significance of the pension reform can not be underestimated as the social significance of the pension system in Russia can be compared perhaps only with the housing and communal services of the country, these sectors affect all segments of the population and have a particular impact on the most vulnerable segments of the population not as pensioners, particular importance of these issues are for exclusive territories, in particular - monotterritory Russia. (Kryukova et al., 2014; Makeeva et al., 2013; Kryukova et al., 2015)

In the course of the study it was found that non-state pension funds play a crucial role, as in the economic development of Russia, as well as in providing social guarantees for the establishment of a decent level of pension benefits. In this connection, the creation of a stable system of private pension insurance requires special attention from the government as a fundamental sector of the economy. Addressing the financing of insurance premiums of insured citizens, investing their retirement savings and insurance reserves is a priority for the development of private pension insurance. In addition, special attention should be paid to monitoring ongoing activities of non-state pension funds, the establishment of additional control and supervision of their activities, as well as to strengthen the requirements on the part of a mega-regulator with respect to the non-state pension funds, which manages the funded part of the retirement pension of the insured citizens.

Private pension funds acquire an exclusive role of key domestic investors in the national economy. Pension funds and pension reserves are working in the real economy in three main areas, namely: lending of public-private partnerships, debt financing long-term investment projects, participation in equity. According to the authors, it is necessary to expand the list of tools for investing pension savings without deterioration of the credit quality of these investments. At the same time it is necessary to legislate additional guarantees on return of voluntary pension savings, if the pension fund will not be able to fulfill its obligations. However, the study did not consider the potential impact of the moratorium imposed on the transfer of pension savings under the mandatory pension insurance to private pension funds over the period from 2013 to 2015, on the state pension funds in lost profits as part of the policy of public authorities . This analysis could be carried out on the basis of statistical data for 2014, which will appear later. Research in this direction is assumed by the authors continue.

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Organizational and Economic Mechanism of Integration Restructuration of State-Owned Enterprises in Russia

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Abstract

This article contains the results of the authors' complete research on the development of organizational and economic mechanism of restructuration and integration of state-owned enterprises in Russia. The need for restructuration is caused by a wide range of issues and the country development objectives, but a scientifically proved mechanism is still absent. The organizational and economic mechanism of integration restructuration, developed by the authors, contains a set of tools and methods, financial resources in accordance with their specific features (cost-effectiveness and strategic significance for the country) and their legal status.

Keywords: public sector of the economy, integration, restructuration, classification scheme, method of restructuration, joint stock companies, state-owned unitary enterprises

1. Introduction

1.1 The Role of State-Owned Enterprises

In many countries' economies, the public sector plays a significant part. The average figure is about 30%, but now in many European countries it is close to 50% (Peev, 2010). That determines the importance of the public sector and the importance of determining impact which is made by its development on the economic development of the country as a whole. On the one hand, in the current conditions there are some public corporations that are beginning to play an important part not only in the domestic markets (Buge et al., 2013; Christiansen, 2011; Schmitz, 1996). On the other hand, there is the dependence of the economy on their performance, and their low efficiency can result in a slowdown of the economy's development. So, in some countries control of such enterprises' activities is becoming increasingly stringent (Rohan). Thus, it is necessary to find some effective methods of managing such enterprises.

The problem of low efficiency of the state-owned enterprises remains topical in many countries, including Russia (Rondinelli, 2005). Sustainable development of the Russian economy is much determined by the efficiency of state-owned enterprises, as the share of the state's presence in the Russian economy is very large and is not less than 50% of GDP (while according to other estimates, exceeds this figure). That means that the development of the Russian economy as a whole is directly associated with the increase in the efficiency of enterprises with the state share in the authorized capital.

The efficiency of enterprises (EE) of the public sector as a whole can be assessed as not high enough, which is proved by the economic performance of most enterprises. The labor productivity of some of them is 2-4 times lower than in the private sector, the capital productivity of industrial enterprises (different industries) is 15% below the average figure (Artemov et al., 2007).

That proves the need of developing of a tool to enhance the economic benefit of the public sector of the economy and the efficiency of their management system. The restructuration of the management system can become such a tool.

To prove the relevance of the development of mechanisms of restructuration of the Russian state-owned enterprises we should note the following:

- as it has been mentioned before, the analysis demonstrates that many public enterprises in Russia have poor criteria of economic efficiency, which indicates the need of implementing some measures for their rehabilitation and for improving their economic benefits;

- the excessive amount of control objects, which hampers the implementation of management actions is also indicated. All the public enterprises in Russia are assigned to certain executive government bodies, the number of management objects may be more than 100 enterprises, which that creates the excessive amount of the relations controlled;

- the enterprises with the state share in the authorized capital belong to different organizational and legal forms (unitary enterprises, joint stock companies or Ltd). That determines the multiplicity of management modes, because the state as an owner has different rights at the enterprises of different organizational forms. Some researchers suppose that the low efficiency of a state-owned enterprise is determinated by its organizational and legal form itself (DailyOjo);

- the necessity of the participation of the state-owned enterprises in the implementation of government programs and the strategic objectives of the whole country.

1.2 Relevance of Research

According to the aforesaid features of the Russian state-owned enterprises, proving the relevance of this research, the restructuration of the management at such enterprises may be carried out in two directions:

- privatization of the inefficient enterprises and enterprises with state share which is less than a blocking one: that will reduce the burden on the budget for the maintenance of inefficient enterprises, as well as for monitoring and managing these enterprises, unable to have any sufficient influence on decision-making because of holding a minority stake;

- the creation of integrated structures, which will reduce the number of objects managed (interaction of the executive authority with the companies can be carried out through the parent organization), and the concentration of capital, as well as the bringing together the labor force, customer base, brands, etc.

The analyses demonstrated that the integration of the enterprises and the creation of state holding-type agencies are being used in Russia often and often. That determines the need for organizational and economic mechanism of restructuration and integration of enterprises.

The creation of state holding-type structures allows reducing the burden on the executive authorities related with managing the enterprises as the state will own only a part of the parent company shares directly, while the parent company will control the affiliated companies through holding their controlling stake. On the other hand in fact it is the state who is able to influence on the affiliated companies performance through the mechanism of the implementation of the owner's rights established for the joint stock companies with the state owned share in the capital. Thus, in spite of the fact that the control over the economic activities of the affiliated companies is being lost (the owner of the parent company is not allowed to interfere), the indirect control will be implemented through managing the parent company. In other words the state, having no rights of an owner of the affiliated companies included into the holdings, still keeps enough resources to ensure the full execution of all the government programs.

At the same time the budget-oriented objectives will be gained. Integration of the enterprises into the holding will allow concentration of capital and financial resources as well which provides an additional precondition for the development: there appears an opportunity of credit resources raising and also greater capitalization of the city-owned enterprises in ensured. As a result the increase of the budget receipts in the form of taxes and dividends will take place.

The main purpose of the research, the results of which are presented in this article was to develop some methodological tools restructuration on the basis of the selection of effective organizational, legal and integration forms.

The enterprises of various organizational and legal forms with the state share in the authorized capital were the object of the research.

2. Methodology

The theoretical basis of the research were to economic theory, the theory of management and organization theory, as well as the concept of sustainable development. The methodological basis were the principles of the system, process and situational approach. On this basis, within the research a conceptual model and the organizational and economic mechanism of integration restructuration, adapted to the field of the research were developed.

Meanwhile, the mechanism of organizational is referred as the set of approaches, methodology and management tools of producing some integrated structures on the basis of the state sector of the economy as well as the set of movements to implement them.

Within this research, the following basic principles of the theory of management are used:

- during the restructuration of priority should be given the task of increasing the economic efficiency of the enterprise (on the basis of the provisions of the Scientific Management School - A. Fayol, F.U. Teylor) (Taylor et al., 1992);

- within the process of restructuration taking into account the principles of rational construction of the management system at the enterprise become particularly significant (according to the principles of the Classical (Administrative) School - P. Druker) (Drucker, 2004);

- the restructuration of enterprises should take into account the so-called "human factor", in order to prevent any resistance to changes and to motivate the staff to participate in the transformation processes (according to the School of human relations - E. Mayo) (Mayo, 1924).

The results of numerous research, related with the problems of managing the state-owned enterprises and their privatization, were also applied (Kennedy & Jones, 2003; Shirley, 1983; Montagu-Pollack, 1990; Balatsky & Konyshev, 2005).

3. Key Findings

3.1 Purpose of Restructuring State-Owned Enterprises

Taking into account the main problems of the Russian enterprises with the state share in the authorized capital, the priorities and objectives of restructuration, which the executive authorities of cities, the subjects of the Russian Federation and the country as a whole face, were formulated in a systematic manner:

- firstly, the reduction of state involvement, which is associated in particular with the privatization of stakes in joint-stock companies with the state share in the authorized capital, which is less than a blocking stake;

- secondly, the objective of providing the life support in the cities, in the regions of the Russian Federation and in the country as a whole, including the preservation of the state-owned unitary enterprises (SOUE), engaged in the activities authorized by law only for the SOUE, to ensure the implementation of government programs concerning the state-owned enterprises (in noncompetitive areas), as well as keeping the state control over the enterprises which meet the implemented requirements for their economic efficiency;

- thirdly, the objectives associated with the increase in the cost-effectiveness of state-owned enterprises system, while the components of efficiency are refered to as the size of revenues, the increase the capitalization of the joint stock companies, the profitability of enterprises;

- fourthly, the objectives assosiated with the improving of the effectiveness of management efforts. Achieving this objective can be provided first of all by the reducing the amount of objects managed, that is, through the privatization of enterprises or the creation of some integrated structures (Verstina et al., 2014; Silantieva, 2013).

3.2 The Conceptual Model of Organizational and Economic Mechanism of Integration Restructuration

Moreover the conditions of the functioning of the enterprises with the state share in the authorized capital include the legal framework within which these enterprises operate. All of the identified conditions of the functioning of the public sector enterprises were taken into account during the research process.

Within the research the authors developed the conceptual model of organizational and economic mechanism of integration restructuration, defining the science-based principles according to which the organizational restructuration should be carried out and the integrated structures should be produced in order to ensure the effectiveness of the process.

The aforesaid model includes the following units:

1) the investigation of all the possible integration models and the selection of the best one taking into account the features of the state ownership as well as organizational and legal forms of the enterprises;

2) the analysis of the enterprise totality, for which the options for restructuration and integration may be offered;

3) the classification of the enterprise totality on the basis of the key features to make a decision on their restructuration;

4) the methodological tools for the integration restructuration, including the cycle of the suggested movements concerning the selection of enterprises into the integration framework and the guidelines for choosing the effective organizational and legal forms;

5) the block of selection of the business model of the integration structure functioning;

6) choosing of the business model of the integration structure is followed by the estimation of the predictive efficiency of the restructuring measures and the immediate practical implementation of organizational restructuration.

Further we should explain each of the selected units as this is the sequence the in which the stages of the research were carried out.

3.2.1 The Choice of Model Integration

Proving of the integration model chosen as a whole can be called a unit of comparative analysis, within which (taking into account the objectives of restructuration, legal characteristics and associated criteria) the selection of the type of the integration structure is carried out. The main models of integration such as: network structure, investment funds, the association with the transfer in trust, association with the transfer of the management company, holding company are to be compared. The given integration models are compared with the model of direct management of enterprises according to the criteria of flexibility of changes in the composition and structure, the production and managerial costs and manageability.

Among the criteria for the selection the most important place is occupied by manageability, which in this research stands for the guaranteed by the subject's ability to ensure the safety management of the totality of public assets and their effective use.

Schematic comparative schedules are shown in Figure 1.

Flexibility of the changes in the composition and structure
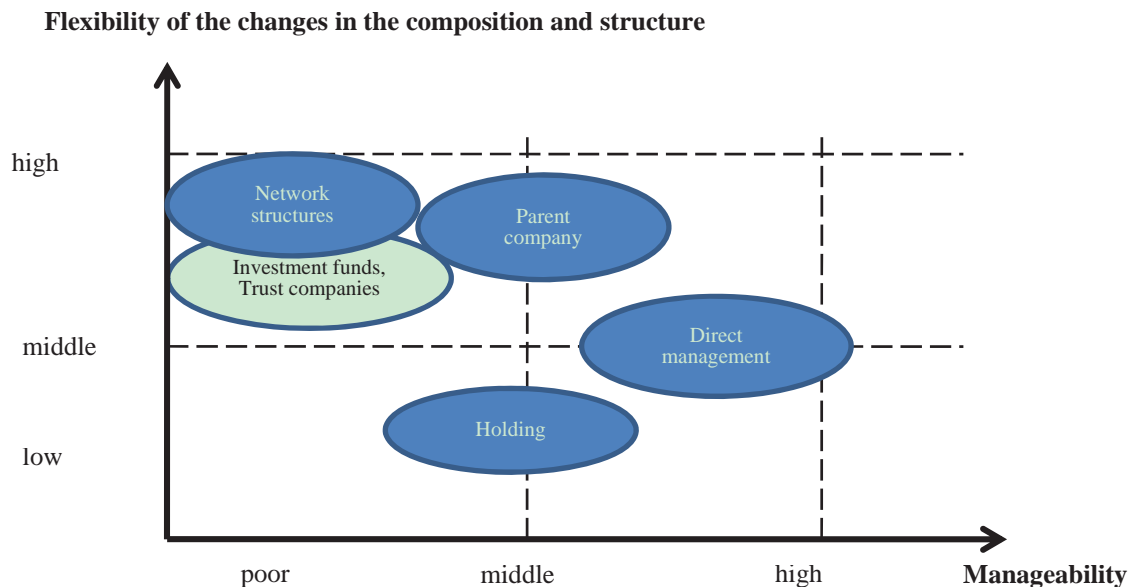
Figure 1. Schematic comparison of the basic models of integration according to the criteria that are important for the research

According to the comparison results the conclusion about the choice of the holding as the most rational form of integration was justified.

As the Russian laws do not define the term "holding" properly, for the sake of this research the following definition of holding was supposed: holding is the form of business association representing the group of organizations (participants), based on the economic dependence and control, the participants of which formally keep the legal independence but conform their activities to one of the group participants - to the parent company. The parent company is the center of the holding association because of owning the prevailing share in the authorized capital (enough for control, that is greater than the number of shares held by any of the other shareholders), which allows influencing on the affiliated companies' decisions. The federal law "On Holdings" has not been adopted in spite of the fact that the attempts to formulate it have been taking place since 1990th. So, we can conclude that a uniform comprehension of this economical and legal phenomenon lacks at the moment.

Further the generalization and systematization of legal information were carried out. As a result, it was concluded that the parent of the holding company can be both SOUE and JSC, while the subsidiary can be JSC only (# 208-FL, 1995; # 178-FL, 2001; # 161-FL, 2002).

3.2.2 The Analysis of the Enterprises

Basing on the analysis of the enterprise, for which options of restructuration and integration can be offered, it is supposed to assess the economic efficiency and the strategic importance of the selected companies.

Economic evaluation is carried out with the help of some key indicators of the effectiveness of financial and economic activities of the enterprises, including:

- return on assets (profit before tax);

- absolute liquidity ratio;

- asset turnover ratio;

- financial independence ratio.

The choice of these indicators due to their highly informative, revealing the actual solvency of the company, the structure of its capital, financial risks and operational efficiency.

3.2.3 The Classification of the Enterprises

One of the most significant scientific problems named and solved within the study was to develop a classification model based on the criterion ratings. Using the classification model becomes possible because of the analysis of represented enterprises totality performed in the previous stage.

The general form of the classification scheme is given in Figure 2.
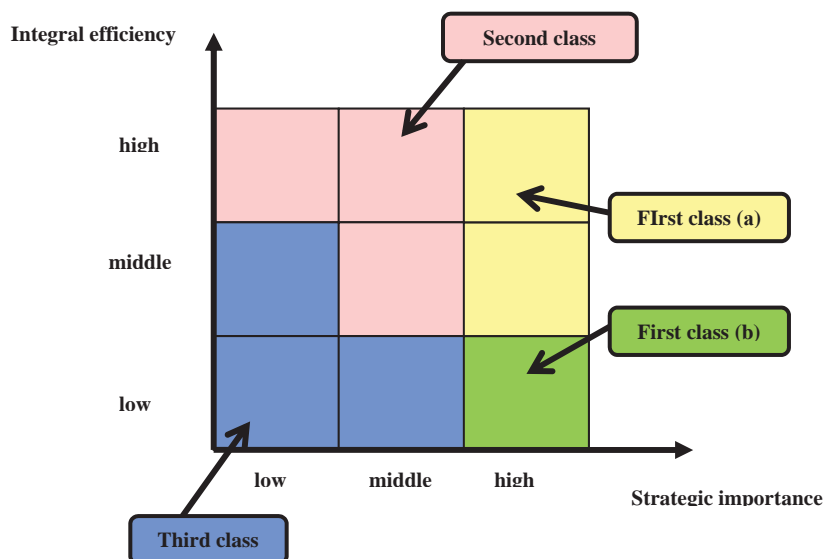
Figure 2. Classification scheme

According to the results of the research the integrated efficiency and strategic importance of the enterprises were suggested as the classification criteria.

The range of values for each of these criteria includes 3 levels (low, medium, high). The combination of these values determines the position of a particular enterprise and allows to divide all the enterprises into 3 classes. First-class enterprises are recommended to be included into the integration structure, as a parent company as well (assuming their medium or high economic efficiency). Second-class companies are recommended to be included into the holding as a subsidiary. Third-class companies are not recommended to be included into any holdings and in general they can be objects of privatization.

The scoring of the integrated efficiency is based on a set of economic indicators, as defined before. Calculations of all proposed coefficients should be made according to the latest annual financial statements. An enterprise can get 1, 2 or 3 points for each of the coefficients, depending on the value of the coefficient - "low", "medium" or "high", respectively.

Then within the classification of enterprises it is necessary to determine the limits between "low", "medium" or "high" values of the coefficients. In general, if there is no universally accepted standard value of the indicator, the definition of limits is carried out according to the expressions:

$$U \lim = Vav + \sigma \qquad (1)$$

$$L \lim = Vav - \sigma, \qquad (2)$$

where $U \lim$ - is the upper limit value of the coefficient (above which the company will receive 3 credits);

$L \lim$ - is the lower limit value of the coefficient (below which an enterprise will receive 1 point);

Vav - is the average value of the coefficient (calculated separately for each group of activities);

σ - is the standard deviation of the coefficient values (calculated separately for each group of activities).

To ensure the comparability of enterprises if they are engaged in different activities, it is suggested to divide them into homogeneous groups and to define the limits for each group separately.

The determination of the level of strategic importance enterprises is considered further.

Strategically important enterprise is referred as an enterprise, solving some crucial strategic matters, as well as dealing with specific activities in the non-competitive market. To estimate the strategic importance of the expert maps were developed as well and descriptions how to fill them.

Each expert estimation is translated into points according to the generated translation scheme shown in Figure 3. After that, the points for each enterprise are added to the calculation of the total score.

	Estimation: Strategic importance of the enterprise (name)	отсутствует	низкая	средняя	высокая
1	the degree of influence of the enterprise activities on the changes in situation in the city, region, etc.			x	
2	originality of the enretprise activities		x		
3	the demand for the products and the entrprise activities results продуктов		x		
4	the degree of the investment autonomy of the enterprise			x	
5	the level of management		x		
	scoring estimaton	0	1	2	3
	Score	7 points			

Score	Importance
10-15	High
5-9	Middle
0-4	Low

Figure 3. Scheme of translation of the expert estimates into points

3.2.4 The Methodological Tools for the Integration Restructuration

The organizational and economic mechanism of integration restructuration of the state-owned enterprises includes a technique of organizational restructuration. In a structured form the stages of the organizational restructuration are presented in Figure 4.

In general, this scheme is a combination of two integrated modules, the first of them can be determined as a preliminary, and the second - as realizable. The preliminary module includes three stages, the content of which represents the step-by-step procedures for the solution of the classification task.

The complete results of the classification task are considered as "input" for activation the realizable module. Its content represents the options for the subject of management, targeted on a particular company. In turn, these options result from the characteristics of the enterprise which belongs to a particular class in the classification scheme and the organizational and legal form.

For each class of enterprises potential options for implementation of the restructuration are identified. The essence of these options is the choice between inclusion or rejection to include some enterprises into the integration structure, and also the definition of the final organizational and legal form of the enterprise as well as recommendations for privatization and termination of property rights.

3.2.5 The Block of Selection of the Business Model of the Integration Structure Functioning

An important issue in the framework of the integration restructuration is the choice of a specific business model of functioning of the integration structure. Taking into account the major problems of enterprises with the state-owned share in the authorized capital, analyzed previously, it is recommended form a horizontal property holding company in which the enterprises would produce diverse products of one segment or to form a vertical holding.

In order to verify the feasibility of the developed organizational and economic mechanism of integration restructuration a practical testing of the suggested methodological tools was carried out at the enterprises of the investment and construction sector. Upon the example of more than 30 enterprises, it was demonstrated that the

mechanism and methods of restructuration are applicable in practice and can be used for the purposes of restructuration as they really take into account the problems of enterprises, the main objectives of the executive authorities governing them, and are based on the legal features of each of the legal form of an enterprise and particularly - the features of the state-owned ones.
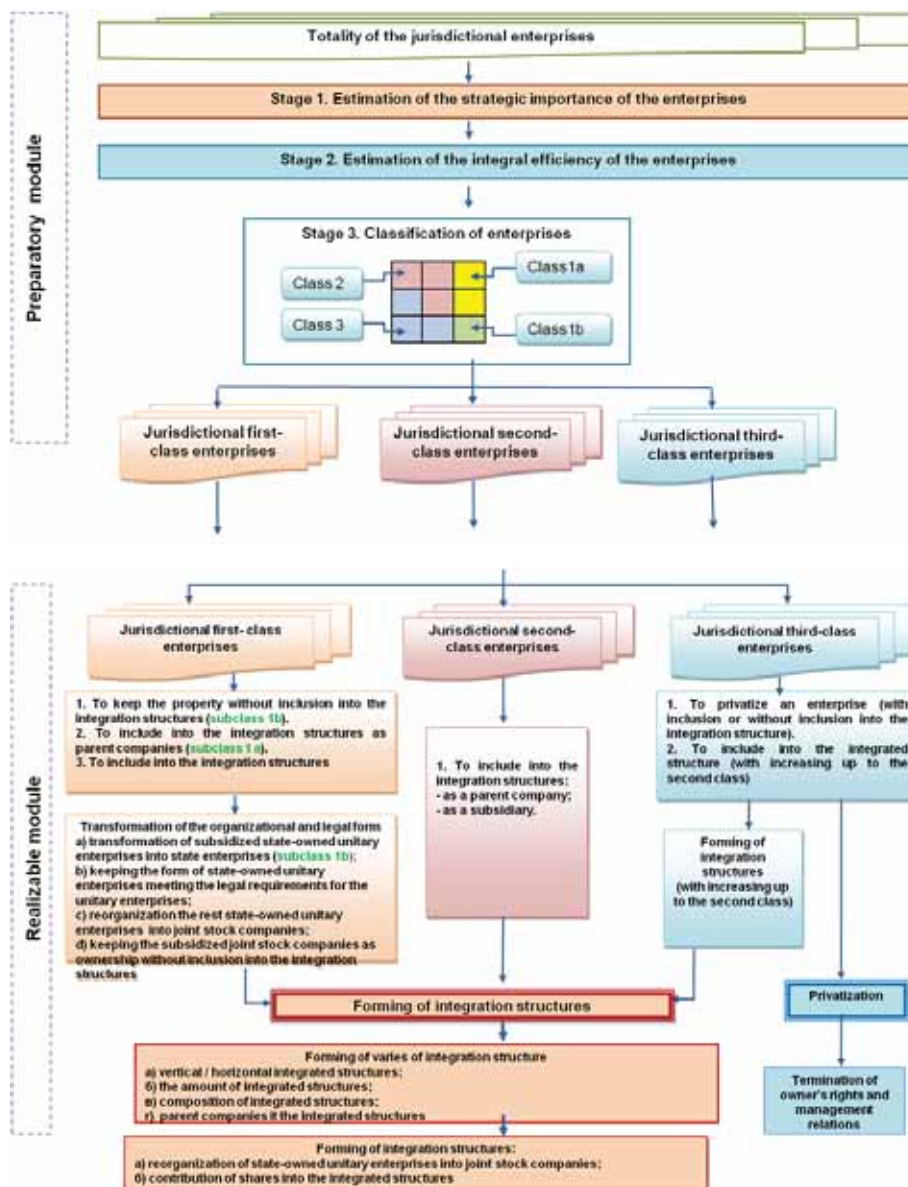
Figure 4. Methods of organizational restructuration of the enterprises with the state-owned share in the authorized capital

Within this research (while studying the enterprises) the in-depth analysis of the social aspect of the alleged organizational changes, related with the overcoming any possible resistance to the organizational changes was carried out (and the tools for such a research were developed).

As the specific tools we have developed and suggested for the practical appliance such common measures as questionnaires and interviewing of the managing stuff of the enterprises studied. Within the questioning and it is expected to find out the opinion of the persons interviewed about the restructuring and integration, their expectations, fears and wishes. So, all those who will take part in such measures, will be able to feel their participation in the changes and also to fell that their opinion is important and can be (in part at list) taken into account while forming the new structure and establishing business processes.

The application of the organizational and managerial tools suggested provides the adequate level of social and psychological adaptation of the managing stuff and makes up the conditions for minimization of the negative consequences which are defined as the resistance to the changes.

3.2.6 The Estimation of the Predictive Efficiency of the Restructuring Measures

The estimation of the efficiency traditionally represents the complete stage of the research in the field of economics and management. Thus, it was necessary to solve the task of defining the methodology, the use of which will provide the adequate estimation of the efficiency of the organizational restructuring. The suggested model of the estimation of the economical effect is based on the common concept of cash flows, according to which the resulting indicator is the net present value (NPV).

Then the traditional algorithm of the estimation of the efficiency, based on the comparing the two variants - before (without the project) and after (with the project) is carried out.

The background information for the variant "without the project" at last represents the forecast of cash flows for the enterprises of the studied aggregate as whole under the condition that the project estimated will not be developed.

The information should be enough:

•   for the estimation of the efficiency of the variant of the development of each enterprise included into the aggregate without the project;

•   for the adequate   taking into account   the influence of the development of the project estimated on the technical and economical criteria for each enterprise , included in to the aggregate, i.e. for the variant "with the project" and for the estimation of its efficiency.

In particular the background information should include the following data:

•   the balance sheet reports and reports on income statement for the latest reporting periods and the reports on generalizing financial criteria for each enterprise included into the aggregate;

•   the revenues from sales;

•   information on operational expenses, including direct material expenses, wages, commercial and managerial expenses, amortization and also taxes, relegated   to cost and incomes;

•   information on volumes of real investments, supposed to be developed   at the expense of the shareholders' equity (does not matter if the estimated project will be developed or not);

•   information on the main conditions of mutual settlements between the counterparts for the products provided, as well as goods and services bought;

•   information on debts long-term loans, received earlier and on the conditions of their repayment.

During the transition from the variant "without the project" to the variant "with the project" we should take into account that the project development is able to influence on various technical and economical criteria of the enterprises, which are being included into the integration structure. During the transition from the variant "with the project" to the variant "without the project" it should be taken into account that   the project development is able to influence on various technical and economical criteria of the enterprises, which are being included into the integration structure special attention should be paid to the following circumstances:

• no matter what share of the fixed assets of an existing enterprise of the aggregate, is involved in the project, the amount of depreciation and property taxes, does not change according to the project development;

• the variant "without the project" as well the variant "with the project" can provide the alternative use of all the property of the enterprise or a part of it (and possibly quit different, e.g. selling or leasing it). It should be taken into account during the estimation of technical and economic criteria of the enterprises, including profit and taxes.

Besides for the estimation of the forecasted effect the criterion of the integral profitability of the shares portfolio of the joint stock company, owned by the state (by the city), is calculated for the estimation of the dividends, inflowing into the city budget from the joint stock companies and calculated as:

$$CIP = \frac{0,6D_i + 0,3T_i + 0,1\Delta Vna_i}{Vna_i} \tag{3}$$

where D_i – the amount of the dividends actually paid by the company for the i-th portfolio of ordinary shares, owned by the city in the i-th year;

T_i – the amount of i taxes, actually paid by the company   to the city budget;

ΔVna_i – the increase in the net asset value of the i-th fiscal year (net of inflation component). If the shares portfolio of the joint stock company was estimated by an independent appraiser in the reporting year as well as in the previous financial year ΔVna_i is an increase in the market value of shares owned by the city, according to estimates;

Vna_i – net asset value or market value of the company shares owned by the city, according to estimates by the end of the i-th of the next financial year.

With respect to this criterion two variants of activities (before and after the organizational restructuring) are also compared. The relevant forecast evaluation of growth of this criterion is about 3%. Taking into account rather large scale of activities in the industry the absolute value of the efficiency can be assessed as quite acceptable.

The common approach suggested for the estimation of the forecast effect of the organizational and managerial restructuring (the part concerning the calculation of NPV) was concretized by the authors in order to develop a detailed factor model. This model has concretized the direction of the effect demonstration. The following directions of the potential effectiveness were distinguished: products, cash flow, financial result, technologies, assets, sources of financing, information and competences. Each of the directions distinguished is corresponding to its specific factor area and a positive change of any factor is representing a component of the total effect. The results of the refinements carried out are presented in Table 1.

Table 1. The components of the effect of the developed integration structure

Object of managing	Results (the components of the effect)
Products *(Epr)*	- the increase in the sales; - the cut down of the operational risks; - the increase in the market share; - the expansion of the production scale effect; - the increase in the marginal income per unit; - the reduction of the stock of finished products
Cash flow *(Ecf)*	- the decrease in the cost of capital; - release of the working capital; - termination of the cash gaps; - the decrease in the work in progress; - the decrease in losses
Financial result *(Efr)*	- the decrease in the commercial expenses; - the decrease in the expenses on the mobilization of stockholders' equity; - the growth of profit and profitability of the enterprise activity; - the promotion of the investment attractiveness of the enterprise
Technologies *(Et)*	- the improvement of the product quality; - the decrease in the production cost per unit - the machine loading increase; - the advance of production flexibility and adaptability;
Assets *(E_A)*	- the reduction of nonfunctioning assets; - the growth of the assets profitability; - the preferential use of the assets of a particular enterprise by other enterprises of the holding
Sources of finansing *(Esf)*	- the elimination of financial risks; - the decrease in the expenses on the mobilization; - the decrease in the weighted average cost of capital (WACC); - the promotion of the investment attractiveness of the enterprises
Information and competences *(Eic)*	- the improvement of planning and forecast accuracy; - the reduction of the term of the managerial decision making; - the improvement of the decisions quality; - the decrease of the "cost of a mistake"; - the decrease in the managerial expenses

According to the preliminary estimation, forming the holdings will result not only in the economic effect, which appears as the holding itself, but also in the budget effect, providing an additional revenue because of the taxes and dividends coming into the budget.

Taking into account the aforesaid the expression of the resulting effect if the following:

$$E_{total} = f(\Delta NPV, \Delta CIP) \tag{4}$$

Herewith the estimation of the increase of the net present value is carried out with the help of the forecasted estimation of the increase of the discounted revenue ($E_{i(d)}$) for all the detailed directions of expression of the effect during the given horizon of planning with taking into account the expenses, suffered by the enterprises (with taking into account the time factor), because of restructuring measures and joining the integrated structure ($Exp_{(d)}$):

$$\Delta NPV = \sum_{n=1}^{n} E_{pr(d)} + \sum_{m=1}^{m} E_{cf(d)} + \sum_{k=1}^{k} E_{fr(d)} + \sum_{l=1}^{l} E_{t(d)} + \sum_{h=1}^{h} E_{a(d)} + \sum_{g=1}^{g} E_{sf(d)} + \sum_{j=1}^{j} E_{ic} - Exp_{(d)} \tag{5}$$

where: E_{total} – the total economic effect of the organizational restructuring;

$$\sum_{n=1}^{n} E_{pr(d)}, \sum_{m=1}^{m} E_{cf(d)}, \sum_{k=1}^{k} E_{fr(d)}, \sum_{l=1}^{l} E_{t(d)}, \sum_{h=1}^{h} E_{a(d)}, \sum_{g=1}^{g} E_{sf(d)}, \sum_{j=1}^{j} E_{ic}$$ – the economic effect of the improvement

of the criteria for each of the field of the enterprises' activities, provided with the help of organizational restructuring.

Within the analysis of the economic effect one of the main accents was made on the level of the organizational factors influence, the direct expression of which is the increase in the manageability and as the final result - the quality of the managerial decisions.

4. Discussion

The completed research, targeted at searching for ways of rational restructurization and improvement of the effectiveness of state-owned enterprises, was based on the principal problems of such enterprises and the main objectives of the owner (the state) within such enterprises management. Its relevance is emphasized by the fact that the integration of state-owned enterprises and the creation of public corporations in Russia has been becoming a trend recently. Such public corporations are increasingly becoming important players at the market due to the concentration of capital, assets, experience, research results, client databases, etc. Moreover, they are beginning to demonstrate a sufficient level of economic efficiency, which confirms the correctness of managerial decisions targeted at the integration of enterprises. Meanwhile the share of state in the state corporation enterprises is usually quite high - from 75 to 100%.

Consideration of the main features of the enterprises and the owner's objectives enabled the maximum consideration of the peculiar properties of such enterprises as well as the particularity of the current economic performance. The tools developed within the research can be applied for the enterprises in different spheres and industries. The presented mechanism can be scaled with respect to small enterprises and as well as to the largest ones.

Certainly, the mechanism of restructurization, presented in the article, is based on the peculiarities of Russian legislation, but the authors believe it to be flexible, so they emphasize the possibility of arranging it in conformity with the particular legislation.

The positive feature of this research is the fact that the practical applicability of the developed mechanism of integration restructurization has passed the practical approbation.

5. Conclusion

In conclusion, we shall once again consider the main results of the research, and also point out the prospects for further research in the field of restructuring and integration of enterprises.

Thus, the main research results are the following:

- the developed conceptual model of the integration restructurization of enterprises of the public sector of the economy, which can be used as the common scientific and methodological tools during the restructurization with the creation of integrated structures on the basis of enterprises of different sectors of the economy;

- the developed system of classification of the enterprises of the public sector of the economy according to two main criteria (strategic importance and economic efficiency), which allows   sharing all the investigated enterprises into the groups with certain characteristics and also allows making typical management decisions for them;

- the developed organizational and economic mechanism of integration restructurization of enterprises, which presents the step-by-step guide on making decision for the restructurization of each of the investigated enterprises meaning the decisions: to include the enterprise into the holding structure as a parent company or as a subsidiary; not to include it into the integration structure and to keep direct control over the enterprise; to privatize the aforesaid enterprise.

Practical applicability of the results of research is proved by the approbation of the developed mechanism at industrial enterprises engaged in the production of construction materials and owned by the city of Moscow.

As the future research directions the study of resistance to changes, which can significantly reduce the effectiveness of any changes should be noted first of all. Restructurization and integration of enterprises are the processes of organizational change which can greatly affect the interests of employees and managerial staff, so the employees of the companies must be prepared for these changes. The research of the mechanism of the of cutting down the   resistance to changes during the restructurization period is promising and can be of great practical importance.

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Changing Values in the Context of Generational Approach in the Kazakhstan

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Abstract

The article examines the changing values—individualism, and collectivism in Kazakhstan in the context of generational difference. In the years since the dissolution of the Soviet Union, Kazakhstan has experienced wide-reaching and ongoing social changes. Within this space, identity formation and reformation has been a preeminent process for individuals. Results indicate that both of the modernist and individualistic values predominate in current Kazakhstani society, more pervasive especially among young generation. In Kazakhstani society, which is still based on traditional values and codes of behavior, formation of a new value system in the transition to a market economy is complicated and controversial, particularly for the older generation.

Keywords: sociocultural changes, values, Kazakhstani society, axiological reconstruction of society

1. Introduction

No culture is static as it includes within itself the elements of change. Culture is dynamic because it is essentially an adaptive mechanism, and different social systems seek their adaptation differently by the variations in their natural settings. Thus, cultural change is the process by which the existing orders of society, that is, its social, spiritual and material civilization is transformed from one type to another. It may be caused by internal or external factors. In other words, it may be induced by the factors and forces spontaneously arising within the network or it may take place through the contact of various cultures. Cultural change along these lines takes the form of independent evolution or includes the process called "diffusion" through spread of ideas and objects to other societies. In era of globalization, cultural change has assumed a rapidity and magnitude, unprecedented in human history. The technical inventions, the developments of industrial enterprises and financial and mercantile organizations have contributed towards the intensification of this evolutionary process. Social change is the transformation of culture and social organization / structure over time. In contemporary world we are aware that society is never static and that social, economic, political and cultural changes occur permanently.

The human culture - develops over the time, although changes in value systems can be slow and painful for a society. Social confusion is an inevitable outcome of cultural conversion. Values evolve in the course of time, sometimes over years. In their youth, young generations are open to the environment's impact, especially it is nearest group - the parents and "parental guidance". But, moving away from home frequently starts an independent life, and values may change. Comparing values of young generation with of senior may uncover differences in values between generations.

The role of values plays an important role in defining the main sociocultural transformation in a society. Values are main organizing principles or ideas that govern and determine human behavior. Although the word is generally used with link to moral and cultural beliefs, values are of many types. Unlike the skill or attitude that may be specific to a particular physical activity or social context, values tend to be more multipurpose in their application. They express in everything we do. Values can be explained as the nature of the knowledge gained by mankind from past experiences distilled from its local circumstances and specific context to extract the fundamental wisdom of life derived from these experiences.

Since the collapse of the USSR, Kazakhstan has emerged as the lone success story in Central Asia, largely due to its vast stores of oil and natural gas. As a result, the country is part of a global, historical trend toward the erosion of traditional value systems, which is associated with increased development and changes in social structure (e.g., urbanization, higher education levels, and an increase in working mothers). But, this trend has not yet progressed

as far as it might have been. In kazakhstani society, which is still based on traditional values and codes of behavior, formation of a new value structure in the transition to a market economy remains complicated and controversial. Transitive characteristic of society complicates self-definition and socialization of people and is influenced by globalization, on the one hand, and socio-economic reform in the internal politics of the country, on the other.

It should be noted that, in today's society, youth is strongly stratified; various needs and opportunities for self-actualization, education, profession, etc. define both intergenerational and intergenerational differences in basic values. Today in the 21st century society is changing more rapidly than ever. Now people of all generations and ages are facing new kinds of psychological and interpersonal issues. They are living and pioneering new kind of family patterns and relationships. One of the greatest philosophers of the 20th century, A. N. Whitehead (Whitehead, 1990), notes that, in the past, significant changes in society took considerably longer time than a human longevity. Nowadays, according to the new conditions of human existence, this time has become much shorter than human lifespan. All these make the issue on intergenerational differences in value orientation most challenging in the context of rapidly globalizing and developing society.

Referring to modernization theory, we can assume that the process of massive structural changes in culture in the context of modernization defines the occurring changes in the form of a gradual transition from normative values (traditional) to contemporary values, focusing on the rationality of choice, tolerance and self-expression (Inglehart, 2000). Cultural values are very deeply rooted in the national consciousness and have a strong influence even in the rapidly developing world, therefore it is impossible to change the value orientation in a short time. R. Inglehart argues that value hierarchies that are formed during early adulthood remain relatively stable during the rest of the life course. By consequence, R. Inglehart puts far more stress on cohort than on life cycle effects. Older generations, that grew up in less affluent conditions and under threat of war, is expected to give higher priority to materialist values, while younger cohorts will probably prioritize post-materialist values (Meuleman & Davidov, 2012). The generational sociocultural distinctions are becoming easier to define in our case - generational approach. Is very important here for understanding the term "generation gap", was introduced to indicate the empty space in which people born of various times do not understand each other because of their differing interests, values, communication, and attitudes. Generational feature evolve during the formative growth years of that generation. These factors affect people's values and attitudes throughout their lives.

One of the peculiar things people owns it's their "value system". Knowing your own priorities and values is significant in achieving career success, setting goals, and developing relationships with others. One of the main aspects of the values - value systems are formed by the direct effect of outside forces and how an actor reacts to them. This can be the method of parenting, education, an environment and events during one's younger years.

The theme of intergenerational differences in the Republic of Kazakhstan, we explored in the context of culture – society, that is, in the system of norms, traditions and values that determine the differences and changes in culture and behavioral preferences. At that, important are the sociocultural categories; the cultural basis of society represents as a system which has the following features: 1. The system is settled by preference of value, norm and symbols - regulating the choice made by people and erecting particular types interaction, which can be appear among participants. 2. Personally systems and social cultural systems are main intercommunication category in identification action theory. This system was planned on concrete aims and its achievements (satisfaction of needs). 3. Social cultural system has been formulated in subject - object relationship at inseparable unity representing universal knowledge and basic values. In this case the main significance has notion of values orientation which gives direction to person (Seidman, 1990). Today is mostly approving that in most preindustrial societies, this value system takes the form of a religion and changes very slowly; but with industrialization and accompanying process of modernization, these worldviews tend to become more secular, rational, and open to change (Passe-Smith & Mitchell, 2003).

The beginning of 1990s brought Kazakhstan a true independence, and with it a "traumatic" change in local resident's lives. Those were the years of the most fateful decisions that determined the future course of Kazakhstani nation. Modern challenges urgently requiring a more dynamic modernization of the entire system of social, economic and political relations. Today Kazakhstan develops along a modernization path of building a democratic state and Kazakhstan's model of modernization takes into account social and cultural context. Undoubtedly, all this is related with the changes in value orientations. In this connection, there needs an important rethinking of the Soviet legacy in modern Kazakhstan. Given the current realities, the discussion of this issue is important to the topic under consideration, because many people still hold the memories of the Soviet time. At that, almost every Kazakhstani inherits both positive and negative sides of the Soviet heritage. Today Kazakhstani, mostly former workers of state-owned and collective farms, who could not adapt to the

market-based management, are prone nostalgia to Soviet times. Another group consists of a people, who were in retirement or pre-retirement age at the time of the Soviet state collapse. All they were not just ready for the collapse of such a strong state as the USSR. To some extent, doctors, teachers and former army men can be attributed to this category. Many of them regret the loss of the social guarantees of employment, education and health care, as well as respect of the society and relatively better remuneration, which they, as professionals, had in the USSR. Often their opinions are shared by the former Communist Party members and activists, as well as individual representatives of Diaspora, who are still nostalgic for the ideology of Marxist internationalism (Olcott, 2011).

2. Research Methodology

To investigate the intergenerational differences in terms of values, we performed a mass survey (September, 2013) in the form of questioning the population of Semey [Semipalatinsk, The East Kazakhstan region] city and several rural regions which are also located in eastern Kazakhstan [hereinafter: EKR]. Primary unit of sample is a city of regional significance. Sample size of respondents were 320: the local residents older than the age of 18 and eligible to vote, and is representative of the general population by age, gender, education. The sample was targeted; the age of the respondents in the first group was 18-35 years, while the second group consisted of 36-63 years old respondents (up to retirement age). Sampling is enough representative to the people of Kazakhstan, who is 18 years and older, and reflects the social-demographic and social-economic structure of the population of Kazakhstan. The questionnaire based on research objectives includes 35 questions, which contains by both types semi-open questions (designed for getting responses with wider expression) and closed questions (limited options of response). The research used the tools of World Values Surveys (WVS) project in accordance with the designed thematic focus.

During the research we studied also 3 focus-groups. The first focus group included 7 townsfolk people of senior generation. The second focus-group included 11 representatives of young cohorts, and third mixed focus-group consisted of 8 country-folk people. In total 26 people with the age ranged from 18 to 63 were interviewed in three focus-groups.

The purpose of the study was to reveal the differences in the value orientation of the older generation and youth. Age cohort was defined as the generation that has experienced some sociocultural impact of certain socialization factor or group of such factors pertained to a certain value system, educational standards, the major historical and cultural events, fashion, subculture styles, etc. In short, the impact of major historical events on the formation of value system is important because just at that spot the most significant sociocultural intergenerational differences were revealed. Definitely, greater differences between the generations arise when the fledging experience of the young cohort essentially differs from the socialization conditions of older generation. All this is presented in the publications of the WVS project (Inglehart, 2012). According to R.Inglehart (Inglehart, 1997), changes in the socio-economic environment, affecting the life experiences of individuals, contribute to the reformation of beliefs, attitudes and values at the individual level. Therefore, significant changes in the environment usually are most of all affecting those generations, whose representatives have lived under the new conditions during the years of their personhood achievement. Consequently we think that young generation more adapted to modernization and economic as we know that they are from new generation (cohort effect) not because they are young (life-cycle effect). The generational difference is not depend on their age-related contradictions. If it was so they would reach a particular age and these differences would disappear: forty, fifty and seventy year old aged people would have psychological copy of their peers who passed these years ten, twenty, thirty years ago. They would have that kind of value, aspiration and reaction on outer irritants when they reach the age of their parent they operate think, do, consume, work and live in a different way. As a result young generation have that kind of value as a rationally choice and participate in social life political life not because they are young but due to the fact that they reared in developed society, they have high quality educational achievements. So we decided to acquire this issue.

The main criterion for selection of Semey is that the province is situated in the very heart of the largest continent –Eurasia. The province`s territory is 283.3 thousand square kilometers (Romanov & Zhandauletov, 2010, p. 212). The urban population is 56% (Romanov & Zhandauletov, 2010, p. 218).

The city is the cultural center where many prominent figures of Kazakhstan were born, lived, and worked (Romanov & Zhandauletov, 2010, p. 222). In terms of demography, EKR is experiencing a gradual decline in the population. Moreover, the natural population decline is observed since 1996. In Soviet times, EKR was the most important area in the Republic in terms of mining and smelting (polymetallic) industry as well as hydropower industry. Though, as a result of structural changes, severance of economic ties and other negative

factors (especially during the 1990's), the region has still been in a state of crisis. It should also be noted that EKR, a former military training area, is still environmentally neglected region. Ecological problems are mainly related either to the industry, or to the zones of ecological disasters. These regions in Kazakhstan include mainly Aral and Semipalatinsk (the strategy of territorial, 2007).

The movement "Nevada-Semipalatinsk" was originated exactly in Semey. It drew attention of the society to the outrageous price that was paid by Kazakhstan and its people for the presence of military nuclear and chemical facilities, with complete disregard for the health status of those who lived in areas adjacent to the landfill sites. In terms of economic development, Semipalatinsk region is considerably inferior to Ust-Kamenogorsk, the center of the region. Citizens call Semey the "city of flea markets". After the socio-economic reforms of the second half of the 1990's, the city's industrial base was not earned in full force, and trade has become the main scope of the labor. Market trading involves most Kazakhs who are "bilingual", as well as part of the Russian population. In fact, in these conditions, trade is the only source of income for former employees of the Soviet enterprises, as well as for the people who do not speak the state language.

3. Research Findings

The mutual relations of sociocultural spaces, economy and sometimes politics during the many centuries of historical development have significantly contributed to the uniqueness of Kazakhstan. As any other sociocultural space, Central Asia is not a homogenous one and includes a different of life-styles and patterns of political and social behavior (Yerekesheva, 2007).

Concerning ages and value we are able to use two main competitive theories. The first of these the theory of generation replacement or cohort effect which suppose that generation brought up in different economical and social-cultural condition have different psychedelic view, interest. This is explained that human value in considerably level formed in formulation period and remain the stability and unchangeable during his temporary life. Reaching maturity, people usually tend to maintain a learned world perception, whatever it was. Every generation has own temporary measuring and historical cultural space. The second theory is a life circle, which is supposed that people have passed aggregate phase developing and reached maturity step by step change their value. Consequently young generation can follow different value in youth but in their old age they can accept value as typical to older people (Tan & Wang, 2007).

Yet, like generational theories, here is significantly of formative years, the period effecting argument posits that macro-level historical periods and events affect each individual regardless of one's membership in generation or life cycle phase. The emphasis on period effects is detected in our studies. Results of research display the existence of difference of generations. Each generation is a temporary cohort, and it is changing and developing in the course of generations. Participants in the focus-group of older cohort more often identify themselves with the generation of the Soviet era, the culture of collectivism: *"We have lived so much, seen so much, saw the Soviets...but after gaining independence we have lost some Soviet values, whereof we regret"* (man, 58 years, townsman).

Younger generation often identify themselves with the new contemporary values: *"We have other ideals, keep pace with the times and think contemporarily; their advice may be a little bit obsolete, they look to many things in different eyes, their values yet differ from our values; there may be something similar, but there is still a difference"* (woman, 31 years old, townswoman, the young cohort).

By European investigation R. Inglehart discovered that achievement of society to high level of security promote transition of society to new system of value, structure which formulate attitude of tolerance, subjective well being, direction to self expression. Scientists think that shift in society value appear as a result transition of European country to post industrial stage and the definition to this notion is a silent Revolution (Inglehart, 1971). After comparing these facts with obtained facts by WVS (World Values Survey), researchers defined this process as effect of cohort - value transformations in other parts of the world. Accordingly we should expect that to the generation differences in values has main meaning as level of economical security and social stability (Inglehart, 1997).

Similar initial stages of these tendencies we can observe in Kazakhstan too. The current younger generations face market laws for the first time in history. The youth of today, put in more stringent conditions in terms of selection of their adaptation ways comparing with previous generations, shows more contemporary value systems than the older generation. Transition to the market contributed to the outreach of materialistic and even post-materialistic values, among which we include personal freedom, rational pursuit of success, achieving a high social position and willingness to take risks. It is here, as we expected, we found differences in values, especially in relation to the materialistic values.

Younger generations are more individualized and more interested in self-actualization in comparison with the older generation: *"All depends on the person himself. He must fulfill himself in some specialty, to work, to show himself ..."(male, 28 years old, townsman, young cohort); "Now nobody thinks about working in favor of society!? As for me, I do not want to bring the benefit to everybody "(woman, 23 years old, townswoman, young cohort).*

In order to better understand the tendency of changes basic values among generation we included to variable - traditional values. Traditional values is a the variety of values which is selected, passed and perceived from a man to the man from a generation to the generation by historical social experience, as the best example, norm, principles of idea about the best, a authoritative in culture. This particular value is directed on keeping and reproduction to a folded norm and aims of life, but modern literature of individual modernism indicates that due developing of the capitalist system, people started to refuse some «traditional» foundations. Regarding to this fact, traditional views of respondents' are measured, observing of nowadays individuals in social situation - how they react to some of the basic value as family and work.

"Although others have unlimited personal freedom in the relationship, but for our nation there needs to be some kind of limitation. For example, not to be rude to the older, not in any way. Is it restrictions?! Yes, it is restrictions ... respect and the attention of older in a certain sense. And finally I can not talk with the older as well as talking with their my peers. There must be some restrictions in that. Just for example, there are people who are already 50 years old, but they do not smoke cigarette in front of her mother still...... this is respect, and it also means the restrictions. So I think in the Kazakhs relationship should be limited on traditional background" (Female 37 years old, resident of the village, older cohort).

In Weber's view, the emergence of contemporary society was accompanied by significant change in patterns of social action. He saw that individuals were moving away from traditional beliefs grounded in religion, custom and long-standing habit. Instead, individuals were increasingly engaging in rational, instrumental calculations that took into account efficiency and the future consequences of their actions. In industrial society, there was little room for sentiment and for doing things simply because they had been done that way for generations. If in traditional societies religion, norm and custom where the attitudes and values of people are determined in comparison with modern society for social action is characterized such kind of value as realization, rationality and effective of economical achievement. In Weber's view, the Industrial Revolution and the rise of capitalism were evidence of the larger trend towards rationalization (Giddens, 2009).

In the today's kazakhstani society, we can detect differences in terms of attitudes and evaluations between the people of older and younger ages. In the study, that we investigated, on the question of what was most important to the respondent in traditional and materialistic values, we found that, among younger generation, the indicators of orthodoxy are lower, and the choice is made mainly towards materialistic values. If we look at the Table 1, showing the commitment to the various values depending on various age cohorts, we clearly see differences. Especially the differences are detected in the category of self-expression. We also observe that, for younger generation, traditions are not relevant as much as for the older generation.

Table 1. Value assessment for respondents of different age

Value assessment for respondent	Respondent's age		Total
	18-35	36-63	
Self-expression	30	16	46
Money	26	24	50
Job	50	52	102
Religion	2	5	7
Respect of traditions	6	9	15
My country	54	46	100
Total	168	152	320 (respondents)

Here, perhaps for intergenerational transformation to happen there must be societal changes: the context the later cohorts grow up must be different from that of the older ones. But, what are the social changes that matter most for modern values? Here, the key meaning plays a economically security at the formation period of values; Considering the changes as a whole, the authors stressed, that that in some developed countries the values are changed very quickly than in developing countries, as result the gap between both countries become more and more (Inglehart & Abramson, 1994). Historically unprecedented degree of economic security, which found out the new generation in industrial societies, led to a gradual shift in priorities from "materialist" values (primarily emphasis on the economic and physical security) to the values of "post-materialist" (when advanced to the

foreground self-expression and quality of life). Here certainly is very important the concept of modernization. Modernization does not just lead to the formation of a centralized state power, to concentration of capital and to an ever more division of labor and market relationship, to mobility and mass consumption, and so on.

So evidence from WVS suggests that major cultural transformation have occurred, and that they reflect a process of intergenerational differences and change linked with rising levels of human security (Inglehart, Norris, 2012).

In this context we have measured the social condition of the respondents, that is, the indicators of the index - "security" and the "stability of society". As the data of our survey in general from 320 respondents (of 100%), 91.3 % answered that the socio- economic sentiment for the future is good, only 7.7 % said that looks to the future with anxiety and fear (Table 2).

Not to mention the wars and natural disasters, nothing affects the daily lives of people stronger and more direct than the socio-economic development and the accompanying changes. Socio-economic development is transforming the foundations of material existence and the social organization of society.

Table 2. Socio-economic sentiment to the future of respondent

The options	percent
with hope and optimism	69,3
quietly, but without much hope and illusion	22,0
with alarm and uncertainty	6,5
with fear and despair	1,2
in total	99,1

On next issue, the majority indicated the level of welfare in terms of happiness. 96.6% respondents are happy, while only 2.5%are unhappy. Here for us is also important the level of indicator, that is, the higher the indicator is, the higher is the level of guide to modern values.

Nowadays in Kazakhstan is ensured with favorable economic condition, is forming and developing of new democratic values of modern society. Kazakhstan is firmly and consistently reaching modernization by democratic statement, constitutional state specified on cardinally changes in, economical, national and political system of country, aroused by necessities of society and formation new system of general Kazakhstani values. Linking all these facts together, we suppose as the result of transformation of process underlying all society and sphere its social safety, axiological space of Kazakhstani society lost its previous value unity and become open minded for another cultures, rationally individuality because it is necessary for successful adaptation in order to change social economical condition.

If we look at the Figure 1, we see that the ideals also differ for various generations. The difference is particularly important in relation to the materialistic values, self-expression and religious relations, as the younger generations demonstrate a more orientation towards self-realization and self-expression values than those of older ones. We have noticed the decreasing of traditional values among young generation. It is needed to underline, the specific of developing of modern society is under condition of invisible dynamics of social cultural process, which include the old generation`s experience becomes outdated during the lifetime of this generation and generator of new ideas is youth generation who is more mobile and active adaptive to rapid advance and changes in social and cultural verity and speedy developing world.
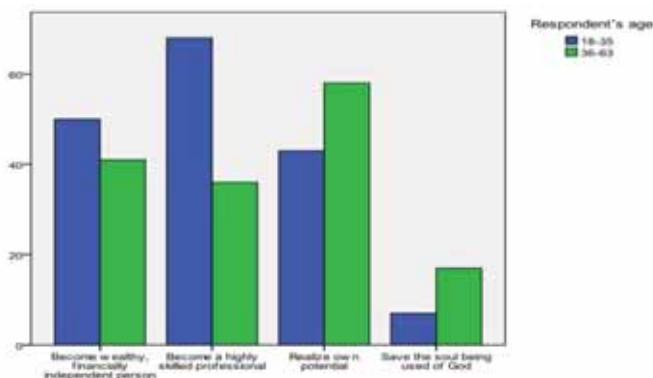

Figure 1. Motivation degree with respect to different values depending on age

Sure, when we think of our values, we think of what is important to us in our lives (e.g., security, success, kindness). Each of us holds numerous values with varying degrees of importance. A particular value may be very important to one person, but unimportant to another (Schwartz, 2012). Consensus regarding the most useful way to conceptualize it is basic values. The concept of basic values is used by us to affirm the link in order to highlight the finite, the target (and therefore more generalized, abstract) human values upon which is formed of all instrumental set of values (operational, current, situational) largely determined the specific content its activity. For instance, we can summarize the main features of the conception of basic values with values such as family and work. We tried to measure the assessment of "basic values", or in other words, the "core values" of two generations. The core values include a family and job that serve basis for value consciousness of individuals. These most common basic values, constituting the foundation of value consciousness of people and influencing their behavior in different areas of their lives, are formed, as a rule, during the period of primary socialization of the individual, while remaining relatively stable in the future.

According to our research, category of family as compared with other value categories, such as friends, job, politics, religion and spare time, was defined as "very important" (94.7%) for both age cohorts. Based upon the responses, family remains in the first place among such important human values as life, job, friends, leisure, politics and religion. Family life, in all its forms, remains in the minds of most people as a natural way of life.

Second place is occupied by job, which is also "very important" value (69.4%). Attitude to job as the highest value is a complex element in human's inner life, which includes specific needs, both material and spiritual. It can be assumed that the labor is valuable in and of itself, as a benefit, as a contribution to the common goal, as well as a means of achieving personal success. Our data suggest that in contemporary conditions of emerging market relations, successful career development, defined by high earnings, is a basis of socialization for concerned categories of respondents.

As is obvious from Figure 1, for older generation important is quality self-fulfillment, i.e. realization of their potential (58), while for young respondents, this indicator means just a priority (43). Material interest is quite high for the first cohort category (50), though it is inferior to professional specialization indicator. Most likely, this can be explained by the difference in value systems.

Value system of younger generation is stipulated by their self-expression through the money; they are characterized by high adaptability to market values and actualization of high wages to the extent that the other working conditions are insignificant to them, whereas older generation puts more value on quality of the work. In today's youth value structure, the relation between money and job is rather ambiguous. For some of the younger generation, money became inherent value, the money for them does not "smell".

Next problem that was studied by reviewing respondents concerned their preferences and motivations to work, i.e. we studied the average indicators, which show the attitude of respondent to collectivism, personal gain and career (individualistic quality). It should be emphasized that in highly individualistic societies, people focus on the individual initiative, achievement and autonomy whereas in collectivistic societies, people emphasized belonging to groups and harmonious relationship (Shien Lu & Maimunah, 2012). Results can be found in the following Table 3, where the respondents of different age measured their preferences when choosing a job.

Table 3. Preferences of the respondents, when choosing a job

Preferences of the respondent when choosing a job	Respondent's age		
	18-35	36-63	Total
Job in a stable challenging enterprise.	73	63	136
Job in a company, where there is an opportunity to make a career.	69	30	99
Job that brings benefits to people.	26	59	85
Total	168	152	320

We see that the responses are different depending on the age cohorts. Every person commits acts, aimed at the satisfaction of his needs, by choosing a particular mode of behavior. The contemporary labor market requires "professional flexibility". As is obvious, visions of labor value through the prism of different generations differ: for younger generation proven track of record is not the only digestible option, but also an important opportunity to make a career. Of course, it must be emphasized that, compared to the older cohort, for younger generation, collectivist indicators in favor of society are not valued highly, since personal motivation and interest, which are defined as a contemporary value category, are more important to them.

We can assume that younger generation are interested, first of all, in remuneration for labor. Amount of remuneration is more important than labor input. Despite all the difficulties of the transit phase, the main achievement of the post-Soviet period in Kazakhstan is the acceleration of market standards in behavior of the younger generation (economic freedom of action, initiative, flexibility, and ability to take risks).

Throughout the history of mankind, labor was the sphere of human activity, which allowed him to survive in the outside world, and man's attitude to labor, as noted by French historian L.Fevr, was depended directly on the era, in which he lived (Blazhievskaya, 2006).Therefore, it is necessary to consider material, relevant to the stated theme, through the prism of the principle of development across time and space. Space is not just a blank backdrop to human relations; it is socially constituted, and must therefore be regarded as a contingent element of the dynamics of social relations, and directly relevant to considerations of agency/ structure issues (Gillian, 1999). Specific socio-historical conditions that determine the nature of labor and the nature of the employment relationships have a huge impact on a career of each individual worker. They determine the attitude to labor in the collective consciousness.

In the Kazakhstani society, developing towards industrialization, the main values are not only internal personal growth and creativity-based (work-based) self-exaltation, but family as well. Moreover, from the perspective of both younger and older cohorts, in contemporary society it is quite possible to combine a successful career growth and a fulfilling family life (Table 4).

Table 4. Respondent's most important basic values

Respondent's most important basic values	Respondent's age		Total
	18-35	36-63	
Job and career	17	11	28
Family	48	41	89
Both job and family	103	100	203
Total	168	152	320

It should be noted that the transition from traditional gender approaches to the modern one had a radical impact on the socio-economic relations between the sexes. Thus, in the traditional family, the patrilineal head (man) administered family property and, as a rule, was the one, who made provision for the family; now women have extensive professional and educational opportunities. All this has led many women to achieve personal career. During the last decade, the economic situation in Kazakhstan has improved, and at the same time the employment opportunities both for men and women have expanded. As a result, the level of employment in relation to the economically active population in the country rose from 89.6% in 2001 to 93.5% in 2012 (Statistics Agency of the Republic of Kazakhstan, 2013).

Here by looking at Table 5, we make measuring of traditional and contemporary views about the role of women. The basic amounts of the respondents agree that the main role of women in society is related to the "natural" destination of family, husband and children. We can suppose that most of the respondents in relation to the women prefer the traditional duties of the family (warm family home), children, raising children, etc. Tradition obliges a woman to do housework, in a large extent identifying her life only with the life of her husband and family.

We see the family for the respondents is an important value, but we can see also that for the women who work there is no negative attitude in the society, this is especially noticeable among the younger cohort. Thus we can assume that the reference to the point of the equality of men and women ((gender) the principles of democracy) in the society operates.

Table 5. Statement that mother should only carry out her "natural" duties, i.e. take care of family, husband and children

Mother should only carry out her "natural" duties	Respondent's age		Total
	18-35	36-63	
Absolutely agree	33	29	62
Agree	48	56	104
Do not agree	55	51	106
Do not agree at all	32	16	48
Total	168	152	320

Younger cohorts show non-traditional views on the woman's role in the family, as compared to the older cohort. Young men not just assign themselves to the role of "breadwinners", and the young girls see themselves not just as "homemakers". The data obtained suggest that younger cohorts perceive contemporary family as officially registered marriage, which results in the nuclear, egalitarian family, based on the mutual support, as well as emotional and psychological comfort.

In Kazakhstan, gender equality issues are quite critical. Socio-economic transformation of Kazakh society demanded from the state to form a new policy, taking greater account of the changes in the international policy on gender equality. Assessing the situation by indicators, standardized for all countries, we can say that to date Kazakhstan has already eliminated gender disparity at all levels of education: today there is no gender inequality in education, no problems for girls to access any of the education levels. Kazakhstan is ranked 32 among total 136 countries in terms of gender equality. This is evidenced by data (Global Gender Gap Index) published by the analytical group of the World Economic Forum (WEF) on October 24, 2013, which shows the countries, where women are given the same access as men in education and health service (Center for Humanitarian Technologies..., 2013).

At all times, the system of social values that forms the basis of life self-identity of an individual was assimilated by youth during the close interaction with the older generation, which transmitted their experience to the youth through the practice of personal life, as well as in the process of ideological work of state education institutions. But, dramatic changes in social relations over the last decades caught the society at a weak moment, especially the generation of mature people, whose value system was put to a heavy test. As a result, the socialization of contemporary younger generation is taking place under conditions of higher self-regulation. This resulted in increased selective attitude of younger generation towards their sociocultural heritage and the experience of previous generations.

4. Conclusion

This research found some aspects of generational approach in the understanding of social life. Value types such as survival and self-expression show differences between generations. Individualism is where the greatest difference between generations has been found. In contrast, there are differences suggesting how the types behave at different ages. It is important to emphasize that, in the culture of Kazakhstan, the following basic values here come to the forefront: family, labor and prosperity that gives ground to blur the boundaries between traditional and individualistic values. The peculiarity of contemporary Kazakhstan does not allow one to attribute this country to any particular type of culture; it occupies an intermediate position, to some extent reflecting the synthesis of two opposing value systems. New values, characteristic to Western societies with market economies (individualism, pragmatism, the pursuit of high income) coexist in the minds of the younger generation with certain traditional historical and cultural features (collectivism).

Another hand, the difference between two generations is not as big as it seems that would have affected the substantially to conflict of generations. The gap among these generations in modern Kazakhstani society depends on their age gap between young generation and old generation [the intensity of contradictions and differences has decreases with the age limits of convergence between the young and older generations]. In conclusion, the data of researching cast the total to comprehension that transformation of society leads us to overestimate the value and difference of generation

Thus, we can conclude the following:

1) Changes in basic values of the Kazakhstan population are taking place towards creation of the industrializing type of society. They reveal a relationship with the processes of generations alteration, which occur gradually but pose a long -term impetus.

2) Changing of life conditions and lifestyle causes transformation of values. Thus, long-term period of economic prosperity contributes to transition from materialistic values to post-materialistic values, i.e. from the collectivist approach to individualism. Based on data obtained, we can conclude that the younger cohorts are more interested in personal competitiveness, career, success, entrepreneurship, rationalism and freedom of convictions (under the conditions of social reforms, the emergence of new opportunities, increasing competition and demands for professionalism) than the older generation.

3) There is a process of depreciation of experience, accumulated by older generations, taking place in younger generation.

4) It is revealed that the contemporary Kazakhstanis society is characterized by the lack of sharp contradictions between the older generation and youth. Intergenerational relationships do not possess the potential, enough for

integration, which could help to overcome the natural tendencies of separation between "fathers'" and "children'" generations due to the relative mismatch of socialization conditions, as well as historical conditions in general. This potential depends on the intergenerational consensus in respect of the key values and reproduction of basic social traditions. The structure of the value hierarchy in general confirms traditionalist orientation of most contemporary Kazakhstanis. Top-priority in the value hierarchy of contemporary Kazakhstani older and younger generations occupies wealth-based values, as well as traditional values associated with the foundation of family and reproductive functions, though the latter strictly undergoes changes and loses its role that may result in loss of traditional values.

Analysis of the axiological aspects of interconnections and interrelations between generations is very important, as we are already seeing changes in the value system. The mechanisms of "social inheritance" and drive to self-affirmation of new generations undergo changes as well.

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Lifestyle and Its Impact on Stability of an Urban Family

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Abstract

The paper presents an attempt to study the way a family depends on the nature and intensity of demographic processes, to identify relationship between reproduction and family behavior, its way of life (including reproductive behavior) and stability. There is analysis of changes in the nature of marriage and family relations as well as revealed factors that influence urban family life as well as birth, marriage and divorce rate. The article calls attention to the problem of stabilization and destabilization of urban families and the ways to regulate family relations. The paper is based on the results of the target sociological survey of two-parent families conducted by the author as well the statistics data.

Keywords: lifestyle, family, family stability, birth rate, marriage destabilization, marriage rate, divorce rate, migration

1. Introduction

Reproduction of population and family-marital relations as a part of public being and mind comprises not only the repeated generation alternation resulted from birth and death rates but reconstruction and change of social relations concerning family, marriage and children. Family takes a specific part in reproduction process being both a unique social institute and a small social group therefore acting as an object as well as a subject of reproduction.

Nowadays problems of family stability become relevant first of all for some negative trends of the current demographic situation namely high divorce rate, increased number of children brought up outside the family, more unmarried men and women, secondly, for evolutionary changes in family such as transition from authoritarian to egalitarian relations, restructuring family functions with spiritual and moral values being the most important ones (Gurko, 2010).

The literature devoted to the family problems and its stability pays much attention to the analysis of economic (Vasil'eva, 2001), social and psychological (Forsberg, 2009; Beach, 2007) conditions that make family ties stronger or loose. The aim of the work is to study family stability dependence on the nature and intensity of demographic processes, to find out relationship between reproduction and family behavior, its way of life (including reproductive behavior) and stability. We claim that the best tool to study undetected effects between these processes is the lifestyle of the given city.

2. Methods of Study

Various social institutions and agencies take part in the process of population reproduction. The states regulates family and marital relations directly or indirectly; work collectives, public organizations give effect to labor and moral education of a person, develop their scientific view of the world. The greatest part is played by public consciousness particularly public opinion as well as political psychology that perform regulative function in relation to different groups of population. For the time being there is great need for new relations and their character and stability influence the course of population reproduction, family development and functioning. We believe that among these relations there are following ones: 1) family type and its members mobility; the number of children in the family and social attitudes; 2) the character of family and marital relations and family stability level; 3) type of the settlement and the level of social and areal mobility of its residents; 4) demographic structure of the settlement and levels of marriage, birth and death; 5) public opinion, traditions and reproductive objectives of the family.

To reveal these relationships and dependence in 2006-2007 the author of the article conducted a special sociological research of full families. The results of sociological survey have become the experimental base of the given investigation. Full family was taken as a unit of measure, 600 families were studied, quota sampling was used. The study used survey methods, standardized interviews and document analysis (statistics). The aim of investigation was to study the functioning of an urban family, revealing influence of its lifestyle on reproductive behavior and stability of marriage relations.

3. Results

Lifestyle is an accumulator concentrating changes in conditions and nature of city population reproduction. In turn, the way of life as a way of people's activities and typical and mass stereotypes and behavior based on it has a direct impact on a family and its stability. Lower stability, destabilized family relationships in certain parts of the population are apparently connected to new values that can silence "marriage values" to some extent. We believe that these values are mostly of real and mythical character, but it is obvious that they are formed not only by concerted efforts of the government but also thanks to the mass commonplace sense. Hence there is need for special measures to influence the public consciousness.

Lack of harmony in marital relationship, marriage satisfaction with extremely high divorce rate is inversely proportional to the level of fertility. It goes without saying that one mustn't ignore all the socio-economic factors and demographic structure of the population that impact on reproduction. But they also have to take into account marriage. As L. E. Darsky notes: "increased probability of marriage breakup contributes to a lower level of marital fertility, as a woman is afraid to be alone with children and spouses do not want to "be bound" with a large number of children, taking into account possible divorce" (Darsky, 1999). Therefore, as marriage and family experts reasonably claim one of the most important conditions to increase the birth rate, in addition to stimulating measures of demographic policy in the country (talking about maternity capital) is to take measures against divorces, to prevent family breakdowns, to higher stability of marriage and family relations (Grall, 2011).

Urban family as a social institution as well as a small social group performs important social functions; it reproduces new generations, moral norms and patterns of behavior, being actively involved in socialization. The challenge is to create the most favorable conditions for normal functioning of a family.

Among measures to improve and control population reproduction and family development there must be those of ideological as well as social and psychological character. Our research of different families showed that as far as material wants are met moral and psychological factors in the life of a man and the family become more important. Developing preferences on the number of children in the family, ways to spend free time, communication modes, spouse expectations and claims are moving towards mental and moral realm. Particularly lower stability, destabilization of family relationships in some part of the population can be due to new values that somehow break family values. We claim that these values are both real and fabulous and they are developed not only at the expense of the state but mass common sense. Here arises need for special measures to influence social mind to make it healthy and draw attention of state and public organizations to the problem of the family and population reproduction. Awareness campaign with the help of mass media to inform people about the population, family, children education, indirect influence on public opinion, moral norms and ideals by law enforcement institutes are a part of methods and means to do to develop public opinion in agreement with the demographic policy conducted in our country.

4. Discussion

It goes without saying; professional, social and territorial mobility of citizens is reasonably required because it promotes development of new communities. On the other hand intense migration processes have a direct impact both on birth rate and urban family stability for worse living conditions of migrants can cause deferred demand for children; the time to adopt and change qualification result in economic and social and psychological difficulties in migrant families. We find here dialectically contradictory interrelation between migration mobility of population and family stability.

Feedback effect of family-marital relations on demographic development of the city is mainly produced in the way relations within the family affect migration mobility and marriage rate. It should be noted, a part of migrations is involuntary and caused by disharmony in family relations that intensify territorial mobility of the population and have negative impact on marriage and child birth dates.

Thus we can conclude that family instability results in deferred demand for children, attempts to change residence that all in one lead to smaller families with fewer children or one-parent families as well as misbalance in bride and groom age.

Family instability has a direct impact on birth rate because tension in family relationships, lack of confidence in their partner often become a key factor to decide how many children there will be in the family. Mostly it is the very decision on the second and the third child, whose birth is a response for the question what relations are in the family. It is indirectly proved by our studied materials of Ufa Civil Registry Offices (900 couples). Among spouses to get divorced only 5,6 percent had 3 children, 52 percent had one child and 12 percent didn't have any child at all (Igebaeva, 2005).

The very fact that there are children in the family makes it stronger because spouses are imposed responsibility for each other and the society. The higher educational function of the family more stable and balanced it develops. The family size is dependent on the character and well-being of family-marital relations and its stability level. It is also proved by our studies. Thus stable balanced families have more children than instable and tensed ones.

Family instability is shown up in its higher social and territorial mobility. It takes place as the result of divergence in cultural values, interests, social attitudes to real-life situations of older and younger generations.

Interest divergence in urban families can be explained by absence of joint activity that may unite all family members. This fact seems to result in father's status fall. Sampling studies conducted among students of high school in Ufa show that only 15 percent of children share their troubles and joy with their fathers. Father is an authority in no more than one third of the families. Some students rate fathers the second after mothers and in some circumstances they are mentioned after grandmothers, grandfathers or even agemates.

Speaking about diverse needs and interests of different families it is necessary to distinguish at least two ways of behavior: the first is aimed at saving and strengthening of living conditions, the second one is to change these conditions. Satisfaction and discontent in labour, wage and accommodation are directly related to evaluation of real-life situation and family stability level. More stable and socially similar families are aimed at saving and strengthening of existing living conditions. And on the contrary, unstable socially mixed families tend to change living positions and conditions.

We believe that the main factor that contributes to family stability and harmonious relations between spouses is mutual understanding and respect for each other. Lack or absence of these things in family relationships creates a particular moral atmosphere where there is more than usual nervousness, instability not only between spouses but between parents and children (Tamara, 1982). The question of our survey "How often do you feel a sense of confusion on the part of your husband (wife)?" was answered in the following way: "very often" by 12.5% of women and 9.8% of men; "sometimes" by 38.9% and 42.6% respectively, "rarely" by 24, 3% and 15.0%, "almost never" by 24, 3 % of women and 32, 6% of men.

Unsatisfaction in marriage often occurs due to different interests and ideas on family life values. Each spouse has their own model of family life, particular expectations from marriage. Influenced by the example of parents a stable image of future partner and family life is gradually formed, and for some time, especially in the early years of marriage, each spouse holds to their image. And at the very moment when mismatch in expected and real image of a partner and married life is detected there comes a state of frustration, reappraisal that sometimes lead to conflicts up to family disruption (Sweeney, 2002).

Statistics show decreased marriage stability resulting in increased number of divorces. As our study of married couples applied to Ufa People's Court for divorce shows the most intensively diverge family have lived 1-4 years, they amount 36% of all respondents. Thus divorce is primarily a problem of stabilization of young families. However disturbing is divorce in families where spouses have lived together for 10-12 years, they account 22% of all divorce cases. In most cases divorce initiators are women (63.4%). These data are consistent with the results of surveys in other cities of the country (Pasovets, 2011).

Reasons for higher divorcement rate are different and due to structural and functional changes in the family. Family relations stability is being greatly affected by uneven load to carry by a man and a woman in the family itself as well in the social life. Woman is more tired of her duties at work and at home, she has too many problems to solve. As our research showed more than 60 percent of women find their marriage happy if their household duties are shared with husbands whereas 80 percent of women with unfair distribution of duties in the family think of their marriage as unsatisfactory. Moreover economic independence of women makes them more confident in money matters after divorcement. We don't think it's casual that mostly women become divorce initiators (63,4 %).

Among the diverse motives of divorce one can distinguish between five the most common ones: alcoholism, infidelity, lack of mutual understanding, bad temper of a spouse and mismatch of values accounted for 70% of the possible causes of divorce. Thus the main reason of divorces doesn't relate to the material but moral factors.

5. Conclusions

Urban family lifestyle is due to specific nature of urban relations, common behavior stereotypes, mindsets and value systems. Urban life is characterized by the nature of employment, social and recreational activities of population. Work in large groups, more job opportunities, wider range of leisure activities, abundance of information, social networks and groups intensify lives of citizens and their families. Tendency to expand contacts and social relationships worsen neuropsychic load and interpersonal relationships that leads to concern and anger often affecting the family (Kharchev, 2004; Blossfeld & Hofmeister, 2005).

It should be noted that a city is not a closed self-reproducing social and demographic system. One of urban population reproduction characteristics is its rather unstable demographic structure. If in rural settlements proportion of younger and elderly people has been the same for many years, in urban areas depending on their size, location, age, rates of economic growth, indicators of demographic development are considerably different.

Higher dynamics of social and demographic structure of a city is sure to result in distortions in the ratio of gender and age groups. It, in turn, has an effect on lifestyle of population as many young people having no wedded partners cannot get married thus reducing marriage and birth rates in the city. It goes without saying, sooner or later there will be married couples but the optimum grooms and brides age difference will be broken. According to studies harmony relations in a family mostly depend on an age ratio between a wife and a husband. According to some family researchers age difference between spouses must be 4-6 years (Toscenko, 2007).

The optimum age difference of spouses is dependent on both biological and social reasons. Women live longer but grow old earlier while social maturity of men comes later (years of studies, service in the army delay their independent life). Therefore if the early marriage of women is somehow well taken, early marriages of men aren't approved at all. The situation when husband is much older than his wife or wife is older than her husband mostly ends up with disharmony in sexual life, and as a result, disharmony in family life in general. Disharmony in spouse relations is generated by social factors as well as physiological growth of partners. Sexual distress in marriage arises from internal reasons, however sexuality is sure to be one of the main values of marriage.

Female dominance in a city population structure brings in another very important moral result: considerable number of men gets married for the second or next time to younger women who haven't been married before. For example, according to the statistics data in Bashkortostan the second and next marriage were entered by 12-14% of men and only 9-10% of women (Demograficheskie protsessy v Respublike Bashkortostan, 2012). If you take into consideration the fact that in next marriage men mostly (about 35-40%) get younger women while divorced women very seldom get wedded to men who haven't been married before, it becomes obvious that gender disproportion turns to the so-called men polygamy. It is also due to the fact that the increasing number of divorced women and men do not enter other officially registered marriage but live with their partners outside marriage. It is proved by population censuses data with more married women than married men. Difference is explained by the fact that unmarried women consider themselves married and neither do their partners. Besides, it must be taken into account that men become single twice rare (annually about 300 thousand men get widowers in the country) than women and no more than 1/3 of men whose marriage broke up last year enter another marriage (Walters et al., 2000). Recently the number of unmarried men is known to be growing (both legally and in practice).

It should be also noted that "bending" of the demographic structure of the urban population, violation of its proportions by sex and age, generates a specific social phenomenon as a "rivalry" of girls and women in creating wedlocks. If we add to that part of the women, who are doomed to be unmarried due to the lack of marriage partners those ones who are divorced and not re-married, we get a large proportion of female population that falls out of the process of reproduction of new generations. Meanwhile "excess" of unmarried women has a psychological impact on fragile families, creates additional conditions for adultery, it reduces the level of claims to potential male partners. In particular, divorces that easily occur in cities can be explained by not only the simplified procedure of divorce, but also by psychological confidence in a choice for another spouse. So, in big cities divorced men have chances to get marry again three times higher than women. To a certain extent women "rivalry" as a result of less marriage opportunities stimulates extramarital affairs and adulterate children (Antonov et al., 2002).

"Bending" of demographic structure of urban population and therefore fluctuations in birth rate largely depend on the character of migration flows to cities and out of them. Migration mobility of population has an indirect

impact on family stability. Higher youth rate in migration flows results in gender ratio violations destabilizing existing families for increased extramarital relations, more chances to choose sexual partners and so on (Edin & Kefalas, 2005).

Sampling studies conducted in Ufa showed that every second adult resident is a first generation citizen where more than a half of pollees (55,6%) are rural descents and 18,6 percent people come from small towns and industrial communities. It gives evidence that a large city population is developed thanks to alien people mostly from rural settlements (Varlamov et al., 2006).

What does this fact mean for population reproduction and family-marital relations? First of all it implies that some families having changed their residence retain former reproduction preferences that were developed while they lived in the country. As demographer investigations in different countries of the world show want for certain number of children in the family is developed in childhood and youth and this want is rather stable (Blossfeld & Hofmeister, 2005; McDonald, 2006). Former living conditions, previous reproduction preferences are realized in a new social medium.

Migration of rural people to towns and cities results in changed lifestyle, development of new norms of behavior though it doesn't happen at once. What is more, changing opinions on desirable number of children in the family depends on how long the spouses have been living in the city as well on their education and qualification. In a large city the level of education and qualification is higher than it is in small towns. But there is a contradictory situation: the level of education and qualification has different effect on birth rate but is directly related to divorce level. Thus, some part of city people come from the country being low-skilled workers are notable for intensive reproduction another more educated and qualified part with higher needs and wants for marriage and family isn't very active in reproduction processes but in divorces.

Migration mobility appears to intensify social mobility of population. Meanwhile natural way of population reproduction can both stimulate and suspend intense migration. For example, higher youth and divorcement rate create special conditions for migration. On the other hand migration scale can reflect birth rate: worse living conditions of migrants, overall instability can cause deferred demand for children. Migration mobility seems to change birth date of the first or the second child but it doesn't determine the number of children in the family. As it was mentioned previously rural descendants in the city change their reproduction preferences though it doesn't take place immediately. As for aboriginal inhabitants, third-generation citizens, they are the very bearers of common stereotypes of city lifestyle including negative attitude to a large number of children in the family. Probably it is the very circumstance that makes difference between first- and third-generation city people.

Hence birth rate can be influenced not only by means of economic incentives like higher wages and accommodation but indirect measures for regulating population migration. Still deforming demographic structure of urban population has negative demographic as well as social consequences. Uneven proportion of young and elderly men and women in marital fertile age prevents natural process of family formation and has extensive social implication.

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Economic-Mathematical Model of Building a Company's Potential

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Abstract

This article describes economic-mathematical model of building and analyzing the economic potential in a rational organization of economic activity for the respective business enterprise. In the article the mathematical model, allowing to demonstrate the complexity of concept "economic potential", to show the necessity of its study in many other fields and at different levels, to build a system of indicators to assess the economic potential of an enterprise, that gives the possibility to analyze different aspects of the potential for the subject in its general and basic elements; to get methods for the determination of the system performance assessment of economic potential, based on the solution of the corresponding optimization problems; to identify some regularities of formation and correlation of quantitative estimates of the economic potentials of the system and its separate elements.

Keywords: management, household unit, company, economic potential, factor approach, evaluation of the respective business entity

1. Introduction

In many scientific papers the definition of potential is widely used as a description of opportunities for economic agents. Peculiarity and unification of this category is the fact that it can be used to evaluate the possibilities for business enterprises at different levels – companies and branches (micro), national economy in general (macro), as well as the world economy as the aggregate of national economies (national level). Complexity, hierarchy, structure of the definition "economic potential" explain the development of studies in the sphere of analysis of its aggregates (local potentials), among which are productional, innovative, investment, natural resource, working, energetic, export, transit and so on.

2. Method

Different aspects forming and evaluating the economic potential of different economic agents (objects) are embodied in papers of many economics, among them are Kizim N., Klimahina O., Kubah A., Lapin E., Tichenko A., Tretyak V and many others. So, in the monograph authors define the broadly used scientific approaches to the evaluation of economic potential, namely, criterial, balanced and factorial.

Criterial and balanced approaches are used in the international practice measuring the economic potential of countries within the world economy. As an example implementing these approaches one can give the evaluation of economic potential of the former USSR countries, which was suggested in 1991 by the Deutsche Bank, the definition of countries' ranking according to their internal economic potential (national wealth per capita), which was suggested by the World Bank at the beginning of 90-ties, the 20th century and so on.

Factorial approach to the assessment of the economic potential implies a combination of different factors (structural components), considering that you can get an estimate of the magnitude of the economic potential. A variation of the factor approach is a resource that is widely used in the allocation of capacity-building and component approaches to its assessment (Borodin, 2006; Amitan, Kiklevich, & Filatov, 2002; Borodin, 2004; Busy, 1999; Tischenko, Kizim, Cubes, & Dawiskiba, 2005; Freeman, 1995; Goldstein, 1998; Anisina & Dagaev, 2003; Krylov, 2003; Lapin, 2002; Rumyantsev, 2001; Ilyin, 2006; Tretiak, 2006; Borodin, 2012a; Borodin, 2012b; Lundvall, 1992; Nelson, 1993; Gluhov, Mednikov, & Korobko, 2007; Ivanov, 2003; Kostevich, 2003).

On the whole the economic potential of the work is considered as a variable that depends on the quantity and quality of resources available to the object or that it can attract under certain conditions. However, in the context of assessing the economic potential of the rational use of these resources, in general, the optimal organization of economic processes in which they are involved, proper attention is not given. As a result of evaluation of the economic potential of the subject under consideration can be obtained for far not the best use of its capabilities and thus take low values.

Therefore, the aim of this paper is to develop an approach to the analysis of the economic potential based on econometric models that allow us to determine various indicators to assess this potential in a rational (optimal) organization of economic activity of the respective entity.

Under the potential of any subject (object) we understand its ability to implement (use to implement) a certain activity. The potential can be naturally assessed according to the results of the implementation of these features. If we talk about the economic potential, in this case the possibilities of the relevant economic processes should be analyzed, and for its assessment we should use economic indicators of the implementation of these processes.

3. Results

In order to evaluate and analyze the economic potential of a business entity let us represent the basic processes of its functioning with the help of the simplest mathematical economic model.

We assume that the production (process) possibilities of the given economic entity are described by the system of production functions:

$$y_j = f_j(x_{1j}, x_{2j}, ..., x_{mj}, y_{1j}, y_{2j}, ..., y_{nj}), j = \overline{1, m} \tag{1}$$

where y_j is the value of goods produced or the services performed in the physical units of j, x_{ij}, y_{kj} are expenses of resources i and products (services) in the k form used for the production ofj, calculated also in physical units.

Equation (1) shows that for the implementation of the relevant production can be used not only basic resources, but also products that the system itself induces. Thus, technological relationships that exist within the simulated economic system are widely used.

The basic resources among which one can find natural, human, financial, recreational, production capacities of enterprises and other types, the system has in the limited amount, determined by the value r_i. Therefore, for the production processes some resource constraints must be fulfilled

$$\sum_{j=1}^{m} x_{ij} \leq r_i, j = \overline{1, m} \tag{2}$$

Similar to the condition (3) the limitations on the use of the goods and services produced should be considered

$$\sum_{j=1}^{m} y_{kj} \leq f_k(x_{1k}, x_{2k}, ..., x_{mk}, y_{1k}, y_{2k}, ..., y_{mk}), j = \overline{1, m} \tag{3}$$

where $\sum_{j=1}^{m} y_{kj}$ the total volume of industrial consumption of the product in the form k.

Along with the constraints (2) and (3) within the organization of the functioning of the production one must take into account the existing solvent final demand for the products and services of the respective type, which means that the mathematical model of the analyzed business entity should include inequality

$$f_j(x_{1j}, x_{2j}, ..., x_{mj}, y_{1j}, y_{2j}, ..., y_{nj}) - \sum_{k=1}^{l} y_{kj} \leq S_j, k = \overline{1, l} \tag{4}$$

where S_j - the value of final demand for goods or services in the form j

Model (1) - (4) reveals a number of positions where it is possible to evaluate and analyze the economic potential of any business entity.

In the simplest case potential assessment can be carried out within the framework of the resource approach. Its essence lies in the direct determination of the volume of different kinds of resources, which the economic system has. The estimate of resources can be both in volume and value terms.

Potential indicators of the physical terma are variables r_i. For their evaluation existing market prices of each of the resources p_i should be used.

The value of the economic potential $Э_R$ in line with the resource approach is defined then as follows

$$Э_R = \sum_{i=1}^{n} p_i r_i, \tag{5}$$

ie the total value of the economic potential of the observable subject is a simple sum of economic evaluations of individual resources at his disposal.

The variable $Э_R$ characterizes the amount of resources of the relevant business entity, but does not reflect his ability to use (recycle) these resources. However, it is obvious that these opportunities of the economic system to a big extent form the potential. We therefore consider the approach to the assessment of the economic potential, which takes into account the most important aspect of its origin and development mentioned. This approach, as it will be clear from the subsequent, naturally called functional-targeted, since it reflects the goals of the entity operation and its main functions (possibilities), with the help of which these objectives are realized.

A business entity, using its abilities to achieve a specific goal (or a set of goals) while operating, seeks to implement them the best way. We assume that the degree of realization of the relevant goals (quality of system's functioning) can be determined by a generalized index that is based on the effectiveness of the implementation of all the features of the analyzed business entity, that are defined in the model of production function. Thus, the model of functioning of the economic entity (1) - (4) has the form of the following problem of optimal use of limited resources.

$$F(f_1, f_2, ..., f_n) \rightarrow \max, \tag{6}$$

$$\sum_{j=1}^{m} x_{ij} \leq r_i, \, j = \overline{1,m} \tag{7}$$

$$\sum_{j=1}^{m} y_{kj} \leq f_k(x_{1k}, x_{2k}, ..., x_{mk}, y_{1k}, y_{2k}, ..., y_{nk}), j = \overline{1,m} \tag{8}$$

$$f_j(x_{1j}, x_{2j}, ..., x_{mj}, y_{1j}, y_{2j}, ..., y_{nj}) - \sum_{k=1}^{l} y_{kj} \leq S_j, k = \overline{1,l} \tag{9}$$

$$x_{ij}, y_{kj} \geq 0, k = \overline{1,l}, i = \overline{1,n} \tag{10}$$

In this case different forms of the generalized index $F(f_1, f_2, ..., f_n)$ that reflect the corresponding goals of a business entity can be used. It is usually considered as such purposes are the following: maximizing the total cost of all the products and services produced in the analyzed economic or maximizing the volume (in value terms) of manufactured final products (products used by final consumers). Those goals are being met by the indicators $F(f_1, f_2, ..., f_n)$ that usually have the following form

$$F_1 = \sum_{j=1}^{m} c_j f_j(x_{1j}, x_{2j}, ..., x_{mj}, y_{1j}, y_{2j}, ..., y_{nj}), \tag{11}$$

$$F_2 = \sum_{j=1}^{m} c_j \left[f_j(x_{1j}, x_{2j}, ..., x_{mj}, y_{1j}, y_{2j}, ..., y_{nj}) - \sum_{k=1}^{l} y_{kj} \right], \tag{12}$$

where c_j - price of the product (service) of type j.

Using the optimizing model of (6) - (12) of functioning of a certain business entity, we can get a rating system characterizing its economic potential, both in general and in the context of its individual elements.

General assessment of the economic potential of the subject $F1_1^*(f_1, f_2, ..., f_n)$ may serve as the optimal value of the index C or $F1_2^*(f_1, f_2, ..., f_n)$ got from the solution of the problem (6) - (10) of the corresponding target function.

The magnitude of the economic assessment of the capacity obtained by the method above is constrained by the current demand for products and services. Therefore, it is interesting to estimate the potential of a business entity

that is not associated with conjunctural conditions. Such assessment may be the best value of $F2_1^*(f_1, f_2, ..., f_n)$

or $F2_2^*(f_1, f_2, ..., f_n)$, the same indicators and respectively $F_1(f_1, f_2, ..., f_n)$ and $F_2(f_1, f_2, ..., f_n)$, but for the

optimization problem (6) - (8), (10), that is the problem in the production where there are no restrictions on the value of the current demand.

Indicators $F1_1^*(f_1, f_2, ..., f_n)$, $F1_2^*(f_1, f_2, ..., f_n)$ and $F2_1^*(f_1, f_2, ..., f_n)$ present different kinds of the general economic assessment of the capacity of implementing the analyzed system of all economic activities (its production functions). $F1_1^*(f_1, f_2, ..., f_n)$ and $F1_2^*(f_1, f_2, ..., f_n)$ reflect the different goals of functioning of a business entity – maximization of the total value of the products manufactured and maximization of the final product, respectively. Assessments $F2_1^*(f_1, f_2, ..., f_n)$ and $F2_2^*(f_1, f_2, ..., f_n)$ meet the conditions of an unlimited demand for products produced by this system, and thus characterize its maximum (limited) product opportunities.

Initial resources (represented by indicators $r_i, i = \overline{1, n}$) and technological possibilities for the production of goods and services (reflected in the model as functions $f_j(x_{1j}, x_{2j}, ..., x_{mj}, y_{1j}, y_{2j}, ..., y_{nj}), j = \overline{1, m}$) can be considered as the individual components of the system.

Within this model economic evaluation capacities of certain types of inputs can be carried out in various ways.

Resources assessment should be based on the performance of their full and rational (optimal) use. Therefore, for such an assessment, e.g., resource of type l, the optimum values of $F_1(f_1, f_2, ..., f_n)$ and $F_2(f_1, f_2, ..., f_n)$ of the optimization problem (6) - (10) can be considered, wherein the restriction (7) can be written as follows:

$$\sum_{j=1}^{m} x_{lj} = r_l, \tag{13}$$

$$\sum_{j=1}^{m} x_{lj} \leq r_l, j = \overline{1, m}$$

We would denote these optimal values like $Fr1_1^*(l)$ and $Fr1_2^*(l)$, respectively.

Just like the evaluations $F2_1^*(f_1, f_2, ..., f_n)$, $F2_2^*(f_1, f_2, ..., f_n)$, the estimated value of the potential individual resource can also be retrieved for the case of zero restrictions on the amount of current demand.

This evaluation is the optimal values $Fr2_1^*(l)$ and $Fr2_2^*(l)$ of indicators $F_1(f_1, f_2, ..., f_n)$ and $F_2(f_1, f_2, ..., f_n)$ of the optimization problem (6), (8), (10), (13), where all restrictions on the demand quantity were lifted.

Similarly, the evaluation of the capacity may be determined and, provided that there are no restrictions not only on demand, but also on amounts and other inputs that are to be used in combination with the resource analyzed. In this case, the evaluation of the resource will be the best values $Fr3_1^*(l)$ and $Fr3_2^*(l)$ of the indicators $F_1(f_1, f_2, ..., f_n)$ and $F_2(f_1, f_2, ..., f_n)$ of the problem (6), (8), (10), (13), where the restriction (13) was replaced by the following

$$\sum_{j=1}^{m} x_{lj} = r_l, \tag{14}$$

Calculated by the latter method, the evaluation of the economic potential of the analyzed resource can be regarded as an upper bound for the values of its evaluations obtained by other methods.

Assessments $Fr1_1^*(l)$, $Fr1_2^*(l)$, $Fr2_1^*(l)$, $Fr2_2^*(l)$, $Fr3_1^*(l)$, $Fr3_2^*(l)$ characterize the potential of the resource of kind l from the standpoint of maximum economic result that it can produce, being used alongside with the other resources and technological capabilities of a business entity. However, at some point the opposite approach to assessing the potential of a particular resource of the system is possible. We can calculate this estimate as the quantity of change in the economic results of the functioning of the system in the event of the withdrawal of this resource.

Taking $\underline{Fr}_1^*(l)$, $\underline{Fr}_2^*(l)$ as the optimal values of the parameters $F_1(f_1, f_2, ..., f_n)$ and $F_2(f_1, f_2, ..., f_n)$, respectively, for the optimization problem (6) - (10) where the constraint (7) has the form of

$$\sum_{j=1}^{m} x_{lj} \le r_l, j = \overline{1, m} \tag{15}$$

And the production functions $f_j (j = \overline{1, m})$, allow the interchangeability of resources. Then, the economic evaluation of the resource potential of the resource of type l for the business entity given, can be defined as the difference between the corresponding optimal values of the objective functions

$$\underline{\Delta Fr}_1^*(l) = F_1^*(f_1, f_2, ..., f_n) - \underline{Fr}_1^*(l), \tag{16}$$

$$\underline{\Delta Fr}_2^*(l) = F_2^*(f_1, f_2, ..., f_n) - \underline{Fr}_2^*(l), \tag{17}$$

Following indicators $Fr1_1^*(l)$, $Fr1_2^*(l)$, $Fr2_1^*(l)$, $Fr2_2^*(l)$, $Fr3_1^*(l)$, $Fr3_2^*(l)$, $\underline{\Delta Fr}_1^*(l)$, $\underline{\Delta Fr}_2^*(l)$ characterize the economic potential of the same resource *l*, but from different possible directions that allows to get a comprehensive view on its value under different conditions and for different objectives of exploitation of this resource.

Assessments of the potentials of the enterprise in terms of production of certain products (providing certain types of services) can be constructed according to the same scheme as for individual resources.

In order to assess the potential production systems, for example, products or services of *u* optimal values $Ff1_1^*(u)$ and $Ff1_2^*(u)$ and following indicators can be used:

$$Ff1_1^*(u) = c_t f_t(x_{1t}, x_{2t}, ..., x_{mt}, y_{1t}, y_{2t}, ..., y_{nt}), \tag{18}$$

$$Ff1_2^*(u) = c_t \left[f_t(x_{1t}, x_{2t}, ..., x_{mt}, y_{1t}, y_{2t}, ..., y_{nt}) - \sum_{k=1}^{l} y_{tk} \right], \tag{19}$$

(18)-(19) are obtained by solving problems (6)-(10), where the target functions are $Ff1_1(u)$ and $Ff1_2(u)$. These indicators are similar to $F_1(f_1, f_2, ..., f_n)$ and $F_2(f_1, f_2, ..., f_n)$, but designed for one type of product.

To estimate the maximum of production capability of the production system, product (service) *u,* the values

$Ff2_1^*(u)$ and $Ff2_2^*(u)$ of indicators $Ff1_1(u)$ and $Ff1_2(u)$ can be used, they are obtained after solving problems

(6)-(10), they eliminate restrictions on the value of final demand (9).

By analogy with the resources, another approach to determine the potential of a particular product can be based on the value of changes in the economic evaluation of the functioning of the system while removing this product from production. In this case, the evaluation of potential products (services) and (production or services) can be obtained as follows:

$$\Delta \underline{Ff}_1^*(u) = F_1^*(f_1, f_2, ..., f_n) - \underline{Ff}_1^*(u), \tag{20}$$

$$\Delta \underline{Ff}_2^*(u) = F_2^*(f_1, f_2, ..., f_n) - \underline{Ff}_2^*(u), \tag{21}$$

where the optimal values $\underline{Ff}_1^*(u)$ and $\underline{Ff}_2^*(u)$ of these indicators are:

$$\underline{Ff}_1^*(u) = \sum_{j \ne u} c_j f_j(x_{1j}, x_{2j}, ..., x_{mj}, y_{1j}, y_{2j}, ..., y_{nj}), \tag{22}$$

$$\underline{Ff}_2^*(u) = \sum_{j \neq u} c_j \left[f_j(x_{1j}, x_{2j}, ..., x_{mj}, y_{1j}, y_{2j}, ..., y_{nj}) - \sum_{k \neq t} y_{kj} \right], \qquad (23)$$

for problem (6) - (10), which excludes all elements corresponding to the product u.

4. Discussion

The model represents the economic potential of the enterprise as a whole, and its elements such as the original resources and technological capabilities to manufacture certain types of product, that corresponds to different levels of formation and analysis of this potential. Each element corresponds to its potential. Naturally the question arises about the quantitative ratio of the capacity of the enterprise as a whole and potentials of its components.

If we consider the resource approach to capacity assessment, in this case, as already noted, the total economic potential of the subject is the sum of the estimated potential of its resources.

The situation is different while using functionally-oriented approach to the assessment of the economic potential of the enterprise.

For example, if the optimal solutions of problems (6) - (10) with the target functions (11), (12) for the found values of the variables are the ratio $\sum_{j=1}^{m} x_i^* = r_i$, i.e., the resource l is used in full, then

$$Fr1_1^*(l) = F1_1^*(f_1, f_2, ..., f_n), \ Fr1_2^*(l) = F1_2^*(f_1, f_2, ..., f_n), \ Fr2_1^*(l) \geq F1_1^*(f_1, f_2, ..., f_n),$$
$$Fr2_2^*(l) \geq F1_2^*(f_1, f_2, ..., f_n), \ Fr3_1^*(l) \geq F1_1^*(f_1, f_2, ..., f_n), \ Fr3_2^*(l) \geq F1_2^*(f_1, f_2, ..., f_n)$$

This means that economic assessment of the potential of a certain resource may be equal or even exceed similar assessment of the potential of the system as a whole.

There is no contradictions in the case. The fact is that assessments $F1_1^*(f_1, f_2, ..., f_n)$ and $F1_2^*(f_1, f_2, ..., f_n)$ are received within the existing capabilities of the system, certain limited quantities of all resources. But in order to assess the potential of a certain resource limits on its usage are imposed, assuming that other resources needed (including effective demand) can be used infinitely.

From this it also follows that the optimal value of, for example, $F1_1^*(f_1, f_2, ..., f_n)$ is not equal to the sum of the optimal values $Fr1_1^*(l)$ for all types of resources, similar to other estimates of the economic potential of the subject in general and capacities of its individual elements. Therefore, within the functionally-oriented approach total economic potential of the subject cannot be represented as the sum of the estimates of the potentials of its components.

Built system of indicators of economic potential has not only theoretical and methodological significance, but it be determined and analyzed in economic practice. For this model (6)-(12) and its modifications must be specified by setting inputs such as resources, the prices of these resources and manufactured products, as well as the type of production functions $f_1, f_2, ..., f_n$, which in principle is not an insoluble problem in economic research must be identified. If the functions $f_1, f_2, ..., f_n$ are linear, then constructed models will represent the linear programming problems, which solution methods are well known.

5. Conclusion

Analysis of the economic potential based on the developed mathematical model allowed not only to determine the approaches to assess potential in a rational organization, but also helped

- to demonstrate the complexity of concept "economic potential", to show the necessity of its study in many other fields and at different levels;

- to build a system of indicators to assess the economic potential of an enterprise, that gives the possibility to analyze different aspects of the potential for the subject in its general and basic elements;

- to get methods for the determination of the system performance assessment of economic potential, based on the solution of the corresponding optimization problems;

- to identify some regularities of formation and correlation of quantitative estimates of the economic potentials of the system and its separate elements.

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Dynamics of Labour Input and Average Annual Hours Actually Worked Per Worker in Industry of Developed Countries and Russia: Similarities and Differences

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Abstract

Dynamics of labour input and average annual hours actually worked per worker in industry of developed countries and Russia is analyzed. It is revealed that the correspondence of the given notions depends on the dynamics of employment. It is discovered that for the economically developed countries the quicker reduction of labour input is characteristic in comparison with the employment. In Russian industry labour input is decreasing as well though the employment is decreasing quicker. As a result in economically developed countries average annual hours actually worked per worker in industry is decreasing and in Russia is increasing.

Keywords: labour productivity, labour input, average annual hours actually worked per worker

1. Introduction

In the recent decades in industry of economically developed countries two important social-economical processes went together: the decrease of average annual hours actually worked per worker on the one hand and the reduction of labour input on industrial production on the other.

The reduction of working time is the continuation of a trend characteristic for the XX century. In 1950-70s the reduction of the working time went on quicker than in the following period. In the first decade of the XXI century this process was going on, but its irregularity had grown, motives and ways of its realization had become more difficult (ILO, 2011).

In economics literature the reduction of working time is rightfully connected with labour productivity rising when the part of the effect reached is used for living standards rising by free time enlargement (Glyn, 2006). Modern workers can satisfy their increased needs spending less time for the paid work than their predecessors (Ridley, 2012).

The reduction of the working time goes on not without the problems. Partially it is neutralized by overtime work (Nordstrom, 2004). Nevertheless all these problems are being solved successfully finally.

Really, with increase of labour productivity in the unit of time to satisfy the fixed social demand less working time amount is necessary. As a result the tendency to reduce the general fund of working time in industry arises which allows to free time for social activity satisfying intellectual, esthetic etc. demands of society.

In the period prior to machine industry the growth of labour productivity was restricted by the fact that labour means were brought to the action by the worker. The limitation of physical human abilities put barriers to such growth of labour productivity which would allow to provide the enlargement of product dictated by the growth of population number and increase of demands at large-scale time-safety from industrial production. That is why historically up to the time of industrial revolution the general value of nonproductive social activity of society though was growing in its absolute value, was relatively less in comparison with the growing general fund of working time in industry and agriculture.

The foundation of machine industry had changed the situation in a principal way: the growth of labour productivity had accelerated so that the growth of social product began to forestall the growth of labour input of

the society. Thus, e.g. during the XX th century with the growth of the world population from 1.6 bn people to 6 bn the world manufacturing output had become 50 times more whereupon the employment in manufacturing had become 6.5 time more (Marsh, 2012). Average annual hours actually worked per worker in industry decreased at that.

Since 1900 to 1980 the employment in manufacturing – the dominating industrial sector of developed countries – has grown more than three times. And only in the last 30 years in rich countries the decrease of employment in manufacturing takes place and especially quickly beginning with the year 2000. No doubt the decrease of employment in industry did not reflect the dynamics of labour input extremely precisely, taking into account the reduction of working time existing simultaneously. Nevertheless it does not cancel the fact of labour input general growth in industry of the leading countries in the first half of the XX century.

The decrease of labour input in industry under the condition of output growth shows that the economy became really developed.

The regularity of labour input decrease does not predetermine the dynamics of normal length of working time of a certain worker. It is also necessary to take into account the value of employment and its changing.

Hypothetically this regularity can be fulfilled at different variants of correlation of labour input and the employment in industry.

The variant is possible when the number of workers either stays the same or is decreasing slower than the labour input is decreasing. In this case, the objective precondition of each worker working time shrinking appears with the increase of wellbeing of all members of society.

One more variant consists in the growth of employment in industry simultaneously with decrease of labour input. It would allow to reduce the working time of each worker in a large scale than it dictated by the growth of labour productivity.

Moreover, we can not exclude the situation when reduction of labour input is accompanied by forestalling decrease of the number of employees in industry. It would demand more hours actually worked per worker.

The hypothesis of our investigation is as follows: the reduction of the working time is typical for the developed countries in conditions when the decrease of labour input goes before the decrease of employment.

2. Materials and Methods

To verify this hypothesis the data about the dynamics of labour input, average annual hours actually worked per worker for the developed countries which are the leaders in world industrial production will be analyzed. Doing this we shall use the statistical data of the Organization for Economic Co-operation and Development (OECD). As in the data base of OECD the data about labour input in the industry of Japan are absent, we do not analyze the experience of this country.

The statistics of OECD contains the data concerning average annual hours actually worked per worker and wage without the division of the employees according to the kinds of activity. We consider that the dynamics of these indexes for those working in industry corresponds to general dynamics.

The dynamics of the mentioned values will be examined by the correlation of their meaning in 2007 and 2000. The choice of this period is conditioned not only by the availability of the necessary data. These years were characterized by the growth of industrial production, the changing of the values under the analysis was not distorted because of the world economic crisis.

As for Russia, to evaluate the investigated processes the data of Russian statistics are used which forces us to consider a little bit different period of industry development – 2005-2010 years.

3. Results for a Number of Developed Countries

In Table 1 the corresponding data for a number of developed countries are given.

It is necessary to state that for developed countries the absolute reduction of labour input in industry is typical. Such reduction is well combined with both the satisfaction of the growing needs and the population growth. Evidently, for the nearest perspective this tendency may be regarded as the leading one for this sector of the world economy.

It is evident from the data given in Table 1 for the industrially developed countries the reduction of the employment in industry is also typical. But this reduction takes place slower than the reduction of labour input in industry. As a result average annual hours actually worked per worker are reduced.

Table 1. The dynamics of labor input, employment in industry and also average annual hours actually worked per worker and real wage a year in the total economy in 2000-2007 years (the change in % to the year 2000)

	United Kingdom	Korea	United States	France	Germany	Sweden
Industry						
Labour input	- 26.1	-9.4	-19.6	-13.6	-9.3	-8.7
Employment	-2.2	+1.9	-8.3	-7.1	-6.9	-3.9
Total economy						
Average annual hours	- 1.4	-8.2	-2.1	-2.5	-3.3	-1.5
Real wage	+13.2	+18.9	+8.7	+8.4	+1.5	+13.8

Source: is based on the OECD data

The dynamics of the indexes under the investigation in the US is analogues to the dynamics in the European countries, though the investigators pay attention more often on the specificity of working time reduction in the USA (Bell & Freeman, 2001).

In 2000-2007 years only in Korea the reduction of labour input in industry went together with the increase of employment. As it was to be expected it led to higher tempos of time reduction per worker. Though the dynamics of employment in Korea can not be regarded as typical for the developed countries (the growth of employment in industry is characteristic to China, for instance (Knight & Song, 2005)).

No doubt, that in conditions when new technologies and techniques demand the increase of qualification-education workers level, their responsible and creative attitude to labour the working time shrinking becomes not only a possibility but also a necessity.

The fact that the variant of forestalling employment decrease is purely hypothetical is quite explainable. The case assuming the time absorption for human development by labour is not typical for social progress.

If also follows from the data of Table 1 that in modern economy conditions the contraction of labour input in industry is, mainly, in the form of employment contraction in it. Thus, the tempos of employment contraction in industry were 4times higher than the tempos of average annual hours actually worked per worker contraction in the USA, 2.9 times higher in France, 2.6 times higher – in Sweden, 2.1 times higher – in Germany and 1.6 times – in the UK.

Though the working time shrinking took place initially in the form of working day contraction, it is not the only possible variant of working time shrinking. In the limits of a year, e.g., working time can be reduced due to the increase of holiday days and days of vacation at more or less stable duration of the working week.

We can judge about the correlation of different ways of working time reduction in developed countries taking in account the data of Table 2.

Table 2. Average annual hours actually worked per worker in total economy, the duration of working week and the duration of vacations and days off in a number of developed countries in relation to the corresponding indexes in Germany in 2007 (%)

	United Kingdom	Korea	United States	France	Germany	Sweden	Japan
Correlation of average annual hours	117,9	162,2	126,4	104,4	100	113,8	125,5
Correlation of duration of working week	103,9	118,2	107,1	97,6	100	97,4	113,0
Correlation of duration of vacations and days off*	83,5	…	50,0	89,7	100	88,5	…

Source: is based on the OECD data, ILO data and (Alesina et al., 2005)

As the given data show, the average annual hours actually worked per worker in Germany in 2007 was minimal among the countries mentioned (it was equal to 1422 hrs). Meanwhile the mean duration of working week in Germany manufacturing exceeded the corresponding indexes of France and Sweden.

It also attracts attention that relevant exceeding of the average annual hours actually worked per worker in the countries mentioned in comparison with the index in Germany in all cases considerably exceeds the relevant exceeding of working week continuity. This is explained by a more noticeable number of days of vacations and days off in Germany.

Such situation was forming for decades. In Germany since 1983 till 2007 the average annual hours actually worked per worker reduced from 1809 hrs to 1422 hrs, i.e. on 22.4% and the working week in manufacturing – from 40.5 hrs to 38.5 hrs correspondingly, i.e. on 4.9%.

Consequently, a quarter of a century of working time shrinking in Germany was used predominantly to increase the duration of vacations and days off.

Likewise, the freeing up of the time from production was distributing in France, where the average annual hours actually worked per worker from 1983 to 2007 contracted from 1785 hrs to 1485 hrs (17.8%) and working week – from 38.9 to 37.6 hrs (3.3%).

It is only in Korea where since 2000 to 2007 the average annual hours actually worked per worker contracted on 8.2% (from 2512 hrs to 2306 hrs) and working week – on 7.7% (from 49.3 hrs to 45.5 hrs), the economy of labour was used almost completely for working week contraction. But this country is very far from the indexes of the countries leading in supplying the workers with free time.

As in majority of industrially developed countries the working week is 5 days long (and 2 days off), the reduction of a working week may testify (to a certain degree) to a reduction of working day. Complete identification of these processes would be incorrect: e.g. the introduction of 35 hrs working week in France didn't mean the automatic reduction of the hours of every working day. Under the collective bargain, often the working hours before the days off were reduced.

4. Results for Russia

In Russia before the beginning of the 90-s there was the increase of industrial production. More than that, according to the soviet statistics in the period from 1980 to 1987 labor productivity in industry had increased on 28% (GKS, 1988). The dynamics of labour input had principal specificity though. The number of workers in industry since 1980 up to 1987 had grown on 0.1% and the number of working days – on 0.5%. Thus labour input in Russian industry had grown, though unremarkably. Meanwhile in economically developed countries in the same time period there already were the tendencies to labour input reduction in this sphere of economy.

The average annual hours actually worked per worker in Russia was equal to 1900 hrs and exceed in that period the analogues indexes of the developed countries on 100-200 hrs.

In the 90-s in Russia there was a deep fall of industrial production. In 1998 it was only 46% in comparison with 1990 (GKS, 2013). The reduction of working time happened then for sure had a crisis character. It was followed by the abrupt fall of real wages and the appearance of mass poverty.

Beginning with 1999 the restoration of industrial production began. The main source of growth is the increase in labour productivity. For example, in the period 2005 – 2010 years the volume of manufacturing production had increased on 14.1%, labour productivity in this leading sphere of industry had grown on 25.3% and labour input hag reduced in manufacturing on 7.7% at that.

The number of employees in manufacturing decreased on 11.6% since 2005 up to 2010 but labour input had decreased only on 7.7%. As a result the average annual hours actually worked per worker in this sphere had increased on 3.1% and reached 1895 hours according to our estimation.

In 2012 the employment in manufacturing reduced on 1.1 % in comparison with 2010, though labour input increased on 0.3%. Correspondingly the average annual hours actually worked per worker grewon 1.5% and reached, according to our calculation, 1924 hrs. The given value corresponds to the level which existed in Russian industry in the 80-s.

What is the reason of an employment reduction in manufacturing? These are: more difficult working conditions than in the sphere of "office economy" and, what is not the least important, the longer working time (in 2011 the working week of qualified workers in industry on 2.2 hrs exceed the working week of the specialists of the highest level of qualification and on1.7 hrs – the specialists with medium level of qualification (GKS, 2012).

The analogues reduction of employment with simultaneous increase of working time duration justifies the deficit of labour resources in manufacturing. . One of its criterion is the growth of vacancies number in the given sphere. Thus, only the number of such vacancies grew from 77000 in 2010 to 110300 in 2012 (GKS, 2013). Though the vacancies do not exceed 1% from the number of employees but with taken into account the old age of qualified workers and negligible inflow of young employees, it is possible to forecast the problem sharpening in the nearest future already.

Under such conditions the use of labour migration is regular as the factor of labour supply increase.

According to the official data the number of foreign migrants in manufacturing Russia had grown from 48700 people in 2005 to 167300 in 2012 or from 0.4% out of number of employees in manufacturing to 1.6% (GKS, 2013).

It is known that the duration of migrants working time is higher than that of local workers up to 10-20%.

It is also necessary to take into consideration internal migration into manufacturing in Russia. Thus, if in 2010 there were 172800 of such migrants, in 2012 there were already 219700 of them. The share of internal migrants among employees in this sphere grew respectively from 1.7% to 2.2%. The length of working time of such migrants is close to that of foreign migrants.

So, migrants share in manufacturing according to the most minimal evaluation is 4%. The time worked by them additionally (200 hrs per year) increases labour input on 0.4%. In this case, the average annual hours actually worked per non-migrant worker appear to be 8 hrs less and is equal 1916 hrs.

No doubt, this clarification does not cancel the general conclusion about the of working time in manufacturing of Russia, especially taking into account that the majority of migrants are Russian workers.

More than that, in Russia labour input in the personal plot is unusually high (for the developed countries): it is 95% of labor input in manufacturing. The largest part of this work is that of the industrial workers. Hence, the rest time of Russian workers is in fact less than it would be expected if we take into account the statistics of average annual hours actually worked per worker.

4. Discussion

The decrease of labour input in the developed countries makes it possible to reduce the working time of employees which happens in reality. It was a long-run tendency (Alesina et al., 2005; Bosch & Lehndorff, 2001) which provided the rise of living standards (Bowman, 2014; Chang, 2011).

In Russia labour input decrease in manufacturing was also taking place. Since the end of 1990-s the growth of labour productivity has been being observed. During this period of time the average wage in industry has also grown. Nevertheless, at present the duration of working time in manufacturing is on the level of the end of the 80-s. The gap between the developed countries and Russia has grown on 200-300 hrs and reached 300-500 hrs per year.

For the last 25 years the position of industrial workers from the point of view of the free time they possess has not improved which contrasts drastically with the progress in the developed countries. From our point of view, it is an example of the contrast between the different perspectives of income and capability (Sen, 2001).

The growing of working time duration in Russia has both direct and long-run negative consequences.

In the manufacturing of Russia elderly workers prevail. It is not very easy for them to cope with labour loading increase. Moreover, the lengthening of working time is one of the reasons of young workers deficit in industry.

The increase of labour migration to a certain extent compensates the deficit of labour force in manufacturing. Though, the main source of such migrants are qualified workers of former soviet plants. Evidently, this reserve will be finished during the nearest 5-10 years. More than that, the elongation of working time thanks to the use of migrants labour lessens the labour attractiveness in manufacturing for Russian workers.

Thecoursetotheincreaseofworkingtimeunderminetheinterestofentrepreneursintheuseofnewtechnologies, preserve the backwardness of Russian manufacturing, deprives the enterprises of competitiveness.

Surely, the way of working time increase in Russian industry is not perspective (Mazur, 2009).

In Russian economy it is necessary to take into the account the experience of the developed countries which proves the necessity of both labour input decrease and the average annual hours actually worked per worker in industry (Gubanov, 2012).

5. Conclusion

The developed countries and Russia have the following fact in common: the growth of industrial production on the basis of labour productivity rise is accompanied by labour input decrease. This situation differentiates them from developing countries where industrialization is accompanied by the growth of a number employees in industry and the increase of labour input in it.

At the same time in the developed countries the reduction of labour input in industry though accompanied by the employment reduction has the tempos higher than the last one. It provides grounds for employees free time growth.

In Russia the employment in manufacturing is decreasing quicker than labour input. It leads to the prolongation of working time.

In the context of the problem under discussion it is necessary to further study the influence of reindustrialization on employment dynamics in industry. If a number of employees grow, labour input contraction can give a new impulse to working time shrinking.

In Russia they also started to speak about reindustrialization and creation of 25 million of effective working places which makes the continuity of this problem investigation acute.

It is necessary to take into account how many hours workers work during their working life. It is known that in Russia the workers retire 3-5 years earlier than in developed countries. It makes it possible to believe that longer average annual hours actually worked per worker are compensated in Russia by a smaller number of years of working life. It is evident that without solving this question the comparison of working time dynamics in developed countries and Russia is not complete.

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Problems of Development of Accounting on Peasant (Farm) Enterprises in Republic of Kazakhstan

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Abstract

The great work to create the conditions of transition to accounting in accordance with international and national standards has been done in the republic. A number of regulatory accounting and reporting regulations for all levels regulation have been adopted. However, a number of issues of the problem under study don't get sufficiently complete solution for agricultural enterprises and their main activities. The article presents the results of the study and the expediency of application of the model of simplified accounting. It has been shown that these problems can actually be solved by the development of accounting registers, corresponding to the requirements of the existing legislation in the Republic which allow to fully take into account the economic activity of small businesses (peasant (farm) enterprises, limited liability partnerships, co-operatives).

Keywords: small businesses, peasant (farm) enterprise, simplified accounting, national accounting standards, primary documents, accounting registers

1. Introduction

There have been significant changes in conditions of market relations in agriculture of the Republic of Kazakhstan. There are several types of agricultural formations in this industry nowadays: joint-stock company, limited liability partnership (LLP), peasant (farm) enterprises (PFE) and production cooperatives. 187630 units, which include 76681 units or 40.9% South-Kazakhstan region, in Almaty region – 46790 units or 24.9% from the total number of households, that is the greatest specific weight in agricultural enterprises of the Republic is occupied by the peasant (farm) enterprises, the share of which is 85.2% (Agriculture, forestry and fisheries in the Republic of Kazakhstan, Statistical Digest, 2014, p. 19). These data suggest that the peasant (farm) enterprise is a valid and promising form of economy in the Republic.

According to the Law of the Republic of Kazakhstan "On peasant (farm) enterprises" subjects of the peasant (farm) enterprises are individuals engaged in business activities without forming a legal entity and have no signs of a legal entity (the Law of the Republic of Kazakhstan "On peasant (farm) enterprises", 1998, pp. 1-2). The development of small and medium enterprises in agriculture makes a fundamental change in the formulation of accounting and reporting which are one of the main sources of information allowing their users to make managerial and economic decisions.

Accounting and reporting of an agriculture organization are intended to provide stakeholders with information that may be useful when making their economic decisions. This goal determines the importance of accounting and making reporting in the agricultural organizations (Bayboltaeva et al., 2014, p. 736).

Heads of farm enterprises need to have transparent and accessible information about the economic situation of PFE in order to be able to analyze the results of the economic-financial activity, to identify significant weaknesses in its implementation in time, and eliminate them easily, to compare and analyze the stage of the production process and the final financial results in comparison with other subjects of agrarian business (Treskunov, 2011, p. 22).

Many aspects of the activity of subjects of small business, including accounting and financial reporting in a simplified form that will simplify a tax system, are defined in the law of the Republic of Kazakhstan "On private

business" (Law of the Republic of Kazakhstan "On private business", 2006, pp. 9-10). In particular, Isataeva K. B. notes that the value and necessity of accounting in companies, production cooperatives, peasant (farm) enterprises, on the one hand, are caused by the need for information on the property, costs, production volumes and revenue from sales, and, on the other hand, by the duty of submission to authorities the information on the results of production and economic activity (Isataeva, 2010, pp. 7-8).

Organization of accounting and financial reporting of small businesses under the simplified form were first defined by the law of the Republic of Kazakhstan "On accounting and financial reporting".

According to the Law of the Republic of Kazakhstan "On accounting and financial reporting" of the peasant (farm) enterprises – individual entrepreneurs shall have the right not to carry out accounting (except for the compilation and storage of primary documents) and the preparation of financial statements which must be conformed under the following conditions (Law of the Republic of Kazakhstan "On accounting and financial reporting", 2013, p. 2):

1) if they use special tax regimes on the basis of the simplified declaration in accordance with the tax laws of the Republic of Kazakhstan;

2) if they are not registered to pay the value-added tax;

3) if they are not subjects of natural monopolies and regulated markets. In case of discrepancy between any of these conditions peasant (farm) enterprises – individual entrepreneurs are obliged to maintain accounting and financial reporting.

The law also specifies that the peasant (farm) enterprises – individual entrepreneurs who meet the above conditions and have made a decision about the accounting and financial reporting independently, have the right to maintain such records in accordance with the national financial reporting standard (NFRS) approved by the order of the Minister of Finance of the Republic of Kazakhstan No. 50, dated January 31, 2013 (Law of the Republic of Kazakhstan "On accounting and financial reporting", 2013, pp. 2-3).

It defines the procedure for accounting and reporting of small businesses without forming a legal entity, as well as legal entities under the simplified form (National financial reporting standards, 2013, pp. 3-4):

- Individual entrepreneurs related to the small businesses that use the special tax regimes for peasant (farm) enterprises in accordance with the tax legislation, and they also record their business transactions and events in the income ledger for individual entrepreneurs on the basis of the simplified declaration;

- Individual entrepreneurs who are subject to mandatory state registration in the tax authority and do not pay the value-added tax, maintain accounting records of their activities in the income and expenditure ledger for individual entrepreneurs, who do not pay the value-added tax;

- The entrepreneurs who are payers of the value-added tax, maintain accounting records of their activities in the income ledger for individual entrepreneurs who are payers of the value-added tax.

According to this standard, the peasant (farm) enterprises with the status of individual entrepreneurs keep a record of their activities in the manner determined only by the tax legislation (National financial reporting standards, 2013, p. 5). But accounting on farm enterprises should be primarily maintained for the following purposes: ensuring the effective functioning of the economy; tax base calculation for different types of taxes; crediting; planning the activities; obtaining the information on the enterprise property, costs, production volumes and revenue from sales; accounting and statistical reporting; submission to state agencies of the information on the results of production and economic activities; accounting for grown products; settlement with enterprise members and third parties; analysis of results; monitoring the status and movement of economic resources, their sources, preservation of farm property; prevention of possible imbalances in their business and financial activities (Biboletova et al., 2013, pp. 135-136).

2. Methods

The specificity of the considered forms of enterprises creates additional complexity in the choice of forms and methods of accounting, which depend on the scale and type of activity. In this regard there is an urgent need to study the existing methods of accounting in PFE and the development of a model of simplified accounting, including methodical recommendations and forms of registers used for the registration of land, material, labor and financial resources in relation to modern requirements of accounting and taxation.

The study of the current state of accounting in small businesses in the southern region of the Republic showed that on the peasant (farm) enterprises accounting for their activities is carried out in the adapted documents, where they make the records of all expenditures and receipts of cash on the whole enterprise. Fragmentary

records of income and expenditure are kept by the enterprise head. This suggests that peasant enterprises don't have any accounting.

Industry specifics, the need to respond quickly to constantly changing conditions of PFE cause particular relevance to the development and implementation of a single universal model under these changes.

The development of accounting on farm enterprises should be performed in the following areas (Nesteruk, 2009, p. 154):

- improvement of existing methods of accounting;

- creation of a system of simplified accounting;

- development of specialized registers of property, labor and payment, accounts and financial results.

As the law has defined that the peasant (farm) enterprises conduct their activities without forming a legal entity, then it is worthwhile using the model of simplified accounting which is based on write-once method on the principle of "income-expenditure" (Baiboltayeva & Bolysbayeva, 2014, pp. 15-16).

The development of accounting registers, corresponding to the requirements of the existing legislation in the Republic and allowing to fully take into account the economic activities of PFE is becoming relevant nowadays.

According to NFRS an individual entrepreneur has the following accounting registers (National financial reporting standards, 2013, p. 9):

Cash statement S-1;
Inventory statement S-2;
Statement of settlements with buyers and customers S-5;
Statement of settlements with suppliers S-6;
Remuneration statement S-7;
Biological assets statement S-9;
Fixed assets history statement S-10;
Fixed assets depreciation statement S-11.

For settlements with able-bodied members of PFE and citizens engaged under the employment contract; for determination of the percentage of participation of each member on the enterprise, tax base calculation on the single social tax and contributions for compulsory pension insurance it is required to carry out labor and payment accounting. We can use the "Remuneration statement" provided by NFRS for accounting for wages of hired people. A specimen of the statement is shown in Table 1.

It is a complete and objective basis for determining participation in production activities of members of peasant enterprises and people working under the contract. There is a special tax regime in the code of the Republic of Kazakhstan "On taxes and other obligatory payments to the budget" for peasant (farm) enterprises. This tax regime provides a special procedure of settlements with the budget on the basis of payment of the single land tax and can be applied to the practices of the peasant (farm) enterprises that produce agricultural products and process agricultural products of their own production and its implementation, with the exception of activities in the production, processing and sale of excisable goods. The right to apply the special tax regime is given to the peasant (farm) enterprises in the possession of land plots on the right of private property and the law of the Land Code of the Republic of Kazakhstan ("On taxes and other obligatory payments to the budget", 2014, p. 492).

Table 1. Remuneration statement (S-7) for the month of June, 2014

№	Full Name	Accrued wages	Contributions to NPF	Individual income tax deducted	Sum of refund: (3 gr. – 4 gr. + 5 gr.)
1	2	3	4	5	6
1.	Nurlan Eltaev (Head of the enterprise)	50000	5000	3005	41995
2.	Zholamanov M.	40000	4000	2105	33895
3.	Zhaparbaev Zh.	40000	4000	2105	33895
4.	Maksutov K.	40000	4000	2105	33895
5.	Abildaeva G.	30000	3000	1205	25795
6.	Dastanov A.	30000	3000	1205	25795
7.	Zholamanova G.	20000	2000	305	17695
	Total sum:	250000	25000	12035	212965

The payers of the single land tax are not subject to the following taxes: individual income tax on income from peasant (farm) enterprise activities, value added tax on the turnover from activities; land tax; taxes on vehicles; the property tax.

The calculation of the single land tax

The object of taxation for the calculation of the single land tax is the assessed value of the land. Determination of the assessed value of the land is carried out in accordance with the requirements established by the law of the Republic of Kazakhstan "On the land".

The calculation of the single land tax in fields up to 500 hectares, on pastures, natural grasslands, and other land used in the activity, which is subject to a special tax regime, is carried out by applying the rate of 0.1% to the total assessed value of the land (the code of the Republic of Kazakhstan "On taxes and other obligatory payments to the budget", 2014, p. 495).

The total area of the land of the farm enterprise "Altay" under study amounted to 200 hectares in 2014. According to the above-mentioned legal document the assessed value of 1 hectare of the land amounts to 91644 tenge. Then the assessed value of the total land area of the farm "Altay" will be calculated as follows: 91644 tenge x 200 ha = 18328800 tenge.

The sum of the single land tax: 18328800 tenge x 0.1 % = 18329 tenge.

The procedure of social tax calculating

The payers of the single land tax calculate monthly the amount of the social tax at the rate of 20% of the monthly calculation index established by the law of the Republic of Kazakhstan "On Republican budget", which is valid till the first day of the month, for which the social tax for each employee, as well as for the head and the adult members of the peasant (farmer) enterprises, is calculated. According to the law of the Republic of Kazakhstan "On republican budget" for 2014 the amount of the estimated indicator for 2014 was 1852 tenge (Law of the Republic of Kazakhstan "On the republican budget for 2012-2014 years", 2011, p. 3).

Then in 2014, the amount of the social tax of the peasant enterprise will be calculated as follows:

$$(1852 \text{ x } 0.20) \text{ x } 7 = 2590 \text{ tenge x } 12 = 31080 \text{ tenge.}$$

The property of a peasant (farm) enterprise includes land, fixed and current assets, biological assets. The local administration issues to the Head of a peasant (farm) enterprise the state act for the right to possess the land. If a farmer leases the land, he/she should sign an agreement. The above-mentioned documents contains the information about the amount of land and its brief description. In this regard, there is no need of keeping a special record book for them.

3. Discussion

In the agricultural sector issues of improving accounting of such objects as animals and plants, merged into the group of "biological assets" in foreign practice, have gained particular importance.

Due to the fact that a new accounting category – "biological assets" – appeared in accounting, it became necessary to make adjustments to the accounting practices of the Republic of Kazakhstan in accordance with requirements of the International Accounting Standard (IAS) No. 41 (Bayboltaeva, 2012, p. 119).

According to the International Accounting Standard (IAS) No. 41 "Agriculture", biological assets (or a group of biological assets) are the objects that people affect in the process of agricultural production to a greater or lesser extent, including sheep, dairy cattle, pigs, plants, trees in forestry, shrubs, vines, fruit trees, etc., in order to obtain the finished product (Methodical recommendations on the application of international accounting and financial reporting standards, 2008, p. 211).

According to IAS 41 "Agriculture", as far as recognition and evaluation are concerned, an enterprise shall recognize a biological asset or agricultural production only in the following conditions (Methodical recommendations on the application of international accounting and financial reporting standards, 2008, p. 213):

    - if it controls the asset as a result of past events;

    - if it is probable that the enterprise can get future economic benefits associated with this asset;

    - if the fair value or original cost of the asset can be reliably evaluated.

The International Accounting Standard (IAS) 41 is applied for accounting for biological assets, agricultural produce in the harvest and government grants related to biological assets in agriculture (Bychkova, & Mironova, 2006, p. 73).

The introduction of IAS 41 "Agriculture" requires the development of primary documentation, as well as making adjustments to the sphere connected with recognition of the biological assets in accounting (financial) reporting, improvement of accounting policy of agricultural organizations (Krinichnaya, 2011, p. 1).

To date, particular work on the adaptation of IAS 41 "Agriculture" in Kazakhstan's accounting practice has been done. Sections "Accounting for biological assets" in the National Accounting Standard (NAS), as well as methodical recommendations for accounting for biological assets have been developed. However, many organizational and methodological problems have not been solved yet. In particular the following issues have not been sufficiently developed: the use of the conceptual apparatus of IAS 41; evaluation of synthetic analytical accounting for biological assets; disclosure of the data on agricultural activities in the financial statements (Bayboltaeva & Makulova 2013, p. 327).

One of the key moments in accounting for biological assets and agricultural produce is their valuation. According to IAS 41 "Agriculture", a biological asset is valued at initial recognition and at each reporting date at its fair value less estimated selling costs, except in cases where the fair value cannot be reliably valued. In the latter case, the enterprise shall value the biological assets at original cost (Vyruchaeva, 2011, p. 11).

Agricultural produce collected from biological assets of the enterprise should be originally "valued at fair value less estimated selling costs at the time of harvest". According to the standard, the enterprise can always determine this amount, and therefore the standard does not allow the valuation at original cost because of the absence of fair value.

Fair value is an amount for which an asset can be exchanged, or a liability settled, as a result of a transaction between informed parties willing to make such a transaction (Bychkova & Mironova, 2006, p. 78).

An important reason for which agricultural products at the time of harvest should be evaluated at fair value, is the need to ensure the identity of their assessment to the basis of the assessment of biological assets and avoid inconsistency and distortions of the performance of the current period at harvest.

Selling costs "include fees of brokers and dealers, levies made by regulatory agencies and commodity exchanges, as well as taxes and fees associated with the transfer of ownership", but "do not include transportation and other costs necessary to deliver the assets to market". Thus, theoretically, the actual sale of agricultural products will lead to a profit or a loss only if the fair value at the time of harvest is different from the sales price agreed with the buyer. It follows that, in accordance with methodology for fair value accounting determined by IAS 41 a profit is recognized quite independent of the existence of a sales contract or a transaction (Bayboltaeva, 2012, p. 121).

The standard provides the following rules for determining the fair value of a biological asset or agricultural produce (Methodical recommendations on the application of international accounting and financial reporting standards, 2008, p. 212):

(a) An active market – in the presence of an active market for a biological asset or agricultural produce the price quotation in such a market is the appropriate basis for determining the fair value of this asset. If an enterprise has access to different active markets, it should use the price quotation in the most important market (i.e. the market price it is going to use).

(b) The absence of an active market – in the absence of an active market an enterprise shall apply the following methods to determine the estimated fair value.

An important feature of IAS 41 is a characteristic of agricultural activity as the management of biotransformation. The standard establishes the procedure for biological assets accounting during the period of their growth, degeneration, production and reproduction, as well as the procedure for initial assessment of agricultural produce at harvest. In the period since the initial recognition of biological assets up to the beginning of harvest an assessment is conducted at fair value less estimated natural discharge, except in cases where at the time of initial recognition, the fair value cannot be determined with reasonable certainty.

Methodology for accounting for biological assets on peasant (farm) enterprises is regulated by NAS and IAS No. 41 "Agriculture". In order to account for the biological assets flow peasant (farm) enterprises shall use Biological Assets Statement (S-9).

Fixed assets include facilities with a lifetime of more than one year. For example, buildings, structures, machinery and equipment, means of transport and others.

On the peasant enterprise fixed assets are recorded at original cost (cost). The cost price of the fixed asset comprises the purchase price of the asset, including import duties and non-refundable purchase taxes, after

deducting trade discounts, direct costs of bringing the asset to working condition for its intended use, as well as the estimated costs of dismantling and disposal of the asset (Nesteruk, 2008, p. 181).

In the context of economic activities of a peasant enterprise Fixed Assets History Statement (S-10) should be used for accounting for movement of fixed assets. The specimen of this statement is provided by the National Accounting Standard No. 1.

Working assets (inventories) of the peasant enterprise include seeds, fertilizers, materials, fuels and lubricants, spare parts, plant protection products, finished products of the crop and breeding production, and others. Inventories are stated at cost. For the current accounting for inventories the peasant inventory shall use the Inventory Statement (S-2).

The acquisition (purchase) of fixed and current assets is conducted by the bill or other document drawn up by the supplier. An invoice is drawn up in case of the sale of fixed and current assets. The invoice records the number, the selling price and the value of the released material values.

4. Results

All business transactions of the peasant (farm) enterprises on the basis of the above documents should be recorded in the income and expenditure ledger in the chronological order by the positional representation without the use of double-entry and the chart of accounts for purposes of financial accounting of the subject.

The ledger consists of a front page and the income and expenditure statement of the peasant enterprise. The income and expenditure ledger of the peasant enterprise is provided in Table 2.

Table 2. The income and expenditure ledger of the peasant enterprise "Eltay" (the data as of 2014)

1 Front page

Full name of the individual entrepreneur:	The registration certificate:
Kayyrbaev Nurlan Eltayuly	Series of the certificate:
The name of the peasant enterprise: "ELTAY"	Certificate number:
Registration tax number:	Date of issue:
No. 210410076850	Location: Almaty region, Balkhash District
Type of business activity:	Account details:
Production and sales of agricultural products	Current account number: No. 002643745
	The certificate is valid from January 1 till December 31, 2014

2 Income and expenditure ledger

Date of document completion	Documents Name of the document	No.	Nature of the economic operation	Income, in tenge	Expenditure, in tenge
1	2	3	4	5	6
10.01.	Bill	24	Seeds have been purchased.	–	220000
10.03.	Bill	10	Fertilizers have been purchased.	–	90810
10.05.	Bill	12	Plant protection products have been purchased.	–	90000
18.05.	Bill	35	Construction materials have been purchased.	–	711370
22.05.	Bill	5	Sales income of the cattle products (milk) has been accrued.	213000	–
27.05.	Bill	48	Fuel and lubrication materials have been purchased.	–	300000
27.05.	Bill	69	Spare parts have been purchased.	–	120000
30.05.	Remuneration statement	1	Workers' wages have been calculated.	–	42000
10.06.	Bill	42	The grain elevator has been repaired.	–	200000
30.06.	Remuneration statement	2	Workers' wages have been calculated	–	46000
27.07.	Bill	69	Spare parts have been purchased.	–	110000
30.07.	Remuneration statement	2	Workers' wages have been calculated	–	50000
30.08.	Remuneration statement	3	Workers' wages have been calculated	–	145000
30.08.	Bill	48	Fuel and lubrication materials have been purchased.	–	150000
10.09.	Bill	6	Sales income of the finished products	904000	–

			(wheat) has been calculated.		
17.09.	Bill	7	Sales income of the crop production has been calculated.	394000	–
28.09.	Bill	8	Sales income of the finished products (onion) has been calculated.	280000	–
30.09.	Remuneration statement	4	Workers' wages have been calculated.	–	60000
20.10.	Bill	9	Sales income of the finished products (wheat) has been calculated.	212000	–
25.10.	Bill	10	Sales income of sheep breeding products (wool) has been calculated.	186000	–
30.10.	Remuneration statement	5	Workers' wages have been calculated.	–	50000
10.11.	Bill	11	Sales income of the cattle products (meat) have been calculated.	233000	–
18.11.	Bill	12	Sales income of sheep breeding products (meat) has been calculated.	243000	–
28.11.	By calculation	Itemized table	The amount of capital assets depreciation has been calculated.	–	16782
10.12.	Tax return		Single land tax has been charged.	–	338
28.12.	By calculation	1	Social tax has been charged.	–	14700
	Total sum			**2665000**	**2417000**

The income and expenditure ledger is kept for one financial year and shall be numbered and bound. The last page of the numbered and bound ledger indicates the number of pages, which shall be confirmed by the signature of the head of the peasant enterprise and sealed prior to the moment any records can be made to this ledger.

The difference between the income and expenditures of the peasant enterprise shows the financial result of its economic activity in a form of net profit or loss of the acquired inventories that is indicated in section "Expenditure" of the income and expenditure ledger. We assume that it is feasible to refer them directly to the production costs. Then at the end of the reporting year the inventory on the actual availability of material assets and the their residue shall be conducted. This will reduce the amount of material costs recorded in the income and expenditure ledger.

On the basis of the above recommendations, we have developed a scheme of accounting procedures in the individual peasant (farm) enterprises (see Figure 1).
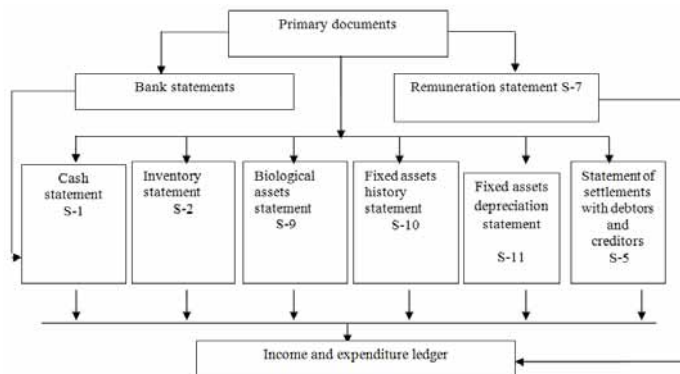

Figure 1. Accounting procedures on peasant (farm) enterprises

4. Conclusion

Thus, it can be concluded that accounting is an integral and mandatory functional activity of any peasant (farm) enterprise, providing at the same time control of the production, availability and use of tangible assets, labor resources and cash. Therefore, the head of the enterprise or other person in charge of accounting shall ensure the following: determine the economic feasibility and profitability of a particular economic action before starting its implementation; at the time of making a business transaction (deal) be able to correctly draw up the primary documents on the basis of which records on the relevant simplified accounting registers should be kept.

Accounting record-keeping of peasant (farm) enterprises on a simplified form implies simplicity of accounting, low labor intensity, lower costs, clarity and accessibility in the formation of financial information along with the timely record of economic operations.

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Some Aspects of the European Union's Policy towards Central Asia

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Abstract

This article examines the political framework of the European Union (EU)-Central Asian relations. The goal of the research is to analyze the priorities of the EU policy towards Central Asia. This article identifies common features of internal political transformation processes, foreign policy orientations of Central Asian countries, and analyzes the EU strategy toward the region, examines the goals and objectives of the national and the EU strategic documents, identifies the matching objectives of the EU and Central Asian countries, and describes the mechanisms and policy instruments used to implement the policy in the region. The main outcome of the current research is the correspondence of the objectives of the EU strategy with national goals of the countries.

Keywords: Central Asia, regional policy, geopolitics

1. Introduction

There are five independent Central Asian countries, which appeared on the world political scene after the collapse of the USSR: Kazakhstan, Kyrgyzstan, Tadzhikistan, Turkmenistan and Uzbekistan. Since gaining independence those countries have started to receive an increase in attention from the world's leading political players such as Russia, the US, the EU, China, also Iran, India, Turkey and Pakistan. Gradually Central Asia became a strategically important region, where the interests of different countries cross.

The importance of Central Asian countries in international relations is determined by their geopolitical position, the presence of significant natural resources and security issues in the region. After the terrorist attacks of September 11, 2001, the countries in the region have gained strategic importance related to the anti-terrorist operation in Afghanistan (Belokrenitsky, 2000; Kazantsev, 2014). Also geographical proximity with Pakistan and Iran gives Central Asia a greater level of importance.

Given the above mentioned factors, Central Asian countries have become the object of policies of the various regional and international organizations. This article examines the lessons and perspectives from the regional policy of the European Union (EU) toward Central Asian countries. Relevance of current research investigation is justified by growing interest and increased activities of the European Union in Central Asia. The article studies strategic objectives, main directions and priorities of the European Union policy for Central Asia, and their main instruments and mechanisms of policy implementation to strengthen its role and influence in the region.

The first chapter provides a theoretical and methodological foundation for national model of each Central Asian country. The second chapter analyses the domestic political framework of the Central Asian countries. It introduces the causes of the world is attention on ongoing development policies in Central Asia in its historical context, and highlights the reasons for the cooperation of the European Union in the region, and also makes a brief reference to the political environment underlying the socio-economic situation in the last decade. The third chapter describes and assesses the European Union's policy toward Central Asia. This evaluation is intended to identify the challenges facing the European Union, in order to analyse the perspective of the European regional integration on the Central Asian countries. The fourth chapter analyses and evaluates economic and security policies and strategies of the different areas of cooperation within the foreign political framework of the Central Asian countries to reveal the possibilities for influence from the European Union. The last section of the article provides a discussion and a conclusion on the topic.

1.1 A Theoretical and Methodological Foundation for National Model of the Central Asian Countries

On the eve of the 21st century the Central Asian countries became independent republics and began to cardinally transform the direction of their development. The countries have started to implement radical socio-economic and political transformations, and have begun their transitions to a market economy

The first discussion on the necessity to develop a model of socio-economic development started in the second half of the twentieth century, when many Third World countries gained independence and started the process of national state building (Krieger, 2000). The second half of the eighties and early nineties became the period of the search for new and more effective forms of organization of social relations (Knox, Agnew, & McCarthy, 2008; Dicken, 2011). This period became important for newly independent states as it was the beginning of formation of market relations in those countries. During this period the central planned economy of the USSR collapsed. Newly independent countries of the ex-Soviet union faced the many challenges of the transformation process.

At that time there were three basic economic models: capitalist, socialist and social orientation. At the end of the twentieth century it was clear that there was no country that could be easily put into a tight framework of the adopted postulates within those economic models (Adamcova, 2006). Thus, the countries continue to further seek their own development path.

The Figure 1 presents the historical development of the basic models for the national policies. The foundation for the globalization of the capitalist system became the market economy model. With emergence of the Keynesian model, which was present in capitalist countries, coexisted the command economy model. This model was known as the central planned economy of the totalitarian states. The model was implemented not only by the socialist camp headed by the Soviet Union, but also by the countries from the capitalist system. The elements of the centrally planned economy of the military – feudal system were rarely present in Japan; the same model was assumed in Germany (Pogorleckij, 2001).

It is important to mention that the Soviet Union possesses rich natural and human resources as well as high qualified human capital (Blank, 1995; Ulyanov, 1999). However, the economic growth was low and did not lead to incentives and motivation to work. Overall, the system was deformed by the social psychology of the population and created a favourable environment for 'parasitism' (Romanov, 2012). The incompetence of the system of central control because obvious because it started to collapse, since it was not able to provide new initiatives to develop the economy and solve social problems. The social, economic, and ecological situation of the regions of the Soviet Union was catastrophic and lagging behind the leading countries in the East and West (Suzdaltsev, 2007, 2011; Lunev, 2006; Vardomsky, 2003, 2009). The socialist system collapsed in such a way that it was necessary to completely rebuild on the principles existing in sophisticated world civilizations.
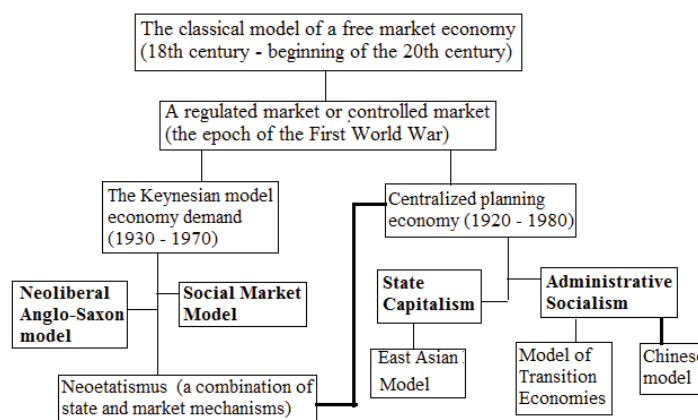

Figure 1. Evolution of basic models of economic development
Source: Pogorletskiy A. I.: "Economy of foreign countries", "Mikhailov", St. Petersburg, 2001, pp. 110-114

1.2 Trends in Internal Transformation of the Central Asia Republics

The Central Asian countries did not pursue independent domestic policies as they were parts of the integrated political and economic system of the USSR. The countries were a part of a single economic space and their economies were mainly raw material orientated towards the Soviet economy. Infrastructure and production capacities of the countries were developed to serve the USSR domestic market. However, the resource potential of the Central Asian countries was not fully explored during those times.

After the collapse of the USSR and gaining independence, Kazakhstan, Kyrgyzstan, Tadzhikistan, Turkmenistan and Uzbekistan were able to choose their own domestic and foreign political development. However during the years of nationhood building the countries faced many difficulties of the transformation process. The newly

independent Central Asian republics had to develop their own independent economic policies and move from administrative-command systems to market economies.

The fall of the Soviet Union led to the collapse of the whole economic structure of the region. The Central Asian countries faced systemic crises that impacted their socio-economic development. The most difficult socio-economic situations occurred in the republics that did not have oil and gas reserves. The confrontation between the rival political factions in Tajikistan caused the conflict that grew into civil war that lasted from 1992 to 1997 (Zvyagelskaya, 2009, 2007). Social unrest that occurred in 2005 in the Uzbek city of Andijan influenced the political processes in the country. Armed rebellion that captured a number of administrative buildings was crushed by the Uzbek authorities. The events in Andijan received the negative assessment from the human rights Non-Governmental Organizations, as well as political opposition. The Western media accused the government forces of Uzbekistan of the use of force against civil demonstrators that protested against the severe socio-economic situation in the country (Kazantsev, 2014). A difficult socio-economic situation in Kyrgyzstan led to the rise of protest in the society. The reason for the revolt or so called 'Tulip Revolution' was the opposition disagreement in March 2005 that led to an unconstitutional change of power in Kyrgyzstan. The political event caused the mass unrest, disturbances and seizures of administrative buildings (Kazantsev, 2014).

The economic downturns in the Central Asian countries have led to poverty and backwardness of the regions. Some of the regional countries remain the poorest in the former Soviet Union. For example, according to the World Bank statistics (2013), 60% of Tajikistan's population lived below the poverty line in 2000. Those figures decreased only by 15% by the year 2013. The GDP per capital in Tajikistan is $ 870 US per year. In Kyrgyzstan, population more than 40% of the population lived below the poverty line in 2000. By the year 2013 the poverty decreased only by 3,2%. Today the GDP per capital in Kyrgyzstan is $ 920 US per year.

During the period of transformation the republics had to develop and adopt their own constitutions, demographic reforms, and the presidential and parliamentary elections. Turkmenistan and Uzbekistan adopted their constitutions in 1992, Kazakhstan and Kyrgyzstan in 1993, and Tajikistan in 1994. The constitution of each country declares them as a 'secular, legal, free and democratic state', as well as were established the principles of 'respect for the human rights and freedom for individual', 'separation of power into legislative, executive and judicial' and 'market economy'.

The common feature of the political development for the Central Asian region during the decade of independence was the relative stability of the political elite that was formed during the Soviet period.

The presence of 'political clans' had a great impact on the internal policies of the regional countries. Those political clans are the most powerful and influential tribal groups. The regional and tribal division of the society of Central Asia is given by the historical traditions, structure of public relations and mentality (Omarov, 2008; Zvyagelskaya, 2009)

The same time, for the newly independent republics of Central Asia raised the question of the relations between the government and Islam. In recent years the nationhood development of those countries has been accompanied by the intensified process of revival of Islam in the region. Even though newly independent republics maintain the secular character of the state power and prevent politicization of religion, Islam became an element of government identity and one of the tools, which was used by the government leaders to develop independent countries. Besides, Zvyagelskaya I. (2009) argues that Islam played an important role in foreign policy of the region. It allowed the Central Asian countries to become members of the Organization of Islamic Conference, and facilitated the bilateral relations with other regional actors, like Turkey, Iran and Saudi Arabia.

On the other hand, other groups started to use the religion to Islamize their societies and their nations. The revival of Islam in the region happened through the increased influence of Islamic organizations. The growing authoritarianism regimes, socio-economic crises, and poverty contributed to the popularity of the radical Islamic groups among the population in the countries (Ignatenko, 2001).

During the first decade of independence the Central Asian countries formally built the democratic institutions and the foundation of the market economy. However, the above mentioned factors prevented the true liberalization of the political and economic regimes in Central Asia. The political power started to concentrate in the hands of the leaders of the countries, the coterie of politicians around them and stable clan relationships. Thus, in the region formed a regime of 'managed democracy' instead of a democratic political system.

The Central Asian countries chose different models of transition to a model economy; Kazakhstan and Kirgizstan hold the general economic liberalization, while Tajikistan, Uzbekistan and Turkmenistan conducted more restrained market reforms with a large share of state regulation in the economy. Overall, the poor

organization of the economic reforms and absence in their structure led to various socio-economic problems in the region that raised concerns of international organizations about the security in the region, and at the same time created the opportunity for cooperation in the region.

1.3 Policy Priorities of the European Union in Central Asia

The key objective of the policy of the European Parliament toward the Central Asian countries is to promote political and economic transformation to Western models of democracy and to market based economies. According to the European Neighbourhood Policy, the level of cooperation and the volume of European aid to the country will depend on the level of *commitments to political, economic, trade, or human rights reform in a country.*

The EU developed a program of Technical Assistance of the Common Independent States (TACIS) in 1993 that was aimed to support political and economic reforms in the Central Asian countries. The priority direction within the program was *to develop effectively-functioning market economies based on private ownership and initiative*', with the main goals '*to develop local skills and know-how required to accelerate economic reforms and to encourage conditions favorable to private investment and the development of the private sector* (Unspecified, 1993).

Since 2007 the TACIS Program has been replaced for the CA countries by the following strategic documents: "European Union and Central Asia: The New Partnership in Action" and "Regional Strategy Paper for Assistance to Central Asia 2007-2013". All projects implemented by the EU and EU Member States in the Central Asian region have bilateral and multilateral basises and formally are considered to be components of the strategic documents. The EU strategy in Central Asia is based on the principles set out in the Declaration of the United Nation "Millennium Challenges" and the EU Security Strategy of 2003. The Strategy can be considered as a comprehensive program of EU cooperation in Central Asia. And the actions within the Strategy framework are not a substitute for the legal basis of bilateral relations laid by the Partnership and Cooperation Agreement (PCA) with regional countries (EC, 2007).

The European Council has provided three reports on the implementation of the Strategy to the European Commission and the European Parliament in 2008, 2010 and 2012. The reports gave a positive assessment of the work done by the EU in previous years, and became a foundation for renewing the Development Cooperation Instrument under the multiannual financial framework for 2014-2020.

The new program is based on experience gained from the last decade of cooperation in the region and geopolitical changes which occurred during the last five years.

The results from the cooperation of the EU in Central Asia since 1993 have shown that external threats of instability and insecurity in the region are hypothetical. Interregional conflicts in Central Asian countries had virtually no impact on the migration situation in the EU, especially in comparison with the consequences of the Arab Spring (Ergeshbayev, 2006; Kumskov, 2002; Fargues & Fandrich, 2012). In addition, the EU should not be so concerned about drug-traffic from Central Asia as to Russia. According to the UN Office on Drugs and Crime in Central Asia, up to 90 tons of heroin are smuggled to Central Asia from Afghanistan, annually of which 75-80 tons goes to Russia. Heroin is delivered to the EU through Turkmenistan and the volume is 8-9 times less [UNODC, 2012, p.48]. However, the EU continues to support further strengthening of the national polices of Central Asian countries in drug demand reduction and in combating illegal drugs supply, and related organized crime within the framework of " The EU-Central Asian Action Plan on Drugs 2014-2020" (EC, 2014; Philippe & Christine, 2012).

The EU interest in the energy security is given by a high degree of politicization of the issue. Today, the import diversification of oil and gas has become less acute for the EU as it was during the period of peak oil prices. The European Commission does not expect the growth of energy consumption and stimulation of the development of alternative and nuclear energy. The prospect of significant U.S. Liquefied natural gas (LNG) export has led to changes in the energy market In Europe (Ratner, 2013, p. 23). In 2011, LNG comprised almost 20% of the EU's natural gas import (Belkin, 2013, p. 3). Today the EU is considering building (LNG) import terminals to diversify its sources of natural gas. Despite those circumstances, the Commission confirms the interest in the construction of a Trans-Caspian gas pipeline.

The main achievement of the Strategy in the region, the EU considers the strengthening of the political dialogues between the two regions (Progress Report, 2012, p. 9). The main tasks of those political dialogues are to '*strengthen political relations with the EU', 'to support political and economic reforms', 'to ensure security and stability,* and *'to promote new forms of cooperation between'* (EC, 2009).

Every year there are meetings held at the Foreign Ministry level and senior officials of the European Commission in Central Asian capitals and in Brussels (EC 2009). This form of interaction was introduced during implementation of the EU Strategy for 2007-2013 and has complimented the mechanism of the Partnership and Cooperation Agreement (PCA). It can be expected that during the new Strategy for 2014-2020, instead of a ministerial format or in addition to it, the EU will propose to hold regular summits of EU-Central Asia.

The EU has fulfilled its goal within TASIC framework to set up offices in regional countries and expand the network embassies of European countries. In 2007, only Germany had embassies in all five countries of Central Asia and the office of the European Commission's Delegation was only in Almaty, Kazakhstan. The first representation of the European Commission was opened in Bishkek (Kyrgyzstan) in 2007, the EC office in Dushanbe (Tajikistan) received full-scale status in 2010. During the I. Karimov visit to Brussels in 2011 the EC's office was opened in Tashkent (Uzbekistan) in 2012.

The terms of trade within the EU strategy in Central Asia envisaged a mutual regime of Most Favoured Nation (MFN) that is free of quantitative restrictions and as possibilities of application of protective measures in case of threats to domestic producers and anti-dumping measures. Also the PCA provides the European companies with the regime of MFN, that allows them to select the most favourable existing regime for the 'establishment and operation' in the Central Asian region and non-application of the new and less-favourable legislation to the European companies during the first three years of its existence.

Also the strategy consolidated the agreed not to interfere in the currency regulation with exception of emergent cases. The regulations of business activities within the EU-Central Asia Strategy enabled European companies to place their companies on the territories of Central Asian countries. Thereby, the EU extended its economic presence in the region and ensured the implementation procedures of the economic reforms.

The European Commission also carries out an economic aid to the Central Asian countries through European financial institutions such as the European Bank for the Reconstruction and Development (EBRD) and the European Investment Bank (EIB). In 2006 the memorandum of understanding was singed between the European communion, the EBRD and the EIB on the coordination of the Central Asian policy to enhance the effectiveness of the policy in the region. In 2008 the Council approved the proposal of the European Commission to extend the activities of the EIB in Central Asia, which in fact means the strengthening of the financial instrument of EU influence in the region. The EIB and EBRD in Central Asia mainly focus on energy and transport projects (Barysch, 2012).

The implementation of the European projects in CA countries does not always bring expected results. For example, in Kazakhstan the project of the "National Human Rights Action Plan for the period 2009-2012" has been completed only by 23% (Vorkova & Jamankulova, 2013). There have been numerous delays during the implementation of the Southern Corridor project since 2009 (Barysch, 2013). Also, the second EU-Central Asia Action Plan on Drugs for 2009-2013 (EC, 2014) has not brought expected results (UNODC, 2012).

The low performance of some of the projects conducted in the region is directly related to the peculiarities of the CA region (Gregory, 2000). However, overall the cooperation is beneficial for the political, economic and social development of those countries, because the idea of all ongoing European projects correspond with priority direction that had been chosen in the initial stage of Central Asian national hood development to create a 'secular, legal, free and democratic state' that respects the principles of 'respect for the human rights and freedom for individual', and 'separation of power into legislative, executive and judicial' and 'market economy' (Constitution of the Republic of Kazakhstan, Constitution of the Republic of Uzbekistan, Constitution of the Republic of Kyrgyzstan, Constitution of the Republic of Turkmenistan).

The Strategy of the European Union in the Central Asian region for the period 2007-2013 has fulfilled its main objectives to reinforce the EU presence in the region and to gain the solidarity of the Central Asian countries in cooperation in mutual goals to keep security and prosperity in the continent.

1.4 Foreign Policy of Central Asia and Its Economic Integration into the Global Economic System

In Central Asia there is a concentrated abundance of natural resources, especially hydrocarbons. For today, natural resources are the primary factor for national development of the Central Asian republics. The natural resources became one of the main instruments of foreign policy. Three of the five Central Asian countries have significant reserves of energy resources, for example, according to oil and natural gas reserves Kazakhstan is among the ten leading countries. Uzbekistan and Turkmenistan possess mainly natural gas reserves, which are considered to be the eighth and fifth largest in the world, respectively. Gas reserved in the region is divided between Turkmenistan, Uzbekistan, and Kazakhstan. Natural gas export is delivered to the West by Soviet

pipelines 'Central Asia-Center' and 'Bukhara-Ural'. Most of its oil exports, Kazakhstan sends by Caspian Pipeline Consortium (CPC) 'Tengiz-Novorossiysk' that were built during the Soviet period also.

Central Asian countries have a strategic geopolitical position in the region. Despite large distances and low population densities in some of those countries, geographical location of Central Asia has transit potential that creates opportunities for communication between East-West and North-South regions (EC, 2009). On the other hand, the proximity of the Central Asian countries to Afghanistan creates transit routes for Afghan drug production to Russia and Europe, the so-called 'northern route'.

The ruling elite of the Central Asian republic realized that creating favorable external conditions will contribute to solving the problems within the economy that greatly arose during the first decade of their independence. The common feature for all five Central Asian countries was aspiration to diversify external relations to expand the space for political maneuvering and strengthen its sovereignty. In March 1992 all five members of Central Asian countries were admitted to the United Nations. In January 1992 the countries became members of the Conference on Security and Co-operation in Europe (CSCE/OSCE). Moreover, the same year the countries joined the Euro-Atlantic Partnership Council (EAPC), the Organization of Islamic Cooperation and other organizations (EC, 2014).

The priority for all regional countries remains the cooperation within the Commonwealth of Independent States (CIS). The economic cooperation prevailing in the CIS region is the Eurasian Economic Community (EurAsEC), which was established in October 2000. The member countries of EurAsEC, are Russia, Belorussia, Kazakhstan, Kirgizstan, Tadzhikistan, and Uzbekistan. The Central Asian countries had attempted to establish their own economic cooperation. The Organization for 'Central Asian Cooperation' was established in 2002, however has not attained significant results.

In 1992 all Central Asian republics, except for Turkmenistan signed the Collective Security Treaty (CST) for the next five years, with the possibility of automatic extension. In 2002 the Treaty was converted into the Collective Security Treaty Organization (CSTO) and became one of the leading forms of cooperation in the security field. The members of CSTO are Armenia, Belorussia, Kazakhstan, Kyrgyzstan, Russian, and Tajikistan. Its foundation became the negotiations on the border issues between China, Russia, Kazakhstan, Kyrgyzstan, and Tadzhikistan. In 1996 was held the meeting in Shanghai, where the abovementioned countries signed the agreement on Confidence Building in the Military Field in the Border Area.

The formation of the independent Central Asian foreign policies occurred through the integration into the global political and economic organizations. The membership of the regional countries as independent entities in international organizations, such as the European Union, the Conference on Security and Co-operation in Europe (CSCE/OSCE), and the Euro-Atlantic Partnership Council (EAPC) creates opportunities for influence in the region. All countries in the Central Asian region conduct 'multi-vector' foreign policy orientation, which was determined by the search of partners ready to assist them in their economic, political and security development.

2. Discussion

The main outcome of the working paper is based on the fact that to implement the economic policy is always difficult, and requires understanding of all aspects of economic and geopolitical development in the region. Those external geopolitical factors influence the chosen path of economic and political reforms, especially when the countries are in a transition stage and located in the region of the 'Great Game' of world powers. At the same time, it was necessary for Central Asian republics to develop their own model of market transformation and find their role in the world community. And in addition to the above-mentioned factors, market reforms must be based on market relations, taking into account the historical heritage of the totalitarian regime and lifestyle, traditions and mentality of Central Asian nations, and what is particularly important there is a great need to solve urgent social problems that were accumulated since the collapse of the USSR.

In the environment of the complex political and ethnic map of Central Asia, stabilization is possible through external control over the region. Currently there is a confrontation on the diplomatic and economic fronts between the world powers, such as Russia, China, the EU, and the USA, about who will execute the control over the region. The EU cannot afford to stay aside from geopolitical influence in the region, as it would allow them to establish relations with other great players in the region. Some steps in this direction have already been taken. The EU participates in many infrastructure, oil and gas projects in Central Asia. Those projects can provide alternative resources and markets in case of the next turbulence at the political level between the countries' leaders, and hence those projects are becoming another tool for establishing global control in the region.

It may be expected that the European projects in the Central Asia region will give both the EU and the regional countries quite tangible economic benefits, and will strengthen their political position on the world stage. However, the implimentation of such projects so far was prevented by the unresolved ethnic and territorial conflicts, and bureacratic and undemocratic procedures in Central Asia.

3. Conclusion

After the collapse of the Soviet Union, five Central Asian republics have been going through the process of nation-building, establishment of an independent domestic and foreign policy and development concept of national security. Despite the fact that each countries of Central Asia has chosen its own direction of political, economic and social development, the internal development of those countries had many common features. Firstly, the regional and clan divisions played an important role in the development of domestic policy of all countries. Second, the existence of political elites formed during the Soviet period. And the third common feature for all five countries is a growth in presidential power at the beginning of the 2000s. The CA region has never experience genuine liberalization of political systems. In the region formed a regime of 'managed democracy' instead of a democratic political system.

The formation of the foreign policy of the Central Asian countries was largely conditioned by the accession to the different regional and international organizations. The countries have chosen various degrees of "multi-vector" policy-oriented cooperation with various foreign partners, which in terms creates the space for political maneuvering and strengthening its sovereignty. On the other hand 'multi-vector' foreign policy orientation was determined by the search for partners ready to assist them in their economic, political and security development.

The positive results of the Implementation Reports of the EU strategy in Central Asia in 2008, 2010 and 2012, became a foundation for the new strategy for the cooperation in the region for the period 2014-2020. It must be noted some difficulties in the implementation of certain projects within the strategy of "European Union and Central Asia: The New Partnership in Action" and "Regional Strategy Paper for Assistance to Central Asia", such as the program of "The National Human Rights Action Plan", numerous delays during implementation of the Southern Corridor, as well as weak results of the program of the "EU-Central Asia Action Plan on Drugs for 2009-2013", and many others. However, the process of project implementation directly linked to complex social and political interactions within the region. Overall the regional integration is a perspective for the Central Asian countries, as the idea of all ongoing European projects and programs correspond with the national goals of those countries, to develop free and democratic countries.

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Estimation of Effectiveness of the International Quality Management System Implementation on the Example of an Industrial Enterprise

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Abstract

The article considers the creation of the quality management system at an enterprise as an innovative investment project. That is why to estimate the effectiveness of the Quality Management System estimation methods of investment project effectiveness are used. The authors come to the conclusion of a substantial increase in profits due to the Quality Management System functioning.

Keywords: estimation of investment project effectiveness, quality management system, internal rate of return, net discount profit

1. The Introduction

At the moment the State's primary task is to generate the conditions for innovation. In this case you cannot miss neither the new science intensive nor traditional types of production which, having risen to a new technological level, can become "engines" transferring the economy to innovative "tracks". The "engines", first and foremost, include machine-building which is the so-called "circulatory system" of the national economy, in particular, the production of pipeline fittings as an essential part of most industrial systems. The effective development of such important for the national economy industries like oil and gas, nuclear energy is impossible without solving a number of problems of high-technological pipeline fittings ("Animation is not expected", 2009).

Nowadays many Russian companies produce goods according to the old methodology, using the old equipment, spending a lot of money on staff, maintenance and energy supply (luckily, the prices for the latter are still relatively low).

On the other hand, any company, whatever may happen to it, has the potential to significantly reduce staff, rent, heating, and energy supply costs, as well as capital expenditures. Due to this, the company will be more economical, flexible and efficient. All these factors directly affect the selling price of products and, therefore, competitiveness.

From the point of view of economics, the present time is the most suitable for optimizing organization and production processes, because it is possible to purchase new, second-hand or restored western equipment at a reduced price. Delivery of new equipment is significantly quicker now compared to the period prior to the "new economic situation".

The decisive factors for sustainable market position and competitiveness of enterprises are not only the supply and demand on the market, but also such internal indicators as:

-technological level of products;

-qualification of personnel;

-the quality of the products;

-information management (application in information and communication technologies);

-research and development, patents, licenses;

-general management; organizational structure; finance.

The base for the innovation is: invention+production+qualification+introduction=innovtion

Innovations at the enterprise are spread over all types of the enterprise activity and they should be considered as a complex:

Enterprise production cycle. Competitiveness and flexibility. Strategic planning. Innovations, innovation management. Enterprise innovation potential.

It means:

-analysis of efficiency and automation level of the production and organizational process;

- comparative analysis of the quality of products, service, warranty service and maintenance;

-know-how of research and development;

-liquidity and investment potential;

-experience in innovation management.

Product innovation:

- new products on the market;

- new products for the enterprise; essential product changes; new "old" products;

- related services as part of the product; innovations in the production process;

- technology renovation, productivity improvement;

-changes in the value chain / depth of the production process;

-updating of organizational processes in order to increase their productivity;

-reducing the way and simplifying the decision-making process, creating flatter hierarchical structures;

-significant changes in the technological / organizational work processes;

-new tools for planning and management; innovations in the social sphere:

-updating models of remuneration and personnel motivation system;

-introducing a system of continuous professional development;

-implementing new management strategies / new mechanisms of delegating responsibility and administration;

-economic manufacturing / management;

-new forms of team contracts.

Factors contributing to innovation are the expansion and systematization of experience in the field of research and development, application of global technological development and improvement of the link between the production, research and development. Furthermore, it is of great importance to optimize links between the enterprise and markets, to change organizational processes and structures, as well as to consolidate enterprises and to develop cooperation.

Thus, it can be seen that a single "innovation" such as installation of the most modern machine tools does not automatically lead to tangible changes in the field of competitiveness and the improvement of protection against crises, as in reality innovation must be seen as a complex, systematic process of the enterprise (Indrisov, 1997, pp. 28-29).

The basis of evaluation of the effectiveness of the innovative project is a comparative analysis of the scope of the proposed investment and future cash flows. Comparable values refer in most cases to different time periods. Therefore, the most important issue in this caseas well as in determining the cost-effectiveness of new equipment and technology is the problem of comparing the income and expenses and keep them in a comparable form (Indrisov, 1997). The causes of the discounting process (i.e. bringing in a comparable form) may be inflation, unwanted dynamics of investments, the decline in industrial production, different forecasting horizons, changes in the tax system, etc.

Methods for evaluating the effectiveness of the project are subdivided into two groups based on discounted and accounting estimates.

Methods for evaluating the effectiveness of the project, based on accounting estimates (undiscounted) are payback period (PP), accounting rate of return (ARR) and debt service coverage ratio (DCR).

Methods for evaluating the effectiveness of the project, based on discounted estimates are significantly more accurate because they take into account different types of inflation, changes in interest rate, rate of return, etc.

These indicators include the method of profitability index (PI), the net value, otherwise known as "net present value" (NPV), and internal rate of return (IRR).

Our studies have shown that traditional methods of project evaluation are widely used in financial practice.

The method of return on investment is very common. But ignoring the future time value of money and thus the inapplicability of discounting is its significant disadvantage. In the condition of inflation, sharp fluctuations in interest rates, and lower rate of domestic savings in enterprise in real Russian economy this method is not accurate enough.

The coefficient of efficiency of investments, understood as the average profitability for the entire duration of the project, calculated by dividing the average annual return on the average annual value of investments. This indicator is compared with net profit ratio of invested capital (total average net balance) (Skripko, 2010).

2. The Method

However, all three traditional indicators, based on an accounting estimate do not take into account the temporal component of cash flows. They are not joined to a factor analysis and cash flow dynamics in economic reality. So you can more fully evaluate the project, using the methods based on discounted estimates (Zinchenko et al., 2009).

In accordance with the Guidelines on estimation of investment projects effectiveness #BK 477 of June 21, 1999, the base for estimating the commercial efficiency of the investment project effectiveness or operation of a going concern is the so -called stream of real money:

$$P_t = R_t - C_t \; t{=}0 \tag{1}$$

where:

R_t - financialresults, obtained on the t-m step of the project (functioning of the enterprise);

C_t - total costs of operations on the t-m step of the project (functioning of the enterprise);

T - temporal horizon of commercial efficiency calculation .

We assume that a company intends to introduce the system of quality management using an internationally popular ISO 9000 system of certification. Before the introduction of quality management arrangement within the chosen time span the anticipated flow of real money from investment and functional activities is $P_0{}_t = R_0{}_t - C_0{}_t$. With setting up quality management system viewed as a separate investment project and values DC_t and DR_t denoting direct costs and results correspondingly, the processes of quality management introduction and further development may be presented as follows:

$$P_t = (R^o{}_t + DR^p_t) - (C^o_t{}_t + DC_t - DC^t_t), t = 0, T. \tag{2}$$

Costs for the creation of the QMS DC_t include recurrent (investment) costs of repair facilities and purchase of equipment for training (teaching) staff, as well as to pay the costs of consulting assistance and auditing for compliance with the international standard ISO 9000.

A commercial result from the implementation of the QMS DR_t is generally manifested in the functioning of the system due to the total cost savings of the enterprise DC_t compared to the baseline C_t, on the one hand, and to further increase of the total financial results DR_t relative to the base level of R_t, on the other hand .Thus $DR_t = DC_t + DR_t$, and the expression for real money flow from investing and operating activities of the enterprise in the conditions of implementation and subsequent operation of the QMS takes the following form:

$$P_t = (R^o{}_t + DR^p_t) - (C^o_t{}_t + DC_t - DC^t_t), t = 0, T. \tag{3}$$

Dynamics of the costs flow for establishing the QMS and the flow of financial results from its introduction shows that the commercial effect of the QMS begins to emerge with a certain lag in relation to expenses:

$$D_t(r) = \sum_{t=0}^{T} P_t / (1 + r)^t \tag{4}$$

Net present value (NPV) of the enterprise for the entire reporting period is determined by the known formula (5):

$$D_t(r) = D_T^0(r) + \sum_{t=0}^{T} P_t / (1 + r)^t \tag{5}$$

Where r - the discount rate, characterized by the time value of money (TVM).

Since $P_t = P_t + DP_t$, we have (6):

$$D_t(r) = \sum_{t=0}^{T} (\Delta R_t^0 + \Delta C_t^0)/(1+r)^t - \sum_{t=0}^{T} \Delta C_t /(1+r)^t \tag{6}$$

Where $D_t(r)$ - net present value of the enterprise without the project of creation the QMS.

Creation of the QMS at an enterprise is commercially effective at discount rate r if and only if for some calculation horizon $T = T_R$value DD^{rt}) becomes positive and does not change its sign with a further value increase of T. Value To characterizes the payback period for the creation of the QMS without taking into account the time value of money.

Internal rate of return (IRR) of the company creation project of the QMS is to be usefully measured as discount rate r_0, bringing the net present value increase due to the introduction of the QMS, to zero at

$T_i T_0$: $DDT_T (r_0) = 0$.

Estimated value of internal rate of return reflects the relative efficiency of investment in the creation of QMS in percent on invested capital, whereas the calculated value of the net present value of growth expresses the absolute profitability of the project taking into account the time value of money. When $r_0$the net present value increase due to the introduction of the QMS, becomes negative.

In general, the project budget for the implementation of quality management system consists of:

1. Consulting firm service costs.

2. Cost of quality management department organization (repair facilities, equipment, etc.).

3. Tuition of the company personnel.

4. Cost of internationally accredited company to conduct the audit work and the issuance of the certificate of conformity ISO 9000.

3. The Results

The costs of implementation and operation of the QMS at the JSC "Penztyazhpromarmatura".

Imagine annual capital investments (expenses) for the implementation and operation of the QMS in tabular data (Table 1). The QMS was formed in 2010 when a new management team came to the enterprise, so the analysis begins with this very year.

The QMS functioning gives the company certain advantages, the main ones are:

1) reduction of faulty products; 2) rational allocation of responsibility for quality; 3) accountability and transparency of production, organizational and financial processes, improvement of their logistics relationship; 4) increasing staff motivation; 5) improvement of working conditions and safety; 6) rating growth of the enterprise and maintaining a positive image; 7) output of consistently high quality products (increase in output of the first grade.

Table 1. Costs on the QMS implementation and functioning

	2010	2011	2012	2013
1. Cost of consulting firm services thous.roubles	330	590	280	-
Cost of the organization of quality management (repair facilities, equipment, etc.), thous.roubles	600	-	-	-
Cost of enterprise personnel training, thous.roubles	-	-	60	1100
Cost of certification, thous.roubles	-	-	-	-
Total investments, thous.roubles	930	590	340	1100

It should be noted that in most cases the impact of the QMS to the above aspects of the enterprise is indirect.

For example, it is obvious that the presence of an international certificate for the quality management system increases the rating of the company, but there are other factors (policy, effective action service marketing, sales, investment attractiveness, etc.) that influence the rating increase of the enterprise. According to experts from international rating agencies rating upgrade on a 1 % increase in business profits by more than 2 % ("Animation is not expected", 2009).

In connection with the above objective evaluation of the QMS from different perspectives (economic, industrial, environmental, social) is a difficult issue. According to the authors, the problem of assessing the effectiveness of

the QMS and the contribution to the additional profit from the increase in output of the first grade must be approached from the perspective of expert assessments (Shvets, 2009).

The expert evaluation opinions of managers and specialists of "Penztyazhpromarmatura" showed that the proportion of the contribution of the QMS in an increase in output of higher quality (e.g. rotary metal- metal) is 5%.The technique of the expert assessment of the contribution in an increase in output of the highest quality is to assess the increase in output of higher quality after the implementation of the recommendations and proposals made by the Department of quality management activities of "Penztyazhpromarmatura".

Main recommendations and suggestions received from the QMS are as follows:

1) implement the quality management system ISO 9001-2000;

2) use a more high-grade steel for thermal and nuclear power plants for the Far North conditions (Titu, Oprean, & Grecu, 2011);

- DN 80-300 OST 24.125.04-89 of stainless steel;

- DN 10-300 OST 34.10-420-90 of stainless steel;

- DN 100-600 OST 24.125.33-89 of carbon steel grades (Titu, Oprean, & Grecu, 2011);

3) use the module evaluation of the mechanical properties and shipmentof hot rolled coils by statistical method . Statistical non-destructive method to be used for hire, delivered to consumers in rolls. Calculation of quality indicators is made for each coil, the values of quality indicators are automatically entered in the passport and certificate of quality (Militaru & Ionescu, 2011).

4) set the line for the production and application of anticorrosion coatings on bends, which allows to apply several types of one - and two-component coatings (Durakbasa, Bas, & Osanna, et al., 2011).

The work on the formation of the company QMS started in 2005, the certificate of compliance with international standards was received in 2008. Therefore, it took four years to implement the quality management system. The basis for comparison is the year 2004. Studies have shown that the introduction of the QMS involves increasing the output of all kinds of top quality products. Positive dynamics of this process reflects the content of Table 2.

Note: Studies have shown that the only negative result of the comparison with the base period for the production of non-return valves, which occurred in 2011, was due to technical reasons.

Table 2. Dynamics of the main kinds of the highest quality products in "Penztyazhpromarmatura"

ProductType	2009	2010		2011		2012		2013	
	thous. ps.	thous. ps.	Δ by 2009	thous. ps.	Δ by 2010	thous. ps.	Δ by 2011	thous. ps.	Δ by 2012
Ball valves	164133	180363	16230	166866	-2733	185334	21201	207798	43665
Butterfly Valves	45148	48289	3141	50015	4867	55291	10143	48053	2905
Backward valves	169578	177131	7553	152136	-17422	197394	27816	205710	36132
latches	5944	6226	282	6477	533	6874	930	7212	1268

For the calculation of indicators to assess the effectiveness of the project onthe implementation of the QMS it is necessary to determine the amount of additional profits obtained at the increase in production of the highest qualityproducts (Sava (Angheluta) & Tuclea, 2011). With this purpose we use the data in Table 3.

Table 3. Cost and selling prices for the highest quality products of the JSC "Penztyazhpromarmatura" most in demand

Product Type	2010		2011		2012		2013	
	Cost. USD	Price, USD	Cost USD	Price, USD	Cost USD	Price, USD	Cost USD	Price, USD
Ball valves, DN 350 mm	5621,50	10461,31	6316,78	7406,14	7211,86	8307,66	8390,35	9871,00
Butterfly Valves, DN 400 mm	10372,80	12421,00	10939,13	13322,89	11474,56	13521,15	11818,80	13926,78
Checkvalves, DN 700 mm	5792,40	8189,98	6005,42	6485,37	6414,26	7274,49	6955,60	7904,05
Gatevalves, DN 350 mm	6214,10	7402,62	9015,87	9802,35	10187,71	11024,65	11597,10	12120,00

Extra profits due to increasing the output of high quality products is determined by the formula [7]:

$$\Delta\Pi = \sum_{i=1}^{n} \left[(Ц_{нi} - C_{нi}) * O_{нi} - (Ц_{ci} - C_{ci}) * O_{ci} \right]$$

(7)

where:

ΔP - the total amount of extra profits from the improved product quality, USD;

n - number of products for which there was improvement in quality;

Pr_{ci}, Pr_{Hi} - selling price of products respectively of low and high quality of the i-kind, USD;

C_{ci}, C_{Hi} - the cost of manufacturing production units respectively of low and high quality of the i-type, USD;

V_{ci}, V_{Hi} - the volume of production and sales in real terms, respectively, before and after the quality improvement (Chauvel, 2012).

The results of calculations of additional profit of the JSC "Penztyazhpromarmatura" obtained from increasing the output of all kinds of top quality products are shown in Table 4.

Table 4. Additional profit gained by increasing the output of the highest quality in 2010- 2013, compared to the year 2009

Product Type	2010 г.		2011 г.		2012 г.		2013 г.	
	Extra profit (100%) USD	Extra profit QMS, (5%) USD	Extra profit (100%) USD	Extra profit QMS, (5%) USD	Extra profit (100%) USD	Extra profit, QMS (5%) USD.	Extra profit (100%) USD	Extra profit QMS, (5%) USD
Ballvalves, DN 350 mm	6403,709	320,185	353,158	17,658	557,162	27,858	9191,483	459,574
ButterflyValves, DN 400 mm	6433,396	321,670	11601,759	580,088	20758,560	1037,928	6123,682	306,184
ProductType	2010 г.	2011 г.	2012 г.	2013 г.	ProductType	2010 г.	2011 г.	2012 г.
Checkvalves, DN 700 mm	2201,473	110,074	-3568,640	-	11402,608	570,130	10507,185	525,359
Gatevalves, DN 350 mm	213,110	10,656	288,241	14,412	521,199	26,060	12,705	0,635
ΔP total, USD	15251,69	762,585	8674,518	612,158	33239,53	1661,976	25835,06	1291,752

The content of the table also reflects the 5 % part of the additional profits of the enterprise in terms of value received through the effective functioning of the quality management system (QMS).

Thus, the additional profit from the increase in output of the highest quality products due to the introduction of the QMS for 4 years amounted to 4328.471 thousand roubles.

4. The Conclusion

The method and the executive calculations can be used for another industrial enterprises in the region and in the country. Further, the method can be used for benefit forecasts when QSM is intruded.

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Comparative Assessment of Growth Sustainability of Germany, France, United Kingdom, and United States between 2000 and 2010

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Abstract

The results presented in this article are part of a broader experimental research focused on the examination of growth sustainability that is conducted through inequation $\Delta T - \Delta P \leq \Delta S$ conclusively developed on the basis of separate researches. This article examines growth sustainability of Germany, France, United Kingdom, and United States using time series data between 2000 and 2010. We built the inequation based on a simple initial suggestion that any country's economy benefits from balanced development between the needs of current generation and future generation. Inequation is based on three elements: ΔP, or population surplus and public spending dynamics is calculated for the purposes of reflecting the needs of current generation, ΔT, or technological surplus reflects the necessary strategic investments dynamics in economic growth of future generation, ΔS, or savings surplus as one of the most important components of sustainable growth of any country, is evaluated towards equilibrium of two other components. The article presents and analyses results of a broad series of calculations of all collected time series data. The results allowed us to conduct the sustainability testing and we analyzed dynamics of the sustainability elements. The article offers comparative assessment of sustainability of given countries. The conducted experimental research confirmed findings of testing of separate group of countries: mainly we concluded that the concept of a sustainable growth is in its rudimentary stage with given level of strategic application of developed economic knowledge and statistical methods towards practical use for the benefit of society.

Keywords: growth sustainability, Germany, France, United Kingdom, United States, technological progress, population expenditures, savings surplus, generation, welfare, economic growth, surplus

1. Introduction

Growth sustainability is defined as a balanced development that reflects needs of a current generation, but does not deprive future generations from progress and ability to sustain their own needs. The basic principle of sustainability is fair and equal share of resources (technological capacities, financial, etc.) not only inside a given generation but also among generations.

Generally, sustainability might be evaluated through different measures, especially when comparing sustainability among countries. However as the result of various statistical evaluations and extensive economic theory research the debate of what comprises the best evaluation of sustainability we can make a conclusion that the compromise must be found between three general elements: growth in consumption (especially when talking about consumption of social services provided by government in exchange for taxes) should not be smaller than technological growth (because in this case current generation gives up their welfare for the benefit of growth of future generation); if the surplus of both is relatively equal – the balance can be considered fair; the third component is savings – savings surplus is equally important for current and future generations (it serves as essential security net) and must be evaluated towards the balance between welfare and technological surplus.

Theory of sustainable growth has been discussed for a long time, for example in researches conducted by such authors as: H. Hotelling (1931), J. R. Hicks (1946), R. Solow (1974), J. Hartwick (1977), T. Page (1977), R. Turner (1988), D. Pearce, & M. Redclift (1988), C. Conroy, & M. Litvinoff (1988), D. Collard, & D. Pearce (1988), M. Marien (1989), L. Hilbrath (1990), F. Harrison, & G. Titova (1997), D. Pearce, & E. Barbier (2000),

M. Carr (1988), T. V. Terentieva, & M. A. Bobireva (2011), R. Barro, & X. Sala-I-Martin (1995). L. Brown most explicitly and fully presented basic approaches for the concept of sustainable growth in his book "Building a Sustainable Society" (1981).

We define sustainability as an ability of a system to function in circumstances close to equilibrium, in conditions of constant outside and internal disturbing influences. Growth sustainability is a concept that goes ahead of time, as technological progress and investments in future generation with necessary investments from the current generation together with essential savings safety net are components of predictable development of any given country.

2. Methods

This research focuses on assessment (and further comparison) of growth sustainability of Germany, France, United Kingdom, and United States based on time series data for the years between 2000 and 2010 measured through the introduced inequation:

$$\Delta T - \Delta P \le \Delta S , \tag{1}$$

where:

ΔT is a technological surplus,

ΔP is a population surplus and public expenditures dynamics,

ΔS is a savings surplus.

ΔT for every country is calculated based on yearly data for a) volume of high-tech export, b) labor productivity, c) R&D spending, d) license royalties.

ΔP for every country is calculated based on yearly data for a) education expenditures, b) governmental social security expenditures, c) governmental expenditures on retirement, d) healthcare expenditures, e) surplus of population between 15 and 64 years old.

ΔS for every country is calculated based on yearly data for a) gross domestic income, b) quasi money (current LCU), c) cash holdings.

Dynamics of time series data represent growth rates (as oppose to calculated absolute growth). Since the growth rate for every variable is calculated based on difference between "current" and "previous" year, the presented in the paper final statistics starts from year 2001, however it is important to keep in mind that 2001 rate is a dynamics that covers the year 2000 as well.

At a later phase, we calculated statistical medians of ΔT, ΔP and ΔS. At a final stage, inequation $\Delta T - \Delta P \le \Delta S$ is analyzed for every year assessing growth sustainability of a given country.

3. Results

We collected broad range of necessary time series data, explained explicitly in Methods, and calculated growth rates dynamics for every variable of the inequation's elements. We then calculated medians of the inequation's elements and presented final results below. In order to be able to better depict situation for every country we presented the results graphically as well.

Table 1. Germany, 2000-2010. Calculation of inequation elements based on time series data, and assessment of sustainability test $\Delta T - \Delta P \le \Delta S$

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Δ T	1,012	1,022	1,090	1,119	1,126	1,078	1,080	1,063	0,980	0,970
Δ P	0,990	1,075	1,183	1,079	1,019	1,022	1,112	1,048	0,950	1,022
Δ S	1,032	1,025	1,023	1,027	1,034	1,046	1,027	1,044	0,996	0,996
Δ T- Δ P	0,022	-0,053	-0,093	0,040	0,108	0,056	-0,032	0,015	0,029	-0,053
Conclusion	Sustainable Growth									

(Encyclopedia of the Nations, n.d.-a; Encyclopedia of the Nations, n.d.-b; Nation Master, n.d.-a; Nation Master, n.d.-b; Nation Master, n.d.-c; OECD, n.d.–a; OECD, n.d.–b; OECD, n.d.–c; The World Bank, n.d.-a; The World Bank, n.d.-b; The World Bank, n.d.-c; The World Bank, n.d.-d; The World Bank, n.d.-e; The World Bank, n.d.-f; The World Bank, n.d.-g; The World Bank, n.d.-h; The World Bank, n.d.-i; The World Bank, n.d.-j)
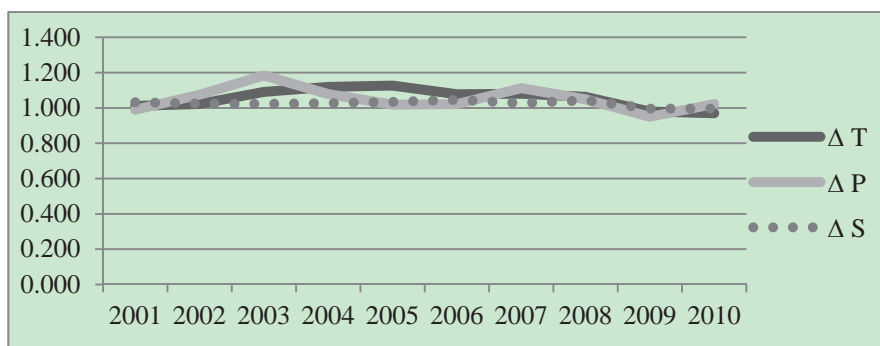
Compiled by the authors

Figure 1. Germany, 2000-2010. Sustainability elements ΔT, ΔP, ΔS

Germany passed the sustainability test as its technological surplus minus population surplus with public spending dynamics was lower than savings surplus (see Table 1 and Figure 1). Savings surplus was the only variable that was kept on the relatively same level through the decade, which is an important economic growth factor. Population dynamics was the most fluctuating one, growing up to 2003 and going downhill till 2005, staring to grow again up to 2007, and hitting its lowest in 2009 (this maybe in relation to the world crisis). These fluctuations in surplus of population dynamics reflect the limitation of German public spending dynamics.

In the light of fluctuation seen at population dynamics, technological surplus can be viewed as relatively stable; however fluctuations of a different character took place. Speaking of technological surplus we mainly speak about perspective for a future generation and for the future growth of the country. In the case of Germany we can see that surplus has grown up till 2005 and went downhill ever since. If we compare dynamics of technological surplus and population dynamics (keeping in mind that positive sustainability testing presumes an equality of these elements), we will see that equality growth between two elements was gained only near the crisis time – around 2007 both growth rates of these elements went downhill, up until then there was a considerable difference. Nonetheless, even considering all of the above – Germany passed the sustainability test.

Table 2. United Kingdom, 2000-2010. Calculation of inequation elements based on time series data, and assessment of sustainability test $\Delta T - \Delta P \leq \Delta S$

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
ΔT	0,989	1,062	1,073	1,132	1,097	1,132	0,910	1,020	0,766	1,000
ΔP	1,024	1,114	1,139	1,160	1,049	1,072	1,112	0,969	0,913	1,015
ΔS	1,075	1,058	1,063	1,079	1,080	1,093	1,065	1,000	1,043	1,048
ΔT- ΔP	-0,035	-0,052	-0,066	-0,028	0,047	0,060	-0,203	0,051	-0,147	-0,014
Conclusion					Sustainable Growth					

(Index Mundi, n.d.-a; Office for National Statistics, 2011; Goodman & Sibieta, 2006; Encyclopedia of the Nations, n.d.-a; Encyclopedia of the Nations, n.d.-b; Nation Master, n.d.-a; Nation Master, n.d.-b; Nation Master, n.d.-c; OECD, n.d.–a; OECD, n.d.–b; OECD, n.d.–c; The World Bank, n.d.-a; The World Bank, n.d.-b; The World Bank, n.d.-c; The World Bank, n.d.-d; The World Bank, n.d.-e; The World Bank, n.d.-f; The World Bank, n.d.-g; The World Bank, n.d.-h; The World Bank, n.d.-i; The World Bank, n.d.-j)

United Kingdom passed the sustainability test, however showed major fluctuations in growth rates (see Table 2 and Figure 2). Savings surplus was the least impacted by either managerial or outside factors instability, which is a positive factor considering that population surplus and public expenditure dynamics was greater than technological surplus at most of the time, with exceptions between 2004 and 2006, and short period in 2008, when technological surplus was greater. As far as technological surplus dynamics, it can be seen that it had been growing up until 2004 and remained relatively at the same level till 2006, starting 2006 there were serious fluctuations: it went downhill till 2007, picked up and started falling again in 2008, picking up again in 2009, reaching equilibrium with population dynamics in 2010. Such instability can be perhaps explained by the started crises.
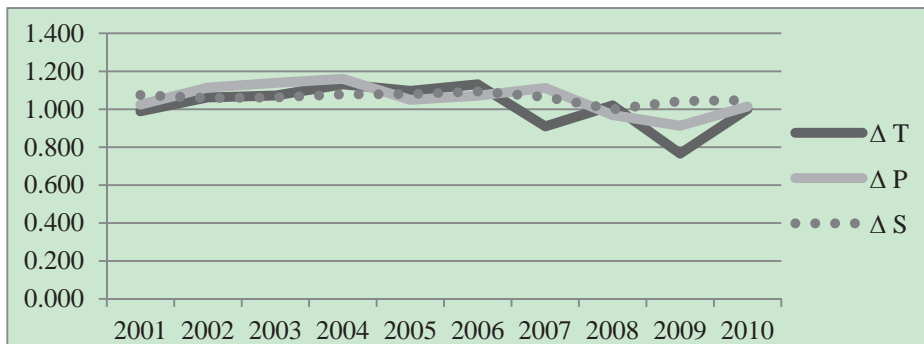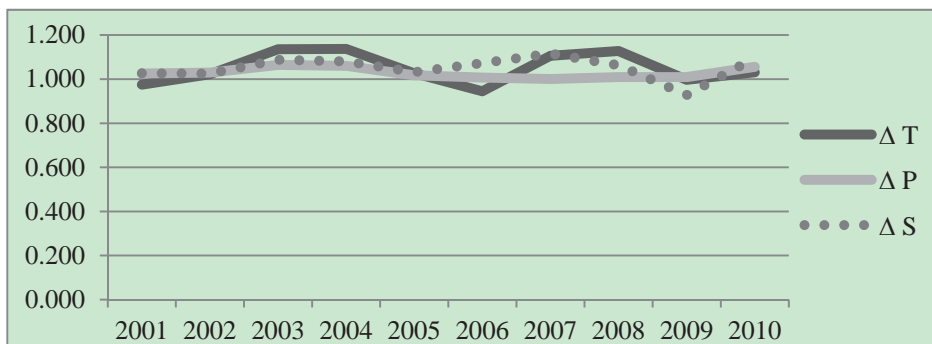
Compiled by the authors

Figure 2. United Kingdom, 2000-2010. Sustainability elements ΔT, ΔP, ΔS

Table 3. France, 2000-2010. Calculation of inequation elements based on time series data, and assessment of sustainability test $\Delta T - \Delta P \leq \Delta S$

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Δ T	0,976	1,023	1,136	1,137	1,027	0,945	1,106	1,128	0,997	1,031
Δ P	1,026	1,030	1,064	1,060	1,017	1,007	1,001	1,009	1,009	1,056
Δ S	1,027	1,025	1,088	1,080	1,032	1,072	1,116	1,063	0,928	1,096
Δ T- Δ P	-0,050	-0,007	0,071	0,077	0,009	-0,063	0,106	0,118	-0,012	-0,025
Conclusion	Sustainable Growth									

(UNData, n.d.; Index Mundi, n.d.-b; Encyclopedia of the Nations, n.d.-a; Encyclopedia of the Nations, n.d.-b; Nation Master, n.d.-a; Nation Master, n.d.-b; Nation Master, n.d.-c; OECD, n.d.–a; OECD, n.d.–b; OECD, n.d.–c; The World Bank, n.d.-a; The World Bank, n.d.-b; The World Bank, n.d.-c; The World Bank, n.d.-d; The World Bank, n.d.-e; The World Bank, n.d.-f; The World Bank, n.d.-g; The World Bank, n.d.-h; The World Bank, n.d.-i; The World Bank, n.d.-j)

France passed the sustainability test. Population surplus and public expenditure dynamics was the most stable element of the inequation for France, however technological growth had been fluctuating in a way that it seems to be almost an experimental for France (see Table 3 and Figure 3). France grew it technological surplus leaving it at the same level from 2003 to 2004, then it went down to its lowest point in 2006, which cannot be explained by drawing more attention to internal social problems because population and public expenditure dynamics remained the same. After hitting its lowest, France repeated the earlier path, picking up technological surplus up to 2007 and leaving it at the same level till 2008. Savings surplus dynamics had remained dangerously unstable.
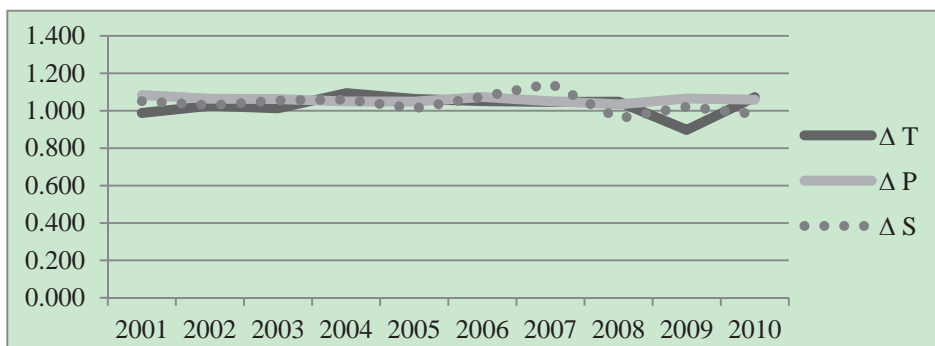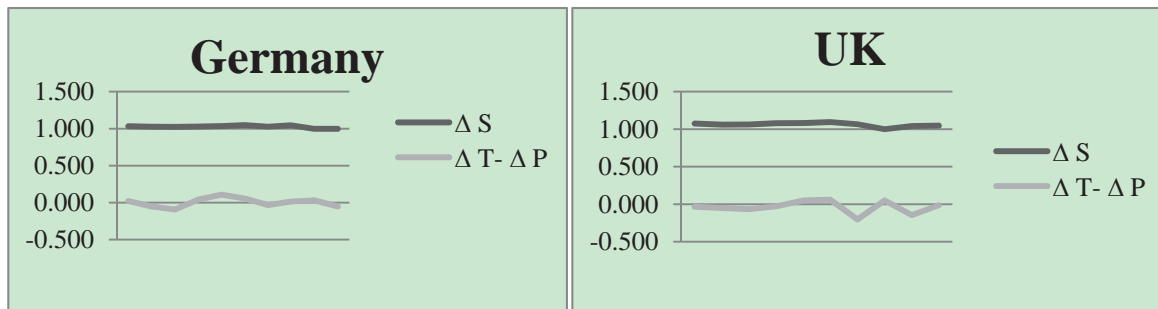

Compiled by the authors

Figure 3. France, 2000-2010. Sustainability elements ΔT, ΔP, ΔS

Table 4. USA, 2000-2010. Calculation of inequation elements based on time series data, and assessment of sustainability test $\Delta T - \Delta P \leq \Delta S$

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Δ T	0,988	1,027	1,013	1,094	1,063	1,051	1,047	1,049	0,897	1,073
Δ P	1,084	1,064	1,063	1,050	1,049	1,074	1,050	1,035	1,065	1,059
Δ S	1,051	1,029	1,055	1,060	1,013	1,075	1,144	0,959	1,022	0,982
Δ T- Δ P	-0,096	-0,038	-0,050	0,044	0,014	-0,023	-0,003	0,014	-0,168	0,014
Conclusion	Sustainable Growth									

(Index Mundi, n.d.-c; Encyclopedia of the Nations, n.d.-a; Encyclopedia of the Nations, n.d.-b; Nation Master, n.d.-a; Nation Master, n.d.-b; Nation Master, n.d.-c; OECD, n.d.–a; OECD, n.d.–b; OECD, n.d.–c; The World Bank, n.d.-a; The World Bank, n.d.-b; The World Bank, n.d.-c; The World Bank, n.d.-d; The World Bank, n.d.-e; The World Bank, n.d.-f; The World Bank, n.d.-g; The World Bank, n.d.-h; The World Bank, n.d.-i; The World Bank, n.d.-j)
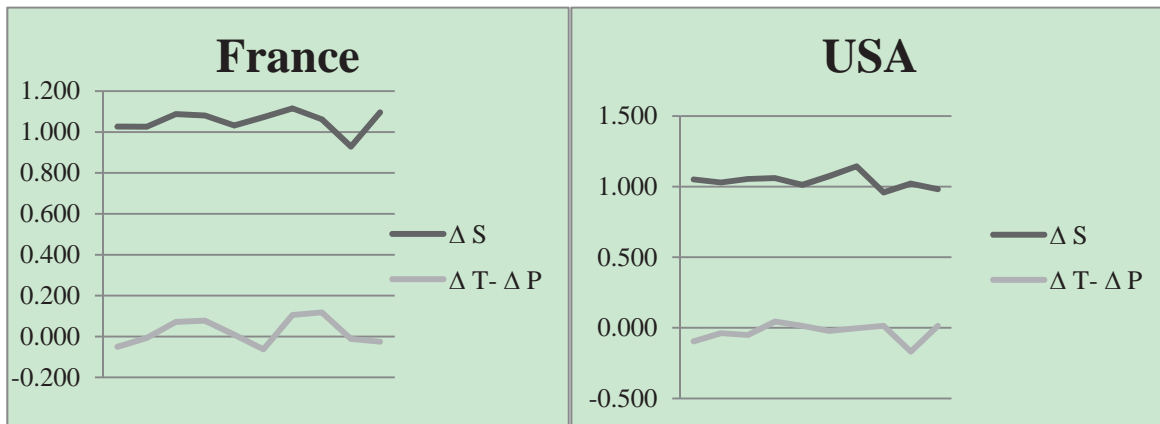

Compiled by the authors

Figure 4. USA, 2000-2010. Sustainability elements ΔT, ΔP, ΔS

United States as well passed the sustainability test and together with Germany showed the least amount of fluctuations (see Table 4 and Figure 4). It is interesting to note that population surplus and public expenditure dynamics was almost at all times greater than technological surplus which correlates with common knowledge about social safety net that is provided in U.S. Technological surplus had been fluctuating reaching its lowest in 2009, as we can see the sharp drop started in 2008 around the start time of the world economic crisis. Savings surplus was the least stable components, which also correlates with what is known about U.S. budget deficit and debt problems. U.S. attempted to elevate savings surplus in 2005, however it started to fall sharply in   2007.
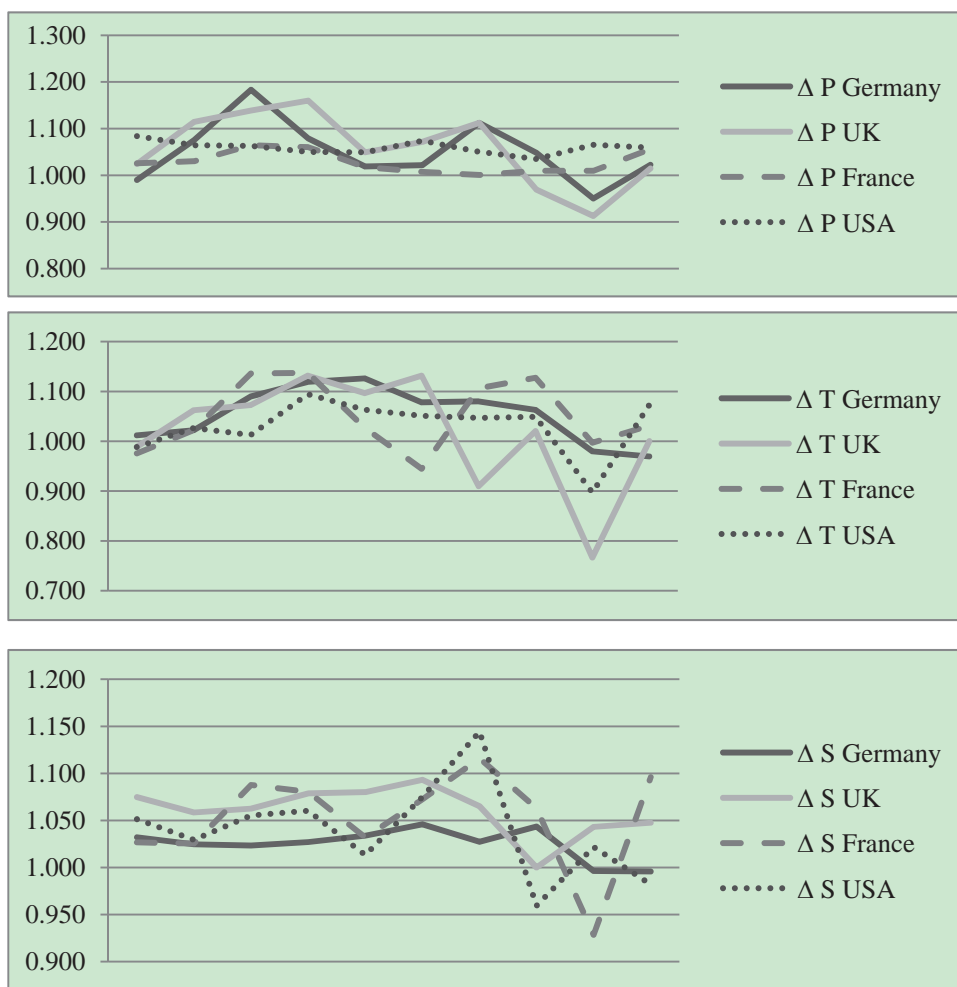
4. Discussion

We depicted the results graphically in order to visually analyze the results of the sustainability testing (see Figure 5). In addition we compared all the elements of the inequation among countries (see Figure 6).

Compiled by the authors

Figure 5. Sustainability testing ΔT- ΔP ≤ ΔS presentation for Germany, UK, France, and USA between 2000 and 2010

Compiled by the authors

Figure 6. Comparison of elements of the sustainability inequitation

Figure 5 depicts the difference between the two sides of inequation: savings surplus on one side and technological surplus minus population surplus with population spending dynamics. ΔT- ΔP difference represents equilibrium between investments in current and future generation, difference at zero level means

equality between the two, positive difference means that technological surplus was greater, negative difference means that public expenditure was greater. The bigger the difference between zero level ΔT- ΔP and ΔS the better, we can simply graphically see the change in savings surplus. In the first decade of the second millennium Germany and USA showed most stability in terms of spreading investments between public expenditures and technology, meaning that out of four countries they managed to sustain the most equilibrium. France and UK had considerable fluctuations. France predominantly had technological surplus over public spending dynamics, while UK had it the opposite way. As far as comparing two sides of inequation and conducting sustainability test – all four countries show desirable results, keeping manageable difference between the two sides of inequation.

Figure 6 depicts comparison of all three elements of inequation that allows us to compare countries more closely in addition to comparison of their growth sustainability. France showed least fluctuations in population surplus and public expenditure dynamics, the growth rate for this element for France had almost not changed in 2010 compared to 2001, which makes absence of fluctuations cautiously strange. They did attempt to lift up the growth rate, but it went down in couple of years, in 2010 the dynamics started to rise again, but not much. USA had almost the same situation; however their surplus was originally higher. It can be seen that USA tried to manage public spending growth rates, however there were small ups and downs along the way, the number they ended up in 2010 is slightly smaller than the number in 2001. Such fluctuations in US are easy to explain by the nature of national budget.   UK and Germany showed large and dangerous fluctuations, both countries ended up with almost same growth rate. It is important to note that both of them attempted to lift the public expenditure rates but the attempts were not successful in a long run.

UK showed most fluctuations for technological surplus, after a series of sharp drops and rises, they ended up on the same level. Considering what we know about fluctuation that UK showed in public expenditures, it is possible to say that strategical application of analytical and statistical tools in UK is missing something because these fluctuations show certain degree of ungovernability. Same goes for France. France ended up with slightly higher growth rate for technological progress in 2010 compared to 2001, but showed considerable fluctuations versus stable growth. Germany had stable advance in the rate of the technological progress, however around 2005 it started to fall very slowly. It is possible to presume that it was because of the world crisis that Germany did not manage to sustain even the stable slow down in technological progress and the country ended up with slightly lower rate than it started with. USA had a similar situation for the most part, however after sharp fall, they did lift up the rate and ended up with higher rate in 2010 compared to 2001, their rate was the highest among all four countries.

As far as savings surplus UK and Germany showed least amount of fluctuations, both countries showed rapid drop around the same time, though Germany did not manage to lift the rate up and ended up with lower rate in 2010 compared to 2001, UK managed to do so and ended up with only slightly lower rate in 2010. Both USA and France experienced large fluctuations in savings surplus. The difference between the two countries was that USA ended up with slightly lower surplus in 2010 compared to 2001, but France managed to significantly raise it.

5. Conclusion

All four researched countries – Germany, France, United Kingdom, and United States had a sustainable growth in the first decade of second millennium (between 2000 and 2010). Despite the fact that all four countries show growth dynamics (meaning that there is always a surplus), the question posed by this research is not to assess the growth dynamics, but the sustainability of the development. This paper presented the results of the experimental research, the results correlate with other tests conducted by the authors.

  Though all four countries passed the sustainability test, it is possible to say that the concept of growth sustainability has failed to sustain. We have used the experimental inequation to clearly depict the manageability of growth: all four countries maintain relative balance between technological progress surplus and population surplus with public spending dynamics, and most importantly they managed to maintain savings surplus, which was an essential condition of sustainability test. However very considerable fluctuations of elements, including comparative to each other, allow us to draw a conclusion that that growth sustainability of those countries is very vulnerable. Though superficial balance between welfare of current generation and investments in future generations was managed, the real stability was not achieved. Overall, we can see that though some countries develop faster and more stable relative to each other, the concept of balanced sustainable growth is not explored enough on a governmental scale, the complex systems of national economics are managed from the point of view of immediate necessities and short-term strategies.

It is important to understand that there a lot more research needs to be done in future. We have tested the formula that was developed as the result of broader research, applying knowledge about economics and statistical analysis methods. We realize that economics is not an exact science and national economy of every country is influenced by many factors, but of all the indicators of economic development most indicators show the dynamics of growth, not its sustainability. National debts, lack of resources, technology and infrastructure will influence future generations; weak social welfare and unemployment discourages current generations. Future research must further focus on balancing our growth between the two and developing effective tools for strategically managing national economies.

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Methodology for Integral Evaluation of Human Development Level as Exemplified by the Leading Countries of Asia-Pacific Region and European Union

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Abstract

The authors examine evolution of approach towards understanding of human capital and qualitative transformation of human's role in economics, conditioned by the transition to post-industrial society. Neo-classical approach has a special role in development of human capital theory. Examining human capital as a source economic growth of any country, the authors point out qualitative perfection of human potential. The article introduces methodology for integral evaluation of level of human development exemplified by the leading countries of Asia-Pacific Region an European Union. In addition, complex evaluation of human capital development is discussed as a two-side process: from one side, it is a formation of human abilities and skills, from the other side – realization of gained abilities and skills for the use of production or for recreation, cultural, political activity. Several key points of human development are pointed out for the purposes of a complex evaluation of human potential.

Authors' methodology of calculation of human development index is distinguishable from conventional methodology by at least one main principle: the authors believe that conducted experimental calculations might provide the most complete idea of human development from the point of view of three interconnected characteristics: human capital, human resources, and evaluation of conditions for formation and implementation of abilities and skills of a person.

Keywords: human capital, human potential, methodology, complex evaluation, Human Development Index, Asia-Pacific region, Human Potential Development Index, clusters, dendogram, social sectors

1. Introduction

In 60-80 years of the last century, there was a tendency to the emergence of the new economic growth theories (Lucas, Becker, & Schultz) proving that the main factor of the economic growth was a human capital. The level of the society development is determined not only by the dominant types of economies, but also by the established hierarchy of values and interests, and the population characteristics, which is "human capital". The human capital involves the abilities, knowledge, and skills of employees, which give them the opportunity to operate in an economic environment. Investing in human capital tends to lead to higher productivity and increased production efficiency. A practice has shown that an increase in human capital through education, better health care and nutrition, affects economic growth, especially in the countries (regions) with low incomes and limited human capabilities.

A qualitative change in the role of man in the economy associated with the transition to a postindustrial society led to a growing interest in the problems of human capital and the reproduction of the human potential.

The main problem of the formation of sustainable development economics is still the efficiency of investing in human capital, which is now the central determinant of the level of the economic growth and the quality of life.

The economy and the education level of the society are interdependent elements of the social system. Each of these elements influence the development of the other one in a very complicated way. If this relation is viewed from the perspective of the initial pulse, the priority, of course, belongs to the scientific and educational potential of society, because, in the conditions of information society, it acts as the most important factor in the reproduction of the national wealth and as an essential element of it. Considerable expenses for the development of education are not a consequence of the well-being of the country; it is an element of this prosperity.

There are many approaches to the definition of human capital as an economic category, as it is a very complex and multifaceted concept. Therefore, it could be claimed that this is a very ambiguous phenomenon which is also quite capacious and includes a lot of different areas such as social, economic, psychological, and even philosophical, as there is no aspect of human existence, which would, in principle, do not fall under the definition of a human capital. In the category of the human capital, it is necessary to see what is inherent in the capital as a whole notion, as well as particular properties that are specific for human capital. Hence, the existence of different definitions is quite natural, although it is obvious that the capital itself, as an economic phenomenon, is multifaceted, takes many forms, and performs different functions, i.e. becomes pervasive, "multifunctional".

1.1 The Formation of the Human Capital Concept

The paradigm of human capital was first formulated in 1960 by the future Nobel laureate American economist G. Becker. However, this concept did not appear out of nowhere, but was a natural result of the development of world economic thought. Its origins are seen in the works of the representatives of almost all schools of economics.

In the 17th century W. Petty, standing at the origins of classical political economy, put forward the idea of the primary values of labor skills in the national wealth of the country. A. Smith developed this idea, having included knowledge and qualification in the fixed capital of society, along with machines and land. He believed that the fixed capital consists of machines and other tools, buildings, land, and, "the acquired and useful abilities of all the inhabitants or members of the society."(Smith, 1956, p. 208). What is more, the last factor he put first, "the increase in productivity of useful work depends, first of all, on the increase of dexterity and the ability of the worker, and then on improvement of machines and tools with which he worked." (Smith, 1956, p. 235). Besides, A. Smith noted that these abilities, being a part of the characteristics of a particular person, at the same time become part of the wealth of the society to which the person belongs.

J. R. McCullosh clearly defined human resources as the capital (McCullosh, 1870, p. 57). In addition, he pointed out the close analogy between the common and human capital, considering that investment in human resources should have turnover rates consistent with the turnover rate of other investments plus the normal rate of turnover determined by the market interest rate during possible life of an individual. (McCullosh, 1870, p. 67). *In our view, it was an attempt to quantify the human capital.*

N. Senior suggested that human resources can be treated as capital; nonetheless, in this capacity, he took skills and acquired abilities, but not the person. (Senior 1939, pp. 68-69). On occasion, however, he treated human resources as capital with maintenance costs invested in person with the expectation of receiving benefits in the future. He argued that there is a slight difference between the arguments about the value of a slave and the values of a free man. The principal difference is that a free man sells himself for a certain period and for a certain relation, while the slave is sold on all his life.

H. Macleod considered the "producing" person as the fixed capital. From his point of view if this person isn't productive, he or she isn't subject to the economic analysis (Macleod, 1881, p. 134, 205-206, 213).

The Marginalists adhere to the following considerations about the nature of human capital. J. G. Von Thunen noted the reluctance of some economists to assess human resources in money, this reluctance, he said,"… arises the lack of clarity and confusion of concepts in one of the important areas of the political economy. Moreover, it may seem that the freedom and dignity of the people could be successfully provided, if they were subject to the laws of capital."(Thunen, 1875, p. 3). Von Thunen assumed that many social institutes could be cancelled if expenses which increase labor productivity, were considered in the analytical scheme of the human capital. The capitalized value of these expenses, besides, has to be included as a part in the aggregated stock of the capital (Thunen, 1875, pp. 1-10).

L. Walras included all human resources in the capital. And the value or the price of these human resources, Walras said, is defined like other capital goods (Walras, 1954, p. 40, 214-216). He argued that the pure theory, "inherent in complete abstraction from the consideration of fairness and practicality", and urged, "to consider human resources solely in terms of exchange value." (Walras, 1954, p. 271).

At the beginning of the XX century, the neoclassic A. Marshall admitted that estimates of the capitalized cost of the person can be useful, and considered them in an explicit form by the method of capitalization of net earnings (consumption subtracted from earnings before capitalization) he rejected this notion as "unrealistic" because human resources are not sold on the market (Marshall, 1959, pp. 469-470, 705-706.).

The human resources were included in the definition of the capital by J. Fisher. Capital, as he claimed, is, "a useful intended material object", and, therefore, as human beings possess this characteristic, the sequence in reasonings demands their inclusion in the concept of the capital (Fisher, 1897, pp. 201-202; 1927, pp. 51-52, 68). However, the skill of an individual isn't the capital, it is an additive to the individual. J. Fisher pointed that there is trained individual who is to be included in the concept of capital (Fisher, 1965, pp. 12-13).

Thus, the question of whether or not the individual is a carrier of human capital has been resolved by the middle of the XX century. Though, there were different interpretations of the concept of human capital and controversy concerning the question whether the identity of the cost of useful skills and abilities and the cost of the individual.

From a variety of researches, it is decided to allocate a number of studies which reflect an attempt to mechanical projection of the concept of capital to human capital and attempt to evaluate it.

For example, E. Denison thought that talking about technological progress embodied in physical capital means simply to refer to changes in the quality of fixed assets (capital goods) (Denison, 1964, p. 91). Such an analogy could be applied to human resources as well. Skill and the acquired abilities are embodied in the person and, allegedly, increase their quality, as productive units. Therefore, their skill and abilities are integral from individuals, and the trained individual is the capital.

According to S. Huebner, the human capital can have the same scientific interpretation as the usual capital has. Its operational definition can be received "by capitalization of human life cost through bonds, giving them a life annuity (for this labor) and negotiability (as to a credit source), considering them by the principle of providing and using a method of depreciation funds for the implementation of the considered object, if only the person has prospect of future business activity, and his family has obligations to block the existing risk of uncertainty of duration of human life." (Huebner, 1914, pp.18-19).

Some authors used estimates of the capital cost of the person as an assessment of losses in World War I (Guyot, 1914; Crammond, 1915; Bogart, 1919). "The person is the capital," told I. Guyot, "and society have to be interested in the reduction of death not only on humanitarian, but also for the economic reasons." (Guyot 1914, p. 1197). E. Bogart claimed that the assessment of the monetary cost of the human lives lost in war is "method of doubtful statistical relevance", nevertheless, he considered that only the monetary assessment of these lives lost in war can help to realize their enormous economic importance. (Bogart, 1919, p. 269).

H. Boag considered a question of, whether it is correctly or not "to include in estimates of reduction of the capital, as costs of war, losses of human lives." (Boag, 1916, p. 7). He drew a conclusion that it is correct, as there is a close analogy between "material and human" the capital. Moreover, Boag has formulated some important issues relating to evaluation of the human capital. The first issue stated that the method of assessment should depend on the purposes for which the evaluation will be used. The second issue proposed that it is necessary to be careful in carrying out calculations for articles both for human, and for the usual capital. And, the third issue pointed that interference of costs of the usual and human capital should be taken into account.

H. Boag also noted that the method of capitalization of earnings in the evaluation of human capital has been more preferable since with the help of it the cost of material things is estimated, while the method of production cost may include an individual cost apart from its the effect on the increase in individual earning capacity. The "gross" method, in his view, is more preferable, because, "… in the calculation of material losses, losses of income are usually compared with the total national income, not the national savings, and, therefore, it is often better to consider the capitalized value of the gross income, but not the surplus income." (Boag, 1916, p. 11).

Although Nassau Senior previously noted that H. Boag was the first who accurately defined one of the difficulties connected with method of an assessment of the human capital at production cost; it is still precisely impossible to determine the amount of expenses for education and the contents is necessary for the production of the recipient of the income considered separately from his or her abilities "to love, enjoy, admire which cannot accompany the production of material wealth." (Boag, 1916, p.14).

J. Walsh noted, "Since the time of sir William Petty many economists included the person in the category of the fixed capital, because as like a capital the human demands spending for the creation and serves for the return of these expenses with a profit. This conclusion, nevertheless, is made in the general concepts, the relation is

established for all people, as to the capital, and for all types of expenses on education and training, as its costs." (Walsh, 1935, p. 255).

S. Woods and J. Metzger showed that symmetry in consideration of both the human, and usual capital is reached only on condition of use of categories of "depreciation", "preservation", and "disposal". Preservation costs are recorded when the consumption costs are deducted from earnings, and depreciation with disposals are considered in the way in which average earnings are estimated, "this factor (depreciation and disposals) is entered into consideration by calculation of an average annual salary of workers, which includes a low wage of older workers along with a high salary of more effective producers. The former, of course, receives smaller salaries and wages than healthy and productive workers in the first half of their life, but the earnings of the latter are diluted with 'average' with lower earnings of the first group and those very young workers who have no qualifications yet" (Woods & Metzger, 1927, p. 122).

As a result, these scientists draw a conclusion that the monetary cost of the population is the greatest asset of the country and that "the public citizens and students interested in national welfare actively support the progress promoting preservation of human life and the enjoyment of the available health, so that the productive life of individuals was extended and, therefore, added to the well-being of society." (Woods & Metzger, 1927, p. 127).

This conclusion is contradicted by the opinions of some modern economists who claim that a further increase in costs of health care in the developed countries "will make health, but not welfare and, therefore, in an economic sense, it will be not quite productive" (Lees, 1962).

In the first quarter of the XX century there were a lot of works in which the authors used the analytical framework of human capital in an attempt to determine the monetary loss due to the prevention of disease and death (Fisher, 1908; Forsyth, 1914; Crum, 1919; Fisk, 1921). Their idea is to ensure that diseases and premature deaths lead to the loss of human capital and the effect of its accumulation can be increased by preventing and delaying diseases and deaths to the extent in which it is possible.

Thus, the analytical framework of human capital used by economists to explain it in the ordinary scheme of capital. In this context, it is necessary to pay attention to the problem of assessing and measuring the contribution of the intellectual potential of the individual and society as a whole in economic development.

The special attention to this question is deserved by K. Marx's views. K. Marx`s theory of reproduction of labor power is in line with the ideas of classical political economy. Marx, like classics, treated the person as fixed capital, emphasizing the great value in his or her development and accumulation of education, work experience, and expenses of free time.

From the social point of view, individual consumption is an integral part of social reproduction. K. Marx wrote, "Consumption is also a production just as consumption of chemical elements and substances is the production of a plant in the nature. That, for example, in the course of nutrition, representing one form of the consumption, with the help of which people make their own bodies; and it is quite clear, but it is also applicable to any other type of consumption, which, with one party or another, each in its own way, makes a man. This consumer production... is a second type of production, resulting from the destruction of the first one."(Marx, 1958, p. 719; 1969, p. 27).

He agreed that according to T. Hodgskin, abilities of the person to work are "the main accumulation of wealth, and most important preserved result of the previous work" (Marx, 1964, p. 306).

In the process of consumers' production, the individual labor is not only being produced, but also improved, and evolved. There is some kind of accumulation of productive force of work, creative abilities of the person, and more mental capacities.

Thus, the development of the labor force is able to create more value per unit of time than a simple one, i.e. has great use value, but as for its production consumes a large quantity of social labor, then it has a higher cost of reproduction. K. Marx wrote, "The work that has a meaning of higher and more complex work than the average social labor, is a manifestation of such a workforce, which formation requires higher costs, the production of which is worth more time, and, which, therefore, has a higher cost than simple labor. If the value of this force is higher, it manifests itself in a higher labor, and, therefore, materialized in equal intervals of time in the relatively higher cost "(Marx, 1960, pp. 208-209).

Thus, the cost of necessary social labor per unit of time and the quality of the workforce must match each other under equal conditions of application and the intensity of labor. According to this premise, all rates of hourly wages and salaries of employees, engineers and technical workers are set; for higher skilled workers, higher rates and salaries are set.

The specific type of accumulation of the labor substantiated in the person remains rather low-investigated in economic science today. It is rather obvious that the physical development of man and his state of health depend on volumes and structure of food, the rationality of clothes, living conditions, services of health care; the intellectual development and professional qualifications of the person depend on volumes and structure of consumption, services of education, culture, and professional education. Processes of human personality development are studied by the representatives of different sciences, but still there is not a systemic nature that allows individual economists write that the costs of reproduction of labor, broadly defined as livelihood of the population, do not have a clear "technological" borders, but should be carried out regardless of participation in production.

K. Marx's allocation of necessary and additional labor as key concepts of his economic theory could be useful in the analysis of simple and expanded reproduction of labor for the certain person and the population in general. The category of labor cost is close, according to the contents, to the concept of reproduction of labor power costs. In the calculation of its value over the lifetime of the person it is close to the amount of lifetime costs for maintenance of human and investment in human capital. It is possible to say firmly that K. Marx is one of considerable intellectual predecessors of modern developers of the neoclassical theory of the human capital.

Summarizing carried-out analysis of the genesis of the concept "human capital", we came to the decision that it is possible to conclude, that the concept "human capital", as separate economic category, is a result of natural development of economic science; and almost all representatives of all directions of economics, beginning with Petty and Smith, who considered various aspects of the concept, have contributed to the emergence of the concept.

As an independent branch of economic analysis, the theory of human capital was formed only at the turn of 50-60s of the 20th century. The merit of its promotion belongs to the famous American economist, the Nobel Prize laureate T. Schultz, and the basic theoretical model was developed by G. Becker (also the Nobel Prize laureate) in his book "The human capital" (the first edition of 1964). This book became the basis for all future research in this area and has been recognized as a classic of modern economics.

The development of human capital theory tended to follow the neoclassical direction. In recent decades, the source for the neoclassical principle of optimizing behavior of individuals began to spread to different areas of non-market activities of man. Concepts and methods of economic analysis have been used for the study of such social phenomena and institutions as education, health, migration, marriage and family, crime, racial discrimination, and so on. Human capital theory can be regarded as one of the manifestations of this general trend, dubbed "economic imperialism".

Thus, at this historic stage of the formation of human capital concept, it has been proven that "it (human capital) is a form of capital, because it is a source of future earnings or future satisfactions, or both together. It is human, because it is part of the person" (Bowen, 1978, p. 362).

The productive qualities and the characteristics of workers were found as a particular form of capital, on the grounds that their development requires a significant investment of time and material resources, and that it, like physical capital, provide its owner with higher incomes. "In recent decades, the idea that capital consists of some physical assets has been undermined. A more comprehensive view was gradually approved in its place. According to this view, the capital is any asset, the physical or human, possessing ability to generate a flow of future income" (Schutz, 1975, p. 5).

In the modern theory in a human factor three basic elements are allocated:

1) human capital, which corresponds to the return on the capital;
2) natural ability, which corresponds to the rents on these abilities;
3) pure work.

All the elements together characterize the work in the conventional sense, but the first two characterize human capital. It should be noted that the concept of human capital is not identical to the concept of the labor force, but human capital is capitalized labor costs.

Formation of physical capital and human capital formation have certain the technical and economic similarities. Both concepts require the diversion of significant funds at the expense of current consumption, the level of economic development in the future depends on these concepts, and both types of investments give long productive effect.

Due to the theory of human capital, investment in human came to be regarded as a source of economic growth, not less important than the "normal" investments. T. Schutz, E. Denison, J. Kendrick and others made a quantitative assessment of the contribution of education to economic growth. It was found that during the 20th century, human capital accumulation outpaced the accumulation of physical capital. According to E. Denison's calculations, growth of per capita income in the United States during the postwar period was 15-30% due to a higher educational level of the workforce. An experience of such countries as Hong Kong, Singapore, South Korea confirms that the rate on investment into education and health care is the most effective strategy of economic development.

The kernel of the theory of the human capital is investment treatment of expenses for high-quality improvement of human potential (development of abilities and the formation of the requirements of the population), and also the characteristic of a contribution of these investments in economic growth.

D. Schutz substantiated the following thesis, "If education affects the production, which is important for the economy, therefore, it is a form of capital" (Schutz 1973, p. 50), and as "a form of capital is education, it is called 'human' because it becomes part of the person, and the capital is due to the fact that the future is a source of satisfaction or future earnings, or both together" (Schutz 1979, p. 13). G. Becker examined this concept in a broad sense, "Human capital is formed at the expense of investment in human, among which there are education, training in the workplace, health care costs, migration and search for information on prices and incomes" (Becker, 1962, p. 14).

Y. Ben-Porath defines human capital as the "fund, whose function is a production of labor services in conventional units, and which in its quality is similar to any car as the representative of the material capital" (Ben-Porath, 1967, p. 352). Edwin J. Dolan under the Human Capital understands "the capital in the form of intelligence obtained through formal training or education, or through practical experience" (Dolan 1992). S. Fischer, giving his definition of this category, relates to capital's ability to generate income, as well as innate abilities, education and the acquired qualification.

Summing up the results of our historiographic analysis, we can give the most complete definition to the category "human capital". Thus, human capital is a category representing set of the creative abilities, knowledge, skills, personal qualities and individual motivations which are on their property, accumulated due to investments and used in the national economy during the certain period for the purpose of obtaining future income and promoting growth of national wealth.

Increased knowledge of modern production capacity leads to a change in the concept of the economy in the development of labor to the opposite, highlights the creative potential of man, his professionalism and erudition, the ability to be "excessive", more than those roles and functions in which human could be replaced and appears only as "the next mortal carrier of the immortal social beginning". There is a formation of the new priorities of the personality and society, meaning the transition from maximizing material consumption to "quality of life": humanistic, ecological and in general to "not monetary" criteria of life.

2. The Experimental Part

In summary, we can say that the human capital and its conditions may be a criterion for evaluation of the quality and tends of processes which can be observed in the society. In this analysis the evaluation of the development of the human capital should be examined as a complex process. **On the one hand, it is the formation of human capabilities** (health protection, acquisition of knowledge, improvement of professional skills), and on the other hand – **it is the realization of acquired skills** for industrial purposes or for recreation, cultural and political activities. Thus, human development integrates the concept of "human capital" and "human resources".

As a criterion for evaluation of the development of the country and regions it can be used not only the economic indicators. During this research we refer to the experience of the global development of the countries which do not have natural resources and the countries with destroyed material base during the World War II (Taiwan, South Korea, Japan, and Germany). The strategy of socio-economic development of these countries was based on calculations per person. This strategy was a cause of high economic growth and high degree of its socialization.

The human development is often examined from the perspective of scientific and technological progress, the education and income component, which undoubtedly affects the healthy and safety life. However, nowadays there is a feeling of instability both in individual households and in the global socio-political system. Accordingly, the sustainable progress in the human development and the formation of human vitality depends not only on the empowerment of choice and the ability of receiving the education, being healthy, achieving a

reasonable standard of living. It also depends on how reliable are these achievements and whether there are sufficient conditions for sustainable human development.

According to the modern trends it should be noted that in the global scientific literature there is a great number of ideas and concepts that aim to form the integral presentation of the individual which, on the one hand, could be worked out analytically and, therefore, be used strictly enough, and on the other hand, could be operated completely. However, nowadays there is no one equal definition of the category of the human development, and with this connection the question of the integral indicator is relevant.

3. Methods

For the complex evaluation of the human capital, it is necessary to allocate a few basic key areas of human development:

1. Development of the human capacity for knowledge, education, achieving of high qualifications, the development of science and innovation progress in society.

2. Adaptation of social programs for various categories of the population that will help to maximize the human potential and use it effectively in the economic and social development.

3. Formation and realization of human potentials in the existing socio-economic and political conditions.

The logic of formation the system of informative indicators for evaluation of the human capital is summarized to the following stages.

Firstly, for classification of statistical indicators, it was constructed the general scheme. Secondly, this general scheme is filled with concrete indicators which can help to evaluate the level of human potential.

The selection of indicators was carried out with the following requirements:

−   representativeness, according to which it must be submitted in this list of the main indicators of this category;

−   information availability, it means that the indicators should be available for its statistical registration, moreover, that it should be included in the range of official statistics;

−   reliability, it means that the using statistics should adequately reflect the conditions of the analyzing aspects of human potential.

The analysis of the available information and the selected key areas of human development allowed us to form the priori selection of indicators. Selecting the number of members of a limited set of indicators was carried out in each case based on a combination of theoretical and substantive considerations.

During the next stage of analysis, in order to ensure the comparability of basic statistical information, each indicator, which is included in the integral index, is resulted to a common scale of measurement, i.e. normalized, and the particular choice of a unified transformation factor depends of the type of this analyzed indicator:

−   if the initial indicator x_i is connected with analyzed integral attribute (development of the human potential) by monotonically-increasing dependence (1):

$$\tilde{x} = \frac{x_i - x_{min}}{x_{max} - x_{min}} , \tag{1}$$

where, x_{min} and x_{max} – the smallest and the largest values of the initial indicator.

−   if the initial indicator x_i is connected with the analyzed integral attribute by monotonically-decreasing dependence (2):

$$\tilde{x} = \frac{x_{max} - x_i}{x_{max} - x_{min}} , \tag{2}$$

Thus, the linear transformations allowed us to reduce the range of possible values to the interval [0,1], and zero indicates the poor quality of this attribute, and one indicates the highest.
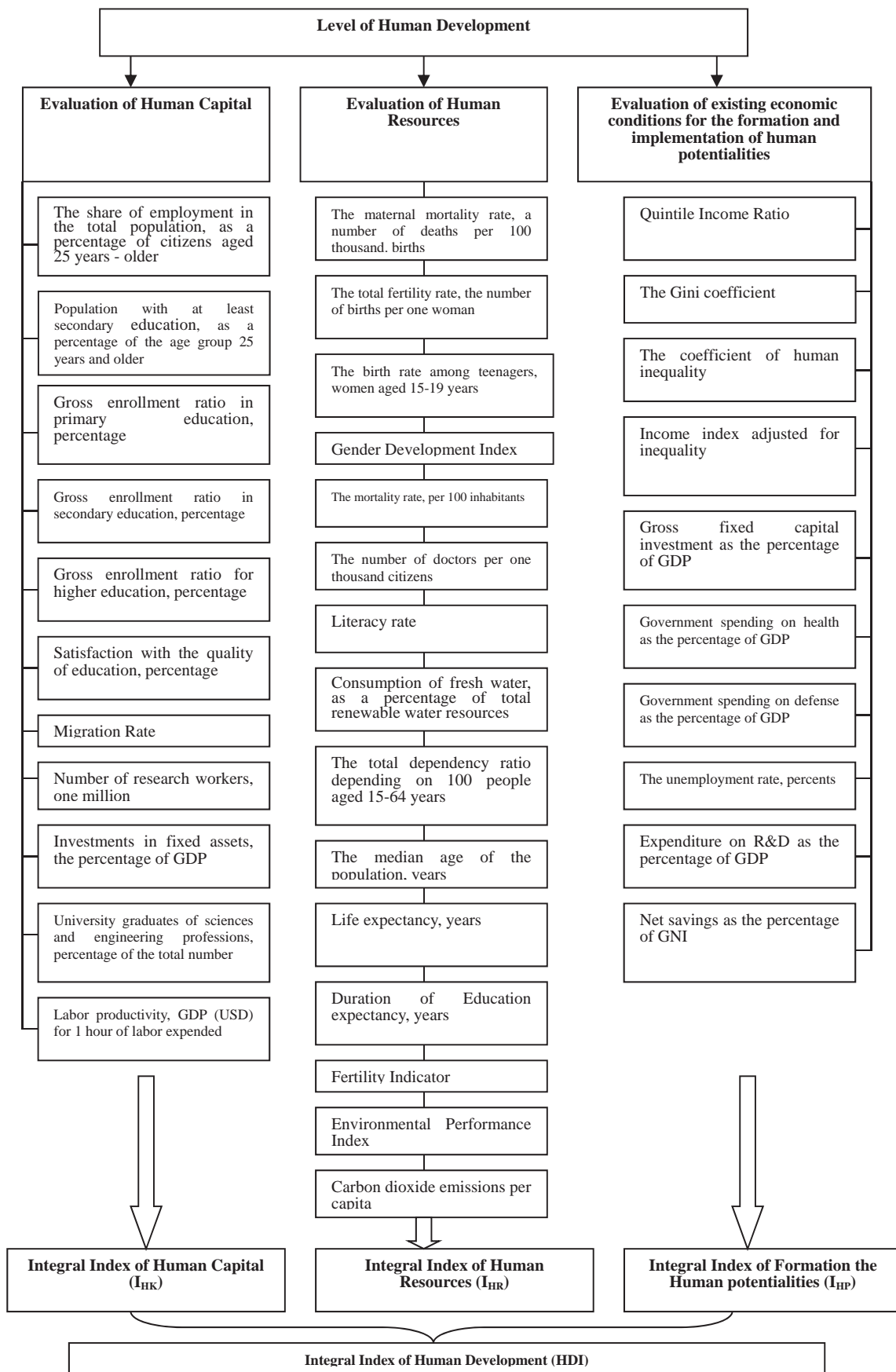
Figure 1. Methodology of the integrated evaluation of the level of human development

During the next stage, we calculated the integral indicator for the each block of indicators (in vertical) (3).

$$I_i = \sum_{i=1}^{n} w_i \tilde{x}_i ,$$

(3)

where, I_i – integral index, which calculated for every block of indicators;

w_i (i=1, 2,…….,n) – weighting coefficient of i-index in the integral index, which represents the proportion of explained variance characteristic in total variance;

$\tilde{x}_i$ – the normalized value of i-index which included in the corresponding block;

n – the number of original normalized indicators included in the integral index.

Thus, as a result of transformations we obtain three integral indexes: IHK – Integral Index of Human Capital; IHR – Integral Index of Human Resources; IHP – Integral Index of formation of Human Potentialities.

As the integrated evaluation (horizontal) it is advisable to calculate the integral indicator of the human development in the aggregate determinants (Human Development Index (HDI)), which is a complex of evaluation of the partial criteria of this concept and it is designed for comparative analysis (in the categories of time and space).

In conclusion, integral index of human development HDI is calculated as the arithmetic mean of the integral indexes (human capital, human resources and potentialities of human formation) (4).

$$HDI = \sum_{i=1}^{n} f_i I_i ,$$

(4)

where, f_i – the weight of corresponding integral indexes HDI: weight proportion of human capital is 1/3, human resources – 1/3, formation of human potentialities - 1/3; I_i – integral indexes: I_{HK} – Integral Index of Human Capital; I_{HR} – Integral Index of Human Resources; I_{HP} – Integral Index of formation of Human Potentialities.

4. Results

Based on the above mentioned methodology it was calculated the integral characteristics of the largest countries in the Asia-Pacific Region and the EU. The results of calculations are presented below (Table 1).

Table 1. Integral indicators characterizing human development at the end of 2013

| Country	I_{HK}	I_{HR}	I_{HP}	HDI	Rang
Australia	0,669	0,718	0,517	0,634	4
Great Britain	0,576	0,698	0,451	0,575	9
Germany	0,661	0,703	0,555	0,640	3
Hong Kong	0,498	0,692	0,366	0,519	10
India	0,242	0,401	0,312	0,318	16
Canada	0,614	0,676	0,484	0,591	8
China	0,393	0,595	0,480	0,489	12
Mexico	0,320	0,672	0,324	0,439	14
Mongolia	0,428	0,642	0,373	0,481	13
Norway	0,720	0,750	0,457	0,642	2
Republic of Korea	0,638	0,666	0,586	0,630	5
Russia	0,491	0,684	0,365	0,514	11
Singapore	0,643	0,687	0,539	0,623	6
USA	0,668	0,684	0,577	0,643	1
Thailand	0,325	0,603	0,304	0,411	15
Japan	0,579	0,654	0,550	0,595	7

Source: calculations of the authors

We made a comparison of the author's method for calculating the integral index of human development with the method suggested by Megnadom Desai (Lord Desai) and Amartya Sen. Human Development Index (HDI UN) was designed for comparing of the countries and was published in the annual UN report of Development Program since 1990. It was displayed the integral index of human development (HDI) and Human Development

Index, calculated by the common method that published in the annual UN Report of Human Development (HDI UN) (Figure 2).

As we can see from Figure 2, during the comparison of two methods of calculating the human development index, it was not observed any sharp deviations in indicators of the countries which participating in this analysis. At the same time, the presented calculations indicate that the common patterns are preserved. The meaning of Human Development Index (HDI), which was calculated according to the author's method, takes the values lower than Human Development Index (HDI UN). It is connected with the fact that in the calculation process of Human Development Index (HDI) it is included simultaneously 37 indicators measuring human development from three areas: human capital, human resources and conditions for the formation and implementation of human potentials. It allows us to make fully and fairly accurately evaluation of the level of human development in order to create concepts and programs for socio-economic development of the country.

It was shown the distribution of the countries in terms of human development which presented the integral characteristics (Table 2). The leading positions in terms of human development are occupied by the USA, Norway, Germany, Australia and the Republic of Korea. These countries have all necessary conditions for the formation, development and implementation of human abilities.
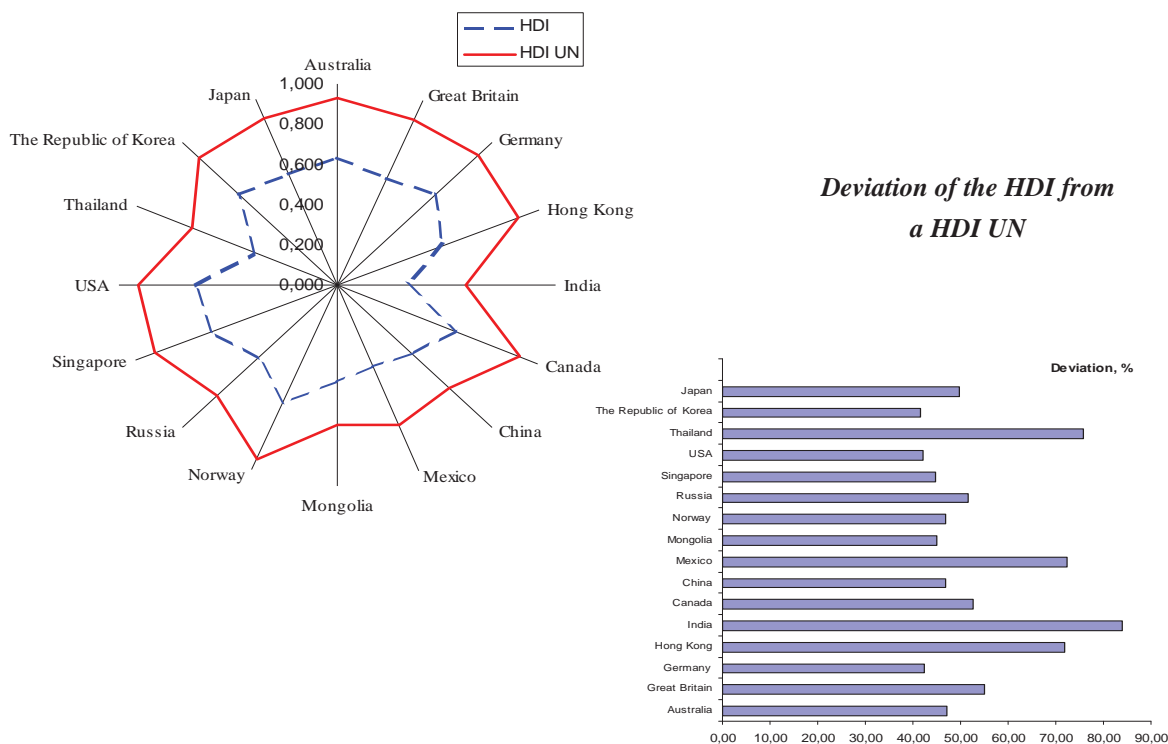
Source: calculations of the authors

Figure 2. Integral human development index, calculated by the author's method, and the human development index, calculated by the method of the United Nations, 2013

For comparison of two selections which obtained in the process of calculating of Human Development Index for classical method and author's method, we use nonparametric criteria. Firstly, we determined whether this distribution distinguish of normal. During our analysis we used the Kolmogorov-Smirnov test, and examined the distribution of the values of variables and HDI UN and HDI for the correspondents of the normal distribution (Table 2).

Thus, the line of Kolmogorov-Smirnov Z contains the z-score, which is equal to the significance level for HDI 0,699, for HDI UN 0,064 (last line). It means that the distribution of the value of the index HDI and the index HDI UN is not statistically different from normal.

In order to compare two indexes which measuring HDI UN, calculated according to the classical method of the UN, and the integral index of HDI, calculated according to the author's method, we use Wilcoxon test. This

criterion is based on calculation of the absolute differences between the pairs of values with subsequent ranking, and then the average value of calculated ranks for positive and negative differences (changes). The significance level is calculated on the basis of the standardized value. The result of applying Wilcoxon test is shown below (Table 3).

Table 2. One-Sample Kolmogorov-Smirnov Test

NPar Tests		HDI	HDI UN
N		16	16
Normal Parameters	Mean	0,546	0,833
	Std. Deviation	0,098	0,107
Most Extreme Differences	Absolute	0,177	0,328
	Positive	0,163	0,149
	Negative	-0,177	-0,328
Kolmogorov-Smirnov Z		0,707	1,312
Asymp. Sig. (2-tailed)		0,699	0,064

Source: calculations of the authors

Table 3. Two-Related Samples Wilcoxon Test

Ranks	N	Mean Rank	Sum of Ranks
Negative Ranks (HDI UN<HDI)	0	0	0
Positive Ranks (HDI UN>HDI)	16	8,50	136,00
Ties (HDI UN=HDI)	0	-	-
Total	16	-	-
Test Statistics Z	-3,518	-	-
Asymp. Sig. (2-tailed)	0,000	-	-

Source: calculations of the authors

The visual analysis of the initial data suggests that the values of HDI UN exceed the value of HDI. It demonstrates the value of the criteria of test statistic which equal to z = -3,518, at a significance level of p = 0,000. It means that the difference between HDI and HDI UN recognized statistically significant.

During this analysis we reviewed the descriptive statistics for the characteristics of HDI UN and HDI (Table 4).

Table 4. Descriptive Statistics HDI UN, HDI

Descriptive Statistics	HDI	HDI UN
Minimum	0,318	0,586
Maximum	0,643	0,944
Mean	0,546	0,833
Std. deviation	0,025	0,027
S.E. Mean	0,098	0,107
Variance	0,010	0,011
Skewness	-0,942	-1,012
Kurtosis	0,193	-0,011
K_{VAR}	5,46	7,94

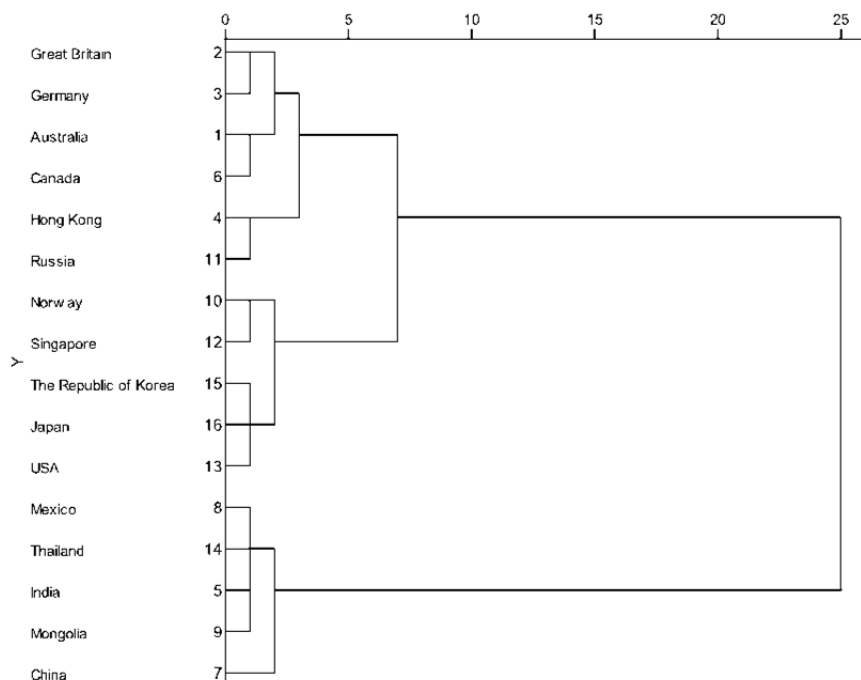*Source: calculations of the authors*

These results of descriptive statistics indicated that the considered indexes are different from each other. We concluded that according to the more quality points for descriptive characteristics have HDI, which was calculated by the author's method, as indicated by the indicators of asymmetry, errors and coefficient of variation.

*The main feature of the author's method for calculating H*uman Development Index (HDI) of the common technique (HDI UN) is that experimental calculations, according to the authors' opinion, can give a fairly complete view of* the *human development from the perspective of three interrelated characteristics*: *human*

capital, human *resources and* evaluation of *the conditions for the formation and implementation of human abilities. The results of calculations* according to *the standard technique are overstated because of a limited set of indicators which used in the calculation of Human Development Index and, accordingly,* it *cannot* completely *appreciate all the positive and negative trends of the certain area.*

For more detailed research of the human development of the researching countries, the authors considered to allocate the homogeneous groups of countries by the indicators included in each integral characteristic.

We distinguished some homogeneous clusters according to the indicators which characterizing the human capital. Based on this scheme, the authors implemented a multi-dimensional grouping of countries, which was carried out using the program SPSS Version 14.0 for hierarchical scheme by Ward`s method, by the criterion of association, which is the metric of the city (City-block (Manhattan) distances) (Figure 3).

Source: calculations of the authors

Figure 3. Dendogramma of countries' distribution according to the indicators characterizing the human capital

Thus, it was examined that the countries were divided as follows (Figure 3). The countries, such as the United Kingdom, Germany, Australia, Canada, Hong Kong and Russia, were included in the cluster A_{HK}. A special feature of this cluster is the fact that these countries have the population with secondary education. This group has the high rates of population with the secondary education. The interesting feature of this group is that it has the largest share of college graduates of science and engineering specialties.

The cluster B_{HK} included Norway, Singapore, South Korea and the United States. This group in conditions of human capital differs from the others that it is focused more qualified staff. The countries of this cluster are dominated by people with higher education. The number of researchers is mainly due to Norway, Japan and Singapore, the number of researchers is the largest in the cluster. Notable, that in this group there is a migration growth in these countries, which also affects the level of labor productivity.

The cluster C_{HK} included Mexico, Thailand, India, Mongolia and China. These countries have the highest proportion of the employed population. It was recorded the highest coverage of primary education. A feature of this cluster is the largest amount of investment in capital assets, mainly it is China and Mongolia.

With the usage of the authors' methodology it was implemented the grouping of countries according to the indicators describing the development of human resources (Figure 4).

In the cluster A_{HR} it was included Germany, Japan, Australia, Canada, Norway and the United Kingdom (Figure 4). A feature of this cluster is the high level of literacy. This group of countries has the highest life expectancy, which is about 81, however, it was also marked the highest mortality rates (except Australia). In this case, the

number of doctors per 1000 of citizens in this group is predominant in comparison with other clusters. It is observed that this cluster has the most senior population, the median age is 41. As a consequence, the countries of this group have the high demographic pressure on the working-age population. If we say about the indicators of environmental sustainability, it is observed the highest carbon dioxide emissions, but it is noted the favorable trend of the index of environmental achievements.
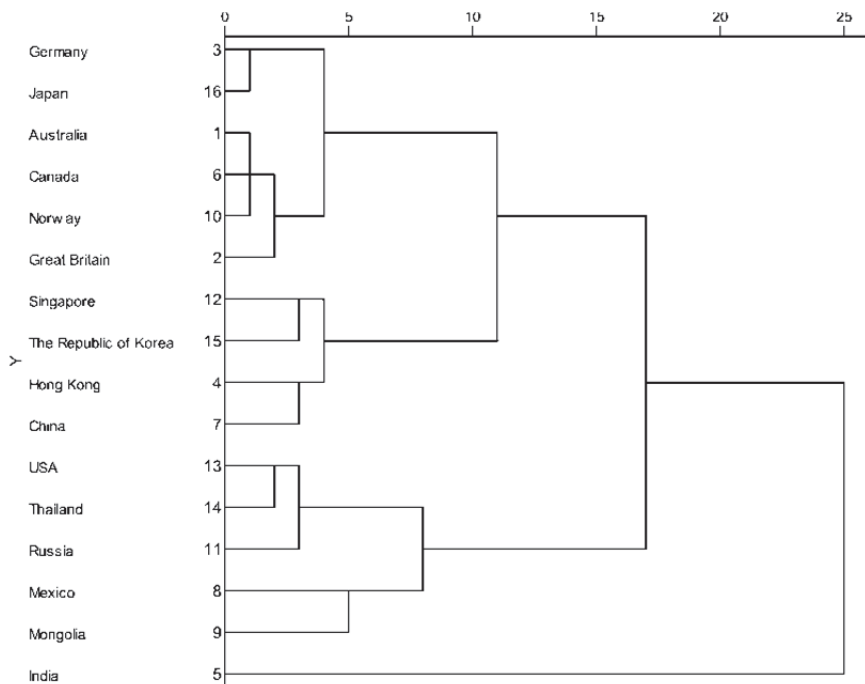
Source: calculations of the authors

Figure 4. Dendogramma of countries' distribution according to the indicators characterizing the human recourses

In the cluster group B_{HR} it was included Singapore, South Korea, Hong Kong and China. This cluster is different from the others by the points that it is marked by low values of mortality. However, despite of the positive trend of the low level of mortality in this group it was the low values of the coefficient of birth rates and fertility rates. In the countries of the cluster B_{HR}, it was marked the low rates of demographic burden on the working population. A feature of this cluster is the fact that there has the highest consumption of fresh water (as a percentage of total renewable water resources).

The cluster C_{HR} included the United States, Thailand, Russia, Mexico, Mongolia and India. This cluster has the high values of fertility. However, despite of the favorable trend in this cluster it was marked the high levels of mortality, including maternal, mainly in Mexico, Mongolia and India. The level of literacy in this group is at a low level in comparison of the previous cluster. It was examined that in this group has a young population, its average age is 31.

The grouping of countries according to the indicators characterizing the conditions for the formation and realization of human potentials was presented below (Figure 5).

As we can see from Figure 5, the countries can be divided into two enlarged clusters.
The cluster A_{HP} included Australia, Canada, United Kingdom, Hong Kong, Russia, the USA, Germany, Japan and Norway. A feature of this cluster is the high value of the index of income, adjusted for inequality. This group of countries is dominated by government spending on health, education and science, in comparison with a cluster of B_{HP}.

The cluster of B_{HP} included China, Mongolia, Mexico, Thailand, India, the Republic of Korea and Singapore. These countries in this group are characterized by high differentiation of the population by income, mainly in Thailand, Mexico, India and China. In this cluster, there are high volumes of fixed capital (the largest share of China and Mongolia), as well as high net savings, mainly in China and Singapore.
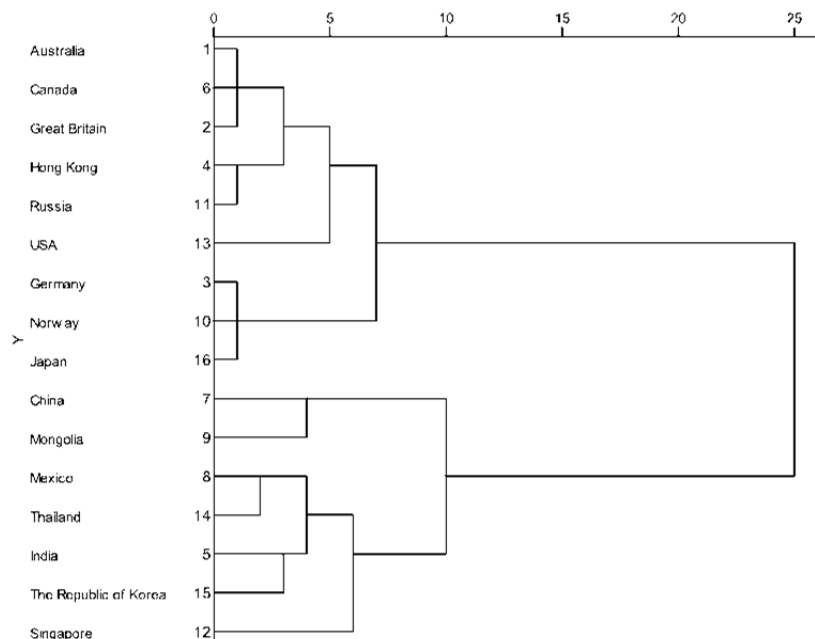
Source: calculations of the authors

Figure 5. Dendogramma of countries' distribution according to the indicators characterizing the economic conditions for formation and realization of human potentials

5. Conclusions

Thus, we can make the following conclusions. The experimental evaluations of the level of human development according to the author's method due to the construction of integral characteristics accumulates indicators of human capital, human resources and indicators to assess the conditions of formation of human potentials, given a complete picture of human development in terms of cross-country comparisons. Thus, the present research of human development gave us the opportunity for more qualitatively understanding of the category of human development as the main wealth of the country, as well as generates some approaches to the definition of administrative decisions in social and economic policy.

The problem of human development should be formulated as a fundamental task of modernizing the state complex of social sectors: education, health, culture and science. Firstly, the social programs and projects should be directed at improving the starting opportunities of citizens, and besides the area of residence; the formation of modern human infrastructure, i.e. human potential to be a part of the modern processes. The results of socio-economic development of the country, and the level and quality of life depend of the main cause of how to use and develop the human potential in the country.

Thus, the presented technique of this research examined the dynamics of socio-economic systems, causing the level of human development, it allows us to develop strategies and social development programs aimed at human development, its potential as the major wealth of the state, allocate resources to strategically important priorities in the field of human development of the country.

Acknowledgment

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Evaluation of Russian Foreign Trade Activities from 2000 to 2013

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Abstract

The current state of Russian economy determines the necessity of evaluation of foreign trade policy, which is a crucial component of industrial regulation. This formed the purpose of the research – the identifying of the opportunities for intensification of Russia's participation in the regional integration process through a comparative analysis of the development of the foreign trade relations of the Russian regions in the period from 2000 to the present time. Analysis of interregional cooperation of Russian regions showed that there is a trade deficit in most regions. In most regions there is a focus on the export of resources and irrational structure of imports, which promotes the preservation of the inertial scenario of expansion of foreign economic activity of the regions and the country as a whole. The growth of exports is implementedat higher ratescompared to the growth of imports. Consequently, Russian foreign trade, which had a stable export orientation previously, has become even more export-oriented. Russian Federation despite the status of a major industrial power has actually become a mono-cultural exporter. With such high concentration of exports in a small group of commodities and materials to Russia the scope of maneuver into the foreign economic relations significantly narrows and its vulnerability against the negative changes in the world conjuncture greatly increases. In addition, high deterioration of external conjuncture of the energy export was a cause of a number of serious systemic risks for domestic economy and finally may be a cause of deep economic crisis.

Keywords: foreign trade activity, export, import, trade balance, foreign economic relations, commodity composition, market conjuncture

1. Introduction

Modern methodology of governmental regulation of foreign trade constituted on the basic economic postulates of classical political economy and international trade theory J. Keynes (2007), J. Mill (2007), D. Ricardo (2007), A. Smith (2007) and others.

Recent trends of socio-economic development of Russia, from the aspects of efficiency of foreign policy, were investigated by Russian researchers: N. Obuhov (2011), Sh. Satimov (2010), P. Taranov (2000), V. Shumilov, (2006) and others.

The relationship of the integration processes and foreign trade regulation of the subjects of international relations from the aspect of trade and economic consequences for the national economy is investigated by well-known representatives of the classical theories of international economic integration: M. Allais, (1998), R. Johns, (2000), P. Krugman (2004), G. Myrdal (1958), P. Samuelson (2010) and others.

The research of conceptual and methodological development of the customs union as an isolated individual-specific model of international economic integration was conducted by the founder of the theory of customs unions: B. *Balassa* (2004), F. List (2005), J. Mid (2000) and others.

Analysis of macroeconomic efficiency of participation of Russia in the integration processes, and the integration of foreign trade within the customs union, in particular, are devoted the researches of scholars such as: S. Borisova (2009), T. Voronina (2005), V. Obolenskii (2011), N. Slyusar (2009).

However, some issues which related to the economic impact of supranational integration mechanism of regulation of foreign trade activities of Russia on the structural and economic performance of foreign trade, were

hardly investigated in the scientific and economic literature, the cause of it is that the research in this area often have general features.

Identifying the opportunities for enhancing of Russian participation in regional integration processes as a factor to increase country's international competitiveness involves a comparative analysis of foreign trade relations development of Russian regions in the period from 2000 to the present time in the context of intensification the presence of Russian economy in the Pacific Rim industry markets. For this purpose, we made a general analysis of Russian regions' foreign trade activity and the analysis of the commodity structure of their import and export from 2000 to 2013.

This is determined by an objective necessity to assess practically the opportunities of Russian economy, in this case, by foreign trade relations for a reasonable development of different directions of structural transformation of Russian economy through the integration in the Pacific Rim industry markets.

Foreign trade policy is an important component of an industry regulation. Import-export flows, dumping, tariffs, grant-in-aids, and quotas have a significant impact on markets development inland and a formation of their structure.

The trends of country foreign relations in modern terms are largely determined by possible scenarios of its development foreign economic relations. This is especially important in the current economic situation that remains insufficiently stable despite the conspicuous efforts of the government. The value of foreign trade for the country economy steadily increases. One of the main factors in increasing the region competitiveness is a balanced foreign economic policy.

The expansion of export capacity improves the economic situation of many regions. However, due to the structural features of their economy, the foreign economic activity greatly varies by volumes, the exports structure, and the involvement into the foreign economic relations in general.

2. Methods

Extensive research involves the use of different research methods, such as abstraction, theoretical modeling, and logical-analytical method. With the help of these methods has been identified special position occupied by foreign trade activities in the socio-economic field.

The methodological basis of the study are also traditional methods specific to the study of international relations of objects, such as the method of comparative analysis, systematic method, which shows the development of relations and cooperation between the two countries, as defined by evolving system, emphasizing its basic elements, cost-effective way, as well as the statistical method.

During the development of a problem and a solution of its main objectives were used a combination of an analytical and heuristic potential of various private methods of studying real economic phenomena and trends that characterize a spatial development of national economy of a country and its regions:economic-statistical grouping, comparative and situational analysis.

These methods give a possibility to determine the range of the most pressing issues currently facing against the foreign economic activity, to trace the genesis of these problems, to identify their theoretical and economic bases.

3. Results

General analysis of foreign trade activities of the Russian regions from 2000 to 2013 showed that the volumes and commodity structure of the country is determined by external policies and priorities for economic development. The study showed that the decreasing of a trade balance for an analyzed period is a typical feature of most Russian regions (see Table 1).

Table 1. Russian trade balance, 2000-2013 (million U.S. dollars)

The region	Trade balance			
	2000	2005	2010	2013
Central FD	16714.60	46275.40	29902.20	57650.43
Belgorod Region	-40.40	-501.10	-1496.90	-943.20
Bryansk Region	-50.30	-416.60	-685.70	-1216.74
Vladimir Region	-46.20	-64.30	-518.60	-916.92
Voronezh Region	14.20	232.70	83.50	422.56
Ivanovo Region	-132.70	-104.40	-427.90	-577.99
Kaluga Region	-42.90	-267.90	-5666.50	-6957.13
Kostroma Region	50.50	52.40	44.50	27.48

Kursk Region	-68.80	87.90	136.10	58.59
Lipetsk Region	892.60	2259.40	2648.60	2841.50
Moscow Region	-29.50	-4419.10	-17465.60	-24670.37
Orel Region	-38.10	-61.10	-776.70	-507.31
Ryazan Region	723.50	-20.00	-153.00	-346.30
Smolensk Region	305.00	394.90	150.80	55.17
Tambov Region	-12.60	-20.00	-304.60	-259.73
Tver Region	-69.20	-84.20	-534.10	-847.64
Tula Region	511.60	1753.80	1608.70	2294.66
Yaroslavl Region	677.60	156.60	-48.50	752.86
Moscow	14070.30	47296.60	53308.10	88440.93
Northwestern FD	5338.60	1116.50	-2966.80	-7637.44
Republic of Karelia	-926.70	815.20	1187.20	837.06
Komi Republic	983.50	472.10	800.10	3195.01
Arkhangelsk Region	665.60	905.60	5309.60	2014.71
Nenets Autonomous Area	-	-	-	-0.68
Vologda Region	1391.40	2699.90	3256.60	3176.24
Kaliningrad Region	-7246.10	-2937.00	-7337.20	-10629.75
Leningrad Region	1638.60	2842.70	5366.50	8470.08
Murmansk Region	462.30	980.30	1576.70	1464.33
Novgorod Region	207.20	463.90	581.60	549.93
Pskov Region	30.60	74.70	-1009.60	-927.49
St. Petersburg	-54.20	-5201.10	-12698.50	-15786.88
Southern FD	1570.80	1474.00	660.80	6505.72
Republic of Adygeya	-5.40	-4.50	-62.60	-60.12
Republic of Kalmykia	148.80	75.00	-39.60	-34.18
Krasnodar Territory	424.00	19.30	-161.50	2232.88
Astrakhan Region	196.70	94.90	70.50	345.58
Volgograd Region	617.10	1520.80	1611.10	3011.48
Rostov Region	189.60	-231.50	-757.10	1010.09
North Caucasian FD	259.80	930.10	-310.10	-892.53
Republic of Daghestan	109.40	-58.20	-281.20	-669.60
Republic of Ingushetia	-19.00	476.50	-10.70	-14.73
Kabardino-Balkarian Republic	-5.20	35.10	-46.50	-38.53
Karachayevo-Circassian Republic	0.60	4.60	-88.80	-437.47
Republic of North Ossetia – Alania	-0.30	8.70	0.90	-21.55
Chechen Republic	-	-	-1.90	-25.24
Stavropol Territory	174.30	463.40	118.10	314.59
Volga FD	13052.70	26166.00	35990.10	45033.98
Republic of Bashkortostan	2426.60	5976.70	8737.30	12426.00
Republic of Mari El	20.00	23.10	349.80	299.28
Republic of Mordovia	-6.10	-27.90	-45.40	-62.61
Republic of Tatarstan	2627.10	8398.00	13302.20	16009.56
Udmurtian Republic	882.00	201.10	-18.00	591.87
Chuvash Republic	6.30	95.90	64.70	-160.89
Perm Territory	2076.20	2660.20	3677.20	664.29
Kirov Region	356.20	342.70	507.30	1609.93
Nizhny Novgorod Region	540.60	659.50	-11.50	2021.02
Orenburg Region	731.50	1281.20	1875.80	-123.74
Penza Region	19.60	-11.20	-29.70	5904.28
Samara Region	2888.40	5213.90	6303.60	4605.63
Saratov Region	364.10	1228.00	1199.80	1514.58
Ulyanovsk Region	120.20	124.90	76.80	-265.22
Ural FD	18605.20	37829.40	51005.90	50913.27
Kurgan Region	115.80	23.70	47.80	299.98
Sverdlovsk Region	2200.90	4423.30	5617.40	4215.50
Tyumen Region including:	8648.70	30031.20	43110.60	20468.40
Khanty-Mansi Autonomous Area – Yugra	-	11181.00	15080.10	22384.53
Yamal-Nenets Autonomous Area	-	401.80	257.00	1960.86
Chelyabinsk Region	1274.10	3351.20	2230.10	1584.00
Siberian FD	9124.20	21652.70	30340.30	26807.80
Republic of Altai	-16.70	-70.50	14.30	16.85
Republic of Buryatia	86.80	186.30	287.80	1099.35
Republic of Tuva	21.40	-	-3.20	0.18
Republic of Khakassia	192.80	377.50	1279.50	1231.05
Altai Territory	92.60	538.80	87.70	206.47
Trans-Baikal Territory	43.70	80.90	-249.40	-345.17
Krasnoyarsk Territory	2983.30	5567.70	8643.10	5872.30
Irkutsk Region	2404.90	2470.10	3919.50	6986.36
Kemerovo Region	1685.70	4208.80	9668.50	11639.06
Novosibirsk Region	201.60	346.10	-390.20	-563.06
Omsk Region	760.30	6890.20	6487.70	249.05
Tomsk Region	668.30	1058.00	595.20	415.38
Far Eastern FD	2962.40	3296.40	10906.00	15903.54

Republic of Sakha (Yakutia)	1050.50	2081.20	3145.80	4543.52
Kamchatka Territory	92.90	108.30	565.00	525.74
Primorye Territory	283.10	-1158.90	-3629.30	-5229.69
Khabarovsk Territory	1186.00	2247.10	286.20	583.20
Amur Region	41.30	50.80	-125.70	-25.79
Magadan Region	-37.50	-60.50	-21.00	-155.34
Sakhalin Region	340.20	-1424.20	10791.20	15809.47
Jewish Autonomous Region	7.50	-0.70	-29.00	-66.30
Chukotka Autonomous Area	-1.60	1453.40	-77.20	-81.28

Retrieved from: (Russian Federal State Statistics Service, 2014; The Ministry of Economic Development, 2014)

Apparently, the negative balance, i.e. trade deficit, is observed in the majority of the regions.

The trade deficit is not always a negative factor. For instance, during the development of country's economy the growth of imports may meet the demand for goods and services, or cause an increase in price competition. However, in some countries, as a rule, prefer to increase exports, based on the creation of domestic jobs and stimulate demand for goods and services which produced domestically. In this situation, the trade deficit adversely affects the whole economy. In times of economic recession, the country has a particularly strong necessity to create surplus value. This usually happens because higher prices are necessary to pay for imports of the finished goods, but raw materials are exported at low prices.

Table 2 presents the analysis of foreign trade turnover in 2005-2013. Obviously, a gradual decline in growth of exports and imports is observed.

Table 2. The dynamics of a foreign trade turnover, %

Region	Export growth			Import growth			Foreign trade turnover growth		
	2005 (to 2000)	2010	2013	2005 (to 2000)	2010	2013	2005 (to 2000)	2010	2013
Central FD	198.94	67.81	47.67	222.67	163	37.44	206.66	100.38	43.07
Northwest FD	99.18	85.12	29.97	303.11	111.88	39.45	164.04	98.12	34.89
Southern FD	88.81	84.85	72.30	191.52	133.6	18.03	122.14	105.61	46.04
North Caucasian FD	149.11	-29.04	16.04	54.34	181.53	57.11	116.09	23.35	39.36
Volga FD	97.7	48.22	33.08	85.08	101.03	60.02	95.78	55.82	38.09
Ural FD	102.59	42.64	-1.49	95.9	116.57	-9.21	101.99	49.09	-2.47
Siberian FD	124.43	47.09	-9.01	73.28	84.97	1.85	115.87	52.18	-7.24
Far Eastern FD	146.06	108.12	50.72	741.92	36.41	57.66	238.86	80.37	52.75

In the recent years, the percentage of a foreign trade turnover in Russia's GDP has been reducing on the grounds of slow export diversification and insufficiently competitive positions of Russian manufacturing companies. The slowdown in export growth was due to a slow increase, and in some cases due to lower prices for the majority of exports of fuel and energy products. The import increasing was enhanced by a further expand of demand and rise in investment activity. By the way, until recently, imports increased due to appreciation of the real exchange rate. The reducing of a trade surplus occurred due to faster growth of imports over the export growth.

According to the data, the foreign trade activity in some regions is presented extremely uneven. The highest volume of exports observed in the Central (47.5%), Volga (13%), the Urals (12.8), and the North-West (10.2%) federal districts. Volga Federal District (5.8%) and Ural Federal District (3.2%), in turn, cede in this position to Northwestern Federal District (17.9%). In such circumstances, the federal districts acquire a significant role, which is to coordinate foreign economic activity in some regions, providing a common economic space of the country.

It is important to realize that the impact of foreign trade on the economy of each country does not appear directly but through the strengthening or weakening of the internal factors of economic growth. The value of foreign trade as an indirect factor of an economic growth depends on the overall strategy of this growth. Therefore, in terms of extensive growth, which is achieved by constant efficiency in production and is characterized by tendencies toward economic isolation, the importance of international relations is largely reduced. In this regard, economic growth is fully justified activities of internal factors, as well as through the system of foreign trade surplus supply of goods for export and purchase necessary goods that are not produced in the country.

In contrast to the extensive and intensive type of economic growth based on the increase in scale and quality to improve the culture of production factors, which include improving the means and objects of labor, improving workforce skills, strengthening organizational parameters of production, so that production growth is provided

mainly by social development countries. Everything that was mentioned claims the intensification of foreign trade relations as one of the most important conditions for its effective implementation.

The analysis of the import-export commodity composition of output by regions of Russian Federation from 2000 to 2013.

The analysis of interregional cooperation of Russian regions shows that most parts of the Russian Federation are characterized by resource orientation of export and irrational structure of import that contribute the conservation of the inertial scenario of foreign economic activity development of Russia and its regions. As a confirmation of this statement we propose to consider more thoroughly the structure of export and import by commodity groups of all Russian regions so far as an essential feature of participation certain industries in the international division of labor is a much higher unit weight of export of these sectors compared to others (see Table 3).

Table 3. The export-import commodity composition by Russian Federal Districts (FD) from 2000 to 2013, %

Region	Provisions		Fuel-energy products		Petro-chemical products	
	export	import	export	import	export	import
Central FD						
2000	19.855	54.892	35.362	45.219	16.735	53.390
2005	29.612	52.020	50.688	23.348	17.406	63.720
2010	22.731	48.059	47.169	13.671	22.390	68.421
2012	32.791	53.392	50.900	36.016	24.465	68.601
Northwest FD						
2000	13.265	24.841	5.803	1.765	11.777	10.262
2005	15.047	30.880	4.364	6.777	10.394	14.094
2010	12.022	27.922	7.588	2.511	11.030	11.654
2012	12.621	29.702	9.009	5.060	13.012	12.587
Southern FD						
2000 г.	25.006	5.136	2.991	2.835	5.074	4.117
2005 г.	34.912	6.341	1.421	2.390	5.713	2.995
2010 г.	21.818	7.014	1.998	10.832	1.877	2.461
2012 г.	27.774	7.444	3.254	7.332	2.194	2.550
Volga FD						
2000 г.	5.220	3.830	19.538	34.254	34.428	7.234
2005 г.	4.794	3.318	13.419	31.101	38.828	4.008
2010 г.	3.070	2.664	11.265	7.541	32.869	4.666
2012 г.	6.379	2.357	12.160	14.071	39.699	6.125
North Caucasian FD						
2010	1.285	1.079	0.015	0.928	2.301	0.275
2012	1.584	1.320	0.016	0.397	2.372	0.442
Ural FD						
2000	4.950	2.637	30.120	6.871	11.209	3.701
2005	2.203	1.489	20.163	21.283	10.387	2.758
2010	1.323	1.024	16.488	14.077	7.664	1.666
2012	1.332	1.028	16.445	18.613	9.921	1.930
Siberian FD						
2000	10.201	4.245	4.321	8.216	20.569	20.056
2005	4.417	3.094	6.870	12.484	16.944	10.133
2010	2.746	2.094	5.469	5.644	12.350	5.710
2012	3.145	1.538	3.573	13.799	7.939	5.405
Far Eastern FD						
2000	21.218	2.085	1.863	0.846	0.169	1.020
2005	8.841	2.539	3.076	2.553	0.307	2.184
2010	21.237	2.578	4.344	1.953	0.202	1.479
2012	13.965	2.768	4.610	3.481	0.328	1.922
Region	Timber industry (Wood)		Ferrous and non-ferrous metals		Machine engineering industry	
	export	import	export	import	export	import
Central FD						
2000	5.570	58.241	17.173	47.775	36.278	48.517
2005	7.059	59.353	17.165	41.130	36.281	54.994
2010	6.249	59.961	17.356	42.595	38.478	62.338
2012	8.610	56.975	21.945	51.818	42.982	63.752

Northwestern FD					
2000	41.665	21.197	14.365	9.438	17.930	15.825
2005	38.898	27.901	15.287	17.699	19.347	19.301
2010	31.237	22.988	11.755	17.093	11.603	15.760
2012	32.676	26.811	14.274	17.366	12.291	17.756
Southern FD					
2000	2.070	7.836	3.921	12.407	5.058	5.869
2005	2.116	4.250	4.939	16.342	5.301	3.546
2010	1.227	4.345	3.863	11.058	2.650	2.695
2012	1.223	5.160	4.357	9.791	2.751	2.146
Volga FD					
2000	10.576	5.675	5.020	16.927	19.024	11.803
2005	8.889	2.760	6.414	6.728	21.889	6.749
2010	8.551	3.414	5.435	6.499	15.130	5.539
2012	10.149	3.907	5.935	6.182	21.512	5.939
North Caucasian FD					
2010	0.087	0.266	0.148	0.536	0.388	0.462
2012	0.060	0.511	0.098	0.608	0.303	0.484
Ural FD					
2000	1.254	2.023	21.726	8.933	5.151	8.405
2005	2.366	2.412	25.070	4.815	5.711	3.534
2010	2.835	1.543	20.697	5.293	9.451	4.474
2012	2.841	1.380	23.315	5.728	10.400	3.083
Siberian FD					
2000	26.050	1.583	36.113	3.276	9.603	5.689
2005	27.361	0.952	28.754	2.079	8.781	3.200
2010	32.633	0.994	32.092	3.044	7.505	2.687
2012	34.629	1.205	28.771	3.613	6.978	3.201
Far Eastern FD					
2000	12.804	1.133	1.679	0.878	6.956	3.342
2005	11.770	1.920	2.342	11.105	2.630	8.006
2010	10.768	2.113	1.166	4.399	1.403	2.880
2012	9.705	3.028	1.377	3.967	2.596	3.365

Retrieved from: (Regions of Russia, 2014)

In 2000, the highest percentage of imports (58.24%) had timber (wood) in the Central Federal District; and besides the percentage in Moscow is 46.36% and 6.48 in Moscow region. The least share is to products of fuel-energy complex (45.22%; Moscow – 33.62%; Moscow Region – 10.26%). If we consider the export of the Central Federal District, we observe the highest percentages in the engineering industry (36.28%) and the energy sector (35.36%). Thus, the wood has the highest percentage of imports, but there are contrasting situations in exports. This sector occupies only 5.57% of the total exports of the Central District.

In 2005, as in 2000, imports of the Central Federal District prevailed petrochemical products (63.72%; Moscow - 50.7%, Moscow region - 8.17% of the total share of imports petro-chemical products in the Central Federal District). However, there were large variations in exports. While in 2000 in total exports dominated engineering industry, in 2005, the highest share occupied by the production of fuel and energy complex (50.69%; Moscow - 50.54%). Significant growth was 15.33%, while the machine-building industry has not increased its share in total exports. The smallest share of exports in 2000 took the timber industry (wood).

Minor changes were observed in the structure of exports and imports of the Central District in 2010, the sector occupied the same position in 2012. Growth in imports of petro-chemicals and chemical industry amounted to 4.88%.

Likewise, the percentage of fuel-energy products has increased to 36.02%. The growth of fuel-energy products (3.73%) is also observed in the export structure. Furthermore, the share of wood was 8.6% in export (growth to 2.35% compared to 2010).

After analyzing each sector separately, we make the following statements: import prevailed almost over all segments in 2000 but the ratio has begun to change to 2012, and we may observe the overall growth of export; in our opinion, the most imported sector is petro-chemical products, then – machine-engineering industry; the most exported sector is fuel-energy products than – machine-engineering industry.Therefore, by analyzing the data, we may highlight that machine-engineering industry is a significant sector in both export and import. The worth

noting is that the whole "picture" has not changed in the period from 2000 to 2012 in the Central FD: the export and import leaders have remained their positions increasing their share.

We consider the Northwestern FD. The largest share of imports was observed in St. Petersburg - 17.42%, Kaliningrad region - 4.15%, Leningrad region - 1.84%. A smaller share is in the products of fuel and energy complex (1.76% of the total share of imports). In exports, the largest share was forest - 41.67%. A small proportion as in the import content of exports of goods energy sector was 5.8%.

The situation in the foreign trade did not change a lot in 2005. The most and least significant sectors in import remained provisions (30.88%) and fuel-energy products (6.78%) respectively. The sectors remainin the same positions in export; only the share changed. Thus, timber was the most important sector; its share decreased by 2.77% compared to 2000. The lowest share was to fuel-energy products (4.36%).

The situation did not change a lot in 2010 and 2012 in the Northwestern FD. Thereby, the export-import positions of sectors have not changed in the period from 2000 to 2012. The most important sector in the Northwestern Federal District is the food and the timber, because these industries occupy a large part of the total imports of the Northwestern Federal District (more than 20%). The minor sector is the products of fuel-energy complex. The share of this sector has not exceeded 6.7% over entirely reviewed period. The indisputable leader of export is timber (more than 30% of the total exports in the reviewing period). The lowest share, as in import, is to the products of fuel-energy complex. The development of this industry has not kept up other sectors in the Northwestern FD.

We consider the Southern FD. In 2000 ferrous and non-ferrous metals prevailed in import (12.41%; Rostov Region – 6.14%, Krasnodar Territory – 4.35%).The lowest share was to fuel-energy products – 2.84%. In export operations provisions prevailed in 2000 with a share of 25.01%; the least share was to timber – 2.07%.

In 2005, as in 2000, ferrous and non-ferrous metals prevailed in import but with a share of 16.34% (the growth was 3.93% compared to 2000). The lowest percentage was to fuel-energy products – 2.39%. Provisions had the highest percentage (34.91%) in the export structure of the Southern FD. The least share was to fuel-energy products – 1.4%.

The sectors taken the major and minor position have not changed in 2010 and 2012.

Thus, throughout the period considered most imported industries include ferrous and nonferrous metals. In the first part of the reviewing period (2000 and 2005) the lowest share is to the products of the fuel-energy complex, and in the second part (2010 and 2012) – petro-chemical products. The most important sector in the export is provisions. The least share in export was to fuel-energy products in 2005, and timber – in other reviewing years.

We consider Volga FD. Fuel energy products prevailed in the Volga FD import in 2000 – 34.25%. The least share was to provisions (3.83%). The petro-chemical products clearly prevailed in the export with the share in 34.43%. The lowest share is taken by ferrous and non-ferrous metals – 5.02%.

Fuel-energy products prevailed in the import of Volga FD in 2005 with a share of 31.1%. The least percentage was to timber – 2.76%. In addition petro-chemical products also occupy the small part from the overall import. However, petro-chemical products prevailed in export with a share of 38.83%. The least share was to provisions (4.79%).

As in the previous years, products of the fuel-energy complex prevailed in the import of Volga FD in 2010 (7.54%). The share of the sector decreased by 23.56% compared to 2005. It is also worth to note the percentage of ferrous and non-ferrous metals in the import in 2010 (6.5%). The least share was to provisions – 2.66%. Import of timber took not a big part of the total import – 3.41%. As in the previous year products of the petro-chemical industry prevailed in the export in 2010 (32.87%). The least share was to provisions – 3.07%.

Products of fuel-energy complex prevailed in the import of Volga FD in 2012 with a share of 14.07%. The smallest part has remained for provisions. The percentage of petro-chemical products in the export structure has increased by 6.83% and reached 39.7%. The least share is to ferrous and non-ferrous metals (5.94%) in the export.

Thus, on the whole reviewing period the most imported industry has been the products of fuel-energy complex. Provision has taken the least percentage of the total import and only in 2005 the most "non-imported" industry has been timber. The most exported sector, undoubtedly, has been the production of the petro-chemical industry. The most "non- exported" industry has been ferrous and non-ferrous metals in 2000 and 2012, and provisions in 2005 and 2010.

We consider the North Caucasian FD. Provision prevailed in the import of the North Caucasian FD in 2010 with a share in 1.08%; the smallest part was to timber (0.27%). Provision also prevailed in the export (1.29%), and the least part was to the fuel-energy production (0.12%).

Provisions also prevail in the import of the North Caucasian FD in2012 with a share of 1.32%; the least percentage is to fuel-energy production (0.4%). Likewise, provision prevails in the export (1.58%), and fuel-energy production has the lowest percentage – 0.02%.

Therefore, both the most imported and exported industry is provision. Moreover, there was a not big change in the weighting factor in the period from 2010 to 2012. Thus, we may conclude that the North Caucasian FD is one of the least developed Russian districts in foreign trade relations.

We consider Ural FD. Ferrous and non-ferrous metals have the biggest part in the import structure of Ural FD in 2000 – 8.93%. Machine engineering industry with a share of 8.41% is worth to be highlighted in the import of the reviewing district. The smallest percentage is to timber (2.02%). The fuel-energy production prevails in the export (30.12%), and the least part is to timber (1.25%) in the export of Ural FD.

If we look through the following years, then we will detect that the positions of sectors did not change in 2005, 2010, and 2012. Thus, the most imported industry was fuel-energy production with a share of 21.28% in 2005, 14.07% in 2010, and 18.61% in 2012. The sector decreased its share by 7.21% in 2010$ the growth was 4.54% compared to 2010. The least part of the import was to provision with a share in 1.49 in 2005, 1.02% in 2010, and 1.03% in 2012. We may notice that the weight factor did not undergo the significant changes in the reviewing period. Ferrous and non-ferrous metals prevail in the export of Ural FD with a share in 25.07% in 2005, 20.7% in 2010, and 23.32% in 2012. The least percentage is to provision – 2.2% in 2005, 1.32% in 2010, and 1.33% in 2012. The worth noting that there was not significant changes in the weight factor of provision export in the period from 2005 to 2012.

Thus, the most imported sector is fuel-energy production (more than 14% of the total import of Ural FD from 2005), and the least imported sectors are timber and provision (the weight factor was less than 2.7% in the whole reviewing period from 2000 to 2012).The most exported industries are fuel-energy production and ferrous and non-ferrous metals (the sector of fuel-energy production was the leader only in 2000, the sector of ferrous and non-ferrous metals took leading position in other years). The least exported industries are provision and timber. In addition, in the provision sector we may highlight a stable decline of the weight factor in the total export of the Ural FD but the share of timber has begun to increase thought did not exceed 2.8% of the total export of the district.

We consider Siberian FD. The petro-chemical production prevailed in the import of Siberian FD in 2000 (20.06%). The least share was taken by timber - 1.68%. The sector of ferrous and non-ferrous metals was the most important industry in the export (36.11%). The significant share was also taken by petro-chemical production (20.6%). The least percentage was fuel-energy production (4.32%) in the export. Machine engineering industry also took not a significant share in the export of Siberian FD (9.6%).

The fuel-energy production prevailed in the import in 2005 with a share of 12.48%. The import of petro-chemical production was worth to be highlighted. Its share was 10.13%. The least percentage was to timber (0.95%). The sector of ferrous and non-ferrous metals prevailed in the export in 2005 (28.75). Timber also occupied a big share of export – 27.36%. The least part was taken by a provision with a share of 4.42%.

The production of the petro-chemical industry prevailed in the import of Siberian FD in 2010 (5.71%). It should be noted the import of fuel and energy sector with a share of 5.64%, which was reduced in comparison with 2005 by 54.2%. That sector was a leader in 2005. The decline of the sector's share was 6.84%. Wood occupies the smallest part of the total import share (32.63%). The sector of ferrous and non-ferrous metals was also an important industry with a share of 32.09%. The least part of the export of Siberian FD was occupied by provision (2.75%).

Fuel-energy production prevails in the import of Siberian FD in 2012 with a share of 13.8% (again this industry takes a leading position with the increase by 8.16%; the growth has been 144.68% compared to 2005). The least part is to timber – 1.21% (the growth of its share is 0.26% compared to 2005). Timber has the biggest part of the export in Siberian FD in 2012 (34.63%). The minors are provision (3.15%) and fuel-energy production (3.57%).

In the provision import we notice the following tendency: there is a decline in its share from 4.25% to 1.54% in a reviewing period from 2000 to 2012. The decrease is 2.71%. The decline of its share was 1.15% in 2005 and 1% in 2010. The decrease of share provision in export was observed from 2000 to 2010. We may note the growth of its share in the export of Siberian FD to 3.15%.

The peak of fuel-energy production import was 13.8% in 2012, and the lowest part was 5.64% in 2010. If we take into consideration the previous years, we will note that its share was 12.48% in 2005 and the sharp decline to 6.84%, in 2010. In the fuel-energy export the peak was 6.87% in 2005. Further, we may notice the decrease of its share in the export of Siberian FD to 3.57% in 2012.

We may highlight the decline of the petro-chemical production share in the import of Siberian FD by 14.65% from 2000 to 2012. We may observe the same tendency in the export.

Thus, the leading positions in import are taken by petro-chemical production and fuel-energy production in the period from 2000 to 2012. The less developed sector is timber. The leading position in export, on the contrary, is taken by timber. The less developed export sectors are provision and fuel-energy production (the last one is the leader in the import). Therefore, if we take into consideration the whole "picture" of export and import, we may note that Siberian FD has more an export component than an import one.

We consider Far Eastern FD. Machine-engineering industry prevail in the import of Far Eastern FD in 2000 (3.34%). The least parts of the import are taken by fuel-energy production (0.85%) and the sector of ferrous and non-ferrous metals (0.88%). Provision is a major of export in Far Eastern FD (21.22%). A significant part of the export is also taken by timber – 12.8%. The minor industries of export in Far Eastern FD are petrochemical production (0.17%) and the sector of ferrous and non-ferrous metals (1.68%).

The sector of ferrous and non-ferrous metals was the most important industry in the import of Far Eastern FD in 2005 – 11.11%. The high percentage was also taken by machine-engineering industry – 8.01%. The increase in the machine-engineering industry was 4.67% compared to 2000, and the growth was 139.82%. The least share was taken by timber (1.92%). Compared to 2000, there was not any industry that took less than 1% of import in 2005. Timber was the major in export in 2005 with a share of 11.77%. The growth of its share was declined by 1.03%. The high percentage was also taken by provision – 8.84%. The growth of its share fell by 12.38%. The least share was to petro-chemical production (0.31%).

The sector of ferrous and non-ferrous metals prevailed in the import of Far Eastern FD in 2010 (4.4%). We can note that the imports of represented sectors noticeably decreased. So, the import of the sector of ferrous and non-ferrous metals decreased by 6.71% compared to 2005. The minors of the import were petro-chemical production (1.48%) and fuel-energy production (1.95). The major in export was provision (21.24%) in 2010. The least developed sector in export of Far Eastern FD was fuel-energy production (0.2%).

The following industries were the leading in the import of Far Eastern FD in 2012: the sector of ferrous and non-ferrous metals (3.97%), fuel-energy production (3.48%), machine-engineering industry (33.7%), and timber (3.03%). The minor of the import was petro-chemical production (1.92%). The leading position in the export was taken by provision (13.97%) in the 2012; and the least share was to petro-chemical production (0.33%).

Therefore, the most imported industry of Far Eastern FD is the sector of ferrous and non-ferrous metals. However, the share of its sector does not take a significant part of the total import, so, all represented industries do not have a great value in the import of Far Eastern FD. Another situation was in export structure. The most exported industry of Far Eastern FD is provision (more than 8.9% of the overall exports). We also would like to specify timber sector (more than 9% of the overall export; even though the share of the sector have begun to decrease). The least exported sector has always been the petro-chemical production (less than 0.5% of the reviewing period from 2000 to 2012).

Thus, the increasing of foreign trade volumes occurred due to export and import. Nevertheless, the growth of export compared to import occurred by higher rates. In this case, Russian foreign trade having had a stable export orientation earlier has become even more export-oriented.

At the same time, a sharp Russian reorientation to a trade with a developed countries, making Russian Federation too dependent on their trade policies – on the one hand, and the continued retention of Russian industrial production – on the other hand, have had a mixed impact on the industrial structure of foreign trade, mainly export, further strengthening its resource orientation. Furthermore, the increasing share in the export structure of raw resources occurred due to the steady export reduction of the industrial goods.

The main reason for the industrial goods export reduction has been a weak development of production potential of the sector and, as a consequence, low competitiveness.

The structure of Russian import formed under the influence of the solvent demand and the decline in production is far from the perfection. Nevertheless, import made a significant contribution to a mitigation of social problems, providing a domestic market saturation of consumer goods. Currently, the percentage of import in the country consumed food is about 60%.

Russian Federation, despite the status of a major industrial power, has actually become a monocultural exporter: three kinds of energy carrier – oil, oil products, and natural gas – now provide 62-63% of total export of goods against 40% in 1994 and 45% in 1997.There are 2/3 of all sales are on the 5 basic positions; and there are ¾ of the total export are on 10 leading positions which are presented by energy source, metals, precious stones, and round wood.

With such a high concentration of exports in a small group of commodities and materials, to Russia the scope in foreign economic relations significant narrows and the Russian vulnerability increases to negative changes in the world conjuncture. In the case of energy export, a sharp deterioration of the external environment poses serious systemic risks for a domestic economy and may lead to a deep economic crisis.

Started an essential drop in the world prices for fuel and raw materials, sharply reduced the government revenue from export, led to a deterioration of an international balance of payment, the growth of foreign liabilities that aggravate the problems established in the foreign economic sphere as well as the economy of the country entirely. In these consequences, the necessity the restructuring of the entire system of organization and management of foreign economic activity has occurred.

Apparently, due to the resource economic orientation a number of regions does not efficiently use their innovative possibilities of foreign economic activity development. In this regard, it is important to move away from the resource export and provide conditions for an export of high technology products and resources.

The main task of Russia in the beginning of the XXI is the restructuring and modernization of the economy, as well as diversification of domestic exports by products of industries, especially high-tech industry.

One of the most crucial objective of foreign economic strategy on federal and regional levels is the growth of high technology products in the export structure that lead to the enhancing of the country's status in the world economy. If the strategy for achieving the innovative development and diversification of the economy will be really implemented, the country has the possibility of effective usage of its intellectual potential in the interests of the national economy, and participates in the globalizing world economy. However, it is obvious, that Russia will not soon be able to completely get away from the economic scenario based on the development of energy resources, and it is clearly demonstrated by the current commodity structure of exports, which is based on energy products.

One of the factors limiting the enhancement of export structure in the direction of increasing the share of finished and high technology production is low competitiveness of different domestic products that highlight the objective of its improvement through the enhancement of innovative activity of scientific organizations.

The structure of Russian export that based on fuel and raw materials more and more diverge with the trends of the world trade development grows mainly because of manufacturing industry products, especially high-tech products, the growth rate of which are particularly high.In long terms we consider a further increasing of the mentioned group of products shares in the world export as the expanding use of resource-saving technologies in the developed countries; the insertion into the circulation the various alternative energy sources, artificial substitutes and secondary material may slow even more the growth of fuel and raw sector of the world market that limit the perspectives of the appropriate Russian export. At saving this structure, the increasing of export volumes cease to be the source of economic growth and becomes a factor of its moderation. It means that in current trends the further increase in export of raw materials and energy resources will not cover the increase in imports of goods, providing final consumption.

In this regard, it is necessary that for each region were developed the programs to increase the share of finished goods with a high value added and programs to rationalize the import structure that should contribute the technology modernization of all region's economies.

The inclusion of the Russian regions in the international labor division is currently taking place in the conditions of the global process of reproduction, and not part of the national economy. However, there are also a number of diversities between regions on the aspects of integration into the world economy, which has results of significant differentiation for external factors for the purpose of reproduction of the territorial resources. It is due to the regional economic position and indicators such as export potential, diversification of export production and services, investment attractiveness, the level of demand.

The main problem is that, despite the obvious necessity of protectionism policy, Russia cannot adequately protect the domestic markets because of the strong dependence on trade policy of leading countries and because of a lack of production capacity for import substitution of import goods and for the growth of exports of manufacturing industry.

Nowadays, the system of protectionism in Russia is at the beginning stage of development, the usage of non-tariff regulation mechanisms are not fully involved and still poorly perform the function of protection of the domestic market.

4. Discussion

The features of national economies development and their integration into the world economy are reflected in the theories of the classical school of B. Ohlin, M. Porter, D. Ricardo, A. Smith, E. Heckscher (Anthology of Economic, 1993), questions of foreign economic relations and enhancement of Russian foreign trade activity and its regions are considered in the studies of A. Arkhipov (2005), A. Basenko (2012), L. Vardomskiy (2008), T. Gogoleva (2010), I. Dumoulin (2008), I. Ivanov (2008), V. Obolenskiy (2008).

In the scientific literature, the research of various problems of region economy is carried out to assess the economic potential of Russian region that is the basis of its development strategy. The study of this problem is reflected in works of A. Granberg (2001), S. Suspitzin (2005), issues of regional policy are noted in the works of V. Ovchinnikov (2008), V. Leksin (2012), A. Shvetzova (2006), the factors of regions' territory competitiveness and analysis of interregional differentiation and construction of ratings of socio-economic development are noted in the studies of S. Baranov and T. Skufina (2005), and other authors.

The problems of region foreign economic potential are reflected in the works of A. Anenkova (2008), G. Gutman (2001), A. Miroedov, A. Marshalova, A. Novoselova (2010), K. Pavlov (2009).

The topicality of the investigated problem consists of the lack of effective mechanisms of foreign economic cooperation and innovative complex in the regions that retains a high level of resource dependence, low investment attractiveness and competitiveness of Russian regions in the world market.In a global economic crisis, the solution of the problems that is stated as the enhancement of foreign economic activity and acceleration of innovative development of Russian regions' economies is becoming more actual.

The escalation of this problem shows the relevance of searching the new theoretical approaches, methods, and mechanisms to ensure the effective foreign economic activity development of Russian regions. A foreign economic activity of the regions should be focused on the solving the urgent problems of increase the export of high technology products, advanced technologies, and the technical services. The meeting these challenges requires an effective interaction of foreign economic complex and innovative system of the region. The important note is that these problems are not developed enough that actualizes the need for further in-depth analysis that may be done after the assessment methods of export potential of the areas of different degrees of localization, which we made.

5. Conclusion

We should then learn that foreign trade is already becoming one of the most important and potentially - the most important element of the regional economy that can provide a determinant influence on the long-term prospects of the latter.

Achieved to the current time the level of Russian foreign economic cooperation, as well as the degree of influence of foreign trade on economic development could be much higher in creating the premises for more active involvement in the international division of labor of the regions of the country having indisputable comparative advantages.

In many regions we observed a negative balance, i.e. trade deficit, amid the slowing growth in a foreign trade turnover. In the recent years, the share of foreign trade turnover in Russia's GDP reduces in a result of slow export diversification and insufficiently strong competitive positions of Russian manufacturing companies.

Russian foreign trade, which had a stable export orientation previously, has become even more export-oriented. At the same time, a sharp Russian reorientation to a trade with a developed countries, making Russian Federation too dependent on their trade policies – on the one hand, and the continued retention of Russian industrial production – on the other hand, have had a mixed impact on the industrial structure of foreign trade, mainly export, further strengthening its resource orientation. Furthermore, the increasing share in the export structure of raw resources occurred due to the steady export reduction of the industrial goods.

The evaluation of the export structure by aggregated commodity groups characterizes Russian exports substantially as external supplies of mineral products and its derivatives, metals, and precious stones. A minor proportion of export with a deep level of processing is presented in a limited format. The negative aspect of Russian exports is the deterioration of its commodity structure in terms of foreign economic competitiveness which has a negative impact on the level and pace of development of the economic system as the whole.

Acknowledgments

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Hypertext of Duysebek Nakipov

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Abstract

In the given paper the aesthetic, stylistic, especially poetological features of D. Nakipov (famous Kazakh poet and writer) are studied, the main features of the author's discourse are also examined. They fit well within the parameters of postmodern literary techniques and style, for example: function codes and markers, symbolism, affectation syntax and quirky shapes, expressiveness and impressionism can be relegated. By analyzing the aesthetic component of the work, the characteristics of author discourse, conceptual characteristics and strategies of the author, there is the conclusion that the novel of D. Nakipov is a sample of postemodern hypertext literature in a new wave of Kazakhstan.

Keywords: Hypertext, fractal, puzzle, culture-rheme, marker, post-modernism, author's discourse

1. Introduction

Nowadays Dyusebek Nakipov is one of the largest and most successful creative figures in contemporary culture of Kazakhstan. The scale and diversity of his work attracted the attention of influential critics, researchers (Badikov, 2009, pp. 122-127).

In aesthetics of D. Nakipov (here aesthetics is spoken in the meaning of literary techniques, in fact the writer's post-modernist thinking exploits intension of desanctification, demystification of traditional values) element of text dominates, it is often the element of radically changed, syntactically transformed text. It is known that plot's internal engine is systematization of character's development in the aesthetics of realism. Modernism has already refused this principle, having suggested another structural paradigm – integrity forms not by character's movement, but by author's model of universe, wherein not infrequently, even decadence, decay of introverted beginning was such model. Post-modern went further. Element of author's discourse, text's demiurge or author-creator's strategy prevail completely and entirely in the aesthetics of realism. Philosopher Nurzhanov B. writes about this: "The concept of" text "(derived from it the notion of" context "," intertextuality "," hypertext ") becomes the central concept of post-modernism and post-modern aesthetics. Semiotic principles of textual analysis have become the dominant methodology of postmodernism. Art in this perspective is seen as a form of discourse that has its own rules, its grammar and syntax, its own system of signification (signification), their hidden assumptions and preconditions " (Nurzhanov, 2010, p. 34). Although literary character, model of the world still do exist in it, they lose their social value, they are not interesting as essence and objects, another element rules the roost, another power, and this is interior power of the text itself, constitutive intension of the author-demiurge. "In all studied work, N. K. Sarsekeev notes that not characters move the plot, but author's wordy play. Hence, spinning "literariness" of the author's image, which is responsible for main author's target – convincing without homily, provoking a reader for co-creation, "thinking and conjecturing", "finishing design" of the text" - theorist L. V. Safronova writes (2006, p. 18).

Aspects that are important for understanding the aesthetics of postmodernism is that the word game in the world of text appears advantageous strategy that assumes the character of the structure-forming paradigm. "Permutations of the text - the interchangeability of parts of the text found in the literature of postmodernism (Borhes "Hopscotch", M. Pavic "Dictionary of the Khazars", "Eternity and a Day", "Bite angel" P. Krusanov). Permutation allows the reader to engage in active co-creation and at the same time emphasizes the possibility of multiple interpretations and finals fate of the characters, the story of intrigue"- emphasizes A. K. Ishanova (2008, p. 365).

2. Method

Before modernism and post-modernism, text in the world literature existed as means of embodiment, implementation, realization of the plot's word in art, movement of literary character (antropological principle)

either way bears objective and subjective thought about universe. Ontological principle (cognition of internal and external, accumulation of knowledge) has not been changed in this aesthetics. Postmodern exceeds the limits of ontological beginning, for not cognition and experience accumulation are significant here, but ways of relativistic clinch in otherness, which continuously disintegrate into similar fractals. Implicit author and implicit reader of postmodern text are natural conditions of this relativistic discourse, where strategic aim is experience of otherness, namely existence. Post-modernistic text breaks the link with external reader, for his reader is virtual, relativistically is preceded in the continuum of times, where perusal (reconstruction) of allusions, euphemisms, symbols, hints and markers, metaphors – semantically encoded language of this art has already been done. With this correspondence to his (virtual) reader, maître's language complexity of postmodern can be explained.

"The Source of reader's activity is the very specificity of artistic creativity. Calculation on the reader may be unconscious, so it is organic, predetermined very communicative nature of art. However, many artists specifically comprehended the role of the reader in the creative process "- sums G. M. Muchnik (1995, p. 73).

Thus, implicit correspondent of the post-modernistic text is a virtual reader (recipient), who particularly participates not only in a text's reading, but also in its reconstruction, semantic reconstruction of signs and symbols, he is in the secret of allusions and codes of prefaced text. In the continuum of the context he is mirror reflection of an author-narrator, his text clone, he is associated with the spoken demiurge, who establishes stratification of symmetry and asymmetry law, scilicet reflection, doubling and multiplication of meanings. These inside relations between author-narrator and virtual reader whittle down the role of outer reader, abstract social environment, creating hermeneutic block between aesthetic world and society. Strengthening of the virtual dimension in the postmodern is stated by aesthetic theorists. (Nurzhanov, 2012, pp. 4-5). In traditional realism laws of reception (readability) for an author were compulsory, he aimed at openness of meanings, transparency of concept, optimality of correspondence, he wanted to be adequately understood, although he did not avoid complexity. Cognitive and sign-aesthetic lines in realism usually spoke about appeal to society, to reading public, even to potentially future reader. Postmodern aesthetic context is broader. On the material of the new literature of Kazakhstan writes Altybaeva S. M. about it: "Postmodernism as a specific and self-sufficient aesthetic phenomenon provides a great painter of genre and stylistic and conceptual freedom for the image of reality, interpreted in the broadest sense." (Altybaeva, 2009, p. 122).

As for text of postmodern, this is often multidimensional author's discourse, communicative space, which builds diverse hierarchical relationship with outer and inner reader. All is different in postmodern, an omniscient demiurge of text requires enlightened reader, if he does not exist, he models him in the text, deriving of himself, cloning, this way implicit reader comes into existence. Therefore, hermeneutic decoding becomes reception condition of postmodernistic text, where reading of inter-texts, reminiscences, mythologem and culture-rhemes, symbols is possible only in the temple of particular religious knowledge, whish lives mainly in the sphere of meta-text and diachrony of art and philosophy. Therefore, symbols, tropes, markers, poetic figures, changed micro-text become major component of cognition in postmodernistic texts, which as if pointers and codes on the walls of labyrinth, lead to sanctum sanctorum of this world, otherwise to existence, which itself is notional core of continuum, or candlemas of associative conjugation of meanings.

It appears that, in the process of postmodernistic text creation, author's consciousness turns out relativistically involved in associative, allusive context world of the world word art or even art system to create cloth of guiding thread (signs and symbols), and only then of inertia dialogic niche with society, with outer recepient left. Apparently, such sign-symbolic, layer-specific use of culture-rhemes is inevitable, it is clearly observed from James Joyce ("Ulysses"), till D. Updike "The Centaur", V. Pelevin ("Chapaev and Void"). Complicated intercultural or cross-cultural diffusivity of textual, aesthetic world of postmodern, its characteristic feature, recipient's awareness are inevitable conditions of an adequate reading.

Similar diffusivity, to the full, inheres texts of Duysebek Nakipov, one of the sign post-modernistic writers of contemporary Kazakhstan. Numbers of arts, particularly, ballet and pictorial art, appliqué and music, decoration, sculpture and poetry are dialogically met in his dilogy "Circle of Ash" and "Shadow of Wind". Author's intention is an important concept of modern literary criticism. (Temirbolat, 2011, p. 75). As you know, intentional, creative energy of the author gave great importance to Heidegger. On this occasion, Zh. Baimukhambetov writes: "Of course, that for Heidegger the author's presence in creation can not be doubted, but his creation the author appears as if the role of Hamlet's father. He, being completely ghostly creature nonetheless inseparable from the events that take place in reality they described. In fact, Heidegger, pointing to a common identity of all creatures to one source, thus evinces confidence in ecstatic body of the author, the body, which gives things their unchanging attributes: weight, weights, ways to implement these or other movement" (Baimukhamedov, 2004, p. 81).

In any of these arts, the author feels himself freely, easily, discovering deep knowledge, surely, especially in ballet, music and poetry. This is not happenstance, for D. Nakipov is famous in his time ballet dancer, later on director of the Ballet Theatre, therefore, a person able to read ballet music. Postmodernism in the contemporary literature of Kazakhstan - a recognized fact studied by critics and literary critics (Ananeva, 2009, p. 328). Undoubtedly, one of the brightest representatives of this new direction is D. Nakipov.

In recent 20 years D. Nakipov has expressed himself as wide scale poet, author of many poems, some of them became libretto to ballet settings. D. Nakipov's intellection seems unlimited in the sphere of World Arts, including sphere of masterpieces of the world prose. D. Nakipov's transformation into a novelist of postmodernistic direction seems natural and inevitable, for he is not a historian of Art and a chronicler, a fortiori not a novelist. Strategy of an author-narrator is creating maximum symbolic, complex and chamber-elegant and whimsical canvases of prose, not only for great reproduction of his own Word to the whole world, but also for the sake of own universe of the word. Energy of his accumulated intension and inter-texts is quite sufficient. **"**Perhaps, apocryphal (sacral, mystic) task of oeuvre is in taking existence appearing in alive, throbbing condition and conceive it again in metaphysical womb. But it is unknown for the author what a complete Word can be born out of this "black box". Therefore, nerve-text artistically "by Nakipov" collapses in the dylogy… this way E. Ismailovich characterizes writer's style (Ismailovich Unit, 2009, p. 5).

However, the author as an aesthetic authority in the text - the phenomenon is absolutely paradoxical, the more it overcome the human, personal, subjective, more productive for text than "transparent" and the integrity of its essence, the fuller its existence, the more fused with the impersonal continuum the more informative. It is legitimate and such treatment as the author in the text:

And perhaps, even so, that is not the author writes something, but something says (to be) through it. Authorship is not depends on the person, is a condition in which a man must empties. Through some "holes" of the space ideas master man (Ortega). Authorship - means or method, to whom the world over me. Paradox. This would seem to me that I want, I'm writing, but no, I did not write. Moreover, in the highest degree the author writes freely when he writes reluctant "(Kolumbaev, 2002, pp. 8-9).

Nakipov's reminiscence, taken from the pages of different genres or World Art, serves not only for depiction of ballet scene, backstage life of theatre, pastel sketching of the most intimate and privy sufferings of ballet dancers (of a Ballerina), but for particular correspondence with symbolic layer of meta-text, where generalization of hermeneutic meanings happens. This is refined staging of culture-rhemes, creation of polysyllabic puzzle, mosaic cloth, which meaning is only understood by text's demiurge and implicit reader. Consequently, the author does not care about integrality of both text and all architectonics, in the second part of the dylogy narrative layers (narration about cannibal, about wiseacre-hermit, about great conqueror) almost do not intersect in the plot, they develop in parallel, only semantically shade each other. Reading of their informational content is trusted to an implicit reader. "Referent of a literary text is within the text, rather than outside it. Artistic text is autoreference. Referent of a literary text, it signified the actual built in the reader's mind "- says K. K. Ahmedyarov (Akhmediarov, 2002, p. 77).

3. Results

The main plot nerve is simple and clear, it is love story of ballerina and Gevr. Unlikely, it demanded such compound, multipronged postmodernistic narration, except for the most important task, which stood before the author; the task was presentment of theatre life, ordinary, inescapable backstage world with its intrigues, shady enterprisers, and world of spirits behind astral contour of the ballerina, where demiurge of art is hidden, muse itself, great spiritual hypostasis of the Ballerina. Ballerina's motion to Goddess, her spiritual development and climax merger with her in the main dance is inner covert plot of the work. Movement of inner and outer plot is organized by gradation of symbols and signs, here all immeasurable chamber, texture of the superfine and unusually ductile and sophisticated descriptions is expanded. Impressionistic expressiveness of Nakipov's language manner, effect of three-dimensional visuality of images, bright expressiveness of phrases, multitone, figures, overflowing one into another, paradoxical, perhaps, are the strongest sides of his literary techniques.

"All recent years, par excellence that he completed his dancing life, from the first film with the participation of Ornello, Doka has gained her in the name of eidolon-goddess-angel-dream woman. This is contour-oval-moon-sunfaced imago, which is incomparable, superior all antique characters and images of revivalist Madonnas, somehow magical, fluorescent, incessantly changed, like surface of peaceful back-water under the crown of silver willow, crazy greenness of eyes, like a wild lynx has, with clever naturally pure eye shape and squint, which were ceaselessly contradiction-harmony with meek smile and full-luscious-explosive contour of lips, this dazzling-niveous-sudden-riviere number of teeth and killing-inviting nick between the upper

teeth, amber-hot-unstoppable waterfall of hair, washes her neck, her neck is from flexible-light-bright china or ivory, which has soft and gentle elasticity of skin, as if it pearl comes to life! – all this is perfect splendor of unfeigned woman, crown of creation of Ornello! – she took him captive of inscrutable admiration-longing-aesthetic climax-insight". (Nakipov, 2010, p. 132).

4. Discussion

Here in the real verbal, phonetic sound-palette, the artist as if is unrivalled. At the same time, the writer is able to convey a complex range of layered experiences, often steeply banked in the astral (exorbitant) visions, hallucinations, dreams, subconscious feeling, where, however, plasticity and objectivity confidently retained. It must be admitted that, many years of experience of a great poet, master of words affects here. Narrative plan, dedicated to the life and work of a genius artist S. Kalmykov, borderes on the astral plane - a tale about the life of alien beings - samions, these two planes interpenetrate, semantically mutually dependent on each other. It is clear that bizarre samions are images generated by the artist's imagination, artist-character, videlicet S. Kalmykov. The history of the artist, life of his soul and tale about his spiritual incarnation - grandmaster - a reference to the fact that in the mid-20th century, one of the great avatar of art lived near us. Therefore, it becomes clear his huge impact on all the artists depicted in the novel, especially on the ballerina.

Postmodernistic text can not do without the energy of love. This is a special theme of the novel D. Nakipov. Characteristic feature, once fixed by theorists of postmodernism (Badikov, 2009, p. 56), herein fully confirmed by emotional, motive suggestive qualification of the work. (Safronova, 2006, p. 32, 56). Eroticism in the novel has dominant and pervasive character, often getting vernacular design. It can be assumed that there is too much going on, both in the first and in the second book of the dylogy. It appears that the beginning of the Dionysian dominates in the novel of D. Nakipov. There is a clear dissonance between high up, almost divine love between the dancer and Gevra and plan of physiological descriptions hypertrophied by sexuality of mythical Osmihorr in the first book and sexual maniac man-eating Bastard in the second book of the dylogy. The nature of this plan does not give confidence that the given dissonance has functional character, resulting from the strategy of the author-creator, gives general sense to the whole architectonics of huge novel. Eroticism clearly gives some alarming to the whole narrative canvas. Samions live in dismay, frightened by Osmihorr's unbridle character and Bastard's anxiety is transformed into a very real inferno, in which the chimerical character lives, gradually turning into a monster of the underworld, devoid of all human qualities, a sort of the Minotaur. It's dark in the first book, and quite black emotional background in the second book, wraps pastoral light stream - a tale of divine love between Ballerina and Gevra. Literary criticism, among other things, fixed, that the image of emotional state voltage requires aesthetic maximum from an artist. (Savelyev, 1999, p. 194).

This bright, creative, truly human flow in the novel is the pillar nerve of the work, it saves everything, real, perceived energy is built on it - moral stream, humanism, the tale of how human love gradually grows, turning everything around in warm, sunny colors. All the excesses of the novel, including style (Dzholdasbekova & Sarsekeeva, 2013, p. 184), is redeemed by this piercingly bright and at the same time emotionally powerful flow of expressive and fine plan. In the concept-sphere of the work, this basic conflict of theatrical novel performs hidden feature, it displays the dance of lovers, as on the scene. On this stage, Ballerina and Gevra perform difficult part - the duo of almost plastic embodiment, dialogue, where words are often unnecessary. There body language and signs, hints, subtle movements, attitudes, guesses, intuitive understanding of mental comprehension and penetration prevail, it's almost telepathic language that can only exist between truly divine lovers. The joy of daily communication and increasing happiness of Gevra heal him from a terrible trauma - he drove into the subconscious memory the death of his wife and child in the crash of an airliner. He drove it so deep that there seemed no reflection, even memories, but there is a dark monster lurking - pain of mortally wounded psyche. Gevra would be doomed if it had not been a balley-dancer. With the help of her love and talent of finely tuned, tactful, gentle soul she heals him, revives for new life. Narrative fabric of the ballerina and Gevra passing through both books, the moral energy of truly renewing and life-giving force, the best song of polyphony in the huge novel, a duo of two voice, which spiritualized, became cleaner and heartier, the voice lifted to divine heights in the chorale. The tale of the ballerina and Gevra has potentially enormous moral power, and it acts on the reader's soul, fulfilling its eternal saving function of catharsis. Polyphony is quite natural for theatrical novel describing the music, chant, let it not even classical polyphony functional point of view (Uspenskaya, 2005, p. 21).

5. Conclusion

It appears that D. Nakipov managed to create the first multi-faceted theatrical romance in the literature of the new wave of modern Kazakhstan with an unusually complex neuro-pulsating, impressionistic shaped cloth. By

his stylistic, aesthetic, contextual parameters, it is quite postmodern work. This is a very complicated text fabric acts as a hypertext, woven from a huge number of microtexts, intertexts, reminiscences, allusions with localized themes and sub-themes and general conceptual plan. Introverted character and plastic expressiveness of these texts are not in doubt.

Acknowledgements

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The Phenomenon of Political Myth in the Social Space of Modernity

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Abstract

The paper considers a theoretical analysis of the political myth phenomenon, which on the one hand is evident as socially and psychologically conditioned phenomenon; on the other hand, political myth can provoke certain social processes. The paper covers the peculiarities of the political myth functioning in the social space of modern time.

Keywords: political myth, power, national mythology, political language, archetype, mythological consciousness

1. Introduction

Currently the political mythology has become one of the hottest topical research issues. Exhibition of 'mythical' in politics is one of the main factors for the 'revival' of interest in the myth in the modern society. Myth today turns into the 'favoured sphere' for different political schemes, slogans, ideology. On this basis, the author considers it expedient to review functioning of the myth in politics.

As an object of intellectual reflection, the political myth has attracted great attention of researchers of diverse area of humanities knowledge. It was caused by the 'most available obviousness', 'demonstration' of modern myths precisely in the area of political action. According to Kazakhstani researcher Bekezhan O. (Bekezhanov, 1998), it is very strong politicization of all spheres of human activity that caused actualization of the political myth.

The political myth case study dates back to the first half of the last century and is related to the understanding of the specific features of political leverage in mass (information) society. Georges Eugène Sorel, Serge Moscovici, Ernst Cassirer, Mircea Eliade and others are among the authors who most thoroughly studied the phenomenon. It is their undeniable merit is that they considered the political myth as 'actualization of the latent, temporarily hidden strata of culture', and not only as the result of deliberately false lie, that was introduced in the society.

Georges Eugène Sorel was among the first researchers in political environment who gave a sharp awareness of the role of myths. Thus, G.Sorel for the first time spoke about the 'myth', having in mind the summation of efforts that contribute revolutionary proportions to ideology. According to Sorel, myths must 'reflect tendencies, instincts, expectations' of people or party, that allows clearly illustrate all these fears and aspirations in the form of 'integrity'. Yet it doesn't matter at all that myths, in particular, look 'surreal' and 'considerably deviate from the reality'; as the point is just to influence the human imagination' (Hyubner, 1996, p. 340).

According to Sorel, myth is a symbolic transfer of rationality into the language of the masses, which authorizes and activates their total mobilization. Social structure and the dependant ideological concepts (in particular, legal matters as well) are based upon the worldview and understanding of the social and political, which is fundamentally irreducible to a purely rational structures. The social structure is the result of full range of images (myth) and the will of the people (mobilization). In this context, myth is antithesis to the absolutely intellectual rationalism.

The theory of political myth (especially finding out the myth effect on the social phenomena) is also associated with Serge Moscovici. Along with the ideas of Le Bon Gustave, he develops a theory of social images, which to some extent was similar to Émile Durkheim's theory of collective representations. By social image he meant commonplace sense, formed mainly by nonrational affects, to a certain extent by ideological views and to a

small extent by scientific knowledge. In the area of social image we are faced with a complex intertwining of rational and irrational, scientific knowledge and 'common sense'.

Developing Le Bon's ideas, Moscovici advances his own set of ideas on the role of myths in modern history (Moskovichi, 1998, pp. 126-127). According to him, mass is not just crowd of people, but aggregate with psychic community. It operates unconsciously (the unconscious has a collective nature). Masses bear on the leader's support, being obeyed by the authority, not by reason. In his turn, leader bears on some mythic image. Crowds are operated by propagandistic hypnogenesis. In politics the regularities of controlling masses of people require advancing a supreme idea and its introduction into consciousness of the masses. In response to indoctrination, the idea becomes a collective image (deeper - into the political myth) and collective actions.

According to Ernst Cassirer, the political myth is a creative process that occurs in critical moments of society. In his opinion, during the period of political stability there is no need in myth-making. In particular, he believed that people who are in balance of mind shall not be in eschatological mood and won't be willing to restrict their personal freedom by those who are staying in power, so his conscience will not possess mythological component. While a person acts within the common, living environment, he hardly ever goes by considerations of a mythological order and does not seek refuge and does not escape reality in the mythical ideas and rituals. When a person enters into the sphere of politics with its complex rituals, different from his common environment, his everyday consciousness is no longer able to help him navigate the surrounding spiritual environment, and he is forced to seek the assistance of political mythology, which explains to him the meaning of political action as a specific ceremony (Kassirer, 1993, p. 154).

In the 70s, -80s of the XX century a wide range of studies on the social mythology is published within the context of criticism of ideology (Gurevich P. S., Makarov M. G., Lifshits M. A., Shestakov V. P. and others). Of special note is Gurevich P. S. with his 'Social Mythology', where he analyzes the approaches to the understanding of socio-political mythology from the standpoint of 'criticism of bourgeois ideology and revisionism'.

2. Method

Of special note is that some researchers of the modern political mythology chose not to further study the subject as a matter of moral compulsion. The myth of Nazi Germany, the mythology of the nation, the myths of the Soviet era became a trigger for declaring everything related to the collective unconscious, irrational moments of social control as dangerous and immoral. Many researchers preferred contrivances to work out methods of controversy to political mythology and to myths management, as 'in the socio-political sphere myth creates the illusion that people and power are united, as according to the myth they are consolidated by shared objectives and move towards them; critical reflection is excluded in the myth, thus providing strength and firmness of ideology and political structures; myth serves the spiritual and psychological support to the political regime upon which the possibility of manipulating the consciousness of the masses is possible; at a certain stage of history, myth acts as the meaning of life for a social group, society or ethnic group, it can play the role of the meaning of life for an individual who is the part of this community; myth galvanizes masses into action for the sake of imposed goals; myth creates a reassuring picture of the world, reconciling a man and masses with 'temporary difficulties' and disasters, and myth is a shelter from irrational fears, invisible social dangers and enemies (Pivoev, 1993, pp. 37-43).

In whole, in philosophical, politological and sociological practice, the attitude towards the socio-political myths is mainly negative. First of all, this was due to a number of reasons: the willingness to see the political myth as something external to the real life, which has no positive esthetics; negative attitude towards the socio-political mythology was caused by manipulative practices of political groups and parties that use the myth for 'seizure' of the audience and long-term retention in the right direction; according to Avtonomova N.S. modern myth '... in its social role cannot be in sympathy with humanistic ideas. The fascist myth alone is well enough to maintain antipathy to manifestations of mythological consciousness and expose them to humanistic denial in the style of negative dialectics' (Avtonomova, 1990, p. 55).

Most researchers so deeply associate the political myth with the ideological sabotage that they concentrate only on the criticism of 'totalitarian mythology' of Stalinism and the German National Socialism. Moreover this criticism of 'totalitarian mythology' was identified with the 'demythologization' of science and mass consciousness and the breakthrough to the objective political knowledge, resulting in narrowing the boundaries of the socio-political mythology ideas. According to the methodological definition of Losev A.F. the 'theory of myth, which does not capture the culture up to its social roots, is a very bad theory of myth. Only very poor

idealists divorce myth from the thick of the historical process and preach liberal dualism: real life is on its own, and the myth is on its own' (Losev, 1994, pp. 22-23).

Myth is fiction, not conscious but unconscious one. Therefore 'it is necessary to disclose not the contents of purposeful fabrications, but rather the importance of the hidden image (not of the myth) - classify objects and motifs of mythological thought. In politics it will respectively be unconscious goals, exalting myth-making or inspirational images that represent certain values. These are the 'disguised phenomena' that politicians should 'unspell'. However it should be noted that any attempt to introduce these unspelled phenomena into policy is destined to fail. Only through a new 'enchanting' in a new, transformed form, they can be assimilated in the political practice... The analysis methodology must observe the 'golden mean', where the analysis is not entangled in countless details of specific myths, and at the same time does not reduce the mythology to some simple reasons or object in the real world' (Kassirer, 1998, pp. 13-14).

Thus it is incorrect to consider any phenomenon (including socio-political myth) only unilaterally. According to E.Cassirer 'myth has, so to say, a double face. On the one hand, it shows us the conceptual structure, on the other - the perceptual one. Myth does not mean accumulation of disordered and incoherent ideas; it depends on the specific shape of perception' (Kassirer, 1998, p. 386).

As noted earlier, the role of myth goes beyond the introduction of the given political ideologeme into the public consciousness. In proof of this statement let us consider and disclose the essence of the socio-political myth.

The political myth as well as the archaic myth is characterized by a specific set of components: a picture of the world as a confabulated concept of social Truth (the basis of fairness), the point in the course of time, associated with the roots of national history and culture, the moment of their supreme worshiping or severe injury (the analog of initiative emotional stress in the mystic ritual - chosen glory or trauma), a vision of the future (interpreted as getting round to ancestry of the 'Golden Age') and deep opposition 'we - they' (the analog of the mythical opposition between Good and Evil).

If the challenge for the archaic myth was that any social action reproduced cosmogonic model of the world (i.e. restored the worldview), then the cultural task of the political myth is *to restore the social picture of the world* that was destroyed during the social cataclysm.

Another aspect of the political myth is in *structuralization of reality* in the situation of total crisis, i.e. in the situation where it's not possible to restore the world view and build a holistic picture. It is divided into the fragments, which are connected with the mythological ties. And only later on mythological constructions 'gather' rational ideas, concepts, legal and political beliefs.

The political myths are not eternal, they are often ruined under the influence of the social earthquake, but they are immediately replaced by the new ones, because myths help people to facilitate the perception of reality. *Short life* can be noted as a characteristic feature of the political myths. As a rule, the political myths are the reflection of a particular historical moment. With the change of specific conditions, myths are also replaced. According to the psychosocial approach of Moiseev I. V. 'the birth of the political myth happens when the social injuries flow into the psychological injuries' (Moiseev, 1994, p. 5). Therefore, most theorists of full range of various directions understand such periods in the history by means of analyzing the role and place of the myths in the crisis situations. No wonder that A. Jaurès, the French historian and politician of the first half of the XIX century, while exploring the events of the French Revolution, noted that it seemed as if people dealt not with real but some imaginary society in which everything seemed simple, reasonable and uniform. The imagination of the crowd turned away from what actually happened. 'The spirit of the crowd soared in some perfect state, created by the imagination of writers' (Zhores, 1983, p. 340). Whereas Le Bon noted that the crowd or mass does not possess a critical consciousness and that it does not think the categories but thinks the images, which might be far from the reality (Lebon, 1995, p. 290). Thus, *reliance on sensual reflection* is another feature of the political myths. Modern myths often do not appear spontaneously, but are created artificially, consciously and purposefully. Myths are based on collective aspirations and hopes that are conscious and cultivated by politicians. As already mentioned, the mass has no logical law. Mass perceives only what in some degree is related to common requests, e.g. justice in the abstract, which cannot, for objective reasons, be fully implemented in the reality. Therefore masses perceive some provisions, stereotypes, myths, only based on faith. Recognition of something true without prior actual or logical check, based only on the internal, subjective immutable beliefs, becomes the 'trap' for the human brain. Justification takes place on the basis of feelings, emotions, which contradicts logical explanation. This becomes a ground where myth-making occurs.

The political myth doesn't spring out of nowhere, otherwise it can't enter the competitive field of politics. According to E. Cassirer, despite immersion in the myth, a civilized man, like an ancient man, still cannot

completely abandon the requirement of rationality. For his faith he seeks some reasonable grounds. The respective theoretical formulation of beliefs can be rather difficult, though leads to the affect, similar to beliefs of primitive people (Kassirer, 1993, p. 112). In our opinion, this is one of the main differences between the political myth and the myth itself. The political myth is and cannot but be rational.

When a politician in power lacks authority, he actively claims to obtain the Creator's power. And for this purpose he turns to the mythical topics, as he finds in them condition, argument of legitimation of his power and clearly stated, chosen policy. When myth becomes the property of collective representations, it forms a certain view of life, psychological and ideological attitude, that possess the endurance of superstition. Myth creates fictional cause and effect relationship between social objects, generates false objects (heroic images of ordinary politicians), creates the legends of the glorious past, replaces social reality by fiction (sometimes uplifting, but often scathing), introducing it as a true outline of political relations.

3. Results

Why is myth so attractive to a politician? Firstly, because of the scope. The scope is so huge that provides an opportunity to create and recreate the social space. Moreover, myths assume enormous degree of subordination and dependence. The global nature of such relationship acts as one of the premises for the existence of the myth.

Secondly, in this setting a politician gets a chance to act as the 'Creator' and a creative personality, as the director of the epic political theater where plays range from tragedy to farce and are all based on some mythical stories. It is incredibly tempting to place himself in a key position and with a huge number of assisting day players in the show, represent a play, for example, about the creation of the 'new world' on the ruins of the 'old' one; or 'absolution' of the country from the 'sins'; or 'consecration of the favorites'.

Third, with such power a politician is able to establish control over the social time, completely eliminating the entrusted territory and people from the sphere of action of the mythical time. A person with no landmarks in the 'past - present – future' system, morphs into a mere blind, weak-willed toy in the hands of the people in power. And the society, forcibly taken out of the context of the historical development of mankind, is fatally on the rocks.

Fourthly, on the ground of the precedent of 'the creation myth' the leader, set in such authority, has the possibility to represent the Law single-handedly and to be the impersonation of Justice and Order in principle.

Some confabulated idea of a political nature is the concept of the political myth as a system. Throughout the course of history of mankind two following ideas are most commonly ingrained in the minds, with some metamorphoses: the idea of the possibility of implementing the ideal model of the state structure in the setting of the ontic reality, and the coupled idea of the possibility of the existence of the perfect person, who is able to turn this model into reality.

According to Kaskabassov, it seems probable that the ideas and stories emerged in the ancient times and then were repeatedly updated and revived in the periods of the history with difficult or crisis situations. (It is well-known that from olden times almost all nations had their myths about the 'golden age'. The Kazakhs also have similar myths. They tell about the wonderful time when everything in the world was so harmonious that 'larks could quietly make nests on the sheep backs' (koi ustinde boztorgai zhumytkalagan). In the Kazakh mythology those are the stories about the so-called *Zheruik* and sometimes about *Zhideli Baisyn* where people would have the life of Reilly and live a free-wheeling existence) (Касқабасов, 1992, p. 266).

One of the political myth peculiarities is its *incompleteness*. In fact, it is absolutely impossible to find a completely formatted political myth in the political mythology. Since the political myth is never being completed in full, in the end, it evolves into the unification and degeneracy stage, and eventually the political myth is no longer a mobilizing force.

The structure of the political myth consists of a system of values, generated by the conceptual idea. Its elements are definite ideas that represent the system of values. The peculiarity of the political myth structure is that it is a two-level structure, as the political myth is implemented at two levels of political consciousness - ordinary and specialized. At each level of consciousness the formation and functioning of political myth is provided by two directionally different and at the same time interdependent structural relationships. So, on the ordinary level of the political consciousness the faith is such structure-forming relationship; the faith is fastened in mind, so a man places any myth created either by his own or other people's imagination in the ontic reality. Thus, due to the faith predominance in this consciousness, for the consciousness of his subject, myth becomes a part of the ontic reality. At a specialized level of the political consciousness, the goal orientation is its structure-forming relationship that ensures the myth existence in the mind; the essence of the goal orientation is to manage the different

consciousness by changing this consciousness, according to the desired model. The relationship of the structure-forming relations that determine the existence of the political myth at the appropriate levels of consciousness, is expressed in implementation of goal orientation, determining the political myth vitality at a specialized level of political consciousness, as a rule is impossible without activating the faith, providing the existence of the myth as such on the everyday level of consciousness.

Among the significant publications of recent years on the political myth problem, we should note two monographs, published in the year 2003 under the same name 'The Political Mythology'. The author of the first monograph is Tsuladze A., the famous Russian theorist and publicist, the second researcher is Kolyev A. N.

According to Tsuladze A., the political myth is 'a myth used to implement political objectives: struggle for power, implementation of the political rule' (Tsuladze, 2003, p. 56).

Kolyev A.N. provides his definition of this phenomenon. According to him, 'the political myth is an archetypical structure, projected in the sphere of self-organization of society or people. The link with the archetype means the involuntariness of myth-making and its interaction with the objectively existing system of thought, laid in the archetype. The political myth requires an answer to a specific question - eternal (as in religion), or momentary, transient, but still associated with the unconscious desire of masses. This is how myth differs from pseudo-myth, where empathy is only simulated by means of some stimulus. (For example, some private or group interest claims to be the 'national idea' element). When the stimulus disappears, empathy disappears as well. However, the specificity of the political myth brings it together with the embellished allegory of the particular interest' (Kolev, 2003, p. 75).

Thus, both researchers describe a myth not as an archaic society attribute, but as a phenomenon of the contemporary mass consciousness.

From our point of view the study of Kolyev A.N. is of interest. With all the diversity of judgments about the nature of the political mythology, a researcher must overcome widespread negative attitude towards the political myth that dominates in the contemporary scientific literature, political journalism and rhetoric. In the opinion of the author, moving away from negativism in regard to the political mythology will restore the dialectical vision of social processes, expressed not only in the general laws of evolution, but also in the duality of the political activities, due to the difference in the perception of mass and individuum. According to Kolyev A. N., the political myth with archaic images, is capable of carrying quite positive properties. First of all this is a symbolic, plot layout of politics in the absence or insufficiency of rational motives. Choosing symbols, we choose the path of society, even if it is not quite clear to us.

The researcher focuses on the fact that myth is a necessary component and in many cases the constructive component of political consciousness. The author particularly stuck at the national mythology as one of the spiritual and creative powers, which could help to overcome the outlook crisis in the country and the implementation of a new positive future of the country. In particular, he writes, 'The return of life to science necessarily requires the return of myth in politics. And, more precisely, it is creation of the Big National myth that will inspire high civic consciousness, love of the country, love of the native history, ancestors and descendants. Such myth would restore ruined link of times, the link of the present with the past and the future, will get back a sensible understanding of social hierarchies and point the place and the area of efforts of scientific work.

Presenting the Big National myth as the Big cultural style for science, means the necessity to get rid of the concept of politics as a competition of egoism and greediness. As a result, the political mythology could become not only a scientific concept, but also a source of political doctrine of the revival of the state and elimination of the shameful mercantile system in the life of the modern society' (Gachev, 1994, p. 75).

The myths, based on the national feelings, generated by the same ontological concepts as the mythical understanding of clanship, seem to be fruitful and 'everlasting'. Sharp differences of material and ideal, internal and external also disappear here. The environment in which the nation lives and materializes (landscapes, monuments, places of worship, national clothes, etc.), traditions and customs are part of the inner nature of every person who belongs to this nation. It is not easy to destroy the national myth, because a person and Motherland are considered as an aggregate. Any attack of a 'stranger' on such kind of myth can result in nation's consolidation around the myth.

It is the national myths that make the 'soul of people', as '... nation is understood through the prism of the myth, and determined through archetypal understanding of the history. However, the one who defines nation in such a way mythologises the space belonging to it (...). Everywhere - in the mountains, in the valleys and plains, in the

river bends and in the cities – there are 'witnesses' of the past, which, as stated above, are perceived as the ideal and material, and thus the substantial part of the present' (Hyubner, 1996, p. 327).

Being formed in the period of formation of the nation, the national myths accompany it throughout the course of the history. The national identity is based on myths and is inseparable from them. Historical events become significant for future generations, when they are included in the structure of the national myth. In this case, the history of the nation is a myth created by the nation about itself. Historical events serve only as the construction material for the myth of the nation.

The national idea is the main component of the national myth. The researcher Turyszhanova R. K. notes that today 'we need an idea of the Motherland, the most important democratic value, the meaning and significance of which no one would dispute. The history of world civilization knows many examples of crisis management and crucible under the banner of national ideas: 'The Motherland is in danger!', 'Welfare society' and others. Would the Soviet Union be able to resist the enemy, and then defeat him, if they didn't name the war as the Great Patriotic War, thus contributing to the unprecedented rise of patriotism and awakening of the best national feelings in the people? And lack of the national idea in Iraq has led to the inevitable and crushing collapse of Saddam Hussein's regime' (Turyszhanova, 2003, p. 118).

People invest in the nation's myth-making the content of his unconsciousness - the experience of ancestors embodied in the symbols, the elite invest a conceptual vision of the whole mythological design and game images - political advertising and national ritual. Consistently reproducible mythology becomes the basis of the national identity.

Polosin V. S. says 'Mythology of the nation is an allegorical image of its moral ideal, its 'blood' and 'soil', it is an allegorical autobiography of the nation' (Polosin, 1999, p. 94). This image reflects the hierarchy of social consciousness structures, and historical pantheon of national heroes, and the ideal of organization of the living space of the nation, and the social hierarchy that is organic to the national history.

According to Polosin the structure of the national mythology is as follows:

1) The archetype of the Great Motherland, symbolizing the origin and the purpose of people as a macro-family;

2) The history, idealized as the frame plot of the universe, and the space, idealized as the geographic center of the Universe;

3) A system of symbols that by means of archetypal key-benchmark (the image of Motherland) will decode the mythical collective experience ('the must') and relate to it 'the desirable';

4) Archetype of superman-Arch father (ancestor of the national elite, the Hero patron), embodies the image of the Hero-superman, based on the national elite and folk archetypes (Polosin, 1999, p. 94).

Cumulative social experience ('the must') is transformed into the idea of the absolute, which, in turn, is associated with the transcendent 'the real', inhabited by the earlier generations, led by Arch father of the nation. In this space of the archaic myth one can see the spiritual and moral completeness of the folk tradition, understood as the expression of the Absolute, divine Absolute-father. Return from the mythological sphere gives the spiritual image of the Great Mother – the hypostasis of the Absolute, which in its earth existence is associated with the concept of the Fatherland (Otan, Zher-Ana), in which the nation feels itself the subject of history. This image covers all national mythology and reproduces it through the national elite, which protects the national leader-hero. Thus, the 'children' of the Absolute are the earthly Homeland, the national elite and the Hero - the voicer of the sameness of the nation, 'the desired' by the canons of 'the must'.

Polosin V.S. notes that 'the national mythology is the subconsciousness of people, 'the well of time' of a big Family, art, *mythopoetic* allegory about her *actual experience*, the archetypes of which are expressed in symbolic images. The basis of the national identity is the education of *natural nationalism* - feeling of the big family, united Motherland-Mother. Family members are 'their', others are 'strangers' and 'remote'. In order 'strangers' could become 'friends of the family', family itself must be available first' (Polosin, 1999, p.98).

The political components of the myth of the nation are the following defensive and conservative ideas: keep the territory, restore the demographic potential, preserve the culture, and regain position in the world civilization.

Kolyev assumes that conceptualized political myth can become one of the technologies of the effective society management, of securing its consolidation, and resistance to destruction of philosophical foundations of the state existence. Demonstration of the national archetype, deep mythological notions of Good and Evil, Justice and Truth are salutary for the country, living in conditions of socio-economic and cultural crisis (Kolev, 2003, p. 377).

'Those who are trying logically, solely rationally and mechanically 'to calculate' the project of the rebirth of the state, mostly hit the wall' (Kolev, 2003, p. 377). According to Kolyev A. N., you must create the national myth, which must include a wide layer of cultural tradition, with all the history and the mythological symbolic world, and it might actually fill the deserted 'middle' space of people's way of thinking. In this case not the Truth but the Victory becomes the dominant idea; not humanity but the nation becomes the main value (Kolev, 2003).

The 'corporeal' project of the myth gets close to the miracle. By a miracle people often understand 'what cannot be'. But this is interpretation of a non-mythical observer. A subject, taken up with myth, does not see anything supernatural in the miracle. For him miracle is natural, but unusual for its beauty, specific harmony, with which it fits into the reality. Anticipation and yearning for a miracle is anticipation to reveal a natural link of things, which until now has been hidden. Losev A. F. writes that miracle is associated with personality, history and symbol and is a synthesis of a certain detachment and phenomenon, a symbol and self-consciousness of a personality - the source and origin of this consciousness.

Miracle is not a violation of the laws of nature, but their deep understanding, identifying the authenticity. In social practice, political magic, indeed, reveals certain relationships that become a productive force (for example, the enthusiasm of the first Soviet five-year industrial plans.

In the 'Dialectics of Myth' Losev writes: 'The miracle basically possesses the nature of *notification, demonstration, annunciation, evidence, wonderful sign, manifestation,* a kind of prophecy, disclosure, but not the existence of the facts, not the occurrence of the events. This is the modification of the meaning of the facts and events, but not the facts and events themselves. This is a certain method of interpretation of historical events, and not finding some new events as such' (Losev, 2001, p. 147).

Of course, not every myth-making leads to salvation, to miracle. It is well known that our mind can generate not only miracle, but monsters as well. But here it is not a case of a superstition, but of a quite conscious acceptance of myth. Mythology creates a specific language of understanding, language of unity around not mastered, but entailing supreme values. Here it is important not to confuse the dream, enlightening the mind, with drug induced sleep. Focusing on myth, we participate in the actual process of struggle between Good and Evil, which takes place in a mythological world, making indelible impact on the history of Earth.

Each nation has its archetypical features, because archetypes were formed at the beginning of its history. After being formed, they accompany people throughout the complete historical path. Therefore, so that to become a mythological character, the politician needs not just to create some structure, but to fit in the 'eternal' national myth, because it is the national myth that makes the 'soul of the nation'. If the myth has the 'corporality' and if it has the 'soul of the nation', then it also has the 'body of the nation'. According to Losev A. F., 'the body is not mere fiction, not a random phenomenon, not just an illusion, not trivial issues. It is always a manifestation of the soul, its footprint. To some extent, it is the soul itself '(Losev, 1994, p. 75).

The myth and the man proximity is regularly used in politics. 'Not any social or political technology, activity in the sphere of management or any marketing strategy can be effective without considering the archetypal layer in the human mind' (Ryazanova, 2005, p. 256). Ryazanova S. V. assumes that each mythological system has a perfect image of the ruler or tsar, who is the custodian of justice and the guarantor of social responsibilities observance. Or this is the image of the deity with anthropomorphic features. Ryazanova S. V. says that these images are projected onto the area of socio-political relations in all known traditional cultures. Since Kazakhstan is among traditional societies, it can fully be related to it.

'Archetypical base in the perception of power and power holder not the least bit transforms in the process of specious modernization, typical for most traditional societies. Outerly sacral character as some paradigm can be changed that does not affect the essence of the dominant traditional governance model' (Bart, 1989, p. 258). Hence, it means that we choose the leader who meets the basic archetypical image of the ruler. An acknowledged leader in politics is the one who is able to represent the archetypical image of 'father'.

A politician, being the subject of myth-making, at the same time is an object of other myth-making projects. Beeing the leader of his supporters, at the same time he becomes a function of expectations and instinctive expectancies of the masses. Appeal to the spiritual and moral measurement of the political process allows revealing the mutual interaction of mass phenomena and behavior of political leaders, who embody prototypical images of the mythical heroes. On the one hand, the political character reflects the collective aspirations of the masses, that has lost the sense of integrity of 'the world picture', and the other he becomes a source of ideological standards, re-establishing 'world picture' in the new conditions. For a politician the myth becomes an integral part of his role function and the tool of political competition.

4. Discussion

Myth-making is a method to restore the reality not only for oneself but also for others. An attempt to build a myth, even if it is an instinctive attempt, at the same time is an attempt to impose your outlook to other people. Perhaps it is most clearly seen in politics. A person or a group who are attempting to create the political myth or to ride the existing myth, try to thrust not only a certain vision of the picture of the social space and the state system, but also his outlook on nature and society. That is why we should expect the dominance of a certain mythological system, which will be approved after the country gets out of the ideological crisis.

But society is not always ready to trustfully accept the myth. Confidence arises only when the myth reflects the collective will, and aggravation in the society results in politicization of the mass consciousness. Confidence also arises at certain specific features of the national-cultural mentality and statehood.

Within this framework, the political myth is the result of human faith in the fact that any power must reveal itself, act as active force, which can be used, if to believe in it. That is why myth can be associated with any form of social power or social claim to power. Myth is always used for justifying and for some special privileges, duties, social inequalities.

R. Barthes wrote, 'Myth is a word, a sentence, and it may be anything that is worthy of a story. For providing the definition of the myth not the object of the message itself, but the way it is reported, is important' (Bart,1989, p.111). Myth is a word, chosen by history. Both in ancient times and nowadays mythology can find its grounds only in history - myth can not arise from the 'nature of things'. Myth is also a message. It represents one of the ways of denotation. The message does not necessarily have to be expressed verbally, it can be a letter, image, photograph, cinematograph, journalistic story, and much more can be 'tangible media of mythical messages', which represent only a starting material for the myth creation. According to Barthes, the main objective of the myth is 'to grant historically conditioned intentions to the status of natural intentions, and bring historically transient facts to the level of eternal ones' (Bart, 1989, p. 111). The outside world provides some historical reality to the myth, while the myth assigns the reality a surface gloss of naturalness. It's in the myth that objects 'lose' the memory of their origin. After special mythological adaptation the world appears as a harmonic picture of eternal essence. As a result, objects are deprived of the human meaning and begin to mean only that the person is uninvolved in them. Thus, the purpose of the myth is in the devastation of reality.

Barthes defines the modern myths as an assembly of connotative means, forming a latent ideological level of discourse ('the area common to all connotative means, is a sphere of ideology' - Barthes). The purpose of the myth is twofold: on the one hand, it aims to deform the reality in order to create such an image of reality, which would coincide with the value expectations of the mythological consciousness bearers; on the other hand, the myth is extremely concerned about hiding its ideology, because any ideology wants to be perceived not as one of the possible world viewpoints, but as the only allowed image, that is, as something 'natural, normal state of things'. Myth does not hide its connotative meanings; it 'naturalizes' them and therefore it's no coincidence that it freeloads on ideologically neutral signs of the natural language.

According to Barthes, the essence of the myth is limited to a single goal – 'the abduction of the language' (Bart, 1989, p. 115), a distortion of the meaning and form. In this case Barthes perceives the politics not 'as the active participation of citizens in public life', but rather as an assembly of human relations that form a real social structure, the ability to create peace.

Being a representative of the structuralist movement, he treats political myth as a secondary semiological structure built over ordinary language. It is a specific meta-language, which builds its own language system on the basis of the language system. Subsequently the political myth is perceived as a system of facts, and according to Roland Barthes is a semiological structure.

What is the socio-political myth-making 'technique' that is at its origin? Many researchers note that social myth-making includes both moments of individual creativity and reflection of mass political consciousness. Historical and contemporary socio-political experience allows to emphasize the following common methods of the political myth-making:

Firstly, it is an appeal to the historical tradition, its integration into the structure of political practice and political knowledge as the strategies or tactic. So, depending on the political orientation, various parties and groups present their options of going back to a particular period of the past. Mythologizing of the past and the transfer of ideas about the past into the future, lead to the fact that the description of the purpose is replaced by a description of means to achieve it.

The transfer in time in mass mythological consciousness can be replaced by the transfer in space. In modern political mythology the idea of transfer in space is presented by a variety of options for the transfer of economic and political models of development (so-called model of 'Japanese miracle', 'American miracle' etc).

Secondly, it is scientific popularization of political information. For example, the party programme myth-making and media activities. In his work 'Manipulation of consciousness' Kara-Murza S.G. writes, 'It's an expert in the modern politics in the West that became one of the important figures and convinces the society in a salutary influence of a decision. Often in this case there is a conflict of interests of authorities, backed by the financial and industrial magnates. If they do not result in collusive agreement, then philistine and deputies are entertained by the 'academic' debate show of the opposing groups of experts.

... At these shows the democracy is nowhere near, as the opinion and concerns of simple people are brushed aside as being ignorant and irrational. The unenlightened representatives of the elite are more politely suggested to study the issue first before starting to criticize. L. Wiener in his book 'The Autonomous Technology' notes that 'this advice is a sort of power legitimation by means of expert's knowledge, and according to my experience, contains not only an invitation to expand the knowledge but rather negotiations for capitulation' (Kara-Murza, 2002, p. 212).

By nominating expert scientists as a special layer of propagandists, who manipulate public opinion, the USA further than other countries moved from the democracy to such mechanism, which has been called 'the decision-making state'. Thus by imitating the science impartiality (freedom from ethical values), politicians replace the problem of choice, which applies to all citizens, by the problem of *decision-making*, which is the internal affair of politicians and experts '(Kara-Murza, 2002, p. 212).

Thirdly, it is the personification of the idea, its transformation into the image of a political leader or some political organization.

It should be noted that all the above myth-making techniques appear as different ways of dosing social information in the course of its production and broadcast. Depending on the circumstances of the political process and in accordance with their own needs, society and power implement this dosage.

Thus, the socio-political myth-making appears as necessary component of the political process. At that on the one hand, myth-making increases the efficiency of the socio-political impact, but on the other hand, by distorting the political realities, it represents them as 'required' for the ruling structures and 'desired' for the society at the same time. The history knows many examples of the facts when such distortions mostly lead to realization of the manipulators' goal.

According to Osipov G. V., the main effect of the myth-making process is that while being materialized, it is inevitably accompanied by the consequences of 'the reverse effect', i.e. the results, the possibility of which no one anticipated and wanted (Osipov, 2002, p. 207).

Thus, despite the presence of mostly negative moments, in our view, the socio-political myth, interpreting the existing reality, creates an ideal and corroborates the type of reproduction of social relations, as 'political myths are closely intertwined with some knowledge of the social reality. But more important is their function of the political behavior regulator through the use of emotional and psychological mechanisms. They act as a kind of compensator of the lack of scientific knowledge in the realm of politics. It is well known that science can provide only a partial and subject to correction image of the real world, according to which one can't be absolutely sure of the correctness of his actions. Such confidence is provided by the political myth, which is the intrinsically irrational absolute faith in the ultimate victory and faith in the attainability of the target social goals. That's why every major political movement tries to imbody its goals into a myth, which is taken by people as hope, assigning a specific meaning, excitement and passion to their collective actions' (Osipov, 2002, p. 184).

The logic of the political myth is to transfer certain causality, disputed in the result of the social crisis, into the sphere of mythical images, where a new causality can be found and then moved to the realm of politics. Thus political myth bears an original research logic that operates in the absence of complete basic data.

Thus, recognizing the social and political myth-making as an integral part of the political process, we came to the following conclusions:

- The political myth is based on the archaic myth prototype. It has its own plan of reality - with its logic and plot laws, its own system of symbols and images. But as opposed to the archaic myth, the political myth is formed not only by the emotional experience, but also by the rationally approved semantic core;

- The political myth, performing a function of restoring the picture of the world, permanently destroyed during a social cataclysm, in some or other way refers to the sense-life reasons, among which the motives of freedom and destiny, the motives of life and death stand apart;

- The positive side of the political myth is seen only in its relation to the cultural and national traditions;

-The political myth simultaneously acts as a tool to manipulate society and the tool for resolution of existential problems, without which it is impossible to proceed to the solution of practical problems.

In general, the awareness of the tangible nature and capabilities of the political myth facilitate the more effective usage of the consciousness of its beneficial capabilities and protection of consciousness from its adverse effect.

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Archaelogical Studies at the Karatau Tumulus Burial Grounds

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Abstract

The Karatau team of the Syganak archaeological expedition of the Research Centre of Archaeology of the International Kazakh-Turkish University named Khoja Ahmed Yasawi hold the exploration works along the lower and middle reaches of Kyzylata and Biresek rivers in 2012 field season. In the course of the study the burial grounds Kyzylata I, Kyzylata II, Biresek I and a single tumulus Biresek II were excavated. The aim of the study is to obtain new data on early medieval cultures, identifying features of the evolution and trends in the overall development of culture and the reconstruction of obsequies and philosophical foundations of ancient tribes. The study was funded by the Committee of Science of the Ministry of Education and Science of the Republic of Kazakhstan in the framework of the budget program 055 "Research and / or scientific and technical activities", sub-programme 101 "Grant funding for research studies" by priority: "The intellectual potential of the country."

Keywords: Tumulus, burial mound, burial chamber, dromos, burial ground

1. Introduction

The Karatau team of Syganak archaeological expedition of the Research Centre of Archaeology of the International Kazakh-Turkish University named Khoja Ahmed Yasawi hold the exploration works on 4 tumuluses of the burial ground Kyzylata I (tumulus no. 4-7) on one tumulus of the burial ground Kyzylata II (tumulus no. 1), on two tumuluses of the burial ground Biresek I (tumulus no. 5, 12) and on a single tumulus Biresek II in 2012 field season.

2. Techniques

The study of tumuluses was carried out taking into account the methodological experience gained in studying similar monuments. Only the inner part of the burial chamber and dromos structures were exposed to clearing. The external shell of the structure, including the collapse of the structure, as well as the structure breakdown and the walling of inner surfaces of the burial chamber walls and dromos were subjected to the drawing. Most often the highest point of the tumulus structure was taken as a conditional "0". Given the fact that most tumuluses are located on slopes with a significant incline, the height of the tumulus was measured from the lowest point of the burial chamber, corresponding to the level of the bed rock of the tumulus structure.

3. Results

Kyzylata I burial ground is situated in the Turkestan, region of the South Kazakhstan, 17 km north-northwest of the Kentau city, in the valley of Kyzylata mountain stream. The burial ground was discovered in 2004 by the Turan archaeological expedition of the Research Centre of Archaeology of the International Kazakh-Turkish University named Khoja Ahmed Yasawi (Report, 2005).

In the course of studies on the monument in 2004 the tumuluses and burial mounds located on both banks of the Kyzylata River were included in the burial ground. In the study of 2012 we divided the tumulus burial ground into two separate monuments - the tumulus burial ground Kyzylata I located on the left bank of the river and the burial ground Kyzylata II located on the right bank of the river (Report, 2012).

The tumuluses of the burial ground Kyzylata I are chained from north to south, stretching along the left bank of the Kyzylata River. The beginning of the tumulus chain is located 60 m north of the Balakorgan fortress, and it ends 2.5 km to the north of it. The majority of tulumuses are located on the top of the ridge, delimiting from east

a narrow valley of the Kyzylata River that lies at the highest point of the pass and only tumulus 1 is located in the bottomland on the bank of the river. The average distance between tumuluses is 150 m. A total number of 17 tulumuses of different diameter and height are recorded in the burial ground.

Tumulus 4 is located on the top of the ridge bounding from east the Valley of the Kyzylata River, at a distance of 460 m north of the Balakorgan fortress. The tumulus consists of two parts: the tumulus structure itself, i.e. embankment and the outer ring, delimiting the tumulus pad along the entire perimeter. The tumulus is built of stones of medium and large sizes (from 0.25x0.1 m to 1.1x0.9 m). Rock broad stone was mainly used in the walling. The sizes of the tumulus itself, taking into account the collapse of the structure, are 8x9 m. The height of the remained part from the floor level of the burial chamber is 1.35 m. Diameter of the ring at the perimeter (excluding the collapse of the ring) is 13 m, the height of ring walling (from the level of the current ground surface) - 0.25-0.4 m, and width 0.5-1.5 m. Because the outer part (the tumulus ring) is located on a natural hill, its eastern and western parts slid down (Figure 1).

Figure 1. The burial ground Kyzylata I. Tumulus 4. General view from the north

The burial chamber of subrectangular form has the dimensions of 2.6 x1.0 m, its longitudinal axis being oriented north-south (Figure 2-1). On the southern part the dromos joins to it. The inner part of the burial chamber is made by "false arching" technique having a ceiling of the large plates. Cross-section of the chamber is frustoconical. The width of the remaining part of the chamber ceiling is 0.5 m. The length of the dromos part visually fixed from the surface - 1.2 m, the width of the dromos at the entrance to the burial chamber is 0.6 m. The major part of the dromos is littered with a small and medium-sized stones caught inside the structure as a result of the tumulus destruction, at the entrance part of the dromos a walling made using the "correct walling" technique and overlapping the entrance into tumulus was observed. The height of the remaining part of the tumulus walling is 0.48 m; the length of the laid part is 0.7 m. In the central and southern part of the burial chamber the upper crowns of walling, as well as the overlap of the chamber did not remain. Also the upper part of the dromos walling was lost.

The Tumulus is located 75 m north of the Tumulus 4, 540 meters to the north of Balakorgan fortress on the bridge of the saddle. As well as the Tumulus 4, the pad of the Tumulus 5 is contoured on perimeter by the annular bank (the so-called tumulus ring) built of small and medium stones. The proper walling wasn't observed in the ring structure. The dimensions of the ring (by outer contour) are 12x13 m. The width of the ring (not including the collapse) is about 1.0-1.5 m, the height of ring walling (from the level of the current ground surface) - 0.25-0.30 m. The tumulus is built of stones of medium and large sizes (from 0.25x0.1 m to 1.1x0.9 m). The dimensions of the tumulus itself are 7.5x7.0 m, and the maximum height of the remained part from the floor level of the burial chamber is 1.35 m.

The burial chamber has an oval shape with dimensions of 2.3x1.2 m oriented by the long axis along the northwest-southeast line. The dromos oriented according to the direction of the center line of the burial chamber is adjacent to the burial chamber in the southern part. The inner part of the burial chamber is made by "false arching" technique covered with the large plates. The cross-section of the chamber has a semi-oval shape - the width of chamber ceiling is 0.7 m. The length of the dromos is 2.5 m, the width of the dromos at the entrance to

the burial chamber is 0.4 m and the width of the exit section of the dromos is 0.6 m. The threshold of the dromos is framed by several large stones embedded in the walling foundation of the burial chamber. The width of the dromos threshold is 0.4 m, the length - 0.3 m, and the height of the threshold (from the floor level) 0.37 m (Figure 2-2).

The tumulus 6 is located 35 m north of tumulus 5. The dimensions of the tumulus are 8.5x8.0, and taking into account the tumulus walling collapse - 9 x 11 m. The maximum height of the remained part (from the level of the current ground surface at the base of the northern floor of the tumulus) - 1.02 m. The ring is missing. The so-called "gabion" made by the local shepherds nowadays is located at the top of the tumulus. The height of the "gabion" remains is 0.53 m. The tumulus has not been excavated. A subrectangular deflection having the dimensions of 2.5 x 1.8 m (depth is 0.3 m) is located in the center of the mound at the place of the burial chamber.

The tumulus 7 is located 110 m north of tumulus 6, and 700 meters north of Balakorgan fortress, in a small saddle between the crest ridges. The dimensions of the tumulus are 12x12 m, taking into account the collapse of the burial mound structure - 12x15 m. The maximum height of the remained part from the floor level of the burial chamber is 1.35 m. The ring is missing (Figure 2-3).

The burial chamber has subrectangular shape with the dimensions of 2.3x 1.4 m, the dromos is adjacent to the burial chamber in the southern part. The longitudinal axis of the chamber is oriented along the northeast-southwest line. The inner part of the burial chamber is made by "false arching" technique. Cross-section of the chamber has semi-oval shape. The height of the burial chamber is 1.34 m. The dromos was partially cleared - on the inner side within 0.5 m. No traces of dromos made using "correct walling" were observed. The length of the dromos part visually fixed from the surface is 1.1 m, the width of the dromos at the entrance to the burial chamber is 0.6 m. The width of the dromos threshold is 0.6 m, the length - 0.5 m, the height of the threshold (from the floor level) is 0.3 m.

The fragments of human bones, including the jaw of an adult, as well as fragments of pottery from - two stucco vessels were found in the northern part of the burial chamber at the floor level.

- Stucco vessel (Figure 3-1). Dimensions of the remained part: bottom diameter is 4.2 cm, diameter of the largest part of the trunk is 8.0 cm, neck diameter is 6.8 cm, height of the remained part is 6.8 cm, the height of the vessel to the widest part is 4.0 cm, shoulder height is 2.6 cm, wall thickness: 1.0 cm (bottom), 1.1 cm (near-bottom part), 0.7 cm (trunk), 0.5 cm (neck). The bottom is flat, without plate. The shape of the trunk is bomb-like. Judging by the small remained part, the neck had a small limb outwards. The forming: stucco. The burning is uneven - floor-standing. The surface of the walls is spotted, from pale red to gray-black. The forming is rough, the smoothing traces weren't observed. The traces of rough shaping with fingers were observed on the inner surface of the walls. The locking ring is missing.

- Fragment of the stucco vessel wall. The sizes of the remained part are 7.2x4.7 cm, wall thickness: from 0.7 to 0.6 cm. The forming: stucco. The paste is of medium density, weth bad batter. The burning is uneven - floor-standing. The outer surface has traces of rough coating with raw clay mortar, partially blackened using the vessel. The forming is rough, the smoothing traces weren't observed. The integrity is bad. A significant part of the vessel was lost.

In the course of the research on the tumulus of the burial ground Kyzylata I the material which allows specifying and significantly expanding our understanding of tumuluses as archaeological sites was obtained. The clothing material, as a whole, is also similar to ceramic complex, which can be found in tumulus burial grounds of Fergana (Litvinsky, 1973; Levina, 1971).

The burial ground Kyzylata II is located in the valley of a mountain stream Kyzylata, on its right bank, opposite the burial ground Kyzylata I. The burial ground occupies two low platforms above the riverbed on the spurs of the eastern slope of the ridge, which serves as a western border of Kyzylata Valley.

Total on the surface were registered 8 burial mounds (of 8 objects included in the described burial ground only 3 can be attributed to the type "Tumulus", the remaining burial mounds at the external examination of tumulus signs, i.e. the ground burial chamber and dromos were missing, or not remained) of various diameters and heights. The burial mounds in the burial ground are located in two groups, the natural border between which is a small hollow between two branches of the ridge. The average distance between tumuluses is 100 m.

The Tumulus 1 occupies the extreme south-west position on the territory of the burial ground. The floodplain area on which the tumulus is located has a strong bias towards the east, which is why most part of the structure collapse is located on the eastern part of the building. The dimensions of the tumulus are 12x12 m, taking into

account the collapse of the burial mound structure - 14x16 m. The maximum height of the remained part from the floor level of the burial chamber is 1.55 m. The ring is missing. The burial chamber has an oval shape with the dimensions of 2.3 x 1.63 m (Figure 2 - 4). The inner part of the burial chamber is made by "false arching" technique. Cross-section of the chamber has a semi-oval shape. The height of the burial chamber is 1.3 m. The dromos has been cleared. The length of the studied part of the dromos is 1.1 m. The width of the dromos is 0.6 m, the total length is about 1.7 m. At the threshold the dromos has an evident widening - up to 0.8 m; threshold height (from the floor) is 0.15 m (0.03 m above the level of the cleared findings).

The fragments of human bones as well as fragments of pottery from three molded vessels were found in the northern part of the burial chamber at the floor level.

- Stucco vessel (Figure 3-2). Dimensions of the remained part: bottom diameter is 7.2 cm, diameter of the largest part of the trunk is 9.3 cm, neck diameter 6.9 cm. Total height of the vessel is 10.7 cm, neck height is 1.25, the height of the vessel to the widest part is 6.0 cm, shoulder height is 3.45 cm, wall thickness 1.05 cm (bottom), 1.1 cm (near-bottom part), 0.9 cm (trunk), 0.7 cm (neck and crown). The handle is bonded and is oval in cross section (the length is approx. 4.5 cm, thickness - 1.2 cm, width -1.8). The bottom is flat at roughly decorated straight disc-shaped pan. The crown is well profiled and curved outwards. The forming is molded. The burning is uneven - floor-standing. The traces of rough shaping with fingers were observed on the inner surface of the walls. A part of the vessel was lost. The archaeological integrity of the vessel is broken only by uncertainty of the exact place of handle attachment to the trunk.
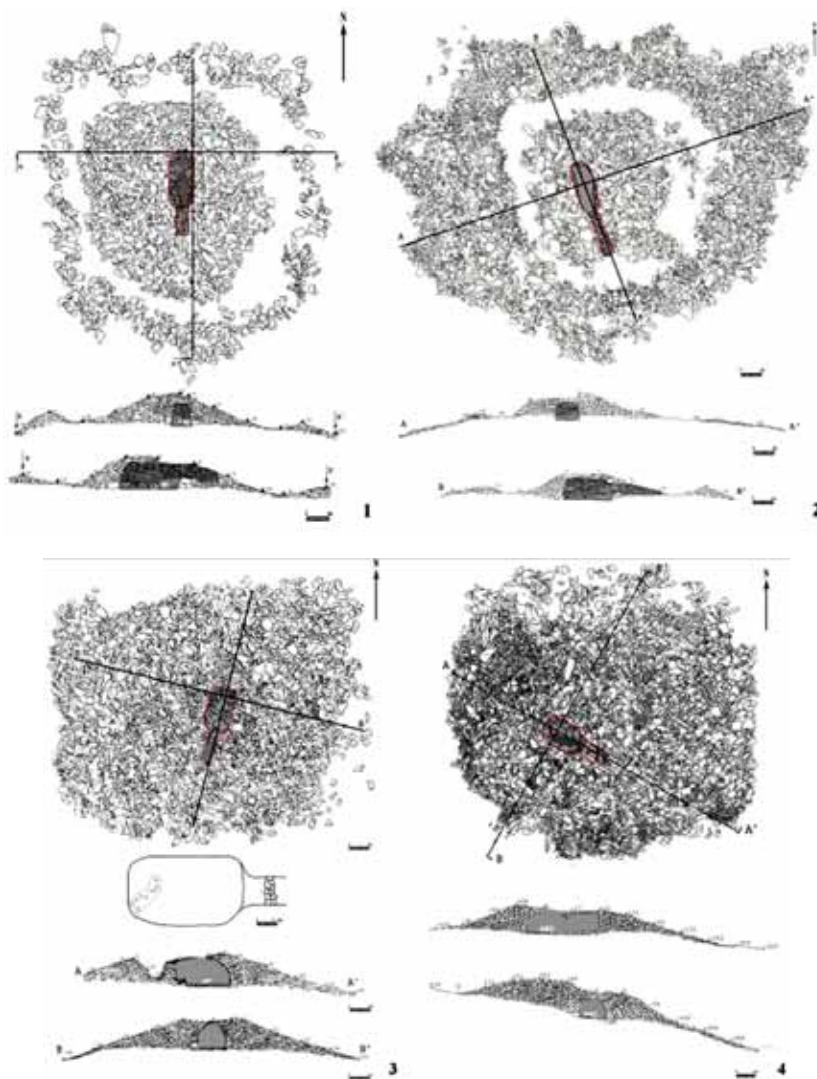
Figure 2. The burial ground Kyzylata I-II. Plans, cuttings

1 - Kyzylata I. Tumulus 4; 2 - Kyzylata I. Tumulus 5; 3 - Kyzylata I. Tumulus 7; 4 - Kyzylata II. Tumulus 1
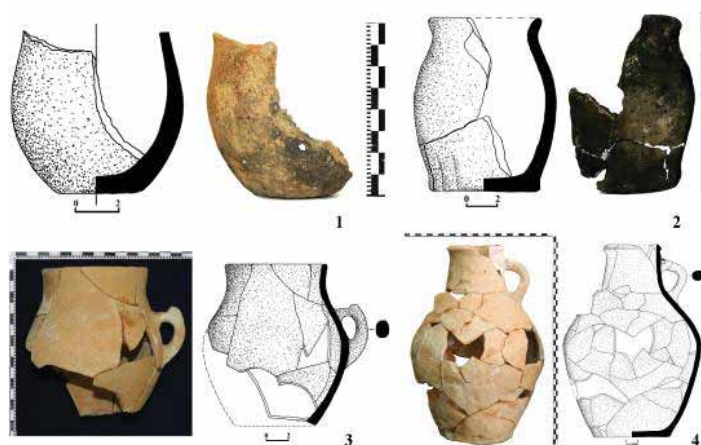
Figure 3. Finds

1 - The burial ground Kyzylata I. Tumulus 7. Fragment of stucco vessel; 2 - The burial ground Kyzylata II. Tumulus 1; 3 - Fragments of vessels; Vessel 1; 4 - The burial ground Biresek I. Tumulus 12. Vessel 2

- Bottom, crown and fragments of walls of a large vessel (khumcha). Dimensions: bottom diameter 24.5 cm, maximum diameter along the trunk 39 cm, diameter of the remained part of the neck 20 cm; maximum height of the remained part 42 cm, wall thickness: 0.8 cm (trunk), 0.75 cm (remained part of the upper part of the shoulder - transition to the neck), 0.9 cm (near-bottom part), 1.05 cm (bottom), 1.4 cm (crown), 0.9 cm (neck). The bottom is flat, without plate. The crown is well profiled and curved outwards. The forming: stucco. The burning is uniform. The scratches were found on the surface at the smoothing down the surface with the chip. Engobed coating. A painting in the form of streaks of red and yellow engobe on a gray background is in the outer surface.

- Crown and a portion of the vessel wall. Fragment (6.0x4.7 cm). Dimensions: entrance diameter 12.0 cm, neck diameter 11.5 cm, the maximum diameter of the remained part of the trunk 14.7 cm. The maximum height of the remained part 5.1 cm, neck height 2.1 cm; wall thickness: 0.6 cm (trunk), 0.7 cm (neck) 0.5-0.6 cm (crown), 0.9 cm (neck). The crown is well profiled and slightly curved outwards. The forming: stucco. The burning is uniform. The vessel is covered with orange engobe of poor quality. The traces of paining with dark brown engobe on orange background are widely scattered. A significant part of the vessel was lost.

The tumulus burial ground Biresek I is situated in Turkestan, region of South Kazakhstan, 11 km to the north - north-east of the city Kentau, in the Valley of Biresek River, 500 m to the south-west of Karatau reserve cordon. The tumuluses are located on the right bank of Biresek on the slope of the ridge delimiting the narrow valley of the river from the northwest.

The monument was unveiled in 2012, by the Karatau team of Syganak archaeological expedition (S. Murgabaev, M. Bahtybaev) (Report, 2012). Totally 17 tulumuses of different diameter and height were recorded in the burial ground.

Tumulus 5 is located on the ridge slope delimiting the Valley of the Biresek River from the west, occupying a small area at the base of a large rock outcrop. The eastern part of the site, on which the base of tumulus is situated, is reinforced with the walling of large raw slabs. Dimensions of the tumulus are 8.0 x9.0 m. The maximum height of the remained part from the floor level of the burial chamber is 1.61 m. A large amount of gravel with sand and small stones is observed in the tumulus walling as well as in the filling of the burial chamber.

The burial chamber is of subrectangular shape with the dimensions of 2.33x1.63 m (Fig. (4 - 1)). The inner part of the burial chamber is made by "false arching" technique. The length of the dromos is 1.75 m, the width of the dromos at the entrance to the burial chamber is 0.6 m and the width of the exit section of the dromos is 0.67 m. The threshold is marked with a large flat stone of sub-triangular shape. The width of the dromos threshold is 0.5 m, the length - 0.45 m, and the height of the threshold (from the floor level) - 0.19 m (-134 from the conditional "0"). The bottom of the burial chamber is a surface of indigenous rocky outcrop. The bottom has a significant slope to the east (-0.2-0.25 m). The threshold level is at an altitude of western corners of the burial chamber. At the beginning of excavation the dromos of tumulus was correctly walled using raw flat stones of medium size (0.4x0.3 m). At the break-up of the walling it turned out that the top crowns of the walling are wedged by small

stones (0.1m0.15 m), triangular in shape, and it was noted that the "wedges" were driven into the walling from the inside of the burial chamber.

The findings in tumulus 5 include only a thin string bead which was found in the southeastern part of the burial chamber at floor level.

The bead. It has an elongated cylindrical shape, noticeable bend, and it is round in cross section. Dimensions: length 1.4 cm, thickness (sectional diameter) 0.4 cm; diameter of the hole 0.04 cm. The bead is of white color. The longitudinal threadlike veins are distinguishable. In contact with water the bead becomes pale pink.

Tumulus 12 has dimensions of 7.5x7.0 m. The maximum height of the remained part from the floor level of the burial chamber: 1.86 m. The ring is missing. The tumulus was built on rocky ground specially aligned for the purpose by the walling of large slabs. The burial chamber has a subrectangular shape with the dimensions of 2.34x1.60 m (longitudinal walls of 2.18 and 2.34 m, cross walls 1.69 and 1.43 m). The floor of the burial chamber is fixed at a depth of «-131» from the conditional «0». The inner part of the burial chamber is made by "false arching" technique. Cross-section of the chamber has a semi-oval shape. The dromos is facing southeast. The length of the dromos - 1.4 m, the width of the dromos at the entrance to the burial chamber is 0.6 m. The height of the dromos from threshold to ceiling is 1.24 m. In section the dromos has the shape of an equilateral triangle. Threshold level of the dromos ("-119" from the conditional "0") rises above the floor of the burial chamber by 0.15 m (Figure 4-2).

The findings are exhausted by three stucco vessels, metal belt buckle, as well as tin plate.

- Stucco vessel. Dimensions: bottom diameter 7.0 cm, diameter by rib 13.5 cm, neck diameter 9.0 cm, entrance diameter 9.5 cm (Figure 3-3). The total height of the vessel is approx. 14.5 cm, neck height 3.2 cm, rib height 7.5 cm; wall thickness: 0.55 cm (neck and crown) and 0.6 cm (trunk), 0.7 (near-bottom part). Handle in section - a rectangle with rounded corners. Handle length: 4.8 cm, width 1.4 cm, thickness 1.1 cm. In the upper part of the handle there is a characteristic V-shaped protome. The bottom is flat, without plate. The neck is straight; the crown is slightly bent outwards. The near-bottom part of the vessel expands to the top, smoothly passing to gradual shoulders. It was made of good paste, the mix is qualitative, and the pottery fragment is tight. The surface is light brown.

- Stucco vessel. Dimensions: bottom diameter - 13.0 cm, diameter by rib - 23.5 cm, neck base diameter - 10.4 cm, diameter of the neck top - 9.0 cm, entrance diameter - 10.5 cm. Total height of the vessel is 33.5 cm, neck height - 8.0 cm, rib height - 15.5 cm; wall thickness - 0.8 cm (neck), the wall thickness of the trunk is not the same - from 0.75 to 0.9 cm (trunk), 0.8-0.9 cm (bottom). Handle in section - a rectangle with rounded corners. Handle length: 8.5 cm, width 1.65 cm, thickness 1.6 cm. In the upper part the handle has two characteristic V-shaped protomes (Figure 3 - 4). The bottom is flat, without plate. The neck is conical - tapered upwards. The crown is rectangular with clearly defined edges, bent outward. The bottom part of the vessel is directly conically expanding towards the top, with a noticeably sharp bend, passing to gradual tapered shoulders. The transition from the neck to the shoulders is also clearly indicated by a sharp change in the angle as well as in some areas by stipples on the outer wall surface. The vessel has a nose at the base of the neck that has been preserved in the traces. The surface is light brown. No ornamentation.

- Stucco vessel. Dimensions: bottom diameter - 9.0 cm, diameter by rib - 13.5 cm, neck diameter - 9.0 cm, entrance diameter - 11.0 cm. Total height of the vessel is 17.0 cm, neck height - 4.8, rib height - 6.0 cm; wall thickness - 0.55 cm (neck), 0.6 cm (crown), 0.7 - 0.8 cm (trunk), 1.1 (near-bottom part). Handle in section - a rectangle with rounded corners. Handle length: 5.6 cm, width 1.8 cm, thickness 1.35 cm. At the top the handle has a characteristic V-shaped form. The bottom is flat, without plate. The neck is high, slightly bent outwards by trumpet. The crown is well profiled and curved outwards. The trunk is bomb-like. The near-bottom part of the vessel expands to the top, smoothly passing to sharp shoulders. The surface is red. Hand molding, the outer surface is roughly smoothed by hand; the fingerprints are visible in some places.

- Iron buckle Dimensions: front metal plate - 4.3x 3.5 cm (thickness 0.4 cm). The forged pattern on the front side - in a rectangle frame two circles with touching edges, with inscribed rhombic shapes are situated. By outer edge of the metal plate there is a pattern supplemented with three pyramidal teeth formed from three welded rings (diameter 0.7 cm) are soldered to the edge, so that the metal plate takes the form of reduced plaque trident. The metal plate is attached to the buckle by two rivets (section diameter 0.3 cm), which were also fixed. The clamp of the buckle is an iron plate bent into a loop with a slot for the prong and the opening for the buckle ring. The remaining long ends of the plate are attached to the rear plate from the face. The total length of the plate is approx. 8.3 cm (in the retracted position - 4.2 cm), thickness - 0.2 cm, width of the prong slot - 1.1 cm. The ring belt has a shape of a regular oval (dimensions 2.2x 3.1 cm); it is made of a rod triangular in cross-section and

expanding to the middle (1.0x0.7 cm) and tapered at the ends (0.7x0.45). The prong is made of rod triangular in cross-section with the enforcement rib facing the front side of the buckle. The tip of the prong is bent inwardly at an angle of 90°. The prong joint has two specially provided lockers, restricting free stroke of the buckle prong and turning it into a hard belt lock. The prong length is 2.7 cm, cross-section: 0.6x0.4 cm.
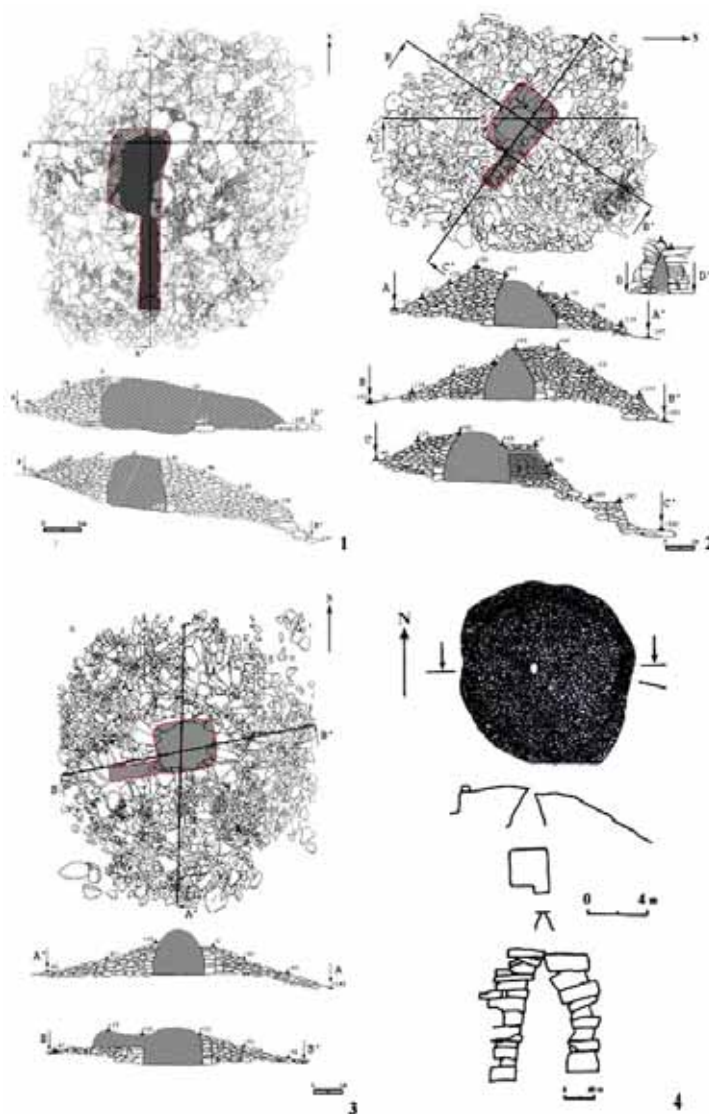

Figure 4. Plans, cuttings

1 - The burial ground Biresek I. Tumulus 5;   2 - The burial ground Biresek I. Tumulus 12;   3 - The Tumulus Biresek II; 4 - The burial ground Esekbel. Tumulus 1

- Fragment of the iron fastening. It is an iron plate folded in half with the dimensions of 5.2x1.2 cm (folded 2.6x1.2 cm). The plate thickness is 0.07 cm, the ends put together tare pierced through with a small iron nail, serving as a rivet. Apparently, the plate has been serving as fixing for something on leather.

The single tumulus Biresek II is situated in Turkestan, region of South Kazakhstan, 11 km to the north - north-east of the city Kentau, in the Valley of Biresek River, 600 m to the south-west of Karatau reserve cordon. The tumulus is located on the left bank of Biresek on the slope of the ridge delimiting the narrow valley from the south-east.

The monument was unveiled in 2012, by Karatau team of Syganak archaeological expedition (S.Murgabaev, M.Bakhtybaev) (Report, 2012).

Dimensions of the tumulus are 8.5 x8.0 m. The maximum height of the remained part from the floor level of the burial chamber is 1.05 m (Figure 4-3). The burial chamber has a subrectangular shape with the dimensions of 2.07x1.75 m (longitudinal walls of 2.01 and 1.63 m, cross walls 1.38 and 1.52 m). The floor of the burial chamber is fixed at a depth "-96" from the conditional "0". Cross-section of the chamber has a semi-oval shape. The tumulus dromos faces west. Dromos length - 1.7 m, width - 0.6 m.

The fragment of the handle and a wall portion of a pottery vessel. Dimensions: wall thickness 0.35 cm. The handle has a shape of a flattened oval in cross-section, with the dimensions of 4.7x1.8 cm. It was made of good paste, the mix is qualitative, and the pottery fragment is tight. No impurities in the mix. The pottery fragment in break is of brick-red color. It is uniformly calcined. The burning is qualitative, oxidative. The surface of the pottery fragment is light red. The forming was made on the potter's wheel. The vessel is covered with a light yellow engobe and the ornament in the form of vertical streaks of red engobe on light yellow background.

4. Discussion

In 2004, the Turan archaeological expedition excavated a tumulus 1 of the burial ground Esekbel upstream the Biresek River. The tumulus has the diameter of 15 m and the height of 2.2 m (Figure 5). According to the construction the tumulus is similar to the described above, but the outer contours of the walling were preserved well, but the burial chamber was preserved in a subsquare shape (Figure 4-4). Two gold products intended for embroidery were discovered at the clearing of the burial chamber. One of them depicts the head of a feline predator; the other is leaf-shaped (Figure 6) (Report, 2005; Arynov, 2005).

In 1958, 1962, 1969 in the course of archaeological research in our area the tumuluses and burial chambers similar in construction to our tumuluses were excavated, and unlike ours they do not have dromoses. The burial chamber is elongated from north to south; the floor of the burial chamber was cleared and paved with stone slabs (Mershiev, 1962; Maksimova, 1973). Most part of the tumuluses found by the authors in the course of exploration in different years since 1998 in the central and northern part of Karatau has dromos structures. (Report, 2005). The burial structures with dromos are practiced from the Late Bronze Age (Itina & Yablonsky, 1997). All tumuluses with dromos examined in 2012 and burial chambers in most are elongated from north to south, sometimes due to the mountainous topography they are oriented to the east. From this we can conclude that there was not a certain strict orientation. The next feature is a stone fence around the mound in Kyzylata I group (Figure 1). Such stone fences of various types can be found in the graves of the Bronze Age, early Iron Age and the Middle Ages (Nurmaganbetov, 2011; Goryachev, 2011; Aitkali et al., 2014; Report, 2013). And in some Fergana mounds the fences were laid in rows of large stones around the mound and the space between them was filled with small stones (Litvinsky, 1973).

Judging by the bone material the legs of the buried are oriented to the corridor. Tumuluses have surface structures and there is no burial chamber inside them. The tradition of burial in Tumulus allows to confidently say that the buried have not been covered with earth. The floor of the burial chambers in Tumuluses excavated by A.G.Maksimova is paved with stone slabs, there were observed very small amounts of the bone material or it does not exist at all, apparently, because the buried were lying on the surface. Or the "dead" was buried after complete or partial burning, or was buried only as a skeleton. The tradition of skeleton burial after the "dead" was given to be devoured by birds, dogs, exist in some cultures to the present day. Probably, tumuluses were used for burial not once, but this is still a hypothesis.

The anthropological material has confirmed the interpretation of tumuluses as burial sites, with the burial rite in many respects similar to that in the tumuluses of the western Fergana (Litvinsky, 1959). The close parallels to Fergana analogs does exist (size, shape, walling technology, the presence of dromoses and rings and etc.) in the architecture of the studied monuments of Karatau, and in the topography of their placement (mountain slopes and passes). The clothing material found in the tumulus of Kyzylata and Biresek georges and, in general, is also similar to the ceramic complex that is found in the tumulus burial grounds of the Western Fergana (Litvinsky, 1973), the ceramic complex of the middle and lower reaches of Syr Darya, including Otrar oasis (Levina, 1971).

In the analysis of the tumulus complexes from tumuluses of the Western Fergana, taking into account all categories of inventory, the researchers divide them into two groups: western and eastern. The Western Group is considered as a mining option of Kaunchi-Jon culture. The eastern group is characterized by tradition of late-usun and plain Fergana. All materials are dated starting from I-II centuries BC to VI-VII centuries. But at the same time the proportion of burials dates back to the V-VII centuries. (Litvinsky, 1972) M.E. Voronets dated tumuluses by the I-II centuries AD (Voronets, 1954), B. A. Litvinsky reviewing these materials dated them to the IV-V centuries. (Litvinsky, 1954) A. G. Maksimova dates the materials from tumuluses of Karatau Ridge by the first half of the I millennium (Maksimova, 1973).

Figure 5. The burial ground Esekbel. Tumulus 1. General form

Figure 6. The burial ground Esekbel. Tumulus 1. Finds

5. Conclusion

Unlike ceramics from the Fergana tumuluses in the region under consideration, the ceramics with zoomorphic handle has not been found, but nevertheless more recent versions with protomai at the top of the handle can be met. Generally, in the first half of the I millennium the zoomorphic images on the handles of ceramic vessels in Central Asia, especially in the middle reaches of Syr Darya, are replaced by conventional Protomai and later, in 7th century they are extremely rare. The ceramics of pre-Syr-Darya Karatau under consideration can be dated to IV-VII centuries. Among the ceramic complex of 2012, only a single exemplar made on a potter's wheel, with traces of light yellow engobe with streaks of red engobe (Biresek II), has a broad chronological framework, covering more recent periods. This feature pushes us to think about reuse of tumuluses.

Among metal products 2 small belt buckles from Kyzylata burial ground, especially one with a forged pattern on the front side, were widely spread in the VI-VIII centuries. It is difficult to draw a clear analogy to gold products found in 2004 in the Esekbel burial ground, but the plate with the head of predator turned full face is stylistically reminiscent to Hun products. A leaf-shaped article with a clasp at the top, in terms of its time, is similar to the time of the plate. We assume that the chronological framework of the metal products is similar to the ceramic complex.

Finally, the topography of the burial ground Kyzylata I, clearly linking the burial to one historical and cultural complex with a medieval fortress Balakorgan, allows to approach the question of settlement monuments left by population that practiced burial rites in tumuluses.

These results are preliminary. Future research on the monuments would extend the chronological framework and will allow resolving the issues of ethnicity.

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Algorithm for Organizing the Process of Ecological and Economic System Regulation of the Territorial Unit

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Abstract

The optimization of using the natural-resource potential of the region is the most important function to manage the social and economic regional interactions, causing the needs to make changes in the management system for the balanced eco-economic development of the territory by taking into account the intensification of reproduction processes. The challenge of improving the theoretical and methodological framework and toolkit to form the scientifically-based system of balanced use of regional resources is characterized by a high theoretical and practical importance. The purpose of this study is to elaborate the perspective directions of regulation development for the environmental and economic sustainability of the territory system. Unlike the undertook studies, the given empirical study focuses on simplifying the regulatory process of ecological and economic development in the region due to the integrated management systems (IMS) implementation.

Keywords: ecological and economic system, development, management, ISO 9000, ISO 14001, integrated management system, Balanced Scorecard

1. Introduction

Currently the development of ecological and economic systems occurs under the influence of globalization and dynamism, contributing to both an increase in the growth rate and the higher uncertainty and instability of economic development (Younga et al., 2006, Sardar et al., 2003), causing the necessity of appealing to the theory of sustainable development (Mulder & Van Den Bergh, 2001), which is currently under the development (Robinson, 2004). From a perspective of the system approach, the sustainable development can be determined as a type of internal deterministic system changes leading to its development and progress. The development becomes unstable, when a crisis state occurs, which leads to the system breakdown. Consequently, the transition to the sustainable development paths requires the formation of environmentally and economically balanced strategy (Akgün et al., 2012), which combines the economic and resource regional needs. At that, the economic and environmental systems should be considered as parts of the subsystem, combination, and co-evolution of which is accompanied by the entire system conversion, and the occurrence of emergent properties.

Among the factors that determine the sustainable ecological and economic development of the region, we shall allocate the following:

- increasing the resource base;

- raising the population's living standards;

- ensuring the environmental safety of the region;

- improving the economical indicators of the region.

Taking into account that the region is a part of techno-biosphere limited by a certain territory, wherein the natural, social and industrial structures and processes are linked with the inter-supporting flows of substance, energy, and information, the sustainability of ecological and economic system represents the dynamic sustainability and is implemented under the certain relations between the parameters, which characterize the state in the economy and ecology of the territorial unit (Moffatt & Hanley, 2001). Changes in one of given areas without corresponding changes in the other may be the cause of dynamic equilibrium violation.

The recent institutional changes make it necessary to apply the standards of ISO 9000, simplifying the development and implementation of environmental management in accordance with standard ISO 14001, which leads to the optimization of using the natural-resource potential of the region (Zhu et al., 2013).

2. Methods

The theoretical basis of the work made the foreign and native concepts of sustainable development, hypothesis and the main provisions of ecological and economic interaction, regional development management, analysis and management decision-making, theories and concepts of a State and Regional Development, Strategic Management theory, and the process-oriented approach to managing economic system.

The methodology is based on the systematic approach principle, under which "Economy - region - nature" are considered as a single system, and the region – as a key part of their interaction, wherein its rationality criteria should be established in view of the essence and nature of the relations, inherent in the system as a whole, and not only for its economic or ecological subsystems. In addition to the system analysis methods in the work the important role played the structurally functional, regulatory, comparative and statistical analysis and forecasting, methods of induction and deduction, economic and mathematical modeling, comparisons and analogies, expert judgments, Econometrics, economic and statistical groupings and dynamic series, and other.

In the course of work the works results of Russian and foreign economists specializing in the field of sustainable development, working outs of theoretical and methodical bases of Environmental Policy, Regional Development, as well the determination of place and role of the environmental factor in the region development have been used. Statistical data, materials of international and Russian conferences on problems of natural processes monitoring, control system integration, and the ISO data, provided in the annual report, have been used.

3. Theory development and hypotheses

In the discussion below, we are developing the arguments to simplify the regulatory process for the ecological and economic region development through the IMS implementation.

3.1 Concept of the Eco-Economic System Management in the Region

The system management process represents the activity of management subjects united in a certain system, which is aimed at achieving certain objectives through the management functions implementation. Since the management process for the eco-economic system is multidimensional and has a complex structure (Munda et al., 1994), which includes functions and management cycles, the implementation of organizational transformations is the most critical stage of the process, since, in many respects, the success of management depends on the competent optimal organizational structure implementation. Nowadays, the necessity to state management for the eco-economic processes does not require any proofs and is generally recognized in the world.

As it is known, scientifically, the management is a directed impact of management subject on the management object based on the objective laws and in favor of the creation of conditions for the optimum functioning of this object. The harmonization of environmental and economic development implies the existence of hard centralized management mechanism. Since the management reflects the relations between the two subsystems: a managed one (the object) and the managing one (the subject), we proceed from the management concept of eco-economic system, in which the management subject is presented as a two-level subsystem, consisting of the subsystem of state and municipal authorities and management bodies of the enterprises and organizations (Figure 1).
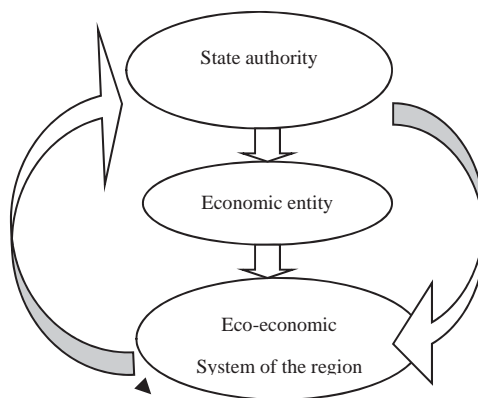

Figure 1. Concept of the eco-economic system management in the region

In the given concept the regional authorities and local government play a great role, since they are responsible for the economic development of natural and territorial complexes in accordance with its characteristic features, and the prevention of environmental problems occurrence. The strategic objectives are brought by the state authorities to the concrete executors of operational objectives.

We should take into account that "functioning of the market mechanism in all fields, including environmental protection, implies not only the relative freedom of exchanging goods, services, resources, and so on, but also the inclusion of a hard enough centralized management mechanism in the field of relations between a person, society, biosphere" (Usov, 2007). However, whatever decisions in the field of environmental safety have been taken at the federal, regional and municipal levels of management, the problem is solved positively, if the enterprises engaged in the economic activities will not be environmentally oriented. In this regard, the bodies of regional and municipal authorities in their work often use the Environmental Management Systems, which allow taking into account the priorities of environmental protection in the planning and implementation of economic activities of separate territory, and are an integral part of the management system.

3.2 Using International Standards in the Eco-Economic System Management of the Region

The Environmental Management is a part of the general organization management system, which is used for the development, implementation and management of its environmental aspects – elements of activities, products or services that can interact with the environment and provide a significant impact on it.

In the environmental sector the following aspects of international standardization are allocated (Vishnyakov, 2005):- technologies in the field of ecology; - products/service; - Environmental Management Systems.

Many researchers agree that ISO 14001 and ISO 9000 are the best practical recommendations in the context of Organizational and Environmental Management (Christmann, 2000). The international standards of series 14000 set the requirements for the Environmental Management Systems in order to give the organizations a tool for the policy development and to determine the objectives of reducing the environmental impact (Pashkov et al., 1997). The Environmental Management System is the basis for the formation of a competitive, sustainable, responsible business, which is able to meet the growing needs and expectations of the public, and increases the investment attractiveness of the region. The application of standards in order to create an effective management system or its using as a tool, which sequentially allow achieving an improvement of all the environmental aspects, predetermines the increase in economic efficiency of the territorial entity.

Nowadays, an intense competition and technological complexity of production in the industrialized countries make it necessary to develop, implement and support the international standards of various management systems (Wiengarten & Pagell, 2012).

The analysis of scientific literature shows that the number of Russian organizations, which are interested in a system building that meets the requirements of two or more different standards, is growing steadily. Among the most widespread management systems it's necessary to allocate the following:

- ISO 9001:2000 Quality Management Systems;

- ISO 14001 Environmental Management Systems;

- Occupational Health and Safety management under the OHSAS 18001.

According to the International Organization for Standardization the certification of management systems based on the ISO 9001 and ISO 14001 is increasing worldwide (more than a million of the Quality Management Systems and more than 285,000 of Environmental Management Systems) (ISO, 2013). Delmas and Montes-Sancho (2011) believe that the more enterprises in the country are certified under the ISO 9001, the greater the likelihood that those enterprises will shortly be certified and under the ISO 14001.

The conducted studies confirm that a well-functioning quality management system is a prerequisite for the environmental management implementation (Wiengarten & Pagell, 2012). The standards have a similar structure and philosophy (Viadiu et al., 2006).

At the heart of the management systems functioning a spiral, repeating cycle aimed at the continuous improvement lies, which ultimately brings the very tangible environmental, social and economic benefits.

The organizations often develop and implement the management systems that meet the requirements of different standards, which are developed in parallel or sequentially. In this regard an optimal solution is the development of IMS. The argument to develop and implement the IMS is the reduction of terms of documents elaboration, because it is possible to allocate the general business processes. The integrated management systems allow us to reduce the marginal cost of certification of ecological systems (Casadesus et al., 2011).

ISO standards advise to consider all types of activities from the standpoint of added value, which leads us to understand them as the business processes, and allows the organization to consider them a factor of strategies for improving the business, enabling to build a organization management system, which will be promptly and adequately react to the internal and external changes.

The identification and description of key business processes is usually one of the important stages in the process approach for the eco-economic system management of the region. In the allocation of main business processes it should be provided that the economic conditions shall be already included in the biosphere development at the stage of business planning. When constructing the integrated management system of the region you should allocate the following general business processes:

- organization management (planning, organizing the implementation of set goals and objectives);

- document management;

- records management;

- personnel management;

- control and measuring equipment monitoring;

- internal communication;

- monitoring and measuring;

- internal audit;

- continuous improvement;

- corrective and preventive actions.

The optimization of management system is performed on the basis of reengineering and allocation of most productive business processes, and using modern information technologies and systems.

The general policy of the organization, the general process model, and the general guidance on the organization management system are developed, the general indicators of processes monitoring are determined.

The organizations are increasingly realizing the importance of integrated management systems, because the integration has numerous advantages (Olaru et al., 2014). In world practice the trend towards the management system integration is noted (Hunt & Auster, 1990; Marcus, 2007).

3.3 Management Algorithm for the Eco-Economic Development of the Region

The implementation of world management models in the field of environmental management, environmental protection, and quality management will determine the balanced eco-economic and social development of local territories.

The purpose of regional eco-economic system management is aimed primarily at increasing the competitiveness indicators, hence the need for the development of regional policy in the field of economy and ecology. The eco-economic goals and corresponding to them objectives can be achieved and solved only when you have developed the regional management policy for the eco-economic system. In our opinion, the management policy for the eco-economic system at the regional level implies its integration with the strategy of social and economic region development.

The existing now need to develop the eco-economic policy in the region implies the identification of a strategy and a measures system, aimed at creating conditions for the effective ecologization of production activities of economic entities and improving the economic indicators.

As evidenced by the national and international experience the most recognized tool of the state management for the sustainable eco-economic systems of the region is its strategic indicative planning (Wrase, 1990). Namely the strategic planning under the unstable market environment becomes one of the essential elements, because it allows taking into account the ever-increasing speed of changes occurring in the economy and the increasing competition in all fields. In the process approach to the strategic planning it should be considered as a process, because planning acts as one of the management functions.

The sustainability of regional eco-economic system depends on the correctness and structuring of strategic objectives, and the sequence of planned activities. The regional strategic planning is intended to identify the prospective and current development objectives of the region, to develop the necessary planning documents, which determine measures to achieve the set goals. In the process approach to the strategic planning, it should be considered as a process, because planning acts as one of the management functions.

Among the key elements of strategic planning we shall allocate as follows:

- analysis of the presuppositions for the region development;

- definition of objectives of the strategic development;

- development of the concept of the strategic region development;

- preparation of management decisions to achieve the set objectives;

- implementation of selected objectives;

- control over the implementation.

The analysis of initial conditions and presuppositions is a key procedure, since the region development is predetermined by the efficient use of its potential and externalities. At the initial stage of the strategy development, first of all, the problems identified as a result of a comprehensive analysis of the initial situation level in the region shall be estimated.
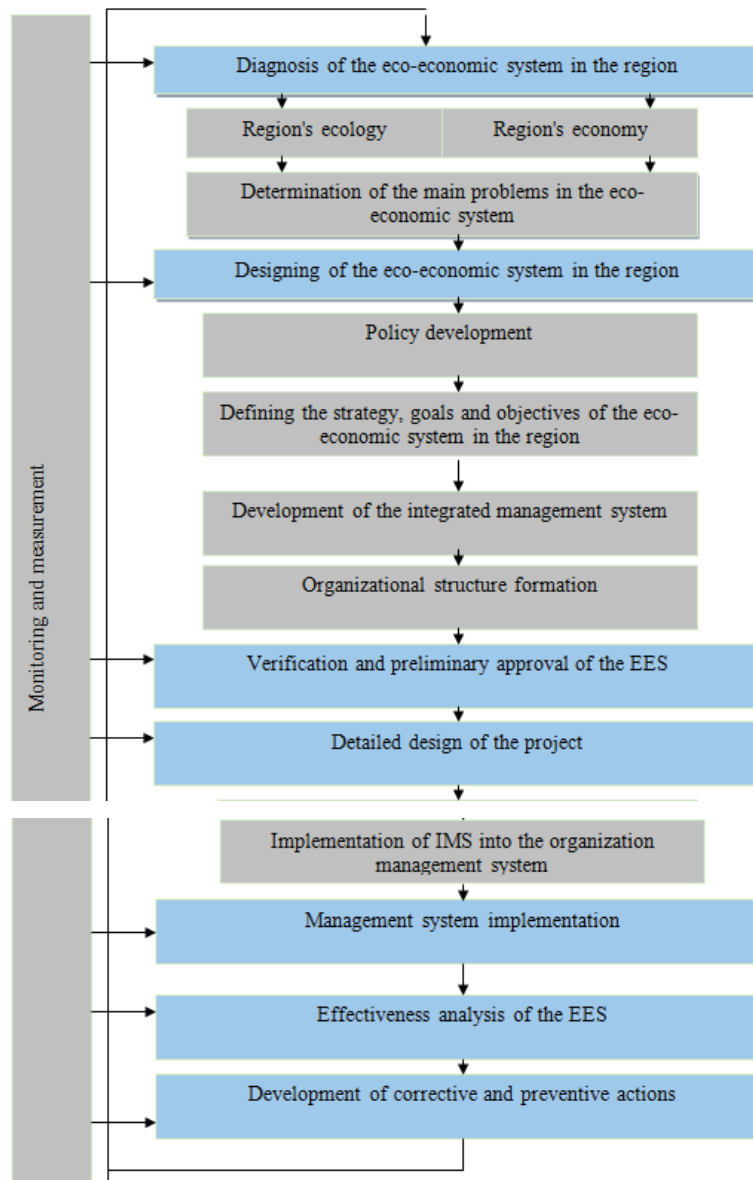
Figure 2. Algorithm for the eco-economic system management of the region development

Thus, since the transition to the sustainable development requires the mandatory environmental orientation, when making the managerial decisions, which makes it necessary to adapt the eco-economic management system in the region to the requirements of international standards in the field of ecology (Martin-Pea et al.,

2014), we attempt to achieve the set objective based on the implementation of IMS into the overall region management structure. As well as J. Tari and J. Molina-Azorin, (2010) we think the most optimal way is to integrate the management systems through the EFQM model.

By the definition of the International Organization for Standardization the process approach is a systematic identification and management of interrelated and interacting with each other business processes, ensuring the achievement of objectives by the organization. This approach shall be as the basis of the eco-economic system management of the region. The process approach, along with a description of activities through the interrelated processes, includes the constant monitoring, management and perfection of processes.

Proceeding from the above, the algorithm for the sustainable development management of the eco-economic system in the region is shown in Figure 2.

The eco-economic system monitoring in the region is the major tool of mechanism for implementing the development process and shall include the evaluation regularly performed according to the program of eco-economic condition of the region.

The implementation of eco-economic system of region management is performed according to the predetermined plan of implementation, which includes:

- scope of work and their interaction;
- terms of the project as a whole and terms of progress works;
- List of those responsible for the execution of works in the project;
- resources required to perform all the work.

3.4 Main Actions of the Algorithm's Successive Stages

The list of main actions in the proposed algorithm for the ecological and economic system management of the region is shown in Table 1.

Table 1. Main actions of the successive stages for the eco-economic system management in the region

Item #	Stage	List of main actions	Documentary proof
1.	Diagnostics of the existing management system	Carrying out of diagnostics of the organizational structure and business processes for the EES. Identification of ecological and economic problems faced by the region. Making recommendations to solve the problems	Diagnostic report for the management system
2.	Designing of the eco-economic management system in the region	Policy development Defining the strategy, goals, and objectives of the EES in the region. Organizational structure formation Developing documentation for the integrated management system	Organizational and functional company model
3.	Verification and preliminary approval of the project	Examination of the organizational and functional model to conform to the stated requirements. Justification of alternative management system.	Approved EES project for the region management system
4.	Detailed design of the project	Development of a detailed project implementation plan Preparing of the organizational and regulatory documents package: provisions on the management system; provisions on subdivisions; regulations; job description Organizational structure determination	Project implementation plan. Package of organizational and regulatory documents (provisions, regulations, instructions)
5	Management system implementation	Implementation of the integrated management system into the overall region management system. Implementation of activities according to the new management system implementation plan	Organizational and administrative documents
6.	Effectiveness analysis of the eco-economic system	Audit of the eco-economic management system	Report

Under the diagnosis it should be understood the recognition and identification of problems of the investigated object, identification of options to resolve them. In this case, the object of diagnostics is the multi-component, contradictory territorial and economic and social and economic substance, formed from the components of eco-economic system, which is in a state of dynamic non-linear development from one attractor to another.

Based on the viewpoint of V. N. Lexin (Lexin, 2003) we believe that the diagnostics of the eco-economic system in the region shall include as follows:

1. Diagnostics of the situation in general.

2. Diagnostics of the key problems posing the main points of monitoring.

3. Diagnostics of the development process, determining the direction of the general situation transformation.

According to the classification of stages of the strategic planning, proposed by Shvetsov (Shvetsov, 2007), we should allocate the following stages of diagnostics:

- primary, which defines the current state of the eco-economic system in the region;

- secondary, which determines the results achieved and defines the necessary corrective actions.

As it is known, the sustainable development process, and the conditions of its occurrence are estimated using both the qualitative and quantitative indicators. The international experience on using the sustainable development indicators, mainly, highlights the construction of indicators system, which reflects the certain aspects of sustainable development (ecological, economic) or the construction of integral indicator, which includes the main groups of indicators. It should be noted that the ecological indices (indicators) of the sustainable development represent the value derived from the other parameters; consequently, the usage of integrated eco-economic indicator is preferable, from the point of view of the ecological factor in the economic development of the region and the possibility of estimating the stability degree of the trajectory for its development.

Since the eco-economic system management is based on the principle of dynamic equilibrium guarantee for the ecological and economic subsystems, we believe that the model of balanced scorecard may act as the fundamental core of the management concept.

4. Results and Discussions

The use of ecological factor in the development of territories is associated with need to take account a number of its specific properties, and management features, demanding the application of adequate organization schemes, interaction of the management subsystem elements, and management technologies.

The territorial social and economic system is a fairly heterogeneous complex, which basis of allocation constitutes the system elements characteristics – separate economic entities and their groups. The distinctive features of this subsystem are the property of activity, reflexivity, and subjectivity.

The development process of local eco-economic systems can be represented as a manifestation unity of two determinants: conservative, which provides the keeping of existing ways of reproduction for a long time, and innovative, which provides the appearance of new qualities in the system. Since this state occurs not because of targeted actions, and as a consequence of domestic private processes and interactions, it's necessary to note the presence of another the most important property of local eco-economic systems – the ability to self-organization.

In the work the attention is also stressed on the following principles of eco-economic system management: expediency, evolutionary, balance between the interests of economic entities, population and the municipal formation's authorities; operability of the management for the production and economic processes; complexity; social orientation and orientation to the market situation.

The principle of expediency implies the increasing of integration ties, ensuring the more efficient use of potentials (administrative, production, resource) of the municipal formation.

The system elements of municipal formation are constantly converging, since it's provided by the principle of Evolutionary. From the simplest forms, such as: the voluntary public organizations without legal entity, to more complex, such as: environmental funds, associations, etc.

Due to the principle of balance between the interests, which restores the destroyed industrial communications based on the parity mechanism, the disproportions in mutual relations of elements united in a single formation are eliminated. The principle of management expediting ensures the effective use of resource potential of the municipal formation through a combination of economic interests of both processors and commodity producers. The accounting of quantitative and qualitative parameters of development and placing of suppliers of raw

materials and processing enterprises, in the vertically integrated formations, is complied due to the action of the complexity principle.

The algorithm formed on the proposed conceptual basis for the sustainable development management in the region provides the vector of development for its eco-economic system, which promotes, on the one hand, the preservation of the system itself and its best qualities and achievements, and on the other hand – the further capacity of changes, corresponding to the imperatives of the sustainable development.

Summarizing the above material, it can be concluded that the algorithm allows to solve issues on the evaluation of state, monitoring, and the improvement of eco-economic system territory, and gives the system the vector of development, which promotes, on the one hand, the preservation of the system itself and its best qualities and achievements, and on the other hand – the further capacity of changes, corresponding to the imperatives of the sustainable development.

5. Conclusions

- Implementation of world management models in the field of environmental management, environmental protection, and quality management results in a balanced eco-economic and social development of local territories. At the same time, the subject of management is represented as a two-level subsystem, consisting of a subsystem of state and municipal authorities and management bodies of enterprises and organizations.

- Management of a balanced eco-economic development is greatly simplified by the implementation of integrated management system into the general region management system.

- The proposed algorithm for the eco-economic system management of the region can be used as a tool for a sustainable region development.

- Sustainability of regional eco-economic system depends on the correctness and structuring of strategic objectives, and the sequence of planned activities.

- The transition to the sustainable development requires the mandatory environmental orientation, when making the managerial decisions, which makes it necessary to adapt the eco-economic management system in the region to the requirements of international standards in the field of ecology, what can be achieved through the implementation of integrated management system (IMS) into the general structure for the region management.

- The model of balanced scorecard shall be considered as the fundamental core of the management concept for the eco-economic development of the region.

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Conceptual Specific of Project Management of Regional Economy Development

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Abstract

The process of social and economic systems management including the system of innovative development of a region as a set of programs and projects realized in a region is analyzed in the article. It is assumed that functioning of this system may be optimized by the system of regional management. The choice of special management technologies supports forming and effective realization of project set of innovative space. As program and project set in a region is variable and unbalanced by a number of characteristics this set or system may be defines as a sort of dissipative structure.

Keywords: management process, social and economic systems, programs, projects, development of a region

1. Introduction

Social and economic programs today are main tool of solving the problem of strategic development of regions. These programs are in essence complexes of program and project steps correlated in terms of realization, resources, executors that form the system of social and economic projects interested not only for a certain economic subjects but for a system of regional management as a whole, for local communities, all the population of a region.

Methodologically verified usage of project management principles on meso-economic level allows optimizing processes of distribution and usage of regional and organizational resources, to focus them on the core directions of strategic development. Project management is now effective instrument supporting transition of regional economy to innovative type and presupposes rational utilization of not only natural territorial and financial resources but of scientific and intellectual potential. So the necessity arises to develop methodology of forming and realization of project management engine that is naturally embedded in regional management system that broaden functional and tool diversity of regional management system. Universally recognized imperative in this domain is priority of modernization of regional management engine. Modernization of management engine is in turn impossible without understanding of structural and functional characteristics of management engine in the context of modern methodological approaches (system, process-driven, projection-based, etc.)

In the context of model representation of a region as complex structural dynamic system of programs and projects management should be supported with diverse toolkit adaptive both in the structure and compound that corresponds to existing system features and tasks.

Well-known researchers Barnes and Wearne noted the necessity and growing requirement in development of model and toolkit in complex projects management (Barnes & Wearne, 1993). Still scientific and methodological mechanism of management of such system is not yet developed and project management as such is realized in micro-level (in the scope of separate enterprises and organizations). As for regional and territorial levels management of the set of programs and projects is conducted on the base of traditional technologies based on administrative approaches that do not account neither for specific of economic development processes behaviour nor innovative specifics of projects. Today management of innovative program and project system is in essence reduced to monitoring of local processes of realization of separate programs and projects at best, and to collection of parametric information on organization and realization of innovative projects and programs of manufacturing plants and scientific and educational organizations in a region, at worst. So there is no system

approach in management of the set of programs and projects with innovative specifics in regional social and economic space.

2. Methods

2.1 Theory

Basing on known approaches to identifying the essence of a project as an object of research it is presupposed to account for two essential components: system and process in interpretation of the concept of project (Liberzon, 2010). On one hand it is a system of correlated and adjusted with resources and termsof steps and actions. On the other hand one cannot but account for the aspect of realization that reveals both the process of realization, executing of these actions that leads to achievement of set aims. It is also rational to consider third dimension of conceptual content of a project. Basing on the principle of system hierarchy (any system is sub-system of higher level system) a project should be viewed as sub-system of a program, strategy, process of development of social and economic system, etc. (Zernadze, 2000).

Management of a set of programs and projects in a region should provide for correlation of ideas, resources used, effects of project and programs with analogous reference points and indicators that were stated in development strategy of a region (Inshakov, 2003). It is caused by the necessity to support grounded funding from regional budget in the scope of three-years plan. Besides, applying regional strategy as the basis of management of a set of programs and projects allows working out organizational and economic foundation to sign contracts between subjects of the process of realization of programs and projects.

To our mind project set may be classified basing on the level of the owner of a project and place of its realization (macro, meso and microlevel; region, municipal unit, organization in wide sense). Neat logical level is related to the source of financing: federal, regional, municipal, organizational or combined budget. Not the less important criterion of classification is the area of project realization: social, economic, financial, ecological, technological, organizational, informational. Intermediate level of classification is related to the industry where project is being realized. Industrial specifics define not only requirements to the content of the project but methods of its prospective profit calculation. In essence, projects of any higher level of hierarchy may relate to this or that area or industry. It is also practical to address in classification multiplicity of project's targets: one-purpose or multi-purpose projects. Number of targets achieved as a result of a project defines multiplicity and complexity of project's tasks.

Specifics of approaches to management of a set of programs and projects as dissipative system is reflected in comparative analysis of concepts of social and economic systems management process and consequently management of the set of programs and projects of a region (see Table 1) (Medvedeva, 2008).

Table 1. Comparative analysis of concepts of social and economic systems management

Dissipative characteristics of management process	Conceptual ideas of management process	
	Traditional	Modern
Determinancy of processes and events	Management process has linear character, toolset is unified	Non-linear management process due to multilayer character of management process; toolset is represented by varying set of decision making ways, methods and technologies
Chaos	Absolute silos, toolset are adaptive	Has hidden structure in most cases qualitatively definable in the scope of successive technological style of decision making
Chaos and order	Opposite to each other	Synthesizes cooperation
Bifurcational processes	Ignored or considered the factors of low importance in the processes of decision making	Are fundamental features of management process, caused by its multilayer character and dynamic character of realization
Insignificant fluctuation	Unable to impact development trajectory significantly	Able to change development trajectoryin the scope multivector programs and projects
Synergism	Ignored or considered the factors of low importance	Are fundamental features of management process, achieved by complementary adaptive organizing of management process, technologies and tools providing it, by compound and structure of resources, dedicated to realization of multivector programs and projects.
Management style	Authoritarian	Democratic, but still underdeveloped even in theory in part of methods, tools and managerial decision making support technologies usually realized by projects and programs

2.2 Features of a Set of Programs and Projects

Non-stable and unbalanced character is typical for innovative set of system program and projects that cause significant level of entropy of processes of forming and realization of innovative programs and projects. The concept "entropy" (the measure of uncertainty of a state) characterizes uncertainty of functioning of any system, including social and economic micro and macro-system (Chalenko, http://kapital-rus.ru/articles/article/211036.) by different indicators and parameters. This is true for analyzed system set.

Unbalanced character of a set of programs and projects may be explained by uninterruptable changing of its parametric characteristics and in the sense of structural forms and resource balance between separate subsets. Processes of development of programs and projects and their realization are unbalanced in time and regional space. According to research of I. Prigogine this feature causes not only the processes of organization and self-organization but chaotic behaviour of a system (entropy is the measure of chaos) in nature, economic and society (Ilya Prigogine, Isabelle Stengers, 1984).

In respect to project management in regional economy entropy is proposed to be viewed as quantitative indicator of irregularity, the measure of extra work to achieve the target or share of non-useful processes and phenomena added to some activity (Cockshott & Wright, http://left.ru/2009/2/cockshott184.phtml). It means that irregular and uncontrolled activity in realization even high effective separate projects without connection with strategic development context may lead to negative phenomena in regional social and economic environment: misbalance in reproductive and environmental areas, social discontent and other negative results. So described features cause the necessity to realize managerial impacts in the scope of special system of management of a set of programs and projects. Technologies, analytical and methodological tools should be adaptive to support noted features of analyzed innovation oriented social and economic system in the process of management.

Management of a set of programs and projects in a region should provide for alignment of targets, used resources, effects of programs and projects with analogous reference points and indicators declared in regional development strategy. It is caused by the necessity to support grounded usage of budgets of a region in the scope of relevant period of planning process (Zarubin & Tkhakushinov, 2014). Besides, using of regional development strategy as a basis for management of a set of programs and projects allows forming social and economic foundation for signing contracts between the subjects of process of programs and projects realization. Strategic targets of a region sometimes are interpreted as intentions that define extension of possibility space of territorial system and directions of its development that should be kept for long period (Shekhovtseva, 2008). So strategic dominants in process of management of a set of programs and projects are defined by strategic imperatives or conceptual approaches to the process of region's development (see Table 2).

Table 2. Strategic determinants of a process of programs and projects management in a region

Target functions of program and project management	Strategic targets of management of a set of programs and projects	Managerial impact
Structural changes of a set of programs and projects	Provisioning for high rate of domestic regional product growth	External and internal sources of investments, subject community
Development of strategic advantages, accumulating of human capital	Growth of competitiveness of regional reproductive	Local interactions with subjects of management of subsystems of regional reproductive complex
Technology modernization, competition stimulation, deployment of innovations	Increase of efficiency of production	Information communication development, information space and external connections set growth
Growth of innovations distribution rate, provisioning for continuity of development	Economic development alignment, technological renovation of reproductive complex	Interactions of reproductive industries, development of growth focal points and channels
Transactional costs reduction	Optimization of spacial distribution of a set of programs and projects	Spacial interactions with regard for limited local resources
Territorial diffusion of innovations	Aglomeration effects increase	Spacial interactions, development of growth focal points and channels

2.3 Methods of Management of Programs and Projects in a Region

Shevchenko I. K. Noted that "strategy should define both concept and priorities of development – target reference point of management, and action program – plans, programs, projects – management tools, as well as

act as a foundation of management process in long-term and short-term perspective. In this context effectiveness of management process is determined by complex of resources, methods and technologies that support decision making process." (Shevchenko, 2009). Many authors point out correlation between strategy and effective management of programs and projects (Meskendahl, 2010; Rodrigues & Williams, 1997). Some authors suggest to consider project success criteria from the point of view of critical success factors (Turner, 1994; MorrisPWG. 2000). Development of theoretical and practical conclusions has ledto development of the Perfection model (Westerweld, 2003). In our research we take a priori as prerequisite thesis that all programs and projects developed and realized in a region are defined. But this thesis may be not completely correct. It may be partially explained by a certain degree of spontaneity of development of innovative programs and projects, unstable and changeable character of a set of programs and projects. In this regard strategy only focuses unstable set of programs and projects in the space of regional determinants. This focus is relatively flexible because management of development and progress of system of projects and programs is mainly carried out in decentralized manner. In this case it is senseless to speak about the necessity of centralization of management process (Elazar, 1991). At the same time in management for example national projects, some part of regional and industry-specific programs and projects methods of direct management may be used. On other cases direct management is impossible (organization make decisions on development of innovative projects and programs) and management may be conducted only indirectly via setting starting conditions (development of infrastructure, forming of institutional environment, etc.).

Transition to program management method based on the system of programs and projects is aimed on improvement of existing system of innovative economy management. Programs are the foundation of budgetary policy carried out by the state that is oriented on realization of the most important tasks of development of activities of economy sectors of a region. Programs are separated by the extent of importance in accordance with assigned status in federal, president, regional, sectorial, object target programs and projects. Regional and sectorial programs depending on importance may be assigned status of federal. Federal target programs (FTP) are the most important instrument of realization of structural policy of the state, active impact on economic processes to achieve final social and economic results.

Methodology of management of targeted complex programs including managing investments supporting transitional period is rather poorly developed. Applying and deepening of experience got during the work with methods of investment projects management is important direction of its improvement. From this point of view programs may be viewed as a set of projects forming single multi-project.

It may be reasonable to interpret a set of programs and projects as chaotic movement of dissipative system in the boundaries of some territory. Characterizing movement of dissipative systems I. Prigogine noted "Phase trajectory behaviour in the sense of stability demonstrate that there are some main types of this movement when all the solutions of the system eventually focus on a certain subset. This subset is called «attractor" (Ilya Prigogine, Isabelle Stengers, 1984). Management of a set of programs and projects is in essence reduced to working out impacts that define entropy level (uncertainty level) of analyzed system. Conceptual scheme of management of a set of programs and projects of a region is shown in Figure 1.
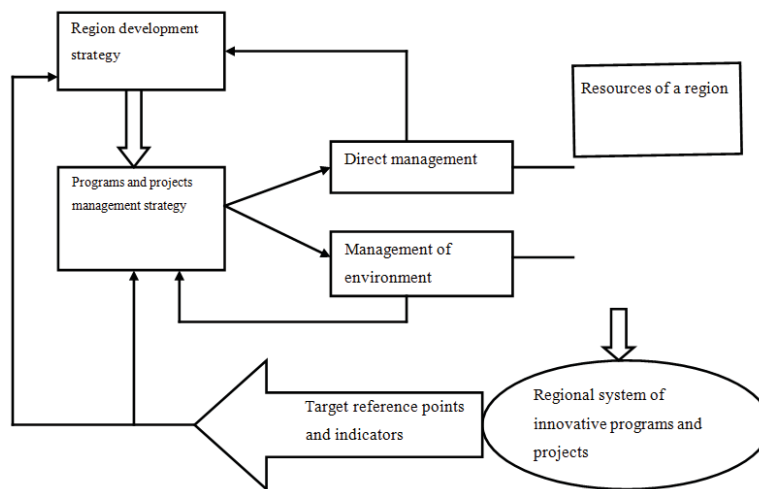

Figure 1. Conceptual scheme of management of system of programs and projects of a region

This system of control actions should have the following main characteristics and features: orientation on innovations; provisioning for long-term effects and relative stability in strategic direction; order (justice) in usage of regional resources; access to information resources of a region and economy subjects (Ilya Prigogine, Isabelle Stengers, 1984).Taking it into consideration the process of management of innovative-oriented system of programs and projects may be interpreted as a number of steps that provide trajectory of development of a set of programs and projects that comply with strategic priorities.

2.4 Program-Based Modular Approach to Management of a Set of Programs and Projects

Economic stability and effectiveness of management of complex systems is followed by growth of structural organization of the system, growth of the number of quantitative characteristics, constant necessity to adapt to external environment. Adaptation of system structure in the scope of management process presupposes growth of activity aimed on improvement of its internal environment that in turn supports achieving balance between the system and its external environment (Gumerova, 2008).

Enhancement of efficiency of managerial decision making and realization in program and project's dimension requires the following:

-development of adaptive decision making algorithms and programs for a system as a whole and its separate subsystems;

-functions identification and alignment of interests of managerial process members, structural subsystems in the context of unidirectional definition of objectives;

-working out programs and projects of effective functioning of subsystems in complex economic environment, adaptation of tools of these programs and projects to management process.

Solving of these tasks in management of meso-economic systems may be achieved in the scope of program-based modular approach based on research of complex systems and including complex of methods of system structuring, modeling interaction between separate subsystems-modules in decision making process and realization of managerial decisions, development of programs and mechanisms of improvement of subsystems' activity in the scope of a certain vector of development of a system as a whole.

Program-based modular approach that is conceptually based on methodological approaches described earlier allows solving the following managerial tasks arousing due to specific features of social and economic systems (Stepanov, 2010):

-structuring of management process to define basic, service and intermediate modules as a bearers of system features. Improved control of these features in the context of preset development direction allows increasing effectiveness of decision making;

-analysis and algorithmization of managerial functions for a system as a whole and separate modules;

-development of target functions, programs and projects after their realization on the base of hierarchy analysis methods;

-transformation of structure of decision making and realization including development of adaptive structures of management;

-development of analytical tools to analyze functioning of improved system structure in management context.

Analysis of program-based modular approach as synthesis of managerial approaches and methods that support management process allows representing this approach in compilation with other approaches, methods and technologies of management as a table (see Table 3).

Table 3. Conceptual and methodological basis of modular approach to tool and technology support of economic systems management process

Management process functions	Basic approach/method	Domain of basic method application	Range of application of program-based modular approach
Goal-setting	Program-based, hierarchy analysis method	Formalization of target functions, their detalization and strategic alignment	Synthesis of target functions of main subsystems by setting correlative links with final aim of management
Organization	Project-based, process-based	Forming and workig out main measures, aligned by terms and	Complementary adaptive design of main processes in modules and system as a

		resources, integrated into target function	whole
Scheduling	Structural and functional	Processes structure identification, resources optimization	Resources distribution depending on potential and capacity of realization of target functions by modules and system as a whole
Regulation	Program and targeted	Forming of control impacts on the base of usage of different resources depending on target purpose	Control impacts modeling, redistribution and reinvestment of resources and effects of their usage
Interaction	Synergetic	Complex usage of resources, interrelation of staps and objects of decision making	Distribution of resources and effects of their usage with account for poentials of modules and their synthesis in the process of decision making
Realization	Project and process	Combination of process and project tools to provide uninterruptable and effective management process	Combination of process and project tools of realization of target functions of modules and aggregating of effects in complex result of management process
Innovation	Project	Development of perspective decisions by forming relatively independent projects and programs	Multi-vector orientation of projects on the base of flexible combination of resources and executive modules
Control	Cybernetic	Feedback provisioning	Step by step feedback provisioning

3. Results and Discussion

Algorithmization of management process as integral part of research and development of effective model and structure of decision making and realization process is most fully represented by tools of strategic management. Realization of project-based approach to management in a region is related to the necessity of solving numerous tasks that presuppose analysis of a number of projects in the context of their content, terms and steps, requirement of different types of resources; alignment of made decisions by directions, intensity and time characteristics. Complicated and multidimensional character of these tasks defines the necessity to apply the potential of modern computer technologies that requires relevant formalized representation. Representation of processes of realization and management of projects in multidimensional spaces of signs may be the base of such representation. Space of signs is defined by the set of the most important parameters for a certain task and object characteristics (project in our case) as well as the way to correlate objects with each other. One of the most valuable characteristics on project-based approach is time. We distinguish between three possible ways of developing of space of signs and, respectively, formal descriptions of realization of project approach to regional systems management depending on the way of time factor considering.

Management of a set of programs and projects in a region should provide for alignment of aims, used resources, effects of projects and programs with the same reference points and indicators declared in regional strategy of development. It is caused by the necessity to provide for grounded usage of regional budget in the scope of relevant period of planning process. Besides, using regional strategy as a basis of management of a set of programs and projects allows developing organization and economic foundation to sign contracts between the subjects of the process of programs and projects realization.

As mentioned earlier a set of programs and projects in a region is dissipative system that is unstable in time and space of the structure with elements linked not by durable horizontal but by loose vertical links. At the same time this system is characterized by integrated potential, including economic, social, ecological, reproductive, innovative and other elements.

4. Realization of Project-Based Approach to Management in a Region

Realization of project-based approach to management in a region is related to the necessity to solve a number of tasks that presuppose analysis of numerous projects in the context of their content, terms and steps, requirements in different types of resources; alignment of made decisions by directions, intensity and time. Complicated and

multidimensional character of these tasks defines the necessity to apply the potential of modern computer technologies that requires relevant formalized representation. Representation of processes of realization and management of projects in multidimensional spaces of signs may be the base of such representation.

5. Conclusion

Analysis of existing theoretical and applied approaches of system support of the process of project management of social and economic systems allows making conclusion that there are no complex forms, methods and technologies that support the process of decision making that could allow accounting for the following in all management steps:

-features and specifics of system functioning;

-system structure and organizational structure of management as adaptive in relation of immanent changes of internal and external environment;

-target functions of a system as a whole and its separate subsystems;

-parameters of effectiveness of decision making and realization that means support for uninterruptable and adaptive character of decision making;

-multidirectional economic, social and political interests of interacting structural subsystems and systems of external environment;

-system integrity level and the level of interaction of subsystems' modules.

Methodological specifics of methodical and technological support of social and economic system management is that in many cases hierarchial structure of complex system on its own is external environment in the scope of subsystems management, i.e. structural units, areas, economical complexes, industries, viewed in complex systems as independent managed social and economic entities. In this context the main parameters of decision making are the following:

- complexity – number of factors the system should react on;

- interrelation of factors – extent of one factor's impact on the others;

- variability level – the level of changeability of each factor;

- agility – rate of changes in internal and external structure of a system;

- uncertainty – ratio of the volume of information and its soundness, accuracy and sufficiency for making managerial decisions.

Economic stability and effectiveness of complex systems management is follows by the growth of structural organization of a system, changes of quantitative characteristics, constant need to adaptation to external environment. Improvement of system structure in the scope of management process presupposes growth of activity aimed on improvement of its internal environment that support alignment of processes of development of a system and its external environment.

Enhancement of efficiency of managerial decision making and realizationin program and project's dimension requires the following:

-development of adaptive decision making algorithms and programs for a system as a whole and its separate subsystems;

-alignment of interests of managerial process members, structural subsystems in the context of unidirectional definition of objectives;

-working out programs and projects of effective functioning of subsystems in complex economic environment, adaptation of tools of these programs and projects to management process.

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Bank Lending to Small and Medium Sized Business: Evidence from Russia

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Abstract

Access of small- and medium-sized enterprises (SMEs) to external financing sources is defined in many respects by the tendencies of bank system development in different countries as well as by the possibilities and interest of commercial banks to make loans to creditworthy small- and medium-sized borrowers. In the present paper, we suggest that even in post-crisis conditions, this is small- and medium-sized Russian banks, rather than large banking institutions, that tend to issue loans to small and medium-sized enterprises. Analysis of the data available from the Russian banks gives evidence that with the growth of the bank size and with widening of the scope of the bank's activity, bank's lending to legal entities, in particular, to SMEs and to individual entrepreneurs, tends to become more intense. At the same time, the share of lending to SMEs and individual entrepreneurs in the legal entities loan portfolio tends to decrease.

Keywords: bank size; small- and medium-sized business finance; bank-firm relationship

1. Introduction

Availability of external financing to small- and medium-sized enterprises (SMEs) is an object of study around the world as it helps to reveal problem areas and barriers for small- and medium-sized business development in the countries with advanced and developing economies. Access of SMEs to external financing sources is defined in many respects by the tendencies of bank system development in different countries, as well as by the possibilities and interest of commercial banks to issue loans to creditworthy small- and medium-sized borrowers.

The issue of Russian SMEs development and support, also on the part of banks, is important due to the fact that in Russia small- and medium-sized enterprises production yields 20% into GDP, while in Europe this figure is much higher – from 55% (France) to 70% (Norway), and 45% in the USA (Note 1).

When studying Russian bank system as a source of financing SMEs activity, one should take into consideration its scale, non-uniform nature and discontinuous distribution on the territory of the country as well as the development tendencies during the crisis and post-crisis periods.

Russian lending institutions can be subdivided into several groups: the largest banks with a state share, large private commercial banks that have a federal branch network, branch organizations of foreign bank institutions, and, finally, medium- and small-sized regional banks.

At the beginning of 2014, five banks with the largest assets that made up 0.54% of the total number of banks possessed more than half of the resources of the Russian bank system – 52,65% of the total assets (Note 2). Capital concentration in the bank system is characterized by the fact that more than half of lending institutions and more than half of bank system resources are centered in Moscow and Moscow region. Moscow lending institutions cater for three fourths of the country's legal entities assets.

Although small- and medium-sized banks possess an insignificant share of the bank system resources, these banks are the main players on the regional market of banking services, thus playing an important role not only in the bank system but in the social and economic life of Russian regions in general. The main production facilities and raw material resources are located in the federal districts (outside Moscow and Moscow region), they yield a greater part of the GDP production, and a greater part of the country's population live there.

As reported in Table 1 and Figure 1, the data about the change in the number of lending institutions in the Russian Federation over the last eight years indicates that the number of lending institutions and their regional presence have gone down. Figure 1 shows that at the same time the number of bank branches, both in the region where the bank has its main office and in other regions, is also decreasing.

Table 1. Dynamics of the number of lending institutions (LIs) and their branches

Indicators	01.01. 2007	01.01. 2008	01.01. 2009	01.01. 2010	01.01. 2011	01.01. 2012	01.01. 2013	01.01. 2014
Number of LIs in all the regions	1 189	1 136	1 108	1 058	1 012	978	956	923
Branches of LIs that have their main office in the same region	772	720	661	601	494	464	403	339
Branches of LIs that have their main office in another region	2 509	2 735	2 809	2 582	2 432	2 343	1 946	1 666
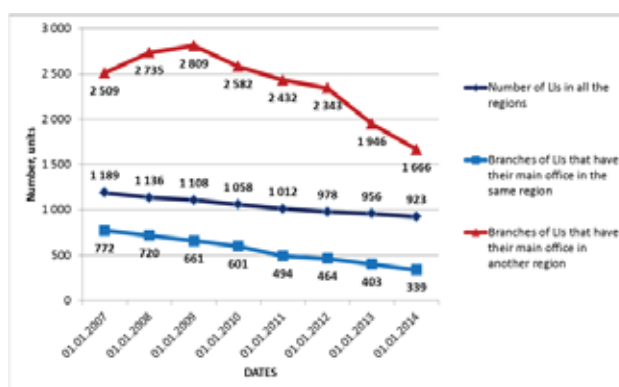
Figure 1. Dynamics of the number of lending institutions (LIs) and their branches

As shown in Figure 1, after the crisis of 2008-2009, there is a noticeable tendency for bank branches number to decrease, especially if their main office is located in another region. However, their total number significantly exceeds the number of the bank branches having their head office in the same region. This happens mostly due to the expansion of the large banks from the Central Federal District (namely, Moscow and Moscow region) into regions. Thus, the general decrease of the number of the branches results in a restricted access of the regional economic institutions to banking services and sources of finance resources.

The above-mentioned tendencies in the Russian bank system development testify to the process of its consolidation. This finds its expression in creation of banking groups and unions. Financial Group Life and VTB Group may serve as examples. We can only estimate the number of banking groups and unions functioning on the territory of Russia based on expert assessment, as a number of affiliations and mergers act as concealed bank holding companies that are not obliged to provide reports of their activities to external users on a consolidated basis.

Bank sector consolidation calls for investigating the relationship between the size and complexity of structural organization of a bank and its ability to originate and hold small and medium-sized business loans. In this context, research conducted by scientists from American, European and Asian countries with advance economies is of great interest, as the process of bank systems consolidation there has started much earlier than in Russia.

The empirical research shows that small banks tend to invest a much higher share of their assets in small business loans (Berger et al., 1998; Cole et al., 1999; Peek & Rosengren, 1998; Strahan & Weston, 1998). Large and foreign-owned bank institutions may have difficulty extending relationship loans to opague small firms (Berger et al., 2001). Small banks are better able to collect and act on soft information about a borrower than large banks (Berger et al., 2005).

However, some studies suggest that bank size growth does not necessarily lead to decrease of small business lending. For example, bank M&A between small banks may increase lending to small enterprises (Strahan & Weston, 1998). Berger and Udell (2006) show the conclusion that large institutions are disadvantaged in lending to informationally opaque SMEs to be misleading. Large banks also provide large amounts of funding and other

financial services to small firms (De la Torre, 2010). Berger and Black (2011) suggest that large banks do not have equal advantages in hard fixed-assets lending technologies and these advantages are not all increasing monotonically in firm size. Studies from different countries argue and develop these ideas (Shen & Shen, 2009; Bartoli et al., 2013).

In the present paper we suggest that even in post-crisis conditions, this is small- and medium-sized Russian banks, rather than large banking institutions, that tend to issue loans to small and medium-sized enterprises.

The paper is structured as follows: Section 2 briefly reports of the literature on large and small banks transactions lending and relationship lending to SMEs in some countries of America, Europe and Asia, where bank systems consolidation began earlier than in Russia. Section 3 presents the main hypotheses of the paper. Section 4 describes the dataset and its limitations, as well as the estimation technique. Section 5 presents the empirical evidence on Russian banks lending to small- and medium-sized business. Section 6 concludes and contains the description of further research areas.

The presented results may have implications for bank supervisors, regulators and bank managers.

2. Related Literature

Banks lend to different firms using a variety of different lending technologies (Rajan, 1992). Berger and Udell (2006) define that lending technology is a unique combination of primary information source, screening and underwriting policies and procedures, loan contract structure, and monitoring mechanisms.

Bank lending to SMEs differs from lending to other economic entities taking in account the significance of long-term financial relationships between a lender and a borrower when lending decision is to be taken (Berger & Udell, 1996). Some empirical researches show the distinction between bank relationship-based lending and transactions-based lending (Boot & Thakor, 2000; Cole et al., 2004; Berger et al., 2005; Agarwal & Hauswald, 2007).

Transactions-based lending technologies emphasize the acquisition of hard information and relate to financial statement lending, small business credit scoring, factoring, equipment lending, real estate-based lending and leasing (Berger & Udell, 2006). Some studies separate transaction lending into distinct technologies and focus on individual technology, for example, asset-based lending or credit scoring (Udell, 2004; Berger & Frame, 2007).

Relationship-based lending technologies rely on accumulation of soft information, infer obtaining by bank customer-specific information and imply multiple bank interactions with the same customer over time and across products (Boot, 2000; Elyasiani & Goldberg, 2004). On the one hand, stronger relationships between a bank and its customers benefits firms by granting them easier access to bank credit and better credit terms (Petersen & Rajan, 1994, 1995; Berger & Udell, 1995; Elsas & Krahnen, 1998; Harhoff & Körting, 1998). On the other hand, relationship lending is labor intensive and likely to cost more than many of the mentioned above transactions-based lending technologies (DeYoung et al., 2004).

Transactions-based lending technologies are more applicable to large-scale business. Large companies with well-established and developed systems of financial and administrative accounting can easily furnish a bank with a significant volume of ready, available and verifiable data about the company's activity and its results, such as financial statements and balance sheets, which can be used by the bank to form a judgment about the borrower's creditworthiness.

SMEs are more informationally opaque for banks than large firms (Berger et al., 2001). However, some studies suggest that many of the transactions-based lending technologies may be suited for less transparent small borrowers (Berger & Udell, 2006; Uchida et al., 2006). Nevertheless, these technologies do not focus on the overall quality of small firms. And the value and the quality of collateral (e.g., accounts receivable, inventory and equipment) may occur incomparably less than small borrowers demand for bank financing.

Relationship-based lending technologies presuppose that beside open public information on the activity of small- and medium-sized businesses, the bank uses the data from the history of the bank's financial relationship with the borrower and firm's non-public information. Such information enables the bank to form a judgment of the borrower's creditworthiness and to reduce credit risks exposure by forming risk-adequate reserves. This makes loans more accessible to the small- and medium-sized businesses that have long-term confidential relations with the banks providing financial services for them (Boot, 2000; Gorton & Winton, 2003).

This is especially important for Russian small- and medium-sized firms, most of which before 2013, had used an opportunity to not keep full accounting records and to not draw financial statements. They only kept income and expenses records in accordance with the Tax Code of the Russian Federation (Note 3). As new legislation on

accounting came into force in January 2003, Russian small- and medium-sized firms are obliged to keep accounting records and to submit accounting (financial) statements to authorized controlling bodies, starting with the 2013 accounting statement (Note 4). At the same time financial statements of the small- and medium-sized firms, according to the new law, can be submitted in a simplified manner. This makes it impossible for the Russian banks to make use of the formalized methods of financial statements analysis they apply to large firms when they form judgment of the small- and medium-sized enterprises' creditworthiness (Korolev, 2006; Korolev, 2007).

Different banks rely more on different types of information in order to resolve information asymmetry problem. Some empirical researches study the lending behavior of large banks to small business and find that large banks approve their small business loans based more on financial ratios, financial reports, value of assets and less on the existence of prior relationships as compared with small banks, and tend to favor transactions-based lending (Cole et al., 2004; Berger & Udell, 2006; Uchida et al., 2008).

Large banks hold a comparative advantage in transaction lending, while smaller or local banks have an advantage in relationship lending (Stein, 2002). Strahan and Weston (1998) argue that small business loans per dollar of assets rises, then falls, with banking company size. Therefore, small banks tend to build up and exploit intensive and long-lasting relationships with their small- and medium-sized customers (Berger & Udell, 2002, 2006; Howorth & Moro, 2006).

When studying lending characteristics of Russian distinct and spread across the country banks it is important to take in account that collecting, transmission and storage of hard information about the borrowers does not likely depend on distance. Therefore, transactions lending to comparably transparent large firms has no spatial limitations. In contrast, relationship lending requires personal contacts of loan officers with their borrowers in order to access managerial skills, decision making procedures, and business opportunities (Hauswald & Marquez, 2006). To collect soft information relationship lenders need to be located close to their borrowers and to understand the local community and business landscape.

3. The Hypotheses

Taking into account tendencies of the Russian bank sector development and perspectives for gradual growth and consolidation of the banking market players, one should pay attention to the specific nature of competitiveness in the banking sphere characterized by a relatively narrow expanse of competitive activity. It is conditioned by a limited scope of services rendered by banks and results from the legal status of banking business as an exclusive activity that does not allow for combining it with manufacturing, trading or insurance activities. This peculiarity makes banks compete within a very narrow scope of activities which calls for specialization, for instance, in filling the needs of certain target groups of customers.

A segment of small- and medium-sized businesses can readily become a target customers' group for Russian small- and medium-sized lending institutions due to the following reasons:

when Russian economy requires re-industrialization, large industrial enterprises need considerable long-term investment resources for the renewal of fixed capital assets and infrastructure improvement. Small- or medium-sized banks, as a rule, do not have such extensive resources;

the size of a loan issued to one borrower is limited for the banks by standard N6, that regulates bank's credit risk exposure at the rate of 25% of capital base (Note 5). Correspondingly, small- and medium-sized banks resources make it impossible for banks to meet large borrowers' credit needs;

provision of financial services for private customers requires considerable investments into creating and maintaining technological platforms for retail business, it also involves high operational expenses. Besides, private customers' deposits are a costly resource, and retail credit risk exposure is high. It finds its confirmation in the amendments to Instruction # 139-I "On obligatory bank regulatory standards" made by the Bank of Russia and effective from 01.07.2013 as regards increased risk exposure coefficient on unsecured customer lending depending on interest rates that are taken into account when calculating assets for bank's capital adequacy N1 – Bank's capital adequacy Regulatory Standard;

small- and medium-sized lending institutions function in close proximity to the customers from the number of small- and medium-sized businesses, have well-established relations with them and command understanding of the specific nature of business in the regions where they are located;

development of Russian small- and medium-sized businesses is greatly determined by arranging financial support of their activity, but it can be hindered by restrictions imposed on attracting direct government support in the context of the WTO. Such support can be given by lending institutions providing resources. At that, small-

and medium-sized banks are mostly focused on financial services for smaller businesses needs, rather than large banks.

We have chosen the below hypotheses for verification implying that strengthening interactions and relations with SMEs can become the priority for small- and medium-sized lending institutions in the context of bank system growth and consolidation.

With the growth of the bank size and with widening of the scope of the bank's activity, the volumes of bank's lending in the course of the year to legal entities, in particular, to SMEs and to individual entrepreneurs (IEs) increase.

With the growth of the size and with widening of the scope of the lending institutions' activity, the share of lending in the course of the year to SMEs and IEs in the legal entities loan portfolio decreases.

4. Data and Methodology

4.1 Data Collection

To prove the above hypotheses, we need the data on each lending institution for a number of periods about the assets volume, loan balances for legal entities, SMEs and IEs indicating overdue amounts, and also the data about the volumes of loans that are issued in the course of each period to legal entities, SMEs and IEs.

At present, the Bank of Russia summarizes and publishes information at the statistics website related to indebtedness of legal entities, SMEs and IEs, and also to the volumes of loans that are issued to legal entities, SMEs and IEs in the course of a period (Note 6). The information is given on a regional basis (in accordance with the geographical districts of the Russian Federation), but not related to individual lending institutions. However, this regional approach is based not on the bank's location, but on the location of a borrower. The changes in banks' lending to legal entities, SMEs and IEs in view of the banks of a given region can only be traced by the volumes of the loans issued by the banks of a given region calculated on an accrual basis. This approach is used as an informational foundation in the present study.

A more detailed information about banks' lending activity for the purposes of the present research could be obtained from the data contained in the financial reporting of the lending institutions on Form 0409302 "Information on the invested assets and borrowed funds" (Note 7), but this reporting is not open to the public and is only submitted to the Bank of Russia, where it is processed and is then published in a manner described above.

Information on the bank system assets is presented by the Bank of Russia in a table form. The tables characterize assets concentration and present information in the view of federal districts without breaking down to the levels of territories and regions. In connection therewith, the present study correlates the data on assets and loans issued to legal entities, SMEs and IEs with an aggregative breakdown to federal districts.

The above-mentioned information is based on the data of the Bank of Russia for the five consecutive periods: 2009, 2010, 2011, 2012 and 2013. This is due to the fact that the information on the loans issued by the banks to SMEs and IEs has only been collected and published on the Bank of Russia website since 2009.

In the data collected for processing and analysis, the Central Federal District is divided in two parts: we distinguish between the data on the lending institutions in Moscow and Moscow region and the data on all the other lending institutions of the Central Federal District. This is due to the fact that the lending institutions of this region dominate both in their assets volumes and in the volumes of their loan portfolios which extend far outside their own region and, having sufficient resources, as such, satisfy the demand for loans that the regional banks cannot meet.

4.2 Estimation Technique

To prove the hypotheses made for the five yearly periods (from 2009 to 2013) we have studied the correlation between the average assets of a lending institution in a given region (mln.rbl.) and the following indices:

volumes of loans issued in the course of the year by lending institutions of the region to all legal entities, mln. rbl.;

volumes of loans issued in the course of the year by lending institutions of the region to small- and medium-sized enterprises and individual entrepreneurs, mln. rbl.;

the share of loans issued by lending institutions of the region in the course of the year to small and medium-sized enterprises and individual entrepreneurs in the total legal entities loan portfolio.

The data for every year and on each region is put in a descending order based on the assets volume per one lending institution of the district. When presenting and analyzing the data, the information on the lending institutions of Moscow and Moscow region was grouped separately.

Presenting data on a geographical basis for each separate year made it possible to identify interdependence between the average volume of assets that accrues to one lending institution of the district (mln. rbl.) and

- the volumes of the loans issued by them to legal entities, small- and medium-sized enterprises and individual entrepreneurs, and

- the share of loans issued to small- and medium-sized enterprises and individual entrepreneurs in the total legal entities loan portfolio.

To prove the interdependence between the indices for each year, coefficients of linear correlation have been calculated.

Calculation of additional statistical indices (determination indices, statistic criteria for confirming significance of results obtained) on the basis of the information available is not currently feasible due to the short time period of the data under analysis and due to incompleteness of the data base. To carry on with the study of dependence of loan portfolio size and structure from the size of lending institutions, we should obtain full relevant information from the Bank of Russia or authorized informational and analytic institutions, and observe, analyze and monitor all the changes taking place. In the long term, with accumulation of more relevant data, additional corrections should be introduced to reconcile the data, e.g. corrections using the GDP deflator.

5. Empirical Results

The data obtained for each year is represented in Tables 2, 3, 4, 5 and 6. For clarity reasons, in every table, the data on each region is put in a descending order depending on the average assets volume per one lending institution of the district.

Table 2. Volumes of loans issued by district lending institutions to legal entities, small- and medium-sized enterprises and individual entrepreneurs in 2009 (the districts are put in order by the average assets volume that accrues to one lending institution of the district)

Federal District	Average assets that accrue to one LI in the district, mln. rbl.	Volumes of loans issued by the district lending institutions to legal entities and individual entrepreneurs, mln. rbl.	Volumes of loans issued by the district lending institutions to small- and medium-sized enterprises and individual entrepreneurs, mln. rbl.	The share of loans issued by the district LIs to small- and medium-sized enterprises and individual entrepreneurs in the district total legal entities loan portfolio
Moscow and Moscow Region	47 252,3	7 555 131,5	798 185,70	10,6%
Northwestern FD	16 430,6	678 038,3	118 809,0	17,5%
Urals FD	12 170,1	336 577,2	96 225,6	28,6%
Siberian FD	10 020,6	204 687,7	99 865,5	48,8%
Volga FD	7 931,6	694 893,2	283 326,0	40,8%
Far Eastern FD	6 824,9	129 854,2	62 057,8	47,8%
Central FD (excluding Moscow and Moscow reg.)	3 284,4	83 965,2	36 673,30	43,7%
Southern FD	2 029,6	165 625,2	60 653,5	36,6%
Total in the Russian Federation:	27 816,7	9 848 772,5	1 555 796,4	15,8%

Table 3. Volumes of loans issued by district lending institutions to legal entities, small- and medium-sized enterprises and individual entrepreneurs in 2010 (the districts are put in order by the average assets volume that accrues to one lending institution of the district)

Federal District	Average assets that accrue to one LI in the district, mln. rbl	Volumes of loans issued by the district lending institutions to legal entities and individual entrepreneurs, mln. rbl.	Volumes of loans issued by the district lending institutions to small- and medium-sized enterprises and individual entrepreneurs, mln. rbl.	The share of loans issued by the district LIs to small- and medium-sized enterprises and individual entrepreneurs in the district total legal entities loan portfolio
Moscow and Moscow Region	55 596,4	7 626 025,0	1 114 087,0	14,6%
Northwestern FD	19 564,2	706 228,0	225 025,0	31,9%
Urals FD	14 900,7	364 974,0	152 086,0	41,7%
Far Eastern FD	11 438,9	156 984,0	98 388,0	62,7%
Siberian FD	10 649,2	168 674,0	88 847,0	52,7%
Volga FD	9 465,3	727 306,0	343 608,0	47,2%
Southern FD	3 702,3	138 822,0	101 417,0	73,1%
Central FD (excluding Moscow and Moscow reg.)	3 594,0	103 583,0	65 330,0	63,1%
Northern Caucasian FD	978,0	25 917,0	18 969,0	73,2%
Total in the Russian Federation:	**33 403,8**	**10 018 513,0**	**2 207 757,0**	**22,0%**

Table 4. Volumes of loans issued by district lending institutions to legal entities, small- and medium-sized enterprises and individual entrepreneurs in 2011 (the districts are put in order by the average assets volume that accrues to one lending institution of the district)

Federal District	Average assets that accrue to one LI in the district, mln. rbl.	Volumes of loans issued by the district lending institutions to legal entities and individual entrepreneurs, mln. rbl.	Volumes of loans issued by the district lending institutions to small- and medium-sized enterprises and individual entrepreneurs, mln. rbl.	The share of loans issued by the district LIs to small- and medium-sized enterprises and individual entrepreneurs in the district total legal entities loan portfolio
Moscow and Moscow Region	71 581,3	11 924 567,0	1 408 813,0	11,8%
Urals FD	19 536,0	427 371,0	193 301,0	45,2%
Northwestern FD	17 987,9	510 142,0	209 121,0	41,0%
Far Eastern FD	15 287,8	188 287,0	124 147,0	65,9%
Volga FD	11 740,0	764 388,0	380 650,0	49,8%
Siberian FD	11 154,7	187 440,0	95 335,0	50,9%
Southern FD	4 597,2	167 938,0	128 043,0	76,2%
Central FD (excluding Moscow and Moscow reg.)	4 573,1	119 791,0	82 862,0	69,2%
Northern Caucasian FD	1 310,0	33 435,0	24 918,0	74,5%
Total in the Russian Federation:	**42 563,9**	**14 323 359,0**	**2 647 190,0**	**18,5%**

Table 5. Volumes of loans issued by district lending institutions to legal entities, small- and medium-sized enterprises and individual entrepreneurs in 2012 (the districts are put in order by the average assets volume that accrues to one lending institution of the district)

Federal District	Average assets that accrue to one LI in the district, mln. rbl.	Volumes of loans issued by the district lending institutions to legal entities and individual entrepreneurs, mln. rbl.	Volumes of loans issued by the district lending institutions to small- and medium-sized enterprises and individual entrepreneurs, mln. rbl.	The share of loans issued by the district LIs to small- and medium-sized enterprises and individual entrepreneurs in the district total legal entities loan portfolio

Moscow and Moscow Region	86 498,3	12 385 978,0	1 735 796,0	14,0%
Urals FD	24 211,2	471 631,0	219 565,0	46,6%
Far Eastern FD	22 633,9	198 965,0	118 126,0	59,4%
Northwestern FD	19 829,9	639 279,0	250 959,0	39,3%
Volga FD	13 715,8	815 629,0	373 147,0	45,7%
Siberian FD	12 015,1	213 660,0	115 492,0	54,1%
Central FD (excluding Moscow and Moscow reg.)	6 000,5	128 919,0	93 296,0	72,4%
Southern FD	5 379,6	175 403,0	137 039,0	78,1%
Northern Caucasian FD	1 627,5	36 700,0	25 133,0	68,5%
Total in the Russian Federation:	**51 788,3**	**15 066 164,0**	**3 068 553,0**	**20,4%**

Table 6. Volumes of loans issued by district lending institutions to legal entities, small- and medium-sized enterprises and individual entrepreneurs in 2013 (the districts are put in order by the average assets volume that accrues to one lending institution of the district)

Federal District	Average assets that accrue to one LI in the district, mln. rbl.	Volumes of loans issued by the district lending institutions to legal entities and individual entrepreneurs, mln. rbl.	Volumes of loans issued by the district lending institutions to small- and medium-sized enterprises and individual entrepreneurs, mln. rbl.	The share of loans issued by the district LIs to small- and medium-sized enterprises and individual entrepreneurs in the district total legal entities loan portfolio
Moscow and Moscow Region	102 509,0	14 576 550,0	2 027 005,0	13,9%
Urals FD	30 361,0	491 630,0	229 567,0	46,7%
Far Eastern FD	25 445,8	154 865,0	101 654,0	65,6%
Northwestern FD	23 577,3	718 403,0	296 637,0	41,3%
Volga FD	15 315,3	838 940,0	424 935,0	50,7%
Siberian FD	12 231,4	211 923,0	117 061,0	55,2%
Central FD (excluding Moscow and Moscow reg.)	6 973,1	126 105,0	91 603,0	72,6%
Southern FD	6 591,9	195 532,0	145 380,0	74,4%
Northern Caucasian FD	1 333,1	28 982,0	18 399,0	63,5%
Total in the Russian Federation:	**62 213,5**	**17 342 930,0**	**3 452 241,0**	**19,9%**

Indices correlations are shown in the graphs clarifying the tables. Figures 2, 3, 4, 5 and 6 show correlations between the average assets of the lending organizations of the district and the volumes of loans issued by them to legal entities.
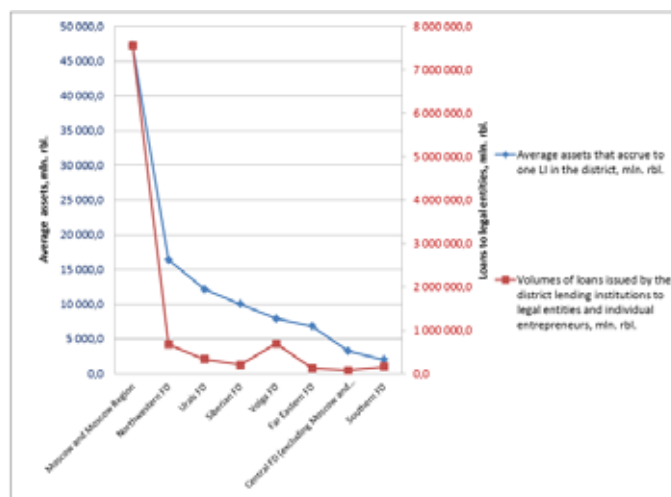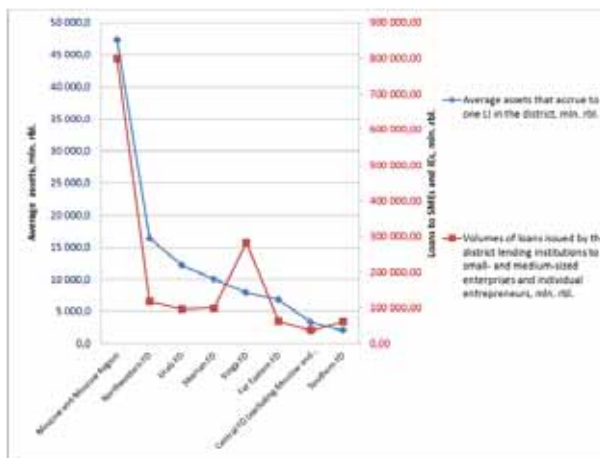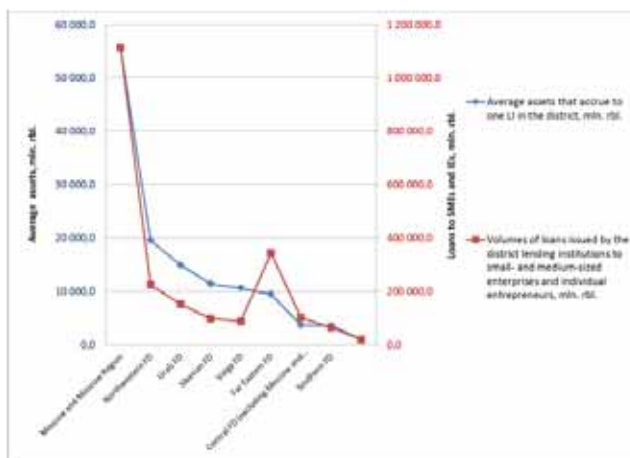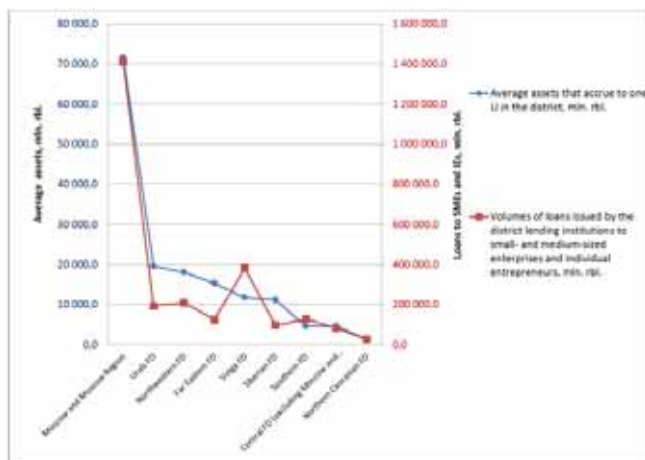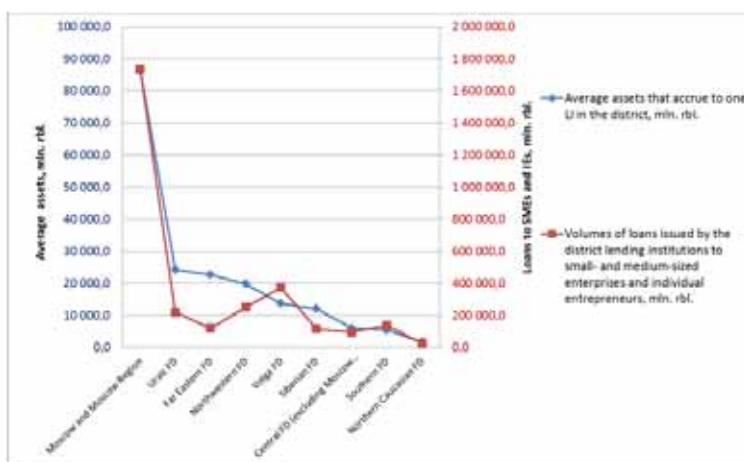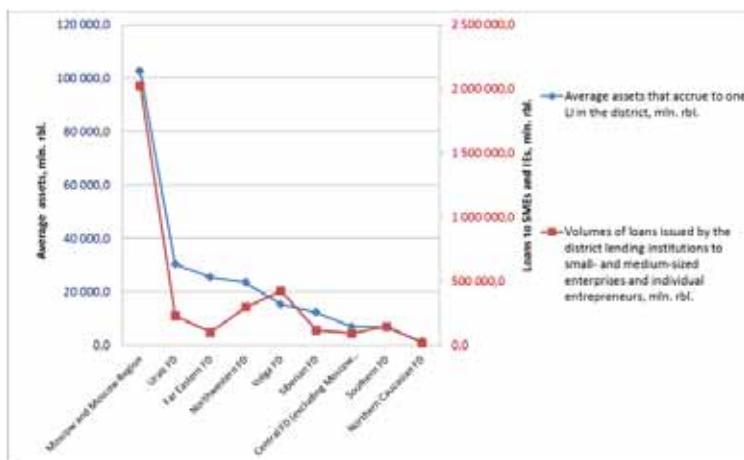

Figure 2. Graphic representation of interdependence of the average assets of the lending organizations of the district and the volumes of loans issued by them to legal entities in 2009
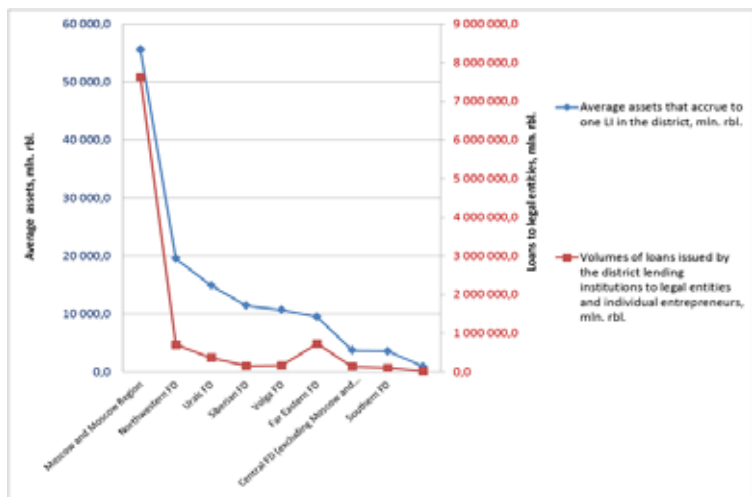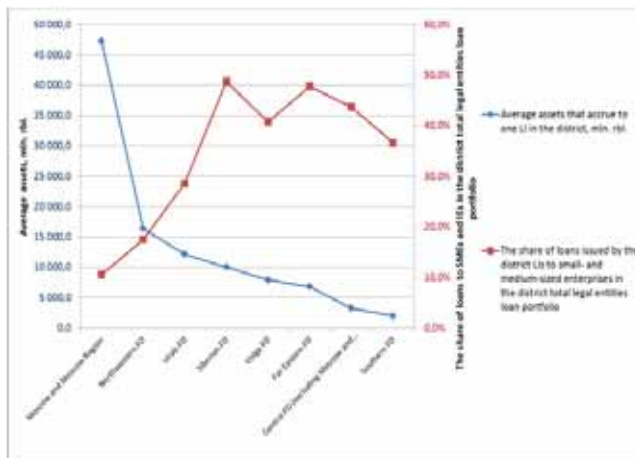
Figure 3. Graphic representation of interdependence of the average assets of the lending organizations of the district and the volumes of loans issued by them to legal entities in 2010
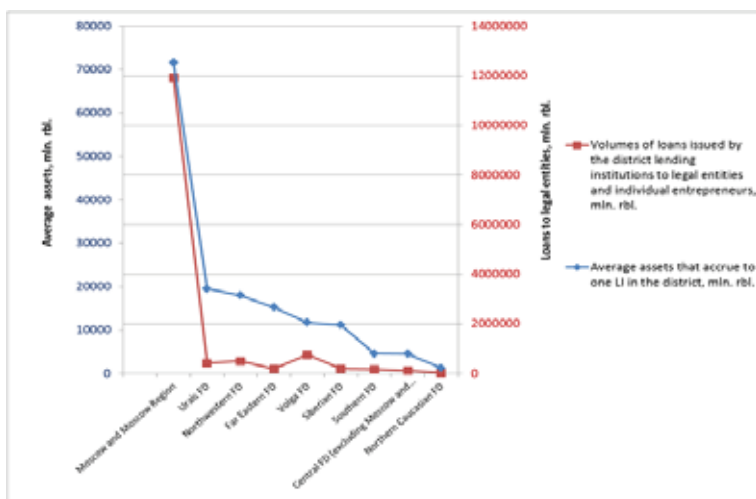
Figure 4. Graphic representation of interdependence of the average assets of the lending organizations of the district and the volumes of loans issued by them to legal entities in 2011
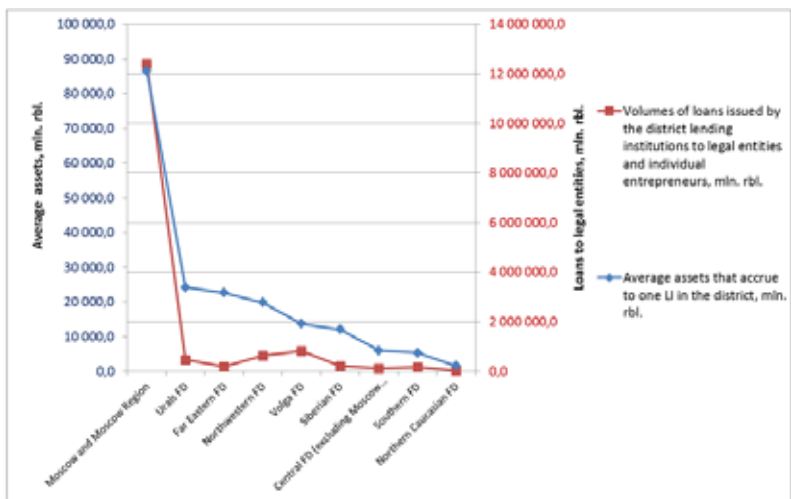
Figure 5. Graphic representation of interdependence of the average assets of the lending organizations of the district and the volumes of loans issued by them to legal entities in 2012
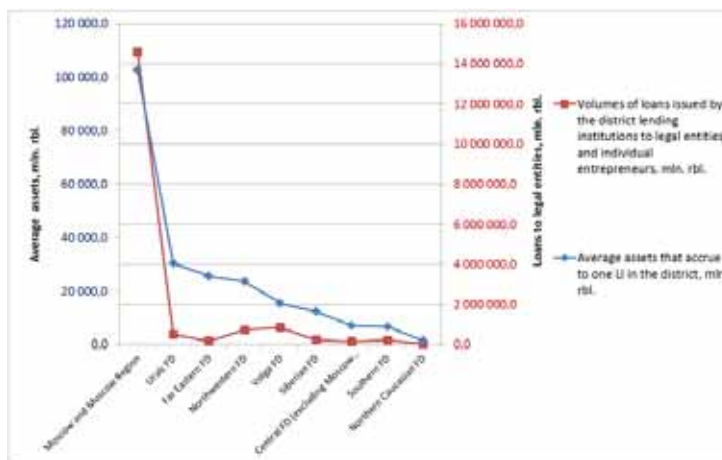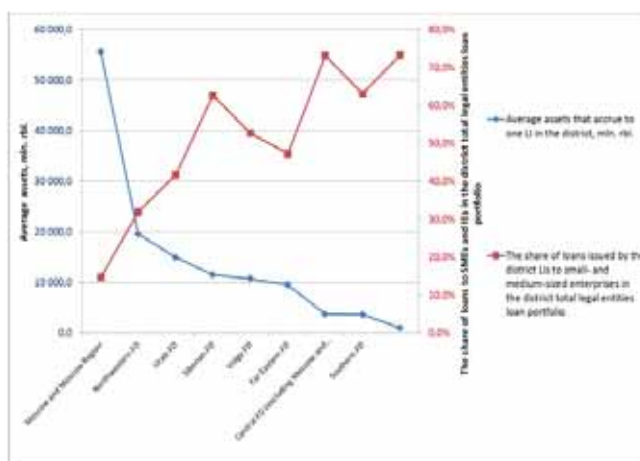
Figure 6. Graphic representation of interdependence of the average assets of the lending organizations of the district and the volumes of loans issued by them to legal entities in 2013

Figures 7, 8, 9, 10 and 11 show correlations between the average assets of the lending organizations of the district and the volumes of loans issued by them to small- and medium-sized enterprises and individual entrepreneurs.
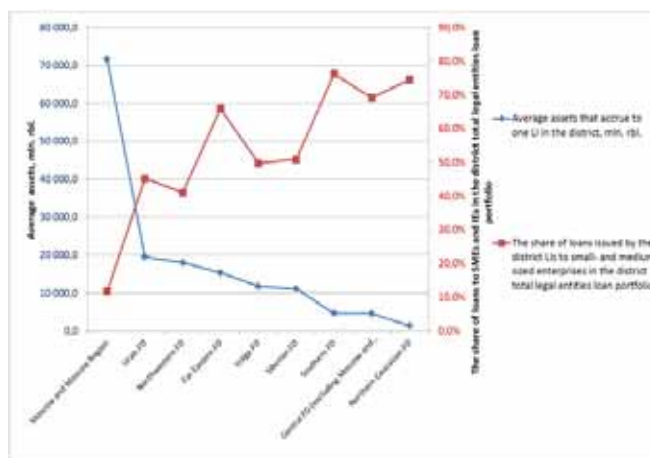

Figure 7. Graphic representation of interdependence of the average assets of the lending organizations of the district and the volumes of loans issued by them to small- and medium-sized enterprises and individual entrepreneurs in 2009

Figure 8. Graphic representation of interdependence of the average assets of the lending organizations of the district and the volumes of loans issued by them to small- and medium-sized enterprises and individual entrepreneurs in 2010
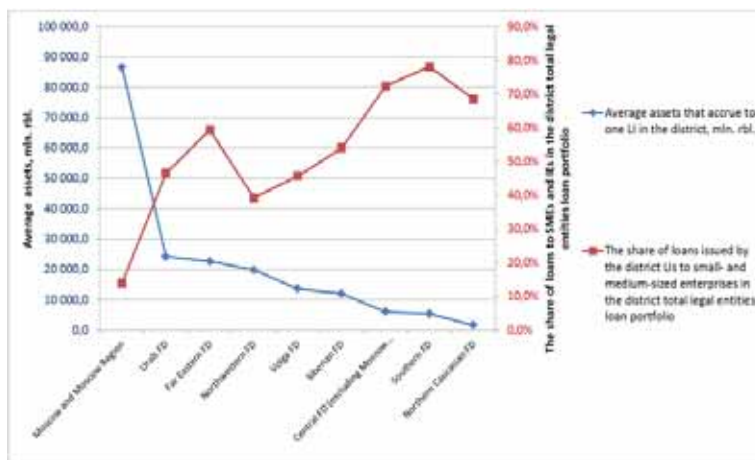
Figure 9. Graphic representation of interdependence of the average assets of the lending organizations of the district and the volumes of loans issued by them to small- and medium-sized enterprises and individual entrepreneurs in 2011

Figure 10. Graphic representation of interdependence of the average assets of the lending organizations of the district and the volumes of loans issued by them to small- and medium-sized enterprises and individual entrepreneurs in 2012

Figure 11. Graphic representation of interdependence of the average assets of the lending organizations of the district and the volumes of loans issued by them to small- and medium-sized enterprises and individual entrepreneurs in 2013

Figures 12, 13, 14, 15 and 16 demonstrate correlation between the average assets of the lending organizations of the district and the share of loans issued by them in the course of the year to small- and medium-sized enterprises and individual entrepreneurs in the total legal entities loan portfolio.
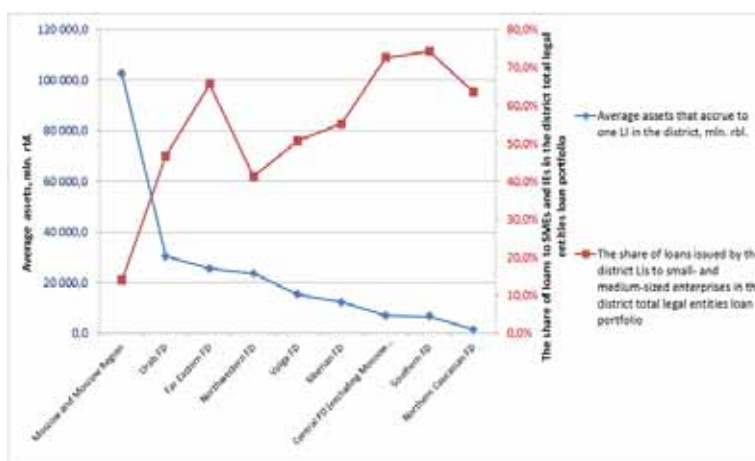
Figure 12. Graphic representation of interdependence of the average assets of the lending organizations of the district and the share of loans issued by them in the course of the year to small- and medium-sized enterprises and individual entrepreneurs in the total legal entities loan portfolio in 2009

Figure 13. Graphic representation of interdependence of the average assets of the lending organizations of the district and the share of loans issued by them in the course of the year to small- and medium-sized enterprises and individual entrepreneurs in the total legal entities loan portfolio in 2010

Figure 14. Graphic representation of interdependence of the average assets of the lending organizations of the district and the share of loans issued by them in the course of the year to small- and medium-sized enterprises and individual entrepreneurs in the total legal entities loan portfolio in 2011

Figure 15. Graphic representation of interdependence of the average assets of the lending organizations of the district and the share of loans issued by them in the course of the year to small- and medium-sized enterprises and individual entrepreneurs in the total legal entities loan portfolio in 2012

Figure 16. Graphic representation of interdependence of the average assets of the lending organizations of the district and the share of loans issued by them in the course of the year to small- and medium-sized enterprises and individual entrepreneurs in the total legal entities loan portfolio in 2013

Table 7. Linear correlation coefficients between average assets of the district lending institutions and the volumes of loans issued by them to legal entities and SMEs and IEs

Correlation coefficients	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Correlation between average assets of district LIs and the volumes of loans issued by them to legal entities	0,962774492	0,955387557	0,964012205	0,959908782	0,957029324
Correlation between average assets of district LIs and the volumes of loans issued by them to small- and medium-sized enterprises and individual entrepreneurs	0,930914758	0,950824399	0,963996585	0,963158196	0,959173798
Correlation between the average assets of district LIs and the share of loans issued by them in the course of the year to small- and medium-sized enterprises in the total legal entities loan portfolio	-0,793780332	-0,886509072	-0,894332537	-0,863223636	-0,877541395

Graphic representation of yearly data and its interdependence enabled us to suggest and establish the presence of the following correlations:

- Positive correlation between the average assets of lending institutions of the district and the volumes of loans issued by them to legal entities;

- Positive correlation between the average assets of lending institutions of the district and the volumes of loans issued by them to small- and medium-sized enterprises and individual entrepreneurs;

- Negative correlation between the average assets of lending institutions of the district and the share of loans issued by them in the course of the year to small- and medium-sized enterprises in the total legal entities loan portfolio.

High values of linear correlation coefficients have confirmed the hypotheses. Calculation data of the linear correlation coefficients is represented in Table 7.

6. Conclusions

Processing available data and calculations we have made confirm our hypotheses described above. With the growth of the bank size and with widening of the scope of the bank's activity, bank's lending to legal entities, in particular, to SMEs and to individual entrepreneurs (IEs), tends to become more intense. At the same time, the share of lending to SMEs and IEs in the legal entities loan portfolio tends to decrease. This can be explained by large banks' interest in lending to large borrowers and by the difficulties and high expenses involved when providing financial services for opaque small businesses.

Increased credit risk exposure, higher expenses involved in lending to small- and medium-sized businesses compared to lending to large businesses call for rationalization of the Russian small- and medium-sized banks' activity models. The success rate of this activity depends both on the banks themselves and the efficiency of bank management, and on the measures of government's influence and promoting development of small- and medium-sized banking.

To elaborate adequate measures of supporting Russian small- and medium-sized banks having interest and able to work efficiently with small- and medium-sized businesses, further data has to be collected and presented on the Bank of Russia initiative, thus making it possible to carry on with the investigation of the issues raised in this article. In particular, there may be interest in studying correlation between the size of the bank, its involvement into providing financial services for and lending to SMEs and IEs and the following characteristics and indices of the banking activity:

organizational structure, presence, number and location of bank's branches and subsidiaries;

changes in the composition and content of the information on the borrowers brought about by coming into force of the new Russian Federation law "On Accounting Statement" in accordance with which small enterprises are obliged to keep accounting records and to submit accounting (financial) statements, although in a simplified manner;

lending activity expenses, and rates of provisions for loans issued to borrowers of various size and activity scope;

rates of return and interest rates on credit operations for different categories of borrowers, that can reflect the credit risk exposure when lending to borrowers of various size and activity scope;

rates of overdue indebtedness of the borrowers of various size and activity scope.

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Notes

Note 1. Source: http://news.kremlin.ru/media/events/files/41d3e10aee6d7935f5f0.pdf

Note 2. Source: data from the Bank of Russia website (www.cbr.ru), Bank Statistics Bulletin.

Note 3. Chapter 26.2 of the Tax Code of the Russian Federation "Simplified Tax System".

Note 4. Chapter 6 of Federal Law of the Russian Federation # 402-FZ dated 06.12.2011 "On Accounting".

Note 5. Instruction of the Central Bank of Russia # 139-I dated December 3, 2012 "On obligatory bank regulatory standards".

Note 6. Source: http://www.cbr.ru/statistics

Note 7. Instruction of the Central Bank of Russia # 2332-U dated November 12, 2009 "On the list, forms and procedures of drawing and presenting financial reports by lending institutions to the Central Bank of Russia".

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Features of Using the Cryptocurrency

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Abstract

The article highlights the issues of emergence and existence of cryptocurrency. Exploring online space, you can select the most popular existing electronic currency which is bitcoin (Bitcoin). The article analyzed the pros and cons and the legality of these "money" in Russia and abroad. Some people believe the money that exist in the online space are simply "cheating", and therefore it is not worth to trust them, but others say that this currency will proceed the future of electronic payments.

Keywords: Cryptocurrency, Bitcoin, money, mining, electronic currency

1. Introduction

Cryptocurrency is money in the form of numbers. It is made not from paper, it is not the precious coins, but cryptocurrency is money in the form of numbers that can be stored in a file on a personal computer. But how do you know where are these numbers? They are generated, calculated by all sorts of complicated formulas. They are forgery. In other words, Bitcoins are some difficult to count numbers, which at the end of the calculations take the form of money. (FL "About Central Bank RF (Bank of Russia)", 2013).

Essentially anything can be money. To do this requires the consent of at least two sides. If you take and tear off leaves from a tree and other side says that it is ready to take the same leaves to be paid for their labor or services, and you say that you are ready to accept them as their own, then you can pay with leaves. This will be our money. These are just necessary conditions. Bitcoins and creators sharing their views once agreed to consider Bitcoin money. They were sided by new enthusiasts. It got to the point that Bitcoins could be paid for services in online space. However, bread still cannot be bought by Bitcoins, but who knows what will be in the future.

2. Method

2.1 The Origin of the Bitcoin Payment System

Over the past six months the Bitcoin payment system attracted a lot of attention. The exchange rate of virtual coins sharply reached from $200 per coin in September to $1,300 by the end of November, 2013. However, in early 2014 after the holidays the rate stabilized and currently it fluctuates in a narrow range between 900 and 1000 dollars (Agarkin, 2011). Proponents argue Bitcoin to be the cryptocurrency which has many properties that can make it an ideal currency for major customers and vendors. For example, Bitcoin has high liquidity, low transaction costs, it can be used to send instant online payments and micropayments (Alekseev et al., 2012). Monitoring the situation of handling the so-called virtual currencies (cryptocurrency) shows a growing interest to them, including the possibility of crime money laundering.

We will try to figure out how this is constructed and consider the interesting facts about Bitcoin.

The mystery still remains, who is involved in "the birth" of Bitcoin. As we can find in press, the author of the virtual currency is the programmer Satoshi Nakamoto. According to some sources, in 2008 he single-handedly, (and according to other sources, – with a group of associates working under his pseudonym Satoshi) developed the source code of the first "e-wallet" (electronic wallet) and made it available to all. A year later, Nakamoto has left the project and transferred all its powers of the subsequent development to Gavin Andresen. Satoshi Nakamoto still denies the fact of their relationship to the project. In contrast to the "paper" money issued by governments of all countries, Bitcoins do not have any control of the regulator. Currency has no administrator, and therefore has full autonomy, so nobody has the right to ban its use. Bitcoin is a set of numbers, which is

transmitted from one computer to another and the transaction's information is stored in the form of a cipher for all participants in the monetary system. That's why Bitcoins have been called "decentralized cryptocurrency". There is no single centralized location responsible for the "issue" of virtual money. So it is the second characteristic feature of Bitcoin. Users of the "mine" coin system need only the video card in their PC system units.

2.2 Features of Bitcoin Currency

There are markets, so called "Bitcoin Exchange", which allow people to buy or sell Bitcoin using different currencies. Mt. Gox Exchange is the largest exchange market of Bitcoin. People can send Bitcoin each other through mobile applications or computers. This is like sending cash in a digital form. People complete "collecting" Bitcoins using computers to solve complex mathematical problems. Thus Bitcoin is created (Belov, 2010).

"Mining" is getting money from almost empty, it is a slow process that requires enormous computing capabilities, as well as electricity costs. The existence algorithm of Bitcoin currency involves one very important point. There is a limit of the total number of coins. It should not exceed 21 million. After reaching this limit, emissions will stop. Since 2009, about 12 million was released, that is near the half. It is predicted that the resource may be exhausted by 2150, taking into account annual increase of the production process complexity (Virtual Gold standard. URL: forbes.ru/tehno/internet-i-telekommunikatsii/67492-virtualnyi-zolotoi-standart. Date Views 30.03.2014).

System is made vulnerable by its legal status. Everywhere it has a different explanation. In early December 2013 the People's Bank of China put its departments under a ban on transactions carried out in Bitcoins. The Central Bank of France calls this cryptocurrency speculative instruments prone to high risk. Thailand criticize the Bitcoin too, its National Bank has not recognized an independence of virtual currency. In Germany the situation is more positive. There Bitcoin was taken and it fell under the definition of private money.

2.3 Abilities of Bitcoin Currency

Purchase of electronics, clothes, books, food and other items provided on the Internet can be made by Bitcoin payments. Number of exchange points, where electronic money is converted into normal money is increasing constantly (Bitcoin: An Innovative Alternative Digital Currency. Social science research network. URL papers.ssrn.com/sol3/papers.cfm?abstract_id=1817857, Date Views 01.01.2015).

The world's first ATM machine that allows you one to convert Bitcoins into dollars and vice versa appeared in Canada in October 2013. Robocoin Apparatus certifies the identity of the person on the basis of handprints. Exchanges worth about $3,000 can be produced per day. Although Bitcoin is electronic currency, it like all sorts of currency it is susceptible to theft (Babina & Bashirova, 2012). Bitcoins is not just a single "cryptocurrency", but it is the first one, which is widely accepted. There are also other currencies, such as Litecoin, which may be produced much faster, Namecoin and dozens of others (Berezina M.P., Business and banks. #22, 2012). First of all, attractiveness of Bitcoin is determined by its anonymity. This is the most expensive currency, while it is open enough and at the same time is absolutely opaque. This is the paradox of this cryptocurrency. It is no coincidence that Bitcoins are popular in criminal structures in the field of trafficking in arms, drugs and even assassinations.

For example, there was a SilkRoad online store selling drugs, which functioned in the anonymous network Tor, part of the Internet, which cannot be detected by search engines. Besides psychotropic substances (including LSD, marijuana, and heroin), site offers also pornographic material and banned books. Ross William Ulbricht, the resource owner, was detained and his servers with the stored Bitcoins were withdrawn. All purchases were paid by using Bitcoin.

A year ago, Assassination Market (market of murders or murder attempts) also appeared on the Tor network's. Its visitors are encouraged to invest in Bitcoins in killing public persons and politicians. Customer before executing the order must make a donation of 1 Bitcoin to the killer encrypting it dates alleged assassination attempt. After executing the killer will be listed other Bitcoins and founders resource receive 1% commission (Berezina M.P., Business and banks. #22, 2012).

One of the UK residents, Briton, "extracted" 7500 Bitcoins at a time when it was very easy to do. After he accidentally spilled tea on a laptop he threw the burned computer in the trash. Briton greatly regretted about his decision when the rate of e-currency rose to $1,000 what could make him a millionaire. He had not succeeded to find dumped "source of wealth" in a landfill. Recently the decision was made by the Financial Supervision Commission of Taiwan to prohibit the use of Bitcoin ATM explaining that Bitcoin is false currency which

should not be used by people or banks for payments. Other countries with currency control are Brazil, Egypt, Iceland, North Korea, Russia, South Africa, India and Argentina (Bunkina &Semenov, 2012).

A few years ago Bitcoin has not been used for payments. In 2011, an American from Florida decided to try to pay by "cryptocurrency", giving one of the Internet forum members 10,000 Bitcoins ($25 at that time) in exchange for the delivery of two pizzas. Now American's dinner is the most expensive in the history ($8.5 million).

Today, the Bitcoin is the most expensive currency. In 2009, the Norwegian student Peter X. wrote a scientific work devoted to unknown e-currency. For this purpose he purchased a few "coins", paying $25. He made it and forgot. He recalled his purchase when he accidentally stumbled on a note about the record price hike of studied currency. It turned out that the total cost of purchased "coins" reached one million dollars. Bitcoin exchange rate is determined by supply and demand for it. Rates depend on the willingness of people to buy or sell coins. Why do people now want to buy Bitcoins? Apparently, enthusiasts still believe and hope that in the future there will be another jump in the cost of Bitcoin and the price will reach the record highest level.

3. Results

It is quite clear that Bitcoin has ceased not to be only a toy of programmers. Governments in developed countries are discussing what to do with e-currency, private business is active, but at the same time carefully experimenting with Bitcoins. Currently Bitcoin emerged from the shadows. The system rotates billions of real dollars most of which is criminal. But the most valuable currency in the world has more and more supporters among romantics who dream of a better radiant life. Furthermore, Bitcoin can now be used by decentralized company for international payments that was impossible previously. Doing business with consumers using Bitcoin is available in many countries all over the world. For example, the electronics retailer that accepts payments in Bitcoins, recently pointed out that during the last nine months he sold $300,000 of goods to 40 countries. This includes countries such as Pakistan and Moldova, which were previously unavailable for American traders (Demidova & Ibragimova, 2010).

An experiment was conducted to determine the locations in countries where Bitcoin is used. It lasted 101 days; a married couple from the United States took part in the experiment. They had to pay for all things just by virtual currency. The journey started from Utah to New York, then there was hop across the Atlantic to Stockholm, there were also Berlin and Singapore. All the time the family was paying for absolutely everything by Bitcoin including food in supermarkets, restaurants, clothing stores, etc. Most complex were searches of gas stations. Bitcoins was not accepted everywhere and they have to prove that it is indistinguishable from the real ones (Samoshkina, 2011). Not only virtual currency exchange rate grows, but a number of users as well. University of Nicosia in Cyprus accepts Bitcoin as tuition fee. Popular e-commerce platform Shopify added Bitcoin-payment option for their sales at the end of last year. Having a base of more than 70,000 online stores, the amount of goods purchased using Bitcoin has increased considerably (Таран & Таран, 2014).

In Europe and America a number of places where it is possible to spend accumulated virtual money are constantly growing that of course is different from Russia. One of the most favorite places in the network for the lucky owners of digital currencies is gambling sites, such as online casino. Here you can quickly double or lose your capital (Redhed & Hughes, 2010).

SatoshiDice today remains one of the most popular gambling sites. Members betting send digital money to one of the accounts and in return receive a payment based on the probability of the winning. Casino PeerBet is also widely known, where other Cryptocurrencies are accepted in addition to Bitcoin.

Bitcoins are perfect for online payment services, but it does not mean that the digital currency cannot be used to purchase real goods. There are a number of sites offering real tangible goods for Bitcoins, although they mainly accept payments via the Internet (URL: What is Cryptocurrency? https://7pay.in/crypto. Date Views 15.01.2015).

Bitcoinshop.us, for example, offers a wide range of products from air conditioners to watches. For those who wish to buy, prices are set in Bitcoins. One catch: the delivery is only to the residents of the continental part of the United States.

Memory Dealers supplies network equipment and memory cards for personal computers. This company trusted Bitcoin digital currency since its birth. CoinSpot provides you the addresses of the interesting local merchants. For example, Keystone Pet Place will satisfy all the needs of your pet. The Java Nomad will send you fresh coffee beans directly from Bali. Persian Shoes will sell you handmade shoes and bags from Iran. Some highly specialized local shops accept as payment only Bitcoins, and do not use the official currency.

The good news is that around the world there are hundreds of small retail shops, where digital money is accepted (Pashkus, 2013).

4. Discussing

4.1 Features of the Bitcoin Used as a mean of Payment

In general, the process is started, the technology is widespread and it can no longer be ignored. Many people know about Bitcoin, and buying it is not a problem. But what should do with it? The meeting which has a strong name "Expert Group Meeting at the Interagency Working Group on combating economic crimes" was attended by representatives of the Prosecutor General of the Russian Federation, representatives of the Central Bank of the Russian Federation, the FSB and the Interior Ministry. The major question under discussion at a meeting was "cryptocurrency in Russia: to be or not to be". Just according to the title of the meeting it is clear that Bitcoin was considered as a negative phenomenon (Larichev, 2011).

The final conclusion of the meeting was that the distinguishing feature of Bitcoin as a means of settlement and accumulation is the lack of availability of real value. Its price is determined by speculative actions that entail a high risk of loss of value, and thus a violation of the rights of persons holding this currency.

According to the Art. 27 of the Federal Law "On the Central Bank of the Russian Federation" official currency of the Russian Federation is the ruble. Introduction on the territory of Russia other monetary units and issue of money substitutes is prohibited (URL: The Ministry of Finance intends to ban cryptocurrency. http://pronedra.ru/money/2014/10/06/minfin-kriptoovaluta/, Date Views 08.10.2014). The owners of cryptocurrency in Russia have rights to protect their interests in administrative proceedings.

Following the meeting it was decided to hold a series of measures aimed at preventing violations in the sphere of money circulation in the Russian Federation. Taking into account international experience, further areas of the work on the legal regulation of this sector were identified. Unfortunately, it is not known the origin of the activities that are planned. There is no content on this occasion (URL: What is Cryptocurrency? https://7pay.in/crypto. Date Views 15.01.2015). Presumably, using of cryptocurrency in Russia will be strictly limited. Internet users from Russia show the greatest interest in the new currency. Because of the lack of official position of Russian financial regulators, the use of Bitcoins for its intended purpose (payment for goods and services) is very tentative. If a decision on the use of Bitcoin as a means of payment will be accepted, it is necessary to evaluate the opportunities and risks of the new currency (URL: The Ministry of Finance intends to ban cryptocurrency. http://pronedra.ru/money/2014/10/06/minfin-kriptoovaluta/, Date Views 08.10.2014).

4.2 Supporters and Opponents of Bitcoins

The whole world is divided into two groups: those who approve Bitcoins, and those who want to ban them. However, there is a clear pattern: cryptocurrency is supported by the country in which its own currency is stable and strong, but a country with a weak currency and large trade flows, as China, try to ban Bitcoins. But the attempt to limit Bitcoins now is clear: Bitcoins had a very significant use.

Whilst one country (such as e.g. Australia) fully uses cryptocurrency, the other countries are quite skeptical. A prime example is Russia.

Russian authorities have prepared a bill aimed at restricting access of Bitcoins - the most popular of the existing Cryptocurrencies. In particular, the Ministry of Finance proposes to restrain people wishing to use cryptocurrency by severe penalties.

Not so long ago, Microsoft Chairman Bill Gates also spoke in support of Bitcoins, but he found that the technology needs to be expanded. According to him, Bitcoin will not get mass distribution because of its anonymity, since the authorities will always assume this payment system as a mean for white-washing and terrorist instrument.

Operations with Bitcoins are now held in the United States, Singapore, Bulgaria. Investors believe that the currency may be the most promising in India and South-East Asia.

But despite the sharp reaction across the world, there are countries that use this "currency" to the maximum extent. For example, residents of the Australian city of Launceston are building a closed economic system based on Bitcoin cryptocurrency. In the city with a population of 106 thousand people a business network will be established, where one can both earn and spend cryptocurrency that automatically exclude circulation of Australian dollars.

In addition, the city will develop tourism, attracting wealthy travelers to spend their savings in cryptocurrency in Launceston.

According to the plan, the city must create their own government that will lead the taxation procedure in Bitcoin. Two of the twelve members of the city council have already approved this initiative.

Project Director, Adam Poulton commented potential Bitcoin: "Bitcoin cryptocurrency is used in all developed countries. Over the past 12 months, its total value increased to $20 billion. Launceston's turn to appreciate the advantages of virtual money came".

First the virtual currency will be accepted ~~go~~ by shops that accept digital payments. Bitcoins will be gradually taken by all traders of the city. Most of the cryptocurrency will remain within the city, in order to evaluate the advantages and disadvantages of Bitcoin-closed economy.

Today one can pay Bitcoins in major online stores in the US, such as Overstock and Newegg, buy property in London, a lot of different online services accept this currency. For Bitcoins ~~you~~ one can buy tickets ~~of~~ for Air Baltic flights, ~~to~~ pay for a hotel on the Expedia online service site make purchases in App Store (Redhed & Hughes, 2010).

In Russia Bitcoins payments are accepted by IT-bar in St. Petersburg, some points of fast food, Subway Killfish bars, and even hotels, in particular B&B Hostel in Krasnoyarsk (Melnikov, 2012).

Bitcoin critics often accuse this currency ~~of~~ in instability of its rate. To date, the official rate of one Bitcoin is $342.32. In January, one Bitcoin was over $800. In December 2013 the rate reached the maximum level equal to $1,240 per Bitcoin. After that its value has fallen twice due to the prohibition of the Chinese Central Bank to official financial institutions to conduct transactions in Bitcoins.

4.3 Comparative Characteristics of Some Payment Systems

From the perspective of e-commerce, using Bitcoin to pay for goods can be called a new payment system, such as WebMoney and Yandex-money. Each payment system should have an operator that defines the rules of the payment system and a license to conduct banking operations. Yet Bitcoin's operator in Russia does not exist. BitPay Company organizes provides acceptance of Bitcoin for online merchants but it is not the only way to organize the sales. BitPay cannot be called the operator of Bitcoin's payment system. Taking into account the low level of payments commission, we can assume that in the short term Bitcoin becomes popular e-currency in our country ~~as~~ for internal payments and international transfers (Larichev, 2011).

What are features that make Bitcoin ~~is~~ better than YandexMoney, Webmoney or QIWI? All of the above are the payment systems, not currencies. Payment system is a set of rules, procedures and technical infrastructure, providing the transition of the cost from one subject to another. Payment systems are a key part of modern monetary systems. Units in these payment systems are directly tied to one of the national currency. In addition, the systems themselves are controlled by companies that are going to have transfer fees and may terminate your account for any reason. Bitcoin is not controlled by anyone and is not tied to any currency (its exchange rate floated against other currencies, depending on supply and demand). It is best to think of Bitcoin as a digital gold - no one controls the gold itself, i.e., anyone can own and can get it, but it cannot be "printed" or change its properties in any way (Satoshi Nakamoto, 2014).

5. Conclusion

Russian financial authorities are ambivalent about the Bitcoin. Earlier, the Central Bank warned the Russians from using cryptocurrency that, within the meaning of the regulator, to be associated with white-washing and terrorist financing. However, in June, George Luntovsky, the first deputy chairman of the Central Bank said the following concerning cryptocurrency: "We are supporters of careful approach to Bitcoin, together with the Bank for International Settlements (an organization of the world's central banks), we are monitoring the situation. We cannot deny this tool, it is quite possible, it is the future".

However, supporters of Bitcoins are even among the Russian financiers. Earlier, the head of Sberbank German Gref said that Cryptocurrencies are "very interesting international experiment that breaks the paradigm of the currency issue". "They definitely do not need to be forbidden, they should be understood and can be properly adjusted," - he said.

In accordance with the published amendments to the legislation for the use of cryptocurrency, the Russian Federation Ministry of Finance proposes to establish penalties in the amount of 30 thousand to 50 thousand rubles for individuals, from 60 thousand to 100 thousand rubles - for officials, and from 500 thousand to 1 million rubles - for legal entities.

Moreover, under the penalty can even get those citizens and companies that do not use cryptocurrency, but deliberately spread information that allows one to issue monetary surrogates or transactions with them. Currently,

it is impossible to get more information ~~at~~ from the Finance Ministry in this regard. The text of the bill on cryptocurrency is called "Cash Surrogates".

Previously we have discussed the possibility of a total ban for using of virtual currency in Russia and criminal penalties for non-compliance.

Thus, the current version of the bill is softer. Nevertheless, authorities still have not provided a mechanism that will help to fight against the virtual currency, and keep track of all transactions in the market. In turn, the Central Bank hastily declared that the identification of operations with cryptocurrency in the Internet and making decisions on them is not consistent with its objectives and functions.

According to analysts, the Ministry of Finance has published a bill, announcing the plans to regulate adoption of Bitcoins in Russia, but this does not mean that cryptocurrency in Russia has no future. "I do not want to say that this is nonsense, but many financial authorities understand that with proper regulation cryptocurrency offer very interesting business opportunities. At least a transaction value of cryptocurrency approaches zero. This is really a very interesting financial instrument" - said Karen Kazeryan, the analyst of the Russian Association of Electronic Communications (Pashkus, 2013).

The most "deplorable" bill, banning the full use of virtual money on the territory of Russia, will be passed by the Parliament in the spring of 2015. Arguing the need for such restrictions, deputies use the European experience, where the flow between the virtual and the real monetary systems was also decided to ban. It will not affect the electronic money (for example, Webmoney), as well as gaming currencies. It is only about paying currencies that have independent issue centers, such as, in particular, Bitcoins.

Cryptocurrencies are a new technology that requires further study; it is a tool, which still has no legislative response from the government of the Russian Federation. On October 2014 no clear rules were developed for businesses or citizens, who would like to work with cryptocurrency; there were only recommendations, such as the statement of the CBRF about virtual currency and Bitcoin in particular (Social science research network).

When conducting the study of such a phenomenon as cryptocurrency, in conclusion we would like to quote a prominent person - Russian President Vladimir Putin (at the extended meeting of the Government on January 31, 2013): "Global technological innovation, which has been already mentioned here, is a reality. New technologies are emerged right in front of our eyes. Not only new technologies, new industries are emerging! We need to fully participate in these processes, create conditions for innovation activities at home, in Russia, due to tax and budgetary measures, due to the customs tariff and antitrust regulation. Just focusing on the mass introduction of advanced technologies, in fact on a technological breakthrough, we will be able to provide the necessary economic growth".

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Current Problems of Interstate Cooperation of Russian Federation for the Protection of Children in Case of Disputes between Parents Living in Different States

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Abstract

In 2011 and 2013 the Russian Federation has become a State party to two important international treaties on the protection of human rights of children - Convention on the Civil Aspects of International Child Abduction of 1980 and Hague Child Protection Convention of 1996. Considering the social significance of these conventions, there is a practical need in the elaboration of the procedure of their application by the state organs as well as the organisation of knowledge-raising campaign aimed at disseminating the information on the provisions of the conventions among the population of the Russian Federation. Due to the lack of experience in the area of application of the Hague convention of 1996 in the Russian Federation it seems actual to examine the practice of its application in other State parties, in particular Germany, Great Britain and Finland. The article analyses the practical realisation of Convention in the indicated States and determines the areas where this experience may be valuable for the Russian Federation with a view to ascertaining the most effective ways to implement this Convention and elaborating its own approaches in this area.

Keywords: human rights, children rights, international law, convention, responsibility of parents

1. Introduction

Ensuring the right of the child who is taken away from one or both parents to maintain personal relations and direct contact with both parents on a regular basis as well as guaranteeing the rights of custody and access to a child exercised by parents in cases when they are separated and are living in different States, is one of the most challenging international legal and national legal issues in the area of child protection.

Due to a considerable growth in the number of cases of illegal removal of children out of the national territory of the Russian Federation, or their non-return to the Russian Federation, as well as the failure of a parent living outside Russia to provide access to communicate with the child and participate in his/her upbringing for the other parent living in the Russian Federation, there is an urgent need to find effective ways to protect children from the negative effects of the illicit removal and retention and to take necessary steps to prevent the onset of such cases (Solntsev & Koneva, 2013; Archard, 2004; Raymond, 2007; Fenton-Glynn, 2014). Indeed, according to the Ministry of Justice of the Russian Federation, the number of marriages of Russian citizens to foreigners is growing steadily. For example, in 2006, the number of marriages between Russians and the French amounted to 108, and in 2008, this number rose to 130; in 2006, the number of marriages with the citizens of Israel amounted to 219, and in 2008, it rose to 263. From 2006 to 2008, 939 marriages were contracted with the US nationals, and the number of marriages contracted with Germans peaked at 2564. Dramatic cases of Irina Bergset (Note 1), Rimma Salonen (Note 2), Irina Belenkaya (Note 3) and many other women, citizens of Russia, also prove the relevance of the topic researched.

2. Method

The article applied scientific methodological approach which allows to determine the scope of the research, clarify the basic concepts and categories, highlight the key conceptual aspects of the research topic. The study used scientific methods of cognition, such as dialectics, analysis and synthesis, the method of generalization, system-structural method. The authors also widely used special methods of science: legal and technical, historical, method of forecasting.

The task of a comprehensive analysis of the research topic has necessitated the use of the comparative method of research implementation processes in various states, which was dictated by the need for a scientific understanding of the issues and trends in the protection of children's rights.

2.1 Legal Analysis

The Hague Convention on the Civil Aspects of International Child Abduction of October 25, 1980 (hereinafter - the 1980 Convention), is an effective international legal instrument for resolving disputes related to the wrongful removal or retention of children. Accession to this international legal instrument allows member- States to provide at the international level additional guarantees of the rights of children and their parents (or other legal representatives), to create a legal mechanism of interaction with other States in dealing with the issue of prompt return of children wrongfully removed or retained in foreign countries, and to take effective measures to make sure that rights of custody and of access provided by the legislation of a Contracting State, are effectively respected in the other States (Abashidze et al., 2014; Eekelaar, 1986; Guggenheim, 2005).

For reference, it should be mentioned that the Russian Federation is a party to the 1980 Convention, in accordance with the Federal Law No. 102-FZ of May 31, 2011, with the Convention entering into force in Russia on October 1, 2011. Under Art. 38 of the 1980 Convention "the accession will have effect only as regards the relations between the acceding State and such Contracting States as will have declared their acceptance of the accession. Such a declaration will also have to be made by any Member State ratifying, accepting or approving the Convention after an accession ..." (Convention on the Civil Aspects of International Child Abduction of 1980. URL: http://www.hcch.net/index_en.php?act=conventions.text&cid=24).

So far, the 1980 Convention has been ratified by 93 States, but for the time being, only 35 States recognized the Russian Federation, including 13 Member States of the European Union (EU) (Note 4) and 22 other States (Note 5). Russia, in its turn, recognized the accession of the Republic of Korea (entered into force on 01.10.2013). Thus, under the 1980 Convention, Russia has treaty relations with 36 States. It should further be noted that 15 EU Member States have not yet recognized Russia under the Convention. By the way the USA also have not recognized Russia under the Convention (Fass, 1997). Bearing in mind that legal issues relating to the Convention are resolved uniformly in all EU Member States pursuant to the provisions of Council Regulation (EC) No. 2201 of November 27, 2003 "On the jurisdiction and the recognition and enforcement of judgments in matrimonial matters and the matters of parental responsibility" (Council Regulation (EC) No 2201/2003 of 27 November 2003 concerning jurisdiction and the recognition and enforcement of judgments in matrimonial matters and the matters of parental responsibility. URL: http://eur-lex.europa.eu/LexUriServ/LexUriServ. do?uri=CELEX:32003R2201:EN:HTML) and considering that the Convention is already in force between Russia and 13 EU Member States, it seems that the reference of the other 15 EU Member States to the fact that the Russian legislation contradicts the legal standards applicable on their respective territories as a basis of their refusal to recognise Russia under the 1980 Convention is not valid. Therefore, the non-recognition of Russia by these countries is hardly motivated by legal reasons rather by political ones. Such a behavior blocks the creation of the only legal framework of EU cooperation with the Russian Federation in cases of child abduction which is in a clear contradiction with the principle of ensuring the best interests of the child and thus undermines the protection of children's rights on their territories (Skakun, 2014; Archard & Skivenes, 2010; Forst & Blomquist, 1992; Zermatten, 2010).

Another international legal instrument specifically designed for the efficient resolution of disputes on child-rearing between parents who are citizens of, or reside in different States, is the Convention "On Jurisdiction, Applicable Law, Recognition, Enforcement and Cooperation in respect of Parental Responsibility and Measures for protection of children's rights " of October 19, 1996 (hereinafter - the Convention of 1996). This convention has been in force in the territory of the Russian Federation since June 1, 2013.

An appropriate central authority (hereinafter - the Central Authority) will be established in the State party in order to coordinate the implementation of the above-named Conventions. Ministry of Education and Science is a Central Authority, in charge of the implementation of these two conventions in the Russian Federation. (Schepetkova, 2014).

In this regard, it is important to point out that the majority of States Parties to the 1980 and 1996 Conventions assign the Ministry of Justice as the Central Authority. However, the choice of the Russian Federation is based on the fact that, since the Conventions are aimed at protecting the rights and interests of the child, the Central Authority's functions should be concentrated in the hands of a public authority, which is a key state institution for the protection of children's rights; namely, the Russian Ministry of Education and Scienc (King & Piper, 1995; Archard & Macleod, 2002).

3. Results

It should further be noted that the implementation of the Conventions of 1980 and 1996 at the national level poses a challenge and requires changes to be made to a number of national acts in order to harmonize the national legislation of the States Parties with the international treaties provisions (Jones and Walker, 2011). Pursuant to the provisions of para. 4 of Art. 15 of the Constitution of the Russian Federation of 1993 (The Constitution of the Russian Federation. URL: http://www.constitution.ru/en/10003000-01.htm), the 1980 and 1996 Conventions form an integral part of the legal system in Russia. Accordingly, if they establish other rules than those stipulated by the Russian legislation, the provisions of these Conventions would apply.

Given the social importance of the treaties and the need for their effective application in the territory of the Russian Federation, it is necessary to develop comprehensive guidelines explaining the procedure for applying the provisions of the Conventions of 1980 and 1996 by the authorities at all levels, as well as to analyze and take into consideration the experience of their implementation in foreign States. To that end, the Federal Act No. 126-FZ of May 5, 2014 "On amendments to a number of legislative acts of the Russian Federation in connection with the accession of the Russian Federation to the Convention on the Civil Aspects of International Child Abduction" was adopted. The afore-referred Act amended the following four laws: the Law of the Russian Federation No. 2487-I "On Private Detective and Security Activity in the Russian Federation" of March 11, 1992; Family Code of the Russian Federation; The Federal Law On Bailiffs No. 118-FZ of July 21, 1997; Code of Civil Procedure of the Russian Federation (CCP of the RF); Federal Law "On Enforcement Proceedings" of October 2, 2007 No. 229-FZ.

One of the significant changes in the procedure for implementing the 1980 Convention in the territory of Russia is the following: before the effective date of the amendments, the Ministry of Education and Science upon receipt of an application for return of the child or for the exercise of the right of getting an access to the child (subject to the conformity of the application to the norms of the 1980 Convention) used to send the corresponding request for locating the child, and receiving information concerning the conditions of the child's life and upbringing, etc. to Russian regional bodies of trusteeship and guardianship. Under the new law, the Ministry of Education and Science since May 16, 2014 is to send tracing requests for the abducted or returned child to the structural subdivisions of the bailiffs of the territorial bodies of the Federal Bailiff Service.

Designation of courts (one in each Federal district), which will be engaged in the consideration of requests for the return of the child or the implementation of the rights of access to a child on the basis of an international treaty to which the Russian Federation is a Member State, has become another important novelty (Tobin, 2009). Designated Courts of justice are the following: in Central Federal District - Tver District Court of Moscow ; in Northwestern Federal District - Dzerzhinsky District Court of St. Petersburg; in Southern Federal District - Pervomajskij District Court in Rostov-on-Don; in The North Caucasus Federal District - Pyatigorsk city court; in Volga Federal District - Kanavinskiy District Court of Nizhny Novgorod; in Urals Federal District the District Court in Yekaterinburg; in Siberian Federal District - Central District Court of Novosibirsk; in Far Eastern Federal District - the Central District Court of Khabarovsk). Designated courts in the Republic of Crimea and Sevastopol will be determined later (Note 6).

However, as far as the application of the 1980 Convention in the territory of the Russian Federation is concerned, it seems appropriate to give examples of the current practice of foreign countries relative to the implementation of the Convention in respect of the designation of competent authorities (courts), empowered to deal with the case of the return of the children and the exercise of rights of access. It is to be recalled that at the present time 8 courts consider such cases in the Russian Federation. In contrast to this approach, examples of the Czech Republic and Japan can be mentioned. In these countries the cases related to the return of children and implementation of access rights are divided into two different categories and are to be considered by different groups of courts. For example, in the Czech Republic the City Court in Brno (Court of the First Instance) and the Regional Court in Brno (Court of Appeal) are entitled to take decisions on the return of children. As for the exercise of the right of access to the child, 86 courts of first instance and 8 courts of appeal have jurisdiction to consider submitted applications. In Japan, two courts have jurisdiction over the cases of return of children (the Family Court of the city of Osaka and the Family Court of the City of Tokyo), and courts which have jurisdiction to determine the place of residence of the child are competent to consider applications for the exercise of the right of access. As we see, States choose different approaches to designate Competent Authorities (courts), empowered to deal with the case of the return of children and the exercise of rights of access. The first approach suggests separation of cases regarding the return of children and cases regarding the exercise of rights of access into two different categories within the jurisdiction of different competent authorities (courts). The second approach suggests integration of these two types of cases into one category, to be considered by the same courts.

As one can see, the Russian Federation has opted for the second approach which is most likely due to the common features of disputes arising between parents living in different States and related to the wrongful removal or retention of children (Fellmeth, 2002; Pardeck, 2006).

The fact that the legislative changes are aimed at ensuring a prompt settlement of children's removal disputes by the competent Russian authorities, can be seen as considerable progress. Specifically, in accordance with para. 6, Art. 65 of the Federal Law "On Enforcement Proceedings" No. 229-FZ of October 2, 2007, the bailiff shall make a ruling within 24 hours from the date of submission of the request, ordering a retrieval or renouncing of a retrieval of the child on the basis of a tracing request obtained from the Russian Ministry of Education and Science. Moreover, in accordance with Art. 244.15 of the Code of Civil Procedure (CCP) of the Russian Federation, an application for the return of the child or of the exercise of rights of access is considered by a competent court within a period not exceeding forty-two days from the date of the acceptance of the application by the court (Note 7). By the terms of Art. 244.19 of the CCP , copies of judicial decisions concerning cases of the return of the child or of the exercise of the right of access shall be forwarded not later than the day following the date of court's ruling, to the Ministry of Education and Science of the Russian Federation, as well as to the court that had been considering the case involving the dispute over the child in question, if the court that issued the ruling is familiar with this case.

In respect of the 1996 Convention it should be noted that (according to its preamble) it was adopted with the aim of improving the protection of children in international cases by avoiding contradictions between the legal systems of the States Parties in respect of jurisdiction, applicable law, recognition and enforcement of measures to protect children. Currently a legislation on implementing rules of the 1996 Convention in the Russian Federation is under development. However, the possibility to recognize and execute foreign judgments under the can now be materialized. In accordance with the provisions of Art. 409 of the CCP, the decisions of foreign courts, including friendly settlement agreements, are recognized and enforced in the Russian Federation, if stipulated in an international treaty of the Russian Federation. The procedure for recognition and enforcement is determined by the current Russian civil procedural legislation. Article 23 of the Convention among the reasons preventing the fulfillment and recognition of a foreign judgment, provides as follows: if the measure, except in urgent cases, was adopted in the context of judicial or administrative proceeding, without giving the child the opportunity to be heard, in violation of core procedural principles of the requested State.

In Russian legislation, the fundamental procedural principles, nonobservance of which violates the procedural equality of the parties and, therefore, prevents the execution and recognition of a foreign court's judgment, are enshrined in Art. 412 of the Code of Civil Procedure.

As the central body responsible for the implementation of the Convention, The Ministry of Education and Science carries out actions, which are similar to those that it takes with regard to the 1980 Convention.

It should be noted that a decision on the recognition of foreign court rulings concerning family relations and the return of children to one parent was made for the first time in the Russian judicial practice on September 11, 2013 when the Moscow City Court ordered a Russian citizen who had an American wife (US citizen) and who had removed their children to Russia, to return them to their mother – his ex-wife.

The story runs as follows: the wife accused her spouse of domestic violence and filed for divorce which was granted in 2011. The two minor sons have dual citizenship - US and Russian - while the younger son has German citizenship. Both children were born in Switzerland and in January 2011, the family moved to London (Egorov, 2013). The English court decided to leave the children with their mother during the divorce proceedings. Sometime later the children left the UK for Russia on vacation with their father and did not come back to their mother. The latter requested to return the children to her. Her husband received the British court's injunction concerning the obligation to return the children. His ex-wife came to Russia twice - in winter and in summer - with the injunction and asked her spouse to return the children. But he was in no hurry to carry out the decision of the British Court. As a result, the American mother filed a lawsuit to the Moscow City Court demanding the recognition and enforcement of foreign court decisions. In her claim she referred to the 1996 Convention. The Moscow City Court, taking into consideration the decision of the Supreme Court of England and Wales and referring to the 1996 Convention ruled on the execution of judgments of the Court of England in the territory of the Russian Federation and, therefore, ordered the father - a citizen of Russia, to return the children to their mother.

4. Discussion

The analysis conducted in the present article reveled that Russia is moving steadily towards improving mechanisms for the implementation of the 1980 and 1996 Conventions in its territory in order to ensure

children's rights to maintain personal relations and direct contact with both parents and guarantee the rights of custody and access to a child to be exercised by both parents living in different States in the event of care disputes between them. It appears that the amendments made in this regard in the Russian legislation will coordinate the activities of the Ministry of Education and Science of Russia, acting as a central body of the Conventions implementation, and the competent public authorities They will also speed up the examination of applications on the basis of these international treaties, and thus increase the level of protection of the rights of children and their parents (or other legal representatives) in the territory of the Russian Federation, and strengthen the legal mechanisms of interaction between states in matters regulated by the above mentioned international instruments.

5. Conclusion

In this regard, the outreach activities, both among the public and the relevant government authorities, become of great importance. It appears that special attention should be paid to providing professional training to Russian judges and employees of the Federal Bailiff Service, as well as family law experts with the participation of the academic community (Franklin, 2001; Fortin, 2003).

In any case, in all the described measures taken by the State a particular consideration should be attributed to the principle of ensuring the best interests of the child in accordance to para. 1 of Art. 3 of the UN Convention on the Rights of the Child of 1989, which reads as follows – "a child is entitled to have his/her best interests to be assessed and taken into account as a primary consideration while any action or decision in both public and private sphere are made in his or her regard." (Detrick, 1999; Freeman, 2007).

Acknowledgments

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Notes

Note 1. Russian woman Irina Bergset to fight for adoption right over her son in Norway. http://en.itar-tass.com/world/688842

Note 2. Russian Rimma Salonen suspends hunger strike in Finland. http://en.infosud.ru/judicial_news/20120116/259586434.html

Note 3. Pavel Astakhov describes verdict against Belenkaya as severe. http://sputniknews.com/voiceofrussia/2012_10_30/Pavel-Astakhov-describes-verdict-against-Belenkaya-as-severe/; Mother of kidnapped girl free to return to Russia. http://rt.com/news/mother-of-kidnapped-girl-free-to-return-to-russia/

Note 4. Bulgaria (01.08.2013), Croatia (01.06.2012), Czech Republic (01.06.2012), Estonia (01.12.2011), Finland (01.01.2013), France (01.01.2012), Greece (01.01.2012) Ireland (01.07.2013), Lithuania (01.06.2013), Romania (01.06.2013), Slovakia (01.04.2013), Slovenia (01.01.2013), Spain (01.03.2013).

Note 5. Andorra (08/01/2013), Argentina (01.12.2011), Armenia (01.08.2013), Belarus (05.01.2014), Bosnia and Herzegovina (02/01/2014) Brazil (09/01/2013), Chile (01/10/2013), People's Republic of China (01/02/2014), China (Macau) (01.03.2012), Colombia (01.04.2012), El Salvador (01/08/2013), Israel (01.03.2012), Japan (01/04/2014), Mexico (1/11/2013), New Zealand (01.02.2012), Nicaragua (09/01/2013), Paraguay (04/01/2014), the Republic of Moldova (01.01.2014), Serbia (01.06.2013), Seychelles (01.07.2013) Ukraine (01.06.2012), Uzbekistan (01.03.2012).

Note 6. The other key novelty is the determination of the courts (one court in each Federal District) who are competent to receive and consider applications for return of the child or effective exercise of rights of access. Application for return of the child or effective exercise of rights of access is submitted to the Tverskoy district court of the city of Moscow if the whereabouts of the child are on territory of Central Federal District, in the Dzerzhinsky district court of the city of St. Petersburg (North-West Federal District), to the Pervomayskiy district court of the city of Rostov-on-Don (Southern Federal District), in Pyatigorsk municipal court (North Caucasus Federal District), to the Kanavinskiy district court of the city of Nizhny Novgorod (Privolzhsky Federal District), to the Zheleznodorozhny district court of the city of Yekaterinburg (Ural Federal District), to the central district court of the city of Novosibirsk (Siberian Federal District), to the central district court of the city of Khabarovsk (Far Eastern Federal District). The relevant courts in the Republic of Crimea and Sevastopol will be determined later.

Note 7. Furthermore, under Art. 244.15 of the Civil Procedure Code of the Russian Federation "return proceedings or the proceedings for rights of access are heard by the court within a period not exceeding forty-two days from the date of acceptance of the application by the court."

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Life Cycle Contracts in the Development of Procurement in the Russian Federation: World Experience

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Abstract

The procurement activity in Russia is in a new phase of its development in connection with the entry into force of the 44-Fededal Law of 05.04.2013. "On the contract system in the procurement of goods, works and services for state and municipal needs". Sufficiently serious innovations are required the analysis of international and world experience of procurement and development of the scientific and methodological support of state procurement. One of the innovations is contracts lifecycle. The article reveals the author's approach to identify and justify the conditions of effective implementation of the life cycle contracts in the procurement of the Russian Federation.

Keywords: procurement, life cycle contracts, public-private partnerships, scientific and methodological support, professional training

1. Introduction

In Federal Law of the Russian Federation №44-FZ "On the contract system in the procurement of goods, works and services for state and municipal needs" from 05.04.2013, the contract life cycle is considered as a contract to purchase goods or work, follow-up maintenance, operation during the term of service, repair, recycling, and the goods supplied or created as a result of the object (Baronin, 2014; Yankov, 2013). Key words in this definition are life cycle.

2. Method

The definition of life cycle may vary in relation to different objects. Different products may also have different stages of the life cycle. Unlike stages of the life cycle of different objects can involve a variety of approaches to the conclusion LCC, their pricing and execution.

The process of calculation of life cycle cost is one of the most challenging tasks for the customers. In part 3 article 32 of the Federal Law on the contract system the criteria value of the product life cycle or created as a result of the object:

• expenses for the purchase of goods or performance of work,

• the costs of subsequent maintenance,

• operating costs during their lifetime,

• the cost of repairs,

• the costs of disposal of the goods delivered or created as a result of the object.

The order of the Ministry of Economic Development of Russia № 567 dated 02.10.2013 approved "Guidelines on the application of methods for determining the initial (maximum) contract price, concluded with a single supplier (contractor, executor)" examines the approaches to the definition of IMCP. Section VIII "Calculating the cost of the product life cycle, the object created in the result of the work" is a mere formality. Enough general information about what criteria the cost of the product life cycle or created as a result of the facility include the costs for the purchase of goods or performance, subsequent maintenance, operation during the term of their service, repair and disposal of the goods supplied or created as a result operation of the facility, which does not allow the customer to clearly understand the specific steps to substantiate the purchase of a contract lifecycle. At the same time, it is recommended to make the calculation of the cost of the product life cycle or created as a

result of the object using the methods for the determination and justification of the initial maximum price contract. These methods include:

• Comparable uncontrolled price method, based on an analysis of information on market prices of identical goods, works and services, the planned procurement or, in their absence, similar goods, works and services;

• Normative method, based on the social requirements for procured goods, works and services, designed to provide the functions of public bodies, the management of state extra-budgetary funds, municipal authorities in accordance with Art. 19 of the 44-Federal Law;

• Tariff method used in the case in accordance with the legislation of the Russian Federation, the price of goods, works and services for state and municipal needs, subject to state regulation or established by municipal legislation;

• Design and estimate method used for the construction or renovation of capital construction on the basis of project documentation in accordance with the procedures and standards of construction and specialized construction activities, approved by the federal executive branch responsible for public policy and legal regulation in the sphere of construction; carrying out work on the conservation of cultural heritage (monuments of history and culture) of the Russian Federation;

• The cost method is used in case of inability to use other methods, or in addition to them; is to determine both the amount produced IMCP costs and normal for a particular scope of profit.

It is interesting to take into consideration the point of view of A. Margolin that the life cycle contracts allow:

• Effectively counteract the possible dumping of potential low-quality vendors, who overestimate their actual competence;

• To deal with suppliers who seek access to government orders in the hope of evading responsibility in the event of failure or partial performance of the contract (Sergeeva, 2014).

3. Results

Analysis of legal documents, periodicals suggests that the life cycle contracts in procurement practices Russia are possible, provided that:

• Development and adoption of the federal law governing the issues of public-private partnerships;

• Development of scientific and methodological support of application life cycle contracts in procurement;

• Professional development of personnel in the field of procurement, ready to plan and implement contracts lifecycle.

Greater details of these conditions put forward.

As for the public private partnerships, the issue periodically rises sufficiently hard, but, unfortunately, remains unresolved. In most countries, public-private partnership is regarded as the joint implementation of the private partner and the government projects on a risk-sharing between the parties, allowing achieving both economic and social effects. S. A. Sergeeva pointed out that the problem of Russia's life cycle contracts has been rising by the Government of the Russian Federation since 2008, but the lack of legal framework before the 44-Federal Law is not allowed to discuss this issue seriously (Gladilina, 2014).

D. Frimsey and H. R. Lewsi distinguish such signs of public-private partnership based on the contract:

• State transfers to the private partner in the ownership of land or other property for the term of the contract;

• Private partner modifies, remodels or builds an object;

• The state defines the characteristics that should be possessed object;

• Services provided by the private partner, using the object (Koltunov, 2013).

Life cycle contract is a form of public-private partnerships, which are used in foreign countries.

Public-private partnership - one of the most pressing issues of cooperation between government bodies and business - communities. Last years in Russia was presented to the protection of a number of dissertation research on the issue of public-private partnerships in the context of financial and economic instability (Minshina, 2013); on effectiveness evaluation innovation and investment projects on the basis public-private partnership (Berdnikova, 2011), and others. Very idea of interaction between government and business is seen in domestic science for a long time (Amunts, 2005). But the issues of implementation life cycle contracts as a separate line of research is of particular relevance in recent years (Koltunov, 2013; Muratov, 2010, Sokolov, 2011, Yankov,

2013; Dao, 2014). Contract life cycle as a tool for public-private partnerships as presented in scientific articles (Freidin, 2011 by Yankov, 2013 and others.) and in periodicals, on the Internet - sites.

The term "life cycle contract" - is a direct translation of the term "Life Cycle Contract", which was first used in Finland.

In some countries, such a contract is called the Design - Build - Finance - Maintain (design, build, finance and operation) - the contract the contractor is responsible for both design and construction of the project and financing, and general maintenance and is one of the types of concessions.

This gives the contractor the maximum space for the use of his knowledge and creativity. Payment to the contractor after the construction is done periodically, on the basis of services rendered. If the contract is not fulfilled, come into force penalties. Profit - the goal of the consortium and private donors should ensure that penalties incurred will be kept to a minimum. Company or consortium predetermined conditions assumes responsibility for the entire project (design, construction and financing for 20 or 30 years, the responsibility for maintenance) (Margolin, 2014).

Analysis of the content model "system - exploits – through" (Build, Operate and Transfer) has shown that it provides for limitations on the duration of the concession period of 10 to 30 years. This fact contributes sufficiently serious role of the state, as upon the expiration of the agreement the state may carry out the following steps:

• Leave the right to operate the infrastructure facility to a private company;

• Select another private partner;

• Change management model of the infrastructure (Klëmina, 2014).

PFI (Private Finance Initiative) is a form of public-private partnerships by funding public infrastructure projects with private capital. Initially, this form emerged in the UK. PFI and its variants adopted in many countries as part of a wider neo-liberal program of privatization and financialization, due to an increased need for accountability and effectiveness of public expenditure (Program of the PFI in the UK, 2011).

LCC (life cycle costs) – is the sum of all recurring and non-recurring costs for the entire life or a certain period of service delivery. Includes purchase price, installation costs, operating costs, maintenance and upgrades.

LCCA (life cycle cost analysis) is a tool for determining the most cost-effective option among the various competing alternatives to make the project when one of them is equally appropriate to be carried out for technical reasons. For example, for a highway, except the initial cost of construction, LCCA takes into account all the costs of users, reducing the potential for work areas, as well as the expenses of the agency relating to future operations, including future periodic maintenance and rehabilitation. All costs are usually at a discount and make the value for the current day, known as net present value. This example can be generalized to any type of material, product, or system (Private Finance Initiative, 2011).

Currently, the State Duma is considering a package of amendments adapting legislation to contract life cycle. Also the Federal Law "On Public-Private Partnership and on Amendments to Certain Legislative Acts of the Russian Federation" is now in the process of adoption. This bill should become a system act in PPPs. One advantage of the emergence of this bill is a significant expansion of the contractual forms of public-private partnership, which will be applied in Russia. Given the fact that the list of shapes is assumed to make open conclusion LCC will also be possible, even if the form is not directly fixed bill.

Implementation of LCC in the public sector today is possible to Law N 115-Federal Law "On Concession Agreements", for example, the construction and operation of toll roads. But the lack of regulatory support LCC and potential competition rules of law 44-FL and 115-FL leads to legal uncertainty which creates additional risks for potential investors and reduces their interest in long-term contracts of this type. Deep enough, this process is considered in the study of problems of the life cycle in modern organizational and management studies (Klemina etc., 2014).

4. Discussion

Thus, it is necessary to secure the contract life-cycle regulatory setting common features of such contracts and the possibility of their implementation in the various legal forms, whether it be a concession, procurement contracts or other models.

The second condition for the effective implementation of the procurement activities of Russian contract life cycle is development of scientific and methodological support of the use of LCC in procurement. For the

development of scientific and methodological support necessary to examine the application of LCC existing world experience. In the UK in 1981 was obtained by the first experience in projects of public private partnership. Initial projects public private partnerships were seen as a way to attract resources, knowledge and expertise of the private business sector of public services (Bromund, 2009).

In the result of the changes in procedures of PFI in 1997 new criteria for government support for public private partnership projects were created. The use of PFI possible after the analysis carried out using the methods of economic analysis and with the guarantee that the use of PFI for this sector (institutions). Government also estimated profitability of the price, which is determined by the rule of optimum value for money, best matched the goals and criteria meet the needs of the end user. In the future, a full assessment of costs and revenues, including the assessment of the risks will take place. It should be noted that a similar method is used in the evaluation of projects traditional funding budget projects the UK (Theodore, R. Bromund, 2009).

By analogy implemented a number of projects, including the construction of schools in Bridgeport and Dorset, an integrated waste treatment system on the Isle of Wight police building in Ilkeston, nursing homes in Surrey, Northern Ring Birmingham and Croydon railway network, etc. Every year in the UK for about 80-conclude new agreements on private finance initiative and provide about 17% savings for the state budget.

At the present moment the methodological and data base assessment of qualitative and quantitative criteria specific projects by the ratio of the value and cost – Value for money. When deciding whether to use the Public-private partnership, the results achieved with traditional approaches are considered to be critical and compared with estimates of VfM.

Preparation of projects takes a sufficient amount of time, resources, and does not depend on the scale of the project (there are fixed costs in the form of the costs of raising legal, financial and investment advisors, and operations according to the calculations, etc.). Large sums are spent on the negotiation and signing of contracts. Earlier most of the projects it was necessary to attract the fixed assets in the amount of not less than 20 million pounds. Currently the rule was adopted that for the implementation of PFI schemes are necessary the projects worth more than 20 million pounds. However, the development of new schemes in which small projects are combined in order to justify the time and cost.
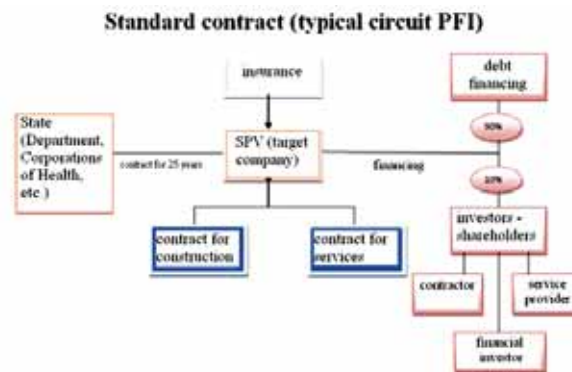

Figure 1. Typical scheme of the PFI in the UK
(based on site ww.pppinrussia.ru/userfiles/upload/files/events/kafedra_2011/11(3).pdf)

The main distinguishing features of PFI projects, according to the experts are:

• The need for a large volume of capital investments related to the need for effective management, risk management in construction;

• Relevant experience and resources, which are represented by the private sector;

• Selection of segments that need renovation and for which PFI is an effective way to "restore" with the possibility of redistribution of risk between the private and public sectors;

• Investments in the long term;

• Long-term payback period;

• High probability of cost recovery and cost of the project;

• Modernized technology sector is not sensitive to sudden changes.

Experts identify the following benefits of PFI projects for the UK government:

• The ability to maintain high standards of service provision of services;

• In connection with investor interest in quick start projects, their payback and profitability - increasing the timeliness of commissioned projects;

• Efficient use of public funds;

• The money is returned to the investor gradually and the investor has an interest to ensure that improving the quality of services as it affects their final profit and the need to eliminate defects at its own expense;

• Private investor determines the cost of services, which includes the cost of construction, reconstruction and the cost of maintaining the object in proper condition;

• New approaches to the provision of services and to work (public sector determines which service will be provided, and a private investor determines how it will be implemented, for example use of innovations, etc.)

The projects of public-private partnership in the United Kingdom are based on a contractual procedure. However, the EU Commission did not agree with the interpretation of the directives of the United Kingdom to establish and later projects of public-private partnerships have become competitive dialogue procedure provided.

The initiator of the project is the company of the public sector. There are many areas of PFI: education, police, health, security, roads, courts, prisons. The draft presence of new construction is not necessary; it may be services or IT-service. Project Agreement to be entered into the enterprise with Single (Special) Purpose Vehicle (SPV) established to ensure appropriate infrastructure project, and not involved in any other projects.

Funding for the project may be provided by:

• Treaty between the shareholders (Memorandum) (Shareholders' Agreement) between different companies (joint ventures) on the basis of equal participation.

• On the basis of the Loan Agreement (Credit Agreement) - ordinary loans.

Under the terms of the project agreement, SPV is able to hire other companies to enter into a contract with a major construction company. The main construction company is one of the circles of belonging to the SPV. It also contracts with FM - companies (Facilities Management companies) for long-term management of the facility project (real estate, services, etc.).

The structure of the project may consist of a large number of contracts, and FM - the company can hire a variety of organizations, in particular to address the issue of design and engineering in the construction, as well as the hiring of staff to service government offices. In the event of a possible failure of the project SPV, each participant enters into contracts directly with the public sector enterprises. In practice, in special projects contractual arrangements are more complex.

For the design and implementation of public policy objectives in the planning of infrastructure projects has established a number of institutions, such as:

• "Partnerships UK" - launched as a public-private partnership and "Local Partnerships", which is a joint venture with the Association of local government, supporting public bodies to provide improved services and infrastructure.

• "The Infrastructure Finance Unit", which considers applications for loans for projects PFI, is negotiating the terms of any such loans and provides monitoring and management of loans.

• "Infrastructure UK" created for the development of infrastructure strategy of the United Kingdom.

• Authority for major projects (Major Projects Authority) (MPA) in the framework of the Group's efficiency and reform (ERG) Cabinet Office was established in 2001 and is aimed at the success of the major projects of the central government by working with departments to ensure consistency and quality of major projects during the period of their validity (PFI, 2011).

Thus, the experience of Great Britain has a fairly serious scientific and methodological support.

The third condition is the development of professional training in the field of procurement, ready to plan and implement contracts lifecycle. I. P. Gladilina notes that professional customers - a multidimensional professional - personal quality with a complex structure consisting of functionally interrelated motivational, cognitive, and reflective components of the activity (Federal Law of 05.04.2013 N 44-FL, 2014). Working with contract lifecycle requires customers seriously expand their professional functions, as well as extensions of the corresponding operations of these functions.

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Comparative Analysis of Regional Development of Northern Territories

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Abstract

The analysis of northern regional development on the basis of the synthesis of comparative research and historical method is carried out in the article. The study of social and economic system enables us to understand better the roles of factors and methods of the governmental control of regional development as well as their position in social and economic and geopolitical aspect.

The northern regions of such countries as Russia (Kamchatka Krai), Canada (Yukon), the USA (Alaska), Japan (Hokkaido), and Iceland and Greenland were chosen as an object of research. All these regions play a strategically significant role in social and economic development of own countries and have climatic similarities.

The determination of common features of regional social and economic modeling makes it possible to compare the development of regions, having the same climatic, economic and geopolitical conditions but different levels of economic activity

There is the statistics generalization, characterizing various activities of regions, including structure of economy, its infrastructure supply, demographical situation, and financial sphere, that enables to see the features of national models of regional economies development. It is also proved that ignoring the actual connection between regional system elements and external and internal factors leads to loosing historical and social and economic basis in research.

Keywords: comparative analysis, regional system elements interaction, regional development models, conditions and factors of development, comparative assessment

1. Introduction

The analysis of policy of Russian Federation regions has shown that the climatic, economic, social, ecological, ethnic and other peculiarities ought to be taken into consideration, as well as negative and positive experiences of use of the different social and economic regional development stimulation.

The approaches to policy design, being used in the beginning of the twentieth first century played a great positive role, which enabled to understand long-term directions, tools and regional development institutions. According to the experience the documents had been formally drafted in a half of the regions.

The meaningful ten-year experience in regional strategic management, interaction between authorities, business interaction, population interaction, and public organizations interaction has helped to create new mechanisms of the conciliation of the interests. At the same time the object of strategic management has been changing itself - it has become more economically and socially dynamic. The changings have influenced the external environment-the regions have cooperated both with the regions within and outside the country more actively. Thus, the scientific problem is that widely used strategic planning methodology has already fallen behind actual level of social and economic regional development of Russia and needs innovations, which let consider fresh knowledge and gained foreign and Russian experiences in regional development.

2. Theoretical and Methodological Background

The questions of development of northern regions have been studied in researches of R. Bone (1992), A. V. Belikovich (1995), A. A. Kharevskiy (2001), G. A. Agranat (2003), E. R. Pullman, M. T. Jorgenson, Y. Shur (2007), V. B. Vereshchagina (2011), K. Grandmont, J. A. Cardille, D. Fortier, T. Gibryen (2012), H. H. Scheel (2012), O. A. Kozlova, and A. V. Karmakulova (2013).

The method of research. The main method of research is the comparative analysis. It is based on comparing differences, backgrounds, and natures of social and economic regional systems development and enables to avoid general summary regarding different national economy models. Hokkaido (Japan), Kamchatka Krai (Russia), Iceland and Greenland, Spitsbergen (Norway), Alaska (the USA), the Aleutian Islands (the USA), Yukon (Canada) were chosen as an object of comparative analysis. According to the authors' opinions successful foreign social and economic development models have their own specifics and cannot be used in Russia without adaptation.

The comparative analysis of social and economic development of regions with similar geographical, geological and climatic conditions made it possible to define effective instruments, factors and resources able to provide dynamic development of region economies. The analysis of state regulation instruments provides a deeper understanding of the role of the state regulation in the enhancing the effectiveness of regional development.

The comparative analysis method is supposed to be very perspective and useful to assess the directions of regional development.

In the research statistic data of Russia, statistic data of Iceland, Greenland, the USA, Canada, Japan, the current social and economic development strategies and programs, the official statistics of Kamchatska Krai, Khabarovsk Krai, Magadan and Sakhalin Oblasts, Chukotka Autonomous Area, Republic of Sakha (Yakutia) and other data have been used.

3. The Results

3.1 The Comparative Assessments of Regional Development Models

The key elements, characterizing regional development model have been sorted out. These are macroeconomic situation, sectoral structure of regional economy, infrastructure supply, and demographical processes, institutional environment, financial situation. All together they make up the basis and reflect the specifics of the functioning of the particular regional economy.

Hokkaido prefecture has the highest GDP as it has the biggest number of population among the considered regions. However, Yukon and Alaska have higher GDP per capita. The high GDP in these countries can be explained by the importance of mining industry, which strikes gold, silver, diamonds. Iceland, where a diversify sector of manufacturing industry prevails, has a medium GDP. The regions, Greenland and Hokkaido, specializing on seafood industry, have lower GDP.

The tertiary economic sector of the northern states is developed due to specifics of the economic conditions and socially orientated policy of these states. Expenditure on healthcare in Iceland makes up 9,1% of GDP(Health expenditure, 2012),while total expenditure on healthcare, education and social services in Kamchatka is 13% of GRP (The structure of the gross, 2012). In Yukon it is 12,4% of DRP (Gross Domestic Product, 2012), in Alaska it is 6,4% of GRP (U.S. Economic Accounts, 2012).

There is a high amount of expenditure on public administration in the regions studied. The reason for this is the special regulations, which are introduced due to the high ecological standards, and the necessity in military protection.

The unique climatic conditions, the surface of the territory, water resources, and volcanic activity with state development policy provide with tourists. Due to this the great amount of services falls on tourism sector. Regional tourism is considered to be successful. The tourism sector of the northern countries has definite specifics and represented by eco and extreme tourism, mountaineering, sky resorts, sport fishing and hunting.

3.2 The Comparative Assessments of Regional Economic Structure

Comparative analysis has showed sectoral structure similarity between neighboring countries. European countries, Greenland and Iceland, as well as the states of North America, have similar sectoral structure.

The fisheries is the leading strategic sector of economy for majority of regions considered, and other sectors such as service, shipbuilding, fish processing and so on are dependent. The fisheries contribution in the GRP of Kamchatka Krai is 17,4%, Fisheries contribution in the GDP of Iceland is 7,1%, Greenland – 8, 3%. The

Aleutian Islands are also specialized on seafood. The economy of Greenland depends on fish export and fishing. The fifth part of Greenland budget goes to fisheries development (trawler building, fishery re-equipment) (Statistics Greenland, 2014). Fishing and fish processing is the important sector in Iceland, which provides 12 % of population with workplaces and makes up 70% of export (Iceland's economy, 2014). There is the great number of factories, farming salmon in Hokkaido.

The fisheries contribution of Kamchatka in catches of Far East is 36, 0 %, in catches of Russia is more than 24,0%. Moreover, the fishery in Kamchatka is a part of the fishing complex, which accounts for more than 50,0 % of industrial production volume and about 86,0 % of krai export. Regarding agriculture Iceland has an experience of geothermal water hothouse production development. Nowadays the deer-raising program is being realized in Kamchatka. There has been focused deer farming development in Ireland, Greenland, North America. The traditional partridge-shooting in Greenland and bear hunting in the north and in the east occur (Vozgrin, 1984). Hokkaido is located in the temperate zone and specialized on agricultural production. Hokkaido is the main agricultural products supplier in Japan. Agricultural products contribution in GRP makes up 3,5% in Kamchatka, while crop products fulfill the needs of population and animal products do it partly (Socio-economic status, 2012).

Alaska, North Canada, Spitsbergen have got raw material bases, developing natural resources. Greenland, Iceland, Kamchatka consider their raw material bases as a development potential. There is traditional offshore hydrocarbons production in Alaska. 25 % of the US oil is produced there. Moreover, Alaska holds second place in The USA (after Nevada) in gold mining, it produces about 8 % of silver and so on (Alaska, 2013). The essential part in mining industry plays diamonds mining. The foreign companies, which make concession, take an active part in striking in Greenland. According to the legislation, they pay the government an interest after they have covered prime investments. There are several silver and gold, silver, lead and zinc mines in Yukon. The diamonds sector developing has influenced the related sectors development, trade and infrastructure in the North-West Canada. Iceland, where mining industry has been represented by a little volume of brown coal, pumice and Iceland spar, has started to develop oil field of Iceland continental shelf and produce argil. Mining industry in Hokkaido also plays a little part. Mining industry is represented by coal production (¼ of Japanize coal production). On the island there is also iron ore mining and oil production (Japan, 2014). Coal production is also essential in Spitsbergen. Coal is exported to Germany. The mining industry development can have some negative ecological effects and aggravate situation for local inhabitants' craft. However, providing the conciliation of the interests mining industry developing can lead to gaining economic profits for both sides as it was in Alaska (The Mining Industry, 2014).

3.3 The Comparative Assessments of Manufacturing Activity

Manufacturing activity is developed in Iceland, Hokkaido prefecture, Kamchatka Krai and makes up 14,2%, 18,2% и 8,5% of GDP (GRP) correspondingly (METI, 2014). The primary sector of economy is the basis of manufacturing activity development in these regions. Thus, food industry, which makes up one third of total cost of products on the island, is developed on the basis of fisheries and agricultural industry in Hokkaido. Due to forestry there are forest processing and cellulose products. The industries such as metalworking, engineering, electrical engineering, stone working are developed (Hokkaido, 2009). The production of Iceland is also connected with fish processing (drying, frosting, fish fillet and flour making). There are shipyards and ship repair facilities, servicing fishing fleet. Metallurgy and chemical manufacturing are developed. There is a cement plant, a factory, producing marine water salt, a ferrosilicon factory. Electrical equipment, furniture, clothes, woolen goods, footwear, metal goods, construction materials are produced. Power-consuming industries such as aluminum plant (American Century Aluminum, 2014), a plant, producing nitrogenous fertilizers are being set up (Enterprises Iceland, 2014). Processing industry is less developed in Greenland than in Hokkaido and Ireland. Kamchatka food industry is represented by 190 year round or seasonal production cycle fish processing plants, 17 of them are canned fish factories and their contribution in the krai industrial production is 52,4% in 2012. Ship repair, containers production, fishing net production, construction materials production are also being realized in Kamchatka (Socio-economic status, 2012).

Energy infrastructure development of the northern regions is the key factor of their development. Thus, the current power engineering of Iceland is called "green" i.e. ecologically clean, because energy is generated through renewable energy sources. Due to the glaciers and the waters flown water-power engineering makes up 75%, the geothermal sources produce 25% of energy while the traditional hydrocarbon accounts for only 0,5% (Population of Svalbard, 2013). The geothermal sources are considered to be essential for power engineering in the future. Nowadays the projects to use geothermal energy in aluminum industry are being developed. In Iceland a hydrogen fuel transition program has been adopted. The energy sector of Greenland is characterized by

the potential of various energy resources. The geological prospecting of island and nearby territories has brought to new energy resources fields developing. The alternative fuels projects are introduced in Greenland. For instance, in Uummannaq 13% of energy, used for maintenance, is obtained from biofuel (Belikovich, 1995).

In Northern Canada water power stations are mainly used. A great number of the out-of-network electric power stations is the particular quality of local energy sector. The usage of diesel and oil products brings some ecological, economic, social problems. In Canada the special program – "ECOENERGY for Aboriginaland Northern Communities Program" (EcoENERGY, 2012) has been developed. It aims to use clear renewable sources such as solar, wind, volcanic activity for generating electric power in the Northern communities. Canada is building several geothermal fuel power stations that are 20 MW in capacity.

Alaska possesses a great amount of not enough used energy resources such as oil, gas, coal and also possesses some undeveloped geothermal resources on the Aleutian Islands. The great amount of electricity is generated from coal, natural gas or diesel in Alaska. The hydropower engineering is developed. The state policy is aimed at developing clean renewable energy resources and stimulates developing of wind and solar power engineering.

Hokkaido takes the eighth place in Japanize rating of electricity consuming and possesses developed energy sector. The climatic island conditions have predetermined the broad choice of various clean energy sources such as wind, solar, snow, ice etc. The open relief form and low estate prices have made Hokkaido an attractive place for developing renewable power. Hokkaido and Kamchatka resemble regarding climatic conditions, which means that the experience of Hokkaido can be drawn on.

3.4 The Comparative Assessments of Transport Systems

The Arctic countries and Russia transport systems are mainly focused on exporting natural resources and importing food, industrial goods, and consumer goods. Transport systems are also focused on servicing military facilities in the Arctic region. The arctic shipping is mainly represented by icebreaker transports. The USA and Canadian Coast Guard icebreakers are funded by the states, while the civil icebreakers are owned by private companies. All types of icebreakers in Greenland are owned by the government. Marine infrastructure plays an essential role for the countries studied (except Northern Canada) because of their geographical position. There is almost only sea freight in Hokkaido (Hokkaido, 2009). There are 29 seaports in Iceland and modern Greenland (Lonak, 2014). There are also small loading berths in some settlements. Boats and dog team were popular among Inuit of Greenland. Marine infrastructure of Alaska is represented by seaports. About 95 % of all products is transported through port Anchorage (Alaska's State, 2013). Seaport Valdez, being the major oil port in the south coast of Alaska, is the terminal point of Trans-Alaska Pipeline. In Yukon sea transport is used for domestics operations and transporting fuels and lubricants.

The air freight is getting more popular, making 10 % of the total land freight. Apart from consumer goods the oil and gas equipment is transported by air to oil fields. The helicopters are used for unloading while aircrafts are used for ice patrol. There is pipeline transport in gas and oil regions of Alaska and Northern Canada. Trans-Alaska Pipeline is the most outstanding constructions. The construction had been finished by 1977. The pipeline starts in Prudhoe Bay and conveys oil to Valdez, Alaska. The part, referred to in Alaska, makes up 1288 km in length.

In Kamchatka sea transport, air transport, motor transport are developed. There is a seaport in Krai center, thirteen terminals in the coast, an international airport, and twelve domestic operations airfields, three heliports, 3043 km of motor road, 38 km of federal motor road (Summary, 2014).

3.5 The Comparative Assessments of Demographic Rates

Kamchatka Krai and Iceland resemble regarding population rate. Kamchatka Krai's population is seventeen times less than Hokkaido's population, and two times less Alaska's population, but considerably larger than population of Northern Canada, Greenland and Spitsbergen. There is the uneven distribution of population in the regions considered. It depends on climatic conditions and urbanization. Thus, 90 % of inhabitants of Greenland ("Black Angel", 2014) live along the south-western coast, and 90 % of population of Northern Canada lives along the USA border (Tourism. North America, 2014). However, there is also uneven distribution of population. The distribution of population in Spitsbergen depends on agricultural and research activities of the contracting states. Majority lives in Norwegian camps, minority lives in Russian ones. After the dissolution of the Soviet Union the number of the Russian people has decreased, while the number of the Norwegian people has increased in Spitsbergen (Population of Svalbard, 2014). There is an urban population growth as mining and manufacturing industries are being developed. There is 24 % of rural population and 76 % of urban population in Hokkaido, specializing on farm produce (2011 г.) (Statistics Bureau Ministry, 2011).

The regions studied are characterized by low population density.

The regions resemble regarding the indicator of age population. There is middle-aged population in the Kamchatka Krai, Greenland, Iceland, Alaska, Yukon, and North West Canada and on the Aleutian Islands. There is 37 aged-population in Kamchatka Krai and Iceland. The youngest population (24, 8) is in Nunavut (Estimates of population, Canada, 2014). At the same time the total fertility rate in Kamchatka Krai, Hokkaido, Yukon, North West Canada does not ensure simple reproduction of the population. The total fertility rate corresponds to a simple reproduction in Greenland, Iceland, Alaska and extended reproduction in Nunavut. Life expectancy in Kamchatka (72, 29) was higher than in Greenland (71) in 2012. However, it depends on a gender. In Greenland male population is higher than female population by 5,6%, which is opposite in the modern world as a whole.

The intense migration takes place in these regions. The adverse climatic conditions and industrial employment structure influence the migration. Organising new productions and developing old ones lead to both local and foreign specialists influx, which partly compensates outflow of locals. Thus, a great outflow of population from Northern Canada was partly compensated by labour migration in 2013. In the period considered Kamchatka Krai, Greenland, Iceland, North West Canada and Nunavut had a negative total migration balance, while Hokkaido, Alaska and Yukon had a positive one (Alaska Population Overview, 2010). As natural increase and migration predetermine population rate changing, they can compensate each other, acting in different ways. In 2013 in Kamchatka there was a negative migration balance, but due to the positive natural population increase, there was no population loss. The migration covered the negative natural population increase in Hokkaido in 2010. The regions differ in ethnic groups. Urbanization negatively influences the local people, destroying traditions and lifestyle and bringing the issue of marginalization.

3.6 The Comparative Assessments of Fiscal Policy and Financial System

The fiscal policy is controlled by the government agencies in Iceland, as in every northwestern economies. Apart from the traditional reinforcement sources of the state budget – taxes, custom duties and so on, the Icelandic state gets considerable incomes from the created infrastructure in the country, these are post, telephone services, shipping, as well as a number of monopolies, including the monopoly on a sale of strong drinks and tobacco goods. Budget of Iceland has always been characterized by social orientation. There were special programs among new ones, directed to the reduction of youth unemployment and household debt during the post-crisis period from 2010 to 2012. Direct foreign investments play an important role in the economy of Iceland and are aimed at the construction of power-consuming industries, the creation of tourism infrastructure and the development of agriculture.

The specificity of the fiscal system in Greenland is that the main revenue side of the budget is developed in the form of governmental grants from the budget of Denmark. Denmark invests in almost all its social programs. Social policy in Greenland is directed to the maintenance of public health and educational systems. The expenditure budget of Greenland, as well as of Iceland, is characterized by high level of social expenditures, whose share was about 26% in 2012.

Northern Canada is more dependent on federal transfers than the provinces. Thus, Yukon's revenues make up only 10-20% of the total income. The special transfer regime Territorial Formula Financing has been worked out for Northern Canada. The budgets of Northern Canada are characterized by a significant proportion of special purpose funding, primarily, Canada Health and Social Transfer – CHST and Federal Transfers and Deductions Health Canada. The rate of income tax on individuals in Northern Canada is lower than in the whole country and is determined by the level of territory development. Tax deductions such as charge-off for travelling to the place of leave and place of treatment are widely used in Northern Canada. The main flow of foreign investments in Northern Canada goes to the extractive industries sector.

The peculiarity of financial system in Alaska is associated with the USA Federal Organization that provides the states with a great power in lawmaking. According to Tax Foundation data, the Alaskans are paid about 1,87 dollars of federal funds on every dollar of taxes. Today Alaska is ranked number two in the country due to this index, it took fourteenth place in 1992. To create favorable living conditions, the USA government and Alaska authorities realize socially oriented public policy in the northern state, based on the profit redistribution accrued by the owners of basic, raw material industries and economic diversification in the country. Alaska is one of the US states during the last two decades, where individual income tax is one of the lowest in the country. In order to preserve financial stability in Alaska, the funds such as Alaska Permanent Fund and Constitutional Budget Reserve Fund are established. The main aim of the Alaska Permanent Fund is to establish investment base that could provide the further generations with incomes, when oil resources will be run out.

Thus, the government supports the northern peoples in the northern European countries, North American and Japan, making up the inhabitation in severe weather conditions through social benefits and guarantees. Moreover, the indigenous peoples of the North support programs are extensively realized in Canada and in the USA. Hokkaido, as whole Japan, has negative demography despite the high life expectancy. There is high child mortality, negative migration balance and low social state support in Kamchatka Krai.

4. The Discussions

Comparative analysis of the sectoral structure has revealed the existence of the advantage in the development of Kamchatka Krai in comparison with other regions, namely, production diversification. Despite the fact that fisheries are the main branch, the development of other industries is also important. However, the territory should increase the production with higher added value. The service industry, having the higher share, is represented weaker in Kamchatka Krai in comparison with other regions. Due to the best production diversification, the impact of the external threats becomes weaker.

Provision and arrangement of the infrastructure is a major challenge in the northern territories, because these territories are developing as primary ones. Iceland is particularly advanced, in terms of energy. There is also developed transport infrastructure. There is developed transport and energy infrastructure in Japan, due to the nuclear power plants closure it needs to recovery energy resources. The transport infrastructure has been established in Kamchatka Krai, but it has been exhausted and many projects are to be fully repaired. However, considering Kamchatka Krai as an important transport nodal point of the Northern Sea Route, the exigency occurs, either in the railway construction, or in the road infrastructure improvement. The same problem takes place in the development of the regional power-generating sector.

Successful development of these countries is explained by government support, official guarantee and provision of such benefits as education, health care, taxes and export. All these conditions allow the territories to be developed successfully and involve into investment and human resources.

5. Conclusions

Thus, any region has a unique combination of social and economic potential, national and cultural peculiarities, historical traditions, as well as natural resource and geography and economic development conditions. The detailed analysis of the social and economic phenomena and reconstruction of the existing relationships between them give an opportunity to identify the nature of the ongoing processes considering the features and developing conditions of particular regions. This makes it possible to raise quality level of corporate planning and explains priority guidelines of investments and human resources mobilization, significantly increasing the effectiveness of regional development policies.

The comparative analysis method is supposed to be very perspective and useful to assess the directions of regional development in future studies. The instruments of state regulation are typical both in Russia and in other countries.

The comparative analysis of the regions that have the same geographical, geological, climatic and other relevant features makes it possible to formulate the recommendations for solving development problems of Kamchatka Krai considering the experiences of the analyzed northern regions such as Hokkaido, Greenland, Iceland, Spitsbergen, Alaska, the Aleutian Islands and Northern Canada.

The comparative analysis of social and economic development of regions with similar geographical, geological and climatic conditions made it possible to define effective instruments, factors and resources able to provide dynamic development of region economies. The analysis of state regulation instruments provides a deeper understanding of the role of the state regulation in the enhancing the effectiveness of regional development.

Acknowledgement

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