Modern Approach to the Regional Strategic Planning: Main Directions and Tools

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Abashev Dmitriy Aleksandrovich
North-West Institute of Management, Branch of RANEPA (Saint-Petersburg, Russian Federation)
Graduate student of the Chair of the Economics and Finance
aba4work@yandex.ru

Yanovskiy Valery Vitalyevich
North-West Institute of Management, Branch of RANEPA (Saint-Petersburg, Russian Federation)
Professor of the Chair of the Economics and Finance
Doctor of Sciences (Economy), Professor
ianovski@mail.ru

ABSTRACT
The trend of Russian Federation economy development assumes not only almost insulating independence, but also risks of the wrong planning connected with it. Development and deployment of development schemes is caused by need of consolidation of efforts of regions. The purpose of our work — to make the comparative analysis of points of views about the choice of key factors for forming strategic planning model for what we allocated basic groups of theories of regional growth. Strategic planning of the region development, in our opinion, has to include several main positions (the regional economy containing infrastructure system, etc.) which are allocated and analyzed explicitly. As obligatory to inclusion in process of strategic planning in the region we allocated one of groups of factors — regional geographical realities. On the basis of this hypothesis the example of the development scheme is necessary to take into account region zonality, which is in detail discussed in work. Authors also revealed various aspects of the concept «strategic planning». In Europe the main activities within territorial strategic planning are systematized, tools for this at the regional level are classified.

KEYWORDS
economy, zoning, strategic planning, regional economy, development
нирования, для чего нами выделены базовые группы теорий регионального развития. Стратегическое планирование развития региона, по нашему мнению, должно включать несколько основных позиций (региональное хозяйство, содержавшее инфраструктурную систему и т. п.), которые нами выделены и подробно проанализированы. Как обязательная к включению в процесс стратегического планирования в регионе нами выделена одна из групп факторов — географические реалии региона. На основе этой гипотезы разработан пример схемы развития с учетом зональности региона, подробно обсуждаемый в работе. Авторами также выявлены различные аспекты понятия «стратегическое планирование». В Европе систематизированы основные направления деятельности в рамках территориального стратегического планирования, классифицирован инструментарий для выполнения поставленных задач стратегического планирования на региональном уровне.

КЛЮЧЕВЫЕ СЛОВА
экономика, зонирование, стратегическое планирование, региональная экономика, развитие

Introduction

Taking into account the need for fast conversion of economy in the Russian Federation to a format of full self-sufficiency, serious revision of regional development planning system is required. One of key factors of regional growth is the correct definition of regional economic activity «field». For this purpose it is necessary to consider a large number of various factors from different scientific areas that, in turn, assumes a cross-platform process. One of such factors is definition of economic development planning in compliance with regional geographical realities. One of methods which are often used in economic geography is the division into districts. Application of this method is based on implicating of the economic region as a basic element of analyzing in this science. In Russia it is actively used for the analysis of geographically various economic space of the country by its splitting (differentiation) into rather uniform sites — areas. At the same time, division into districts acts also as result of work when the task to reveal geographic aspects (placement, territorial changes) of a new economic event (to give its spatial analysis) is set [3, p. 6].

Main part

It is logical to suggest that at the accounting of regional geographical features, to create and plan the development strategy becomes less complicate challenge in several parameters at once:

• the development options which directly are not correlating with region typology are excluded (it is not expedient to create hi–tech production in agrarian area with low density of population for the economic and practical reasons; similarly, it does not make sense to create agrarian complexes in the large cities and their agglomerations from the ecological point of view);
• It becomes possible to develop the chosen direction quicker and more qualitatively (there is no need to build again or to completely convert infrastructure);
• This approach allows to create the list of distribution schemes and placement of regions — partners and regions — competitors at early stages (at governmental planning level there is an opportunity for not to create nearby two regions with identical specialization).

It is conditionally possible to allocate three basic groups of theories of regional growth:

1. Classical.
2. Neoclassical.
3. Cumulative.
Classical theories consider as the main objective the reason and the possibility for occurrence and placement of the companies in the region. The key factor considered within classical theories (for example Y. Tyunen, V. Launkhardt, V. Kristaller) is an optimum placement of the centers of production of rather resource centers. Proceeding from classical theories, we can define remoteness of placement for various centers (resource, social, production).

Neoclassical theories brought consideration of production potential at the international level (trade, coproduction, international logistic chains). However, it is worth allocating also the concept of common regional resource potential used in these theories.

Theories of cumulative growth generalize the stated above theories, creating a concept of region «economic framework», causing stimulating regional development by attractive interaction between centers of production, trade and communication chains.

Synthesis of various conclusions from these theories allows creating the model of regional strategic development considering variability of object zonality.

The Federal Law of Russian Federation N 172 «About strategic planning in the Russian Federation»¹ (of June 28, 2014) is provided preparation of the document, essentially new to Russia, combining approaches of strategic and territorial planning, — «The strategy of spatial development of the Russian Federation», designed to become “projection” of social and economic priorities of development to the territory, to estimate the developed system of resettlement in the Russian Federation, to give offers on its harmonization. Strategy has to define priorities, purposes and objectives of regional growth in Russian Federation, and also a measure for achieving it. As a part of Strategy are developed offers on improvement of resettlement system in RF and the priority directions of production forces placement.

Strategic planning of regional development, in our opinion, has to include several main positions:

1. The regional economy containing the infrastructure system which causes functioning of the region, because a regional economic complex is not the isolated functionality. It is complicate to set of various subjects forming system in which function and place are allocated for everyone. «The regional economic complex is a functioning system, therefore, the system having a certain stability and at the same time developing, changing» [7, p. 143]. Irrespective of region typology, its economy characterizes by internal economic integrity. The main criterion of integrity of an economic complex is its independence in development, or, in other words; its ability to develop independently, without external interventions. For this purpose appropriate resources are necessary. However, one should not forget that the absolute closed systems in objective reality do not exist, and such unit as the region, will not be able to be absolutely closed. Let’s remind that in the complex closed system, including social-economic, the balance will be set up at least, but on the lower level. (In nature, according to the second law of thermodynamics, there is an aspiration to transition from conditions of less probable to more probable, i.e. any spontaneous process happening in reality is irreversible).

2. The production sphere consisting of production of goods clusters (except for agro-industrial complex), as base for production of a gross regional product.

3. Agro-industrial complex, consisting of forestry, agricultural holdings, natural resources, territories as a source of regional wealth.

4. The social sphere as a part of which there are demographic and cultural aspects of regional development.

5. Financial-economic sphere as an element of providing macroeconomic proportions, the regional budget in the form of branch communications of regional finance.

Treat the main objectives of this sphere [5, p. 57]:
- to establish of balance of the decentralized and centralized financial resources;
- to establish of rational distribution and financial resources use;
- organization of economic and social processes regulation and stimulation by financial methods, ensuring increase in population living level;
- to create an effective financial control system.

As object of regional financial policy we consider a complex of regional financial resources, which consists of the sum of:
- consolidated regional budget;
- off-budget funds;
- from the sums arriving for a covering of deficiency of the regional budget ;
- various extra budgetary funds.

6. The sphere of the state management, as a part of federal, regional and municipal authorities in the region.

All positions, except the administrative and social sphere, are directly correlating with exogenous factors. One of such factors also is the geographical location of the region. We are in solidarity with a Dani Rodrik¹, who distinguished geography as the only exogenous factorial group from three main (geographical, institutional, trade) [8, p. 2–4]. We note: in some cases, the exogeneity criterion can be the main factor by using in econometrics. Hence the conclusion — it is worth paying a close attention to division into districts and zoning in moment of making choice and development of regional strategy.

Typological distinction in choice of the strategy (branch, productive— territorial, multi-purpose) does not matter at the account of region arrangement. However, it is necessary to notice that in connection with some geographical features of the RF (they are: large administrative units, big extent of a logistic chain, the big areas of permafrost², prevalence in some regions of sparsely populated zones) the combination of several types of strategy within one administrative unit is possible. Naturally, similar approach cannot be applied within an administrative unit, the federal city by the form representing. As a rule, its economy is accurately aimed at the strategic development of hi-tech and innovative productions as have high knowledge intensity, the large volume of the human capital, and also provided resource (material in this case — a comment of the author) with base.

However there are also other approaches to consideration of the matter. So, for example, V. P. Akatyev and M. B. Alekseeva consider fundamental characteristics of strategic aims of development as the main feature of strategy. And it is more concrete: «The strategy of development for the region has to include not all purposes socially — economic development but only radical, fundamental, large–scale character» [1, p. 131]. On the contrary E. R. Akhmetzyanova and E. N. Valeeva lean on cluster model, offer schematic option of cluster model for regional strategic development (Table 1) as justification of the position.

E. D. Sushko relies on mathematical modeling of multi–agent model of development of the region as attempt to create the tool for approbation of mechanisms of regional government taking into account human a factor (fig. 1).

¹ He is a Turkish economist and Ford Foundation Professor of International Political Economy at the John F. Kennedy School of Government at Harvard University. His works include Economic Rules: The Rights and Wrongs of the Dismal Science and The Globalization Paradox: Democracy and the Future of the World Economy.

² Permafrost occupies up to 60% of the territory of the Russian Federation. It is most widespread in Eastern Siberia and Transbaikalia. A record depth of permafrost — 1370 meters — it is noted in riverheads Vilyuy in Yakutia.
The group of scientists under the leadership of the academician V.L. Makarov (CEMI RAS) developed a complex agent-focused models of regional growth. Formation of a regional complex of innovations is followed by simultaneous development of various structures. The modern model of innovative development considers interaction between government, industry and universities. In that case, a set of potential communications between the research organizations and innovative activity of the enterprises is characterized as innovative space and is considered as a resource for innovations. Definition of characteristics of such communications and interactions is one of the most difficult tasks in the analysis of innovative processes. The hypothesis considers that regional innovations depend on the size of innovative space and how effectively it is used. Econometric results of modeling do not contradict with hypothesis. Using the developed Computable General Equilibrium (CGE) model, innovative elements of regional economic systems were analyzed and effects of various scenarios which seek to improve social-economic system [6] are quantitatively estimated. The indicator of effective innovative space use for this region is switched on as one of CGE model agents of production function. Results indicate an important role of regional authorities in advance of cooperation between the state, the industry, both research and educational by complexes [6, p. 76].

In Europe such concept as strategic planning is considered in various aspects. For example, Ljiljana Vasilevska [10, p. 22] point out that strategic spatial planning concentrates on territorially integrated strategic approaches, and long–term planning of life quality improvement, strengthening of regional identity and development of new forms of regional cooperation. T. Wiechmann pays attention at that strategic spatial planning demands that continuous social process of planning performed function of motivation of interested parties of interaction between actors (as subjects) process [11, p. 439].

Law practice, which defines differentiation of society within a territorial sign, is limited because of unification of application of state mechanisms of regulation without local features of territories. For changing similar practice it is required to consider, first of all, similar features and to define tasks for goals achievement:

1. From positions of today it is necessary to change division of the country by administrative-territorial sign.
2. Increase an efficiency of interaction between various budgets levels.
3. Stimulation of regional community’s activity in social and economic aspects.
4. Creation and ensuring operability of the mechanism for eliminating disproportions in development of regional communities and regional alignment on the basis of economic efficiency.
5. Use of the effective TOP (territorial organization of the population) system.
6. Formation of performance effective scheme by state and municipal authority of own powers and ensuring control of execution at various levels.

As the main activities within territorial strategic planning can be defined:

1) Creating an aim tree, displaying the development plan for the territory.
2) Improving quality of life and welfare of citizens.
3) Providing an optimum in placement of production capacities on territories and their associations in groups.
4) Providing regional policy in expansion of regional production base with defining of points of potential growth.
5) Creating favorable conditions for investments.
6) Saving the balance in regional industrial complex development.
7) Creating an effective system of ensuring economic security of the region.

In the economic theory are distinguished two types of efficiency: economic and social. Economic efficiency is an achievement of the objectives by use of resources by the principle of an economic expenditure of limited means. Social efficiency is an
**Table 1**

<table>
<thead>
<tr>
<th>Concept of cluster model of the region strategic development [2, p. 43]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research of regional social and economic capacity</strong></td>
</tr>
<tr>
<td><strong>SWOT</strong></td>
</tr>
<tr>
<td>Analysis of industrial infrastructure</td>
</tr>
<tr>
<td>Analysis of main and minor cluster chains</td>
</tr>
</tbody>
</table>

Forming scenarios of regional development

Substantiation priorities of regional development

Marking the indicators

Regional social and economic capacity strategy

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**Fig. 1.** Model of regional development by the account human factor [9, p. 21]
execution of population expectations, requirements and interests. Therefore, as it is obvious that there is a problem of definition of complex social and economic efficiency of regional transport infrastructure, i.e. results of transport infrastructure functioning which are reflected in economic and market indicators of activity of the basic branches of production of goods and the non–productive sphere of the region served by it.

In determining economic efficiency of transport infrastructure it is necessary to consider that it is shown not only in internal indicators of the most transport infrastructure, but also finds the expression in resultant indicators of regional economy [12].

If to take for criterion of efficiency of motor transportation infrastructure only a gain of a resulting effect or reduction of the losses/losses reached as a result of use of capital investments in infrastructure, then the assessment of efficiency of transport infrastructure can be carried out on a formula:

\[
E_{ti} = \frac{Pr_{I} + Pr_{cw} + Pr_{ai} + Pr_{ti} + Pr_{terr} + Pr_{iti}}{C_{itid}},
\]

Here:
\(Pr_{I}\) and \(Pr_{cw}\) — a profit increased to the industries and reduction of installation cost and construction works due to improvement of transport infrastructure work;
\(Pr_{ai}\) — a profit increased in agricultural industry as a result of elimination of losses during the transporting and improvement of supply;
\(Pr_{ti}\) — a profit increased in all elements of transport infrastructure;
\(Pr_{terr}\) — a profit increased on transport infrastructure of again developed territories;
\(Pr_{iti}\) — a profit increased on use of the international transport infrastructure;
\(C_{itid}\) — capital investments in transport infrastructure development.

As can be seen from the eq. 1, effects of separate elements of transport infrastructure generally give in to an economic assessment. Extra branch effects of infrastructure make a considerable part of aggregate effect. Therefore, it is important to consider all cumulative types of extra branch factors of efficiency connected with need of the accounting of the regional features much influencing the extent of effects, first of all — geographical. The analysis of complex efficiency of all system of transport infrastructure within one, for example, optimizing model, is connected with difficulties of a quantitative assessment of market indicators of activity of infrastructure elements and their reductions to the comparable generalizing indicator criterion of an optimality of the solution of a complex task. Apparently from the equation 1 to carry out a complex assessment quite difficult as it needs to be seen off in comparable units and their definition from the existing statistical data is unreal. Thus, reduction of results to a comparable complex indicator becomes the main problem when determining economic efficiency of motor transportation infrastructure [12, p. 37].

As tools for performance of the tasks set above it should be taken into account:

1. Researching of medium–term and long–term development plans.
3. Definition and creation of equilibrium model of interaction between the state and business.
4. Development of investment policy for financing projects defined as priority in various spheres of regional action, from the social sphere to innovative programs for development of hi-tech production.
5. Creation of highly effective public sector of economy uses of public–private partnership mechanisms.

If to review various examples of large administrative units and districts, it is possible to create certain postulates, the general both for agrarian and for industrial regions (Fig. 2):
1. Regional «capital» has to represent the administrative center — complex of organizations which are engaged in management of the region.

2. Regional scientific center should not be in «capital», could be located in close proximity to it (in former Soviet Union science cities were similar: Dubna, Serpukhov, the Academic town near Novosibirsk and etc.).

3. With use zoning to allocate several basic resource centers of the region for creation production-territorial associations (clusters) which are most differentiated with taking into account geographic-economic typology.

4. Proceeding from the created development model to allocate area, the most remote from productions, but the most suitable under the description of a recreational zone.

5. Road infrastructure has to conform to geographical standards of this area as much as possible. And the route network providing logistic interaction of regional economy subjects have to be laid taking into account geographical features and economic requirements at the same time. For example, transit routes through the region have to be the shortest on a distance in kilometers, however there has to be a system of the congresses branches, providing an entrance to any settlement and a possibility for route changing. It is necessary to emphasize that from the regional economy point of view it is necessary to understand as the concept «region» like a «territorially specialized part of the country national economy which is characterized by unity and integrity of reproduction process» [4, p. 28].

![Diagram of regional basic elements interaction/arrangement](image-url)
Conclusion
As objective basis of the region economic integrity it is necessary to understand its production — territorial complex. It is necessary to understand also integration processes which allow providing development of production capacity of the territory taking into account lack of cross- and intra economic disproportions and barriers with a possibility of preservation of dynamics of regional farms economy development at comprehensive use of all types of resources (labor, financial and natural) as a similar complex. Need of development and deployment of modern models of regional strategic growth, taking into account the factors revealed by us and instruments of geographical zoning, is caused by relevance of consolidation of regions efforts in view of decrease in a number of main macroeconomic factors, for example, growth rate of GDP (Fig. 3) In more details see Table 2.

Fig. 3. Growth rates of GDP

<table>
<thead>
<tr>
<th>Russia GDP</th>
<th>GDP Growth Rate</th>
<th>GDP Annual Growth Rate</th>
<th>GDP</th>
<th>GDP per capita</th>
<th>GDP per capita PPP</th>
<th>GDP From Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last</td>
<td>–0.57</td>
<td>–1.31</td>
<td>1331,20</td>
<td>11 038,82</td>
<td>23 895,34</td>
<td>1002,30</td>
</tr>
<tr>
<td>Previous</td>
<td>–1.31</td>
<td>12.10</td>
<td>2052,80</td>
<td>11 490,87</td>
<td>24 873,89</td>
<td>344,60</td>
</tr>
<tr>
<td>Highest</td>
<td>4,10</td>
<td>12.10</td>
<td>2231,80</td>
<td>11 615,71</td>
<td>25 144,10</td>
<td>1002,30</td>
</tr>
<tr>
<td>Lowest</td>
<td>–5.40</td>
<td>–11.20</td>
<td>195,90</td>
<td>5505,63</td>
<td>11 917,85</td>
<td>141,40</td>
</tr>
<tr>
<td>Unit</td>
<td>percent</td>
<td>percent</td>
<td>USD Billion</td>
<td>USD</td>
<td>USD</td>
<td>RUB Billion</td>
</tr>
</tbody>
</table>

Similar given the scheme of strategic development with taking into account zonality can be suitable for almost any regional geographical coordinates, however it will consider variability of each region zone location.

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