Integral Assessment of the Social and Economic Development of Megacities in Russia

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ABSTRACT

The relevance of the analyzed issue is due to the existing need for more attention to the problems of large cities, which are the social and economic centers that perform important functions and realize the interests of the population, business and local government. The purpose of this article is to disclose the sources of the urban growth and development, the integrated assessment of the size and spatial distribution of the economic activity, regional planning and the government activity. The leading approaches to the study of this issue are systemic and reproduction, which, along with the use of econometric modeling and statistical analysis, allowed revealing significant shortcomings of the institutional urban management mechanism and proposing a number of measures to correct these shortcomings. The article illustrates the theoretical basis of modeling of large cities as spatial economic systems, determines their sources of growth, gives the characteristic features of the urban development in modern conditions, and proposes a conceptual model of a modern city. The contents of the article may be useful for the development of social and economic development strategies both the urban district, and the region as a whole, since large cities act as a locomotive, and they move the regional economy in the direction of the social and economic well-being.

> KEYWORDS City; city strategy; development; integrated assessment; urban rating

ARTICLE HISTORY Received 11 April 2016 Revised 10 June 2016 Accepted 22 June 2016

Introduction

The evolution of the strategic management system, which began in 1995, is very noticeable in the modern economy of Russia. The effectiveness of the new strategic planning institutions depends on the chosen strategy and the quality of

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the received documents and effectiveness of their implementation mechanism. The transition to the strategic planning is uneven across regions, terms and models.

Taking into account the strategic planning results, the strategies of megacities in Russia are the most interesting. Of course, there is considerable experience of strategic development in small, medium-sized cities, singleindustry towns and in municipalities, but the general trends, inherent in the process of strategic development, are illustrated mainly in the largest cities. All Russian megacities are the centers of the RF subjects, and 4 of them (Nizhny Novgorod, Yekaterinburg, Rostov-on-Don, Novosibirsk) - centers of the federal districts, which determine their administrative or capital functions; largest financial, economic, scientific, cultural centers are concentrated in them. The megacities, in the current conditions of the global development and urbanization, largely determine the social and economic face of the country. The values for a number of key social and economic indicators, calculated on the basis of official statistics, indirectly prove it.

The issues of growth and development of cities, the assessment of the spatial distribution of the economic activity, regional planning and government activities are in the field of view of a sufficiently large number of researchers and analysts. The first attention to the urban development was mainly in the mid-20-ies - the end of 30-ies of the twentieth century. This is due to rapid urbanization and industrialization in the developed countries. Among the authors dealing with this issue, we can distinguish G.H.Thünen (1826), E.W. Burgess (1925), H. Hoyt (1939), C.D. Harris & E.L. Ullman (1945). A significant contribution to the study of the spatial arrangement of the cities, and their hierarchies was made by V. Christaller (1933), A. O'Salivan (2003), J.W. Forrester (1971) and many others. A lot of attention to the study of municipal services is paid by contemporary authors, many of whom are World Bank staff (Biller, Andres&Cuberes, 2014; Engbers, Rubin&Aubuchon, 2013; Bazyar, 2014; de Melo&Ofer, 1999; Lozano-Gracia& Young, 2014; Coulibaly, 2012). However, most of the proposed models of the urban development completely ignore such important elements of the development, as new urbanism philosophy, cities are more and more oriented to human psychology, they tend to such models as the "city for life", "friendly city", "city experiences", "city of a healthy lifestyle", etc. It's worth noting that the city should be perceived as the environment for doing business, the creation and dissemination of innovations, intellectual capital. Today, we are seeing increasing competition of cities for investment, offices and control centers of the world's largest corporations, multinational companies, carrying out a variety of sports, cultural events, summits and meetings of the international level. The strategically important factor in the city's development in these conditions is the formation of the favorable institutional environment, which is very little analyzed in the modern economic literature. The urgency and insufficient analysis of this issue have identified the goal of this research. The authors have made an attempt to identify the sources of the growth of large cities in order to develop a conceptual model of a modern city.

Materials and Methods

Research methods

In the course of research the following methods were used: theoretical (system and reproductive), empirical (social survey, observation), methods of mathematical statistics and graphic results.

Experimental research base

The experimental research base is based on the data from official statistical compilations, including the site of the Federal Service of State Statistics (hereinafter - Rosstat), proceedings of the heads of municipal administrations on the achieved values of indicators to measure the effectiveness of local government, the data of the official websites of local self-government institutions within cities, etc. The period of the analysis is 2009-2014, due to the lack of statistics on the number of indicators in 2015. This research does not include Moscow and St. Petersburg, because of their special status of the federal city. These cities significantly superior to other megacities on population and belong to the megacities, and are the subjects of the Russian Federation.

Research stages

This research was conducted at two stages. At the first stage the authors analyze the level of the social and economic development of the megacities in Russia. The second stage is related to the correlation of the results of the integrated evaluation experience in the development and implementation of strategic plans of cities. At the final stage of research the authors make the proposals to improve the measures of state regulation of the economic development of megacities in Russia.

Results

This research determined the system of indicators, which reflect the balance of economic interests of the population, businesses and local governments in urban management (Malykh et al., 2014).

The final scorecard includes 12 indicators (X_i) , which are presented in Table 1.

Indicators	Indicator name, measurement unit					
X ₁	Thepopulation size attheendoftheyear, thousandpeople.					
X ₂	The population size of working age at the end of the year, thousand people.					
X3	${\sf Theratioof the average monthly salary and the living wage, in times$					
X4	Index cost of living, on average per year, in times					
X5	Migration increase of population, persons					
X ₆	The volume of shipped goods of its own production, its own work and services by type of activity, mln. rub.					
X ₇	The share of fully depreciated fixed assets in the total amount of fixed as sets, %					
X ₈	Thevolumeofinvestmentsinfixedassets, currentprices, mln. rub.					
Х9	Thevolumeofrevenues, mln. rub.					
) X ₁₀	Satisfactionofthepopulation by activitiesofthelocalcitydistrictgovernment,% ofrespondents					

 Table 1. The final scorecard for the comparative assessment of the level of the social and economic development of megacities in Russia

1	X ₁₁	Theshareoftaxandnon- taxrevenuesofthelocalbudgetinthetotalownrevenues of the municipal budget,%
2	X ₁₂	The budget spending of the municipal budget on the local government employees per capita of the municipal, rubles.
	ourcoult is	and by authors

Source: It is made by authors

For convenience and brevity of presentation, each indicator has the name.

The conducted grouping of cities by the value of the integrated index requires determining the number of the formed groups. We calculate it using Sturgess formula:

$$n = 1 + 3,322 \lg 13 = 4,7 \approx 5$$
.

The optimal number of groups for a set of 13 cities – is five. We define a step interval for the group. As the maximum and minimum values of the integrated index we select its corresponding values ($I_{max}=0,09$; $I_{min}=0,718$) among megacities during the entire period of analysis. Substituting the necessary values, we will define a step interval of 0.12. The built grouping of megacities by the value of the integrated evaluation index is shown in Table. 2.

Table 2. Grouping of cities by the value of the integrated index for 2009-2014

The name of city groups	Interval	2009	2010	2011	2012	2013	2014	By the average value for the entire period
Cities with a very high level of the social and econo mic develo pment	from 0,59 to 0,72	Yekat erinb urg; Ufa	Yekat erinb urg; Novos ibirsk	Yekat erinb urg; Novos ibirsk, Kazan	Yekat erinb urg; Novos ibirsk, Kazan	Yekat erinb urg; Novos ibirsk	Yekat erinb urg; Novos ibirsk	Yekaterinburg; Novosibirsk, Kazan
Cities with a high level of the social and econo mic develo pment	from 0,47 to 0,59	Kazan ; Novos ibirsk; Nizhn yNovg orod; Omsk	Kazan ; Omsk ; Ufa	Omsk; Ufa	Omsk; Ufa	Kazan ; Omsk ; Ufa	Kazan ; Omsk; Perm; Nizhn y Novgo rod; Krasn oyars k	Omsk; Ufa
Cities with an averag e level of the	from 0,34 to 0,47	Volgo grad; Krasn oyars k;	Krasn oyars k; Нижн ий	Krasn oyars k; Нижн ий	Nizhn y Novgo rod; Perm;	Nizhn y Novgo rod; Perm;	Volgo grad; Rosto v-on- Don;	Krasnoyarsk; Nizhny Novgorod; Perm; Rostov- on-Don;

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social and econo mic develo pment		Perm; Rosto v-on- Don; Chely abins k	Nizhn y Novgo rod; Perm; Rosto v-on- Don; Chely abins k	Nizhn y Novgo rod; Perm; Rosto v-on- Don; Chely abins k	Rosto v-on- Don; Chely abins k	Rosto v-on- Don; Chely abins k	Samar a; Ufa; Chely abins k	Chelyabinsk
Cities with a low level of the social and econo mic develo pment	from 0,22 to 0,34	Samar a	Volgo grad; Samar a	Volgo grad; Voron ezh; Samar a	Volgo grad; Voron ezh; Samar a; Krasn oyars k	Voron ezh; Samar a; Krasn oyars k	Voron ezh	Volgograd; Voronezh; Samara
Cities with a very low level of the social and econo mic develo pment	from 0,09 to 0,22	Voron ezh	Voron ezh	-	-	Volgo grad	-	-

There are five groups of cities with a very high, high, average, low and very low level of the social and economic development. Table 2 shows that the largest number of cities belong to the group of cities with an average level of the development. There are fewer cities with high and very high levels of the development. The cities with a very high level of the development include Yekaterinburg (for the entire period of research), Novosibirsk (2010-2014), Kazan (2011-2013). In 2014, a group of cities with a high level of the development included Perm, Krasnoyarsk and Nizhny Novgorod. Chelyabinsk and Rostov-on-Don for the entire period under review are cities with an average level of the development, and Omsk is a city with a high level of the development.

The city with a low level of the development is, firstly, Samara from 2009 to 2013, in 2014 it moved to the group with an average level of the development. Secondly, Voronezh from 2011 to 2014. Thirdly, Volgograd from 2010 to 2012. Cities with a very low level are Voronezh in 2009 and 2010 and Volgograd in 2013. It is noteworthy that in other periods, none of these cities got into this group. Ufa shows a gradual transition from the group with a very high level of the development in 2009 into the group with a high level of the development in

2010-2013 and the subsequent transition in 2014 into the group with an average level of the development.

The final grouping of cities by the average value of the integrated index for the entire research period is shown in the last column of Table 2.

Let us consider the distribution of cities within each group. In Table. 3 cities in each group are ranked by the descending average value of the integrated index for the period 2009-2014.

In the first group the maximum value of the integrated assessment of the level of the social and economic development has Yekaterinburg. I_{population}, I_{business}, I_{local government body} also have high values. Novosibirsk is not far behind from Yekaterinburg by the value of the integrated indicator, the difference is only 0.044. However, a low value of $I_{business}$ explains the relatively low value of the volume of shipped goods of its own production, works and services as well as investment. The third place among the leaders is taken by Kazan.

Among cities with a high level of the development are Ufa and Omsk.

Cities with an average level of the development include five cities: Perm, Krasnoyarsk, Chelyabinsk, Nizhny Novgorod, Rostov-on-Don. It should be noted that a relatively high value of $I_{business}$ in Perm is due to the high value of the volume of shipped goods and services, performed works.

The group of cities with a low level of the integrated index includes Samara, Volgograd and Voronezh. It is noteworthy that there are no cities with a very low average value of the integrated index.

In general, maintaining the leading position of three cities - Yekaterinburg, Novosibirsk and Kazan among megacities is provided by balanced municipal economic policies and the successful implementation of strategic projects and programs within the framework of the strategic development plans. At present, many Russian cities have already some experience in the development and implementation of strategies, and the beginning of their implementation in the majority of cities coincides with the beginning of the reform of the local government. Therefore, we consider it is necessary to relate the results of the integrated assessment experience in the development and implementation of strategic plans of cities. We assume that the integrated indicator of the level of the social and economic development of megacities, implementing sound and high-quality strategic plans, is significantly higher than in cities that do not have such development. Let us consider Fig. 1.

The vertical axis shows the average value of the integrated index for 2009-2014, and the horizontal one notes the presence or absence of the strategic plan. Taking into account the fact that the effect of the strategy is not achieved immediately, cities adopted the document in 2013 (Samara), in 2014 (Perm), are illustrated in the III and IV quadrant graph (Figure 1).

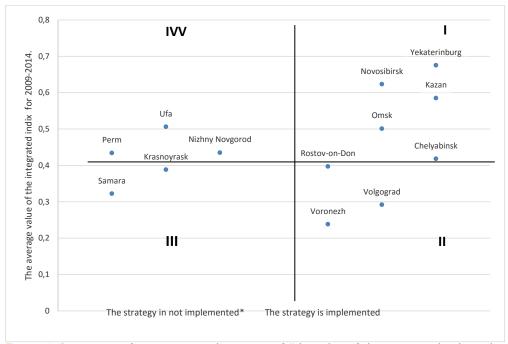


Figure 1. Positioning of megacities in the system of "the value of the integrated index - the existence of the strategic plan."

* Samara, Perm are assigned to this group, as the integrated index was calculated for the period 2009-2014, despite the fact that they adopted policies in 2013-2014. Source: Itismadebytheauthors

Let us consider I quadrant, which includes cities with the highest average value of the integrated index, and they implement a strategic plan. They were the first domestic cities that adopted strategic plans: Novosibirsk in 2004, Omsk in 2002, Yekaterinburg in 2003, and Kazan in 2003.

The city with the best practices of the strategic planning is the city of Novosibirsk, the development of the strategic plan lasted for about 8 years in this city. The strategic plan for sustainable development of the city of Novosibirsk is notable for scientific validity of the mission, strategic goals and objectives based on the assessment of the strategic potential of the city, its positioning in the system of regional, nationwide and international relations, identifying and examining the system goals of residents, taking into account the features of the historical development of the city. Novosibirsk is positioning itself as a city that provides a high quality of life to its residents, it has an attractive image that is included in the global economic metropolis process and it occupies a central place in the eastern part of the Russian Federation. It sees itself as an outpost of modern fundamental and applied science. Special attention is also given to the definition of sustainable development, city marketing, building a hierarchy of strategic objectives by assigning weighing coefficients. All strategic goals and objectives have control (target) indicators, which ensure effective monitoring of the implementation of the strategy. The mechanism for implementing the strategic plan provides for around 24 integrated programs for industrial and service scenarios for sustainable development of Novosibirsk.

The strategy of Yekaterinburg, as well as the strategy of Novosibirsk is characterized by high-quality and comprehensive strategic analysis, the results of which identified eight strategic goals and directions of the development. The mission of Yekaterinburg is its transformation from an industrial city into a modern multipurpose center with the elements of the world city. The Decision No67 / 30 of Yekaterinburg city council in October 26, 2010 updated the strategic plan in 2003 and extended it until 2020. Leadership positions in Yekaterinburg ensure the effective implementation of the strategic plan. For example, the annual report of the city administration on the social and economic development provides a detailed analysis of the progress of the planned values of indicators, the percentage of their implementation, the problems and their causes, and ways to solve them. The whole complex of measures aimed at regulating the development of the city is based on the strategic plan.

Kazan was developing strategic plans in 2002. According to experts of Leontief Centre, a strategic plan of the city can be attributed to "the second wave of plans, created on the basis of the Russian experience," i. e., Saint-Petersburg, Novosibirsk, Yekaterinburg. Kazan's mission is to keep and hand over a comfortable and prosperous city with equal opportunities to future generations. In the strategy of Kazan, all three strategic areas have the goals of the system, objectives and implementation measures (indicating the performance of participants and implementation indicators). In addition, as part of the strategy of Kazan there was developed the megaproject "Safe house, a comfortable area: the reform of the living environment."

The strategy of Omsk is a set of interrelated actions in five strategic areas. The city mission is: "Omsk - the leading diversified, business, cultural, historical and spiritual center of Siberia." A separate section in the strategic plan includes system-wide programs and projects.

Thus, quadrant I of Fig. 1 included cities, classified in accordance with the earlier conducted grouping (Table 2.) to the number of cities with a very high level of the development - Yekaterinburg, Novosibirsk, Kazan - and with a high level - Omsk. The integral index of these cities is characterized by positive dynamics. In many ways, this trend is due to the development of best practices while implementing the strategic plan and projecting strategic goals and objectives into all city programs. In addition, the strategy development process of these cities is characterized by public debate and scientific expertise. There is another common feature of the leading cities - missions of these cities have administrative functions and cities position themselves as the center of a certain territorial unit.

Let us turn to II quadrant in Fig. 1, which includes Chelyabinsk, Rostov-on-Don, Volgograd and Voronezh. The strategic plan of Chelyabinsk, adopted in 2009, was developed by the city administration and Ural Academy of Public Administration. It includes a comprehensive analysis of resources and opportunities for the city development, the rationale for the mission and development of two variants: inertial and innovative scenarios, target indicators and their values defined in the four priority areas.

The strategic plans of Voronezh and Rostov-on-Don include a general analysis of the economic and social situation in the city, the SWOT-analysis and a set of measures with the indication of the planned indicator values. Rostov-on-Don is currently implementing a new strategy until 2025. The mission of Rostovon-Don- this city is the main center of the South of Russia. The distinctive feature of the strategic plan for sustainable development of Volgograd is a strategy of individual social and economic and business complexes (for example, demographics management, housing development, tourism development, etc.)

Thus, II quadrant in Fig. 1 includes cities, implementing strategic plans, but having a low average value of the integrated index. If we look at Table. 3, we can see that these cities belong to the group of cities with an average level of the development, except for Voronezh and Volgograd that belong to cities with a low level of the development.

				The structure of the integrated index in 2014.					
	The city	The average value of the integrated index	The average value in the group	The integratedindex of the cityfavorability for population I _{population}	The integrated index of the city favorability for business	The integrated index of the efficiency of the local government body I _{local} government body			
1	Cities with a ve	ery high level	of the dev	elopment. There a	re 3 cities in t	(
1.1	Yekaterinburg	0,675		0,651	0,611	0,786			
1.2	Novosibirsk	0,623	0,627	0,624	0,373	0,730			
1.3	Kazan	0,585		0,481	0,428	0,723			
2	Cities with a hi	gh level of th	e developr	nent. There are 2 o	cities in the gr	oup.			
2.1	Ufa	0,506	0,504	0,434	0,535	0,337			
2.2	Omsk	0,501	0,304	0,624	0,470	0,393			
3		average level	of the dev	elopment. There a	re 5 cities in t	he group.			
3.1	Nizhny Novgorod	0,435	<u>.</u>	0,506	0,378	0,618			
3.2	Perm	0,434		0,406	0,701	0,552			
3.3	Chelyabinsk	0,418	0,414	0,552	0,296	0,283			
3.4	Rostov-on- Don	0,397	-	0,282	0,159	0,663			
3.5	Krasnoyarsk	0,388	-	0,458	0,280	0,668			
4	Citieswithalowlevelofthedevelopment. There are 3 cities in the group.								
4.1	Samara	0,322	_	0,392	0,710	0,380			
4.2	Volgograd	0,292	0,284	0,426	0,397	0,433			
4.3	Voronezh	0,238	-	0,380	0,066	0,255			
5	Citieswithaverylowlevelofthedevelopment. There are no such cities.								

Table 3. Grouping of cities

Source: It is made by the authors.

Other megacities are only developing strategic plans now, with the exception of Samara and Perm, which adopted the strategy only recently, in 2013 and 2014, respectively. For this reason, they are assigned to III quadrant

in Fig. 1. Let us consider cities of III quadrant. In Nizhny Novgorod, despite the fact that the strategy development has been conducted since 1998, none of the strategic plan has been approved yet. Currently, the city administration together with the Fund "Institute of Urban Economics" has started to develop a development strategy up to 2030. Krasnoyarsk is also in the process of developing a strategy.

The development of the strategic plan of Samara up to 2025 was launched in 2011 with the involvement of a wide range of experts and the public, through a public debate with the citizens. It is assumed that the received document must be "alive", i. e. timely responds to changing conditions. The strategy notes that in 2025 Samara should be a "Zhiguli Gate" of Russia. In general, the strategic plan of Samara outstands with scientific validity of the mission, objectives, design and software content of goals, the analysis of the external environment, the competitiveness of the city, the high-quality strategic analysis, the detailed SWOT-analysis using scores, the rationale predicted development options.

The strategy of Perm was adopted by the decision of the Perm City Duma in 2014. The strategy includes the development of the social and economic development of the city until 2020. The document provides the analysis of competitive advantages and opportunities, major threats and weaknesses in 6 functional areas of the city, each of which defines the goals of the development. In this case, the strategy has no grounds for objectives of the city development, the system of indicators for monitoring the achievement of strategic objectives (it is provided its development in the city development program) and the system of measures and activities. It is worth noting that the strategy of Perm differs substantially from the strategy of Samara.

Thus, III quadrant includes cities with a low value of the integrated index and do not have strategic documents or they started developing the strategy almost 10 years later than cities-leaders of I quadrant.

Let us consider IV quadrant which Ufa belongs to. Ufa does not have a strategic plan now, but the average value of the integrated index, although it is less than in the leading cities, is relatively high. In 2010 it adopted a comprehensive program of the social and economic development until 2015, which defined the conceptual basis of the city development, the mission, strategic goals, targets and priorities. Nevertheless, the special program, which is a set of actions, connected with resources, performers and timing of the implementation in order to solve problems effectively, cannot be a strategic plan. On the positive side it should be noted that since 2013 the city has been developing a development strategy of Ufa in the framework of the urban development forum UrbanBayram. Currently Ufa has started work on the development of the city's development strategy until 2030. Uf a is one of the few megacities, which had no strategic plan. The strategic plan will solve the problems of the urban environment, engineering, transport, social infrastructure, public utilities, and investment attractiveness.

Discussions

As it has already been mentioned, the first wave of attention to the urban development was mainly in the mid-20-ies - the end of 30-ies of the XX century, in its framework special attention was paid to the spatial organization, distribution of agriculture around the city, urban hierarchy by the degree of the development of trade, industry, population, and so on.

The second wave of the burst of attention of scientists to the urban development began in the 70-ies of the twentieth century. This period is characterized by the transition to a post-industrial economy in developed countries, increased spatial mobility of production factors as a result of globalization, information technology and development of technology, increased intensity of the flows of finance, information, investment, accelerated and more complex all social and economic and political processes, new forms of territorial production. The acting theories of the first wave are unable to explain all these phenomena.

Special attention among the new developments, in our opinion, should be paid to professor J.W. Forrester's (1971) model, who submitted the city not just as an object of research or a separate element, but primarily as a complex dynamic system. Forrester's model became the basis for the ecological concept of the world development.

J.W. Forrester (1971) defines a city as the urbanized territory - a system in which different types of businesses, housing and people interact.

Separating three subsystems in the urban system (business sphere, housing and population), the scientist claims that they are more important than the city administration subsystem, social development or financial policy. The structure of the city population is represented by three categories: managers, professionals, underemployed and employed.

In contrast to G.H. Thünen (1826), E.W. Burgess (1925) and others, Forrester defines the spatial structure of the city in connection with the stages of the life cycle. The described changes (by Forrester) in the spatial structure of the city should be taken into account in the development of modern urban strategies and plans, and building programs.

Another distinctive feature of this model is the assessment of the city attractiveness with the help of variables such as social mobility, availability of housing, the size of public expenditure, the availability of work places, public assistance programs to cities.

In our view, the practical application of J.W. Forrester's (1971) model in modern conditions is the following. The model proves that the urban program in fact can only worsen the conditions, which were supposed to be improved. Many city assistance programs and city management programs aimed only at eliminating the symptoms but not the causes of the problem. As models of such programs to solve urban issues the scientist highlights the programs of financial aid to cities from the federal government or the state, low-cost housing construction programs, vocational training programs of the underemployed. The revival of the city does not depend on extensive external aid programs, it depends on the changes in management practices. For the revival of the city it should be carried out the demolition of slums and the vacated land should be built up by new businesses. Another important finding by J.W. Forrester (1971) – is in the possible conflict of short-term goals with long-term goals of the city

development. The desire to meet short-term needs can lead to a poor long-term effect, which is especially has to be taken into account in the strategic planning of the urban development.

The author notes that the suggested approach may be useful as the tool to analyze the efficiency of the city programs, only in the condition that the assumptions made in the model are adequate to the real situation of a particular city. According to J.W. Forrester (1971), his model rather exposes the problems of the city, than offers any solutions to urban problems. However, J.W. Forrester's model is still of practical interest, especially from the standpoint of the efficiency of urban programs, as well as in case of the creation of simulation models, which this research is devoted to. Continuing J.W. Forrester's ideas, the authors have tried to prove it in practice, adding a number of new key provisions:

First, the modern city is the environment for the comfortable stay and realization of human abilities. According to the new philosophy of urbanism, cities are more focused on human psychology;

Secondly, the city is the center of production and consumption, the environment for doing business, the creation and diffusion of innovation, intellectual capital;

Third, the city has always had an impact on the economy of the administrative-territorial unit to which it refers to, depending on the level of concentration of key structures of regional, national or global economy in the city;

And fourth, today the urban development cannot be viewed only from the perspective of national or regional framework. In order to remain attractive to people, capital and other resources, the modern city should be positioned as a global participant in international processes as an element of the global economic system.

Conclusion

Thus, the above analysis shows that the strategic plans of megacities differ both in the method and quality, as well as in the chronology of the development and implementation. On the basis of calculations it can be proved the hypothesized relationship between the level of the social and economic development of the city, estimated by the value of the integral index, and the strategic development of quality and efficiency of its implementation. Most considered megacities are guided by sustainable development, based on the principles adopted at the UN Conference on Environment and Development in Rio de Janeiro (1992). The sources of strategic problems in sustainable development of cities are problems of economic, environmental and social issues related to globalization, demographic processes, environmental pollution, and depletion of resources. The central problem of such cities as Novosibirsk, Kazan, Yekaterinburg and several others is the problem of quality of life, which their general strategic goal is directed to. Due to commitment of modern cities to worldwide recognized values, the goals of top-level strategies, as a rule, do not

differ significantly. At the same time the goal indicators of the quality of life are different. So, Novosibirsk evaluates the quality of life, above all, by life expectancy, and Kazan – by indicators of living standards. This is because the quality of life - is a very complicated category to assess and it covers virtually all aspects of the social and economic development. In addition, at sub-goals level goals and strategic directions of development, there is differentiation – every city has its own priorities. Special attention is paid to strategic directions, a kind of "growth points" in the strategic plans of cities, i. e. directions, which the city gears the limited budgetary and other resources to achieve the goals. All variety of strategic directions can be reduced to the following five: 1) urban environment (housing and communal services, transport, roads); 2) the level and quality of life (welfare, health, housing, security); 3) the development of civil society and local authorities; 4) the development of human capital (education, culture, spiritual and moral development); 5) the development of the economy. As can be seen from the data these areas are represented in all policies. They are indicated in the strategic plan of Kazan most succinctly. The characteristic feature of the newly developed urban plans (Samara, Yekaterinburg), along with sustainable development and quality of life is to determine the development of human capital as the main strategic direction.

As shown by calculations, the strategic plan of the modern big city today - is an objective necessity. Those cities can be successful which are able to combine social, economic, natural and other resources efficiently or to dispose, ensure the competitiveness of the economy, the social sphere, to attract investment and people. The strategy - is not just a document or an action plan, it is awareness of the future potential, what the city should be today to develop successfully in the future.

The key management measures of the economic development of megacities, which give a strategic effect in the long term, will be different for each of the 5 examined groups. Some cities will start introduction of the strategic planning, and the others – will get an access to new development levels, taking into account the existing experience.

The analysis allowed identifying the absence or inadequate adaptation tools to changing environmental conditions. Of course, the strategic plans predict the values and scenarios, but they are clearly not enough, as modern social and economic systems are more dynamic and unpredictable (Malykh et al., 2015). From this it follows that cities need to implement risk management.

In general, we can distinguish two aspects of the strategic plan: as a management tool and as a tool to influence the economic and social sphere of the city. The first aspect of the strategic management of city authorities is expressed in the fact that all decisions, target programs and projects should be consistent with the strategic plan. The second – the social and economic aspect is the coordination of actions of economic entities, interested parties, as well as a platform for the creation of the attractive investment area.

Recommendations

Theoretical and practical recommendations, developed in the article, are of value to the state regulators in predicting indicators of the social and economic development of the city district or the region as a whole.

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