Evaluation of the Development Potential of Russian Cities

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Abstract

The quantitative expert evaluation encompasses all of the centres of constituent members of the Russian Federation with resident population over 50,000 (which are discussed in this paper) as well as significant industrial, transport, scientific, tourist centres etc. (almost 200 cities).

The expert evaluation was curried out with the aid of 22 indicators, which form the following 11 factor groups: demographic situation, administrative significance, industrial potential, scientific and cultural potential, transportation, financial resources, quality of life, infrastructure, ecological situation, political conditions, criminality.

The "million-cities", and large regional centres judging by the development potential and the attractiveness of investment, form the group of the 20 most significant Russian cities (all of them are the centres of the administrative regions of the Russian Federation) and Togliatti is the large centre of motor-car construction.

Some industrial cities have got a relatively high, or low evaluation of development potential. The latter affects to a large extent the cities with a marked monofunctional economic structure, for example, in the regions of the textile industry, coal mining, certain branches of the raw materials industry, and others.

The expert analysis affords a good opportunity of understanding what the contemporary important cities of Russia are and thereby of formulating a representatively new re-evaluation of the cities according to the present investment potential by demonstrating the further development possibilities within the framework of the economic and geopolitical transformational process in the strongly differentiated economic regions of Russia, including
determining and typifying the centres according to their development potential (i.e., depressed, stagnant, prosperous).

**Changes in Geopolitical, Economic, Demographic and Social Situation of Russian Cities.**

The far reaching economic and social transformations, which have taken place in the Russian Federation since the beginning of the 90s, have caused fundamental changes of the functional structure and in the basic conditions for economic development of Russian cities. With the liquidation of the system of state planning, the privatisation of state economic facilities, the conversion of the military production, the formation of a real estate market etc, processes were introduced, which will contribute to shifts of meaning within the city-system of Russia. Problems are arising which, up until now, were not characteristic for the urban-system of Russia, such as unemployment or structural depression of entire regions and cities. This required, in principle, a new assessment of the developmental conditions for the cities (BRADE, PERZIK & PITERSKI 1998, 2000; PERTSIK & PITERSKI 2000; PITERSKI 1997; PITERSKI & BRADE 1999).

At the beginning of 2000, Russia had 106,5 million urban dwellers. This means that between 1989 and 2000 the total urban population of the country did not increase. Moreover, between 1991 and 2000 the total number of urban dwellers in Russia actually went down by 3,3 million (RUSSIAN STATISTICAL YEAR-BOOK, 2000, TABLE 1). This decline could have been more rapid without the massive in-migration of population.

**Table 1. Growth of Urban Population in Russia* (in Millions)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Per Cent Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Urban Population</td>
</tr>
<tr>
<td>1897 (Census)</td>
<td>67.5</td>
<td>9.9</td>
</tr>
<tr>
<td>1914 (1.01.)</td>
<td>89.9</td>
<td>15.7</td>
</tr>
<tr>
<td>1926 (Census)</td>
<td>92.7</td>
<td>16.4</td>
</tr>
<tr>
<td>1939 (Census)</td>
<td>108.4</td>
<td>36.3</td>
</tr>
<tr>
<td>1959 (Census)</td>
<td>117.5</td>
<td>61.6</td>
</tr>
<tr>
<td>1970 (Census)</td>
<td>130.1</td>
<td>81.0</td>
</tr>
<tr>
<td>1979 (Census)</td>
<td>137.6</td>
<td>95.4</td>
</tr>
<tr>
<td>1989 (Census)</td>
<td>147.4</td>
<td>108.4</td>
</tr>
<tr>
<td>1990 (1.01.)</td>
<td>148.0</td>
<td>109.2</td>
</tr>
<tr>
<td>1991 (1.01.)</td>
<td>148.5</td>
<td>109.8</td>
</tr>
<tr>
<td>1992 (1.01.)</td>
<td>148.7</td>
<td>109.7</td>
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<tr>
<td>1993 (1.01.)</td>
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The drastic changes in the demographic situation, the increasing depopulation of a series of regions as well as the real drop in the population growth in cities, which during the course of many decades show a tendency of uninterrupted growth, influenced the developmental perspectives of the Russian cities to a likewise considerable extent. The large cities and even the "million-cities" with a continuing increase in the number of inhabitants show in recent years a tendency of stabilising or even a retrogressive development in the number of inhabitants. Table 2 shows the decline in the population numbers of million-population cities (TABLE 2).

**TABLE 2. Cities of Russia of more than 1,000,000 Population**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1 (1)</td>
<td>Moscow</td>
<td>Central Region</td>
<td>7,194*</td>
<td>7,063</td>
</tr>
<tr>
<td>2 (2)</td>
<td>St.Petersburg</td>
<td>Northwest Region</td>
<td>4,033</td>
<td>4,588</td>
</tr>
<tr>
<td>3 (3)</td>
<td>Nizhny Novgorod</td>
<td>Volga-Vyatka Region</td>
<td>1,170</td>
<td>1,344</td>
</tr>
<tr>
<td>4 (4)</td>
<td>Novosibirsk</td>
<td>West Siberian Region</td>
<td>1,179</td>
<td>1,334</td>
</tr>
<tr>
<td>5 (5)</td>
<td>Yekaterinburg</td>
<td>Ural Region</td>
<td>1,025</td>
<td>1,211</td>
</tr>
<tr>
<td>6 (5)</td>
<td>Samara</td>
<td>Volga Region</td>
<td>1,027</td>
<td>1,198</td>
</tr>
<tr>
<td>7 (10)</td>
<td>Omsk</td>
<td>West Siberian Region</td>
<td>821</td>
<td>1,014</td>
</tr>
<tr>
<td>8 (8)</td>
<td>Kazan</td>
<td>Volga Region</td>
<td>869</td>
<td>993</td>
</tr>
<tr>
<td>9 (13)</td>
<td>Ufa</td>
<td>Volga Region</td>
<td>780</td>
<td>978</td>
</tr>
<tr>
<td>10 (7)</td>
<td>Cheliabinsk</td>
<td>Ural Region</td>
<td>875</td>
<td>1,030</td>
</tr>
<tr>
<td>11 (9)</td>
<td>Perm</td>
<td>Ural Region</td>
<td>850</td>
<td>999</td>
</tr>
<tr>
<td>12 (12)</td>
<td>Rostov-on-Don</td>
<td>North Caucasus Region</td>
<td>789</td>
<td>934</td>
</tr>
<tr>
<td>13 (11)</td>
<td>Volgograd</td>
<td>Volga Region</td>
<td>815</td>
<td>928</td>
</tr>
</tbody>
</table>

* Subordinated to the City Administration


In addition to these factors, one should also take into account the consequences of the migration process, which in the last few years has become a serious problem: the resettlement
of Russians from the new states of the Commonwealth of Independent States (CIS) and the Baltic republics back to Russia, the out-migration of population from the industrial areas of the Russian Far North and the Far East, the settlement of de-conscripted military personnel and their families, who were earlier located in Eastern Europe, as well as flows of refugees of other than Russian nationalities, who had arrived to Russia from areas with acute ethnic conflicts.

After the collapse of the USSR the geopolitical situation in Russia also underwent significant changes. It is generally known that the borders between the republics within the USSR during the Soviet period were formal. However, in the post-Soviet period this was no longer the case. As a result, many of the cities in Russia have lost their earlier central position and are located in what have now become outback districts of the country. Thus, is the case with cities which find themselves in a unique situation which, because of their new geo-political situation, have suddenly wound up in a peripheral position, in the vicinity of the most important border crossings to states, which were formerly Union Republics in the Soviet Union and whose close economic ties and highway links were suddenly cut off.

This affected the areas of, for example, Smolensk on the Moscow - Minsk - Warsaw Axis, Orenburg on the Volga - Kasakhstan - Middle Asian Axis, further cities of Russia near the borders to the European States, such as Pskov, Belgorod, Bryansk, Rostov-on-Don etc. A special case within the border regions of Russia are the border areas of the Caucasian countries (Georgia, Azerbaijan) where the political situation is unstable. In contrast, for example, to the Russian-Ukrainian border where the installation of a State Border Regime has hindered the relations on a societal, economic and private level, but has not prevented it, these relations on the Russian-Georgian border have been stopped by a strict border control system. The changed geographical position will have as its result medium and long term changes in economic and spatial relations, which at the same time will bring forth changes in the functional profile of the cities and in their inner city structures.

The ecological situation in Russian cities with their high industrial concentration and considerable air and water pollution remains tense. It is clear that the environmental pollution in the cities is negatively affecting the state of the health of the population. More than 10% of the cities in Russia are now in a poor ecological shape. (BRADE, PERTSIK & PITERSKI 2000, WOROBJOW & PITERSKI 1997). It has to be taken into consideration that among the regions
and cities suffering from severe ecological conditions are not only the industrial and agricultural districts and centres (which would be understandable), but also the recreational regions and for example the Region of the Caucasian Spa Resorts (PITERSKI & BRADE, 1999, 2000A).

The social situation in Russian cities is complicated further by problems of the growing social-economic differentiation and polarization of the population, which leads to rising social tensions in the cities. Post Soviet Russia is, as other central European and east European countries, characterised by a social structure where the majority of the population lives just above the minimum subsistence level. Unemployment in Russia in 1999 amounted to 13,4% of the workforce and can soon get to be called massive in character (RUSSIAN STATISTICAL YEAR-BOOK, 2000). At the same time, 80% of Russian real estate belongs to 10% of Russian families. This shows that the reforms of the 90s have largely failed to modernise Russia, but rather led to the creation of a new elite in the cities. (ZASLAVSKAYA, 1997).

And last but not least, a transition to a free market economy in Russia has led to an increasing decentralization of central power and to the elimination of state central planning. Russian state now has smaller influence upon economic decision-making structures.

The development of Russian cities reflects, in a concentrated form, all these processes and problems. These developments required, in principle, a re-assessment of the developmental potential of cities. Additionally, it has to be stressed that the economic- and natural conditions of Russia are very differentiated and the developmental processes of the cities in the individual regions varies accordingly.

Re-assessment of the problems related to the development of Russian cities requires an independent evaluation. Two groups of problems need to be analysed. First, the problems of development of the large cities (the aim of this paper is to discuss the development of these cities in the first place) as well as of small and medium sized cities. And second, the specifics of development of certain functional urban settlements.

It needs stressing that problems of development of each Russian city need to be analysed in the individual regional context. This approach will allow to take into account those significant
differences in their natural conditions, economic development, demography and ethnic and social conditions.

**Evaluation of the development potential of Russian cities.**

The expert evaluation to be carried out to judge the development potential encompasses all of the centres of constituent members of the Russian Federation (Districts, Regions, Republics, autonomous regions and areas) as well as significant industrial, transport, resort and other centres in different parts of the country (199 cities). In general the expert evaluation encompasses almost all of the Russian cities of resident population over 100,000.

The quantitative evaluation was curried out with the aid of 22 indicators, which form the following 11 factor groups (BRADE, PERTSIK & PITERSKI 2000, PERTSIK & PITERSKI 2000):

- **demographic situation** (including regionally differentiated effects of migrations to the cities),
- **administrative significance** (including changes within the hierarchical central system),
- **industrial potential** (the Russian urban settlement system was, to a large extent, dependent upon the process of industrialization of the country),
- **scientific and cultural potential**, 
- **transportation** (including effects of the new state borders which change the significance of border and port cities),
- **financial resources**, 
- **quality of life**, 
- **infrastructure**, 
- **ecological situation**, 
- **political conditions**, 
- **criminality**

The selection of indicators was curried out in an expert way. Statistical data of the Russian State Committee on Statistics (Goskomstat) were normalised and the summation of the indicators was curried out with the aid of expert evaluations with the assistance of geographers, economists, ecologists and architects (Moscow Lomonosov State University, State Institute of Urban Planning, Institute of Geography Russian Academy of Sciences, Institute of Economic Forecasting Russian Academy of Sciences, Central Scientific Research
and Design Institute for Town Planning, Carnegie Moscow Center). Each of the capitals of constituent members of the Russian Federation shown on Figure 1 is evaluated individually (Figure 1) iii.

**Some conclusions and key trends**

This part focuses on a development potential of the cities which are the capitals of constituent members of the Russian Federation.

The 13 „million-cities“, judging by the development potential, form the group of the most significant Russian cities (among them Moscow, St. Petersburg, N. Novgorod, Yekaterinburg, Omsk, Novosibirsk, Samara, Kazan, Cheliabinsk, Ufa, Rostov on Don, Volgograd, Perm), as well as other large cities, such as Krasnoyarsk, Vladivostok, Voronezh, Saratov, Irkutsk, Khabarovsk (all of them are the centres of the administrative regions of the Russian Federation) and Togliatti on the Volga (the large centre of motor-car construction). All of these 20 cities have a large, international or All-Russian significance and through a relatively intense development have become sharply defined by market economy factors.

In this regard it becomes especially interesting to analyse the development potential of large cities (with a population over 100,000) and in the first place of the two largest cities of the country - Moscow and St. Petersburg. Generally it is safe to say that Russia like the former Soviet Union (HARRIS 1970) is a land of large cities. The number of cities of more than 500,000 residents in Russia increased rapidly since 1970 from 17 to 33 (Russian Statistical Year-Book 2000).
Let us discuss the development potential of Moscow and St. Petersburg. In the post-Soviet situation these two cities are the two most prominent cases. Functional structures in both cities are much more intensive and perceptible than elsewhere in the “vastness” of Russia, they are in the process of constant change, while city economics underwent rapid change along market lines (BRADE, PERZIK & PITERSKI 2000, LAPPO & HÖNSCH 2000).

In absolute terms Moscow occupies a prime position within Russiaiv. In addition to the functions of a capital city and cultural functions, Moscow also is the centre of Russians economic power and financial capital. Here is where the distribution of investment is decided. Besides the state, the most important economic decision makers, such as banks, economic concerns, industrial finance groups, have their headquarters in Moscow. The regional and local investors are as a rule closely linked to them. Before, it was the large Union Industry Ministers and departments, who knew how to subordinate the regional policy and planning to their own interests, now it is once again the economic structures which exert considerable influence on regulating regional policy. Large areas of reconstruction, towering skyscrapers of the large economic and finance concerns, new image making memorials, large business and trade centres increasingly form the city structure of the former socialist capital of the Soviet Union.

Generally it is to be observed that the influence of Moscow on plans and decisions in the regions is as before very large, because the prominent state institutions, the central scientific research institutes, the independent commissions of experts or the consulting firms in the government and in economic structures are found in Moscow and still have the key role in working out the significant planning projects. For the production of regional and urban planning there are in principle only the planning institutes in Moscow and St. Petersburg (BRADE, PERZIK & PITERSKI 2000; PITERSKI & BRADE 2000B).

At the same time the post-Soviet development of St. Petersburg was largely framed by changes in its geopolitical position, which led this city to become again an important gateway from Russia to Western Europe..

Cities with a population over 100,000 are very interesting Perspectives of development of these large Russian cities are different. For example, in such areas as the Urals (Yekaterinburg, Perm, Cheliabinsk, Ufa), the Volga Region (Samara, Nizhni Novgorod,
Kazan, Saratov, Volgograd, Ulyanovsk), the Central Chernozem Region (Voronezh, Lipetsk), and the North Caucasus (Rostov-on-Don, Krasnodar) as well as in southern Siberia and the Far East (Novosibirsk, Omsk, Tyumen, Tomsk, Barnaul, Kemerovo, Krasnoyarsk, Irkutsk, Khabarovsk, Vladivostok), one might find both winners within and losers of the current transformational process. Because of the attractiveness of the large cities they profit above all from the innovative changes of the economic structure (privatisation of the economy, starting of deindustrialization, connected with the development of tertiary sector of economy).

The largest multifunctional centres of the land are faced with the problem of restructuring, in which maintaining and further developing modern highly technological branches of production is necessary. This includes a share of those branches of production which hitherto had been set up for scientifically intensive mass production. So it came about, for example, already in Moscow the forming of high technological branches in Air and Space Travel-, Electronics-, Machinery- and the instrument-making industry with a same time decline in the share of the metallurgical and textile industries. The number of such branches is still large, such as in the production of heavy machinery and the iron and steel industry, or oil processing industry. Required and to be expected, besides, is a considerable enlargement of the share of the workforce in the entire tertiary sector, especially in the enterprise oriented goods and services area, with further decline of the share of the workforce in the industry.

Although the correlation between the expert opinion of the development potential and the number of residents of this or that city is very large, on the one hand, some cities have got a relatively higher (Kaliningrad/Königsberg, Vladivostok, Irkutsk, Arkhangelsk, et al.), or on the other hand, lower (Ivanovo, Tambov, Saransk, et al.), evaluation, judging by the development potential as would otherwise be indicated by the corresponding number of residents (BRADE, PERZIK & PITERSKI 2000).

In this connection it is important to bear in mind that in the 90s it is observed the stabilisation and sometimes even the decrease of the population in large cities and even in cities of more than a million residents (FIGURE 2). On the grounds of this negative trend it is possible to come to a conclusion, that this situation reflects a reversal of urban processes in Russia during the 90s and a turning point in urban growth in this country (MEDVEDKOV & MEDVEDKOV 1999), but the problem of the length of this period of deceleration is a matter of opinion.
The expert evaluation encompasses significant industrial, transport, resort and other centres in different parts of the country as well. On the one hand, some industrial cities have got a relatively high (Nishnekamsk/chemical and oil processing industry/Volga Region, Cherepovets/iron and steel industry/Northern Region, Naberezhnye Chelny/motor-car industry/Volga Region), or on the other hand, low (Prokopyevsk/coal industry/West Siberian Region, Kineshma/textile industry/Central Region), evaluation of development potential.

The development potential of Russian cities with different economic functions will be discussed in the next paper in every detail.

There is much room for interpretations of the development potential of cities in the strongly differentiated economic regions of Russia. The expert analysis may serve as the first step in this case and affords a good opportunity of understanding what the important cities of Russia are (those which bear the economic and social development of the country) and thereby of formulating a representatively new re-evaluation of the cities according to the present investment potential by demonstrating the further development possibilities within the framework of the economic and geopolitical transformational process.

Acknowledgements

The paper is a result of a research carried out at the Institute of Regional Geography in Leipzig within the framework of a scientific project „Change of significance of the urban settlement system in Russia after the collapse of the Soviet Union“ (Project Director Dr. I. BRADE) in collaboration with the Moscow University (Prof. Dr. E.N. PERTSIK), taking into account the suggestions and observations at the 14th ERSA Summer Institute in Groningen.
References


Harris, Ch. D. (1970): Cities of the Soviet Union. Chicago


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**Endnotes:**

i This paper focuses on capitals of constituent members of the Russian Federation (Districts, Regions, Republics, autonomous regions and areas). Another aspects of this problem have been discussed by **Brade, Perzik & Piterski** (2000); **Pertsik & Piterski** (2000).

ii Here it is necessary to bear in mind that there are two types of urban settlements officially recognised in Russia: cities proper and towns or settlements of an urban type. In general, cities have a population of more than 12,000 and settlements of an urban type of under 12,000, although the criteria for the classification of each depends on function as well as size.

iii The evaluation includes all of the capitals (cities) of constituent members of the RF (Districts, Regions, Republics, autonomous regions and areas) with the exception of Grosny (Chechen Republic) and Nazran (Ingush Republic) as well as of the rural centres of constituent members of the RF (Palana, Tura, Aginskoe, Ust-Ordynskiy). Besides that it was impossible to evaluate some cities in Khanty-Mansi aut. District (Chanty-Mansiysk) and in Yamalo-Nenets aut. District (Salekhard) because of a lack of statistic date.

iv Moscow became a most prominent case in the economic and social-political development of Russia. On the other hand, the disproportionate concentration of capitals (80% of financial resources in Russia are actually concentrated in Moscow) creates difficulties for the
attractiveness of investment in other Russian regions. In this case Moscow looks like a drain on Russian financial resources.

The main objective of the survey was to analyse, within the entire societal system, the changes in the urban settlement system of the Russian Federation during the course of these transitions and to determine and to address difficulties and their causes arising out of these changes.