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## National Competitiveness as the Object of Indicative Planning in the Context of Re-industrialization

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**Abstract:**

*Three years after the adoption of legislation regarding strategical planning we are able to see the first statistical results, reflecting actual conditions of regulated objects. The subject of this article is to examine the system of indicators of state economic policy, targeting to stimulate the development of economic potential with the aim to improve national economic competitiveness. The objective is the competitiveness of domestic economy as the subject of regulation.*

*The aim is the analysis of the system of indicators on the basis of comparison of actual and planned data, detecting weakly correlated indicators and to make recommendations to correct the system of indicators. The article analyses the indicators that are being used in normative and legal documents. The authors consider long-term and medium-term targets for economic frontier development, as well as main factors that should be accounted while formulating the system of indicators for the economic potential in long- and medium-term.*

*As the list of indicators of economic development in the strategic documents is vast, the chosen direction considers the production with high added value. The indicators considered reflect the indicative aim of scientific development, national innovation system and technology as the most important foundations for improvement of national economic competitiveness. Multidirectional trend of economic development and administration indicators has been detected. The formation of system of supplementary indicators that reflect the development of production frontier has been proposed.*

**Keywords:** Indicative planning, forecasting, industrial policy, national competitiveness.

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## 1. Introduction

Newly evolved conditions of socio-economic development in the framework of a raw-materials based economy, has resulted in changes in government economic regulations. The planned approach that has been rejected a quarter of the century ago has now been accepted as the basis of formulating the system of documents of state management as a form of indicative planning. Modern economico-political sanctions have resulted in the formation of domestic import-substitution policy, and has formed the main postulates of industrial policy. The necessity to rehabilitate from recession has resulted in the formulation of a new system of normative documents.

In fact, the legislation *«Regarding strategic planning in the Russian Federation»*, *«Regarding industrial policy in the Russian Federation»*, *«Regarding Public-Private Partnership, Municipal-Private Partnership in the Russian Federation»* has been passed, which reflects the degree of involvement of government in regulating the economic processes at legislative level. Multi-aspect of economic development has resulted in a large number of documents, reflecting the criteria and marginal values of success of economic policy. One of the targets of economic development is the improvement of national competitiveness, formulated via the concept of long-run socio-economic development up until 2020 (further - mentioned as «the Concept»).

In accordance to the Concept, a complex approach is needed to address the problem of improvement of national economic competitiveness, via the development of already established competitive advantage in energy, raw materials and transport industries, and the formation of new competitive industries. In order to develop new competitive advantage, economic diversification is absolutely necessary, which implies a powerful scientific and technological complex and the formation of knowledge-based economy.

## 2. Theoretical, Empirical and Methodological Grounds of Research

The instrument of improvement of national competitiveness is the development of human capital and economic institutes. In order to achieve the set targets it is necessary to concentrate efforts in the following directions:

- science, national innovative system and technology;
- highly-technological industries, basic manufacture, agricultural and fishing industries;
- competitive advantages in transport infrastructure and nature-utilization;
- energy infrastructure and improvement of economic energy-efficiency.

The following targets, formulated indicators, established variables allow to evaluate the planned and achieved figures of these indicators in the medium-term (2-3 years). One of the most important directions in government regulation, with the aim to improve national competitiveness is the development of science, national innovative

system and technology. The following indicators have been registered in the Concept - 2020 and in the Strategy for innovational development in the Russian Federation for the period up until 2020. The achievement of the goal of improvement of national competitiveness is reflected in the number of indicators, presented in the Table 1.

**Table 1.** *Indicative factor in the basis (2007), mid-term (2010) and planned (2020) periods.*

Indicator	2007, %	2010,%	2020,%
Share of enterprises engaged in technological innovation	13	15	40-50
Russian share in the global markets for highly technological good and service (including nuclear energy, aviation, space technology and servicing, shipbuilding and etc.)	-	-	5-10
Weighted share of Russian highly-technological export in the global volume of such exports	0,3	-	2
Gross Added Value of the innovation sector as part of GDP	10-11	-	17-20
Weighted share of innovation production in the total volume of industrial production	5,5	6-7	25-35
Internal costs of Research and Development (more than 50% in the private sector)	1,1	-	2,5-3*

According to Rosstat and the World Bank Data, the dynamic of each indicator can be traced. Let's consider the dynamics of the indicator of share of organizations, engaged in technological innovations.

**Table 2.** *Weighted share of organizations, engaged in technological innovations in the accounting year (Rosstat, 2017).*

year	2010	2011	2012	2013	2014	2015
share	7,9	8,9	9,1	8,9	8,8	8,3

The expected change of this indicator was around 15% in 2010, however the dynamic was very small, and the desired level wasn't achieved even by 2015. It should be pointed out, that the indicator «*innovation activity of organizations in industrial production, engaged in technological, organizational and/or marketing innovations, as a share of total number of enterprises*», reflecting the activeness of enterprises had a similar trend. In 2010, its value was 10,8%, in 2012 the indicator has increased up to 11,6%, whereas in 2015 decreased down to 10,6%. We can see factual absence of positive dynamics of the following indicators. It is important to point out that the result was forecasted by the scientific society at the time of the first version of the Concept.

**Table 3.** Share of organizations of industrial production, engaged in technological, organizational and/or marketing innovations (Rosstat, 2017).

year	2010	2011	2012	2013	2014	2015
share	10,8	11,1	11,1	10,9	10,9	10,6

Based on statistical data we can conclude, that it is impossible to increase the planned level of innovational activity of industrial enterprises. It sounds more than ambitious. Weighted share of enterprises, engaged in technological innovation of 15% - is the increase of the basis indicator by 50%, and it is a massive jump, which in no way corresponds to the quality of science and technology foundation of the Russian Federation, neither the conditions of global competitive environment. We cannot deny the chances to fulfill such planning, however in the current domestic economic climate it doesn't seem possible.

The same situation is seen in the indicator «Weighted share of Russian highly-technological export in the global volume of such exports» to increase up to 2% by 2020 (in 2007 - 0,3%). In practice, the observed dynamics is as follows.

**Table 4.** Weighted share of Russian highly-technological export in the global volume of such exports.

	2010	2011	2012	2013	2014	2015
World, \$ mln	1780078,5	1940137,5	199859,9	2106318,9	2148145,1	-
Russian Federation, \$ mln	5075,1	5443,4	7095,1	8655,8	9842,7	9677,3
Share of global export, %	0,285	0,281	0,355	0,411	0,458	-

The share of Russian highly technological products in the global export volume has increased almost two-fold in the period 2010-2014, however is nowhere near close the indicative projections which accounted for a ten-times increase. Similar dynamics is demonstrated by all the other indicative factors of the Concept.

The Concepts projected a rapid jump in economic development in the period between 2013 and 2020. However by 2017, the results are unsatisfactory. While considering the implied conditions for the economic development in 2017-2019, 3 cases were considered: base case (retaining conservative tendencies of the dynamic of external factors); conservative (insignificant changes in the tendencies of the dynamic of external factors - minor growth in oil and gas prices); and target (achievement of strategic goals during the formation of innovative economy). Dynamic of the indicators corresponds to the development cases, however it projects

the impossibility of structural change. Thus, there hasn't been any significant improvement in the direction of economic innovational frontier development.

The Ministry of Economic Development of the Russian Federation is taking an active stance in the process of implementation of the system of indicative planning, realizing planned projects with reporting of targets, events and indicators. Main focus is given to the activity to improve the quality of administration, and not the regulating mechanisms of economic processes in the framework of market economy. In fact, the last available public report of achievement of target indicators has been published in 2015. The following report outlines the following targets, which will result in:

1. system of strategic management on the basis of state programs and long-term projecting (target set in the 2014 report and is not present in 2015 report, as the target has been achieved);
2. comfortable entrepreneurial environment (Doing Business Indicator);
3. effective system of SMEs support (indicators - enterprise coverage and level of information availability);
4. system of export support (indicators - trends of number of enterprises and non-export products increase);
5. system of technological innovations support (indicator - share of enterprises engaged in innovation);
6. system of provision of municipal and state support quality (indicators - level of satisfaction, availability, number of queries);
7. system of civil institutions (indicators - number of citizens involved in socio-orientated non-commercial organizations).

On contrast to the indicators of economic development, registered by the 2020 Concept, indicators of forecast of achievement of set targets, according to the Ministry of Economic Development plan for the period 2013-2018 (as of 25.06.2013 № AU-127) in 2015, demonstrates a more positive dynamic. All planned indicators strictly comply with planned values and one of them is overachieved. For instance, Russia's position in Doing Business ranking complies to the planned level and is ranked 50th in 2015. This indicator reflects the aim of achieving a comfortable business environment. Share of companies, satisfied with the working of trade representatives (based on the questionnaire with EEA (External Economic Activity)), was planned at the level of 80%, with the actual figure at 95%. The only indicator, that doesn't satisfy the plan - level of satisfied citizens with the service provided by state and municipal entities is 81,9% versus the planned 90%. However the initial plan accounted for the 70% figure.

### **3. Results**

The analysis show that the work done by the Ministry of Economic Development in the context of improving administrative activity shows positive results. The

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indicators of economic development and national competitiveness in the best case are not deteriorating and remain on the same level (Shekhovtsov and Shchemlev, 2017; Ivanova *et al.*, 2017; Kormishkin *et al.*, 2016).

From the point of view of long-term planning and formation of indicative variables of economic frontier, the theory of business cycles and technological state should be taken into account. Technological state is the combination of technological chains, historically formed and interconnected between each other, each forming an industrial core, that formulates the development perspectives of cluster development.

In the context of new technological chains, the process of integration of the stage with greater added value is of primary importance, preferably with high technological capacity. In order to achieve the following target it is necessary to forecast the start of technological state with high probability, prepare material and technological basis for economic processes development (determining the size and direction of investment into the planned production), as well as quality of labor force. Economic forecasting allows to gain competitive advantage in the newly forming markets. The determining factor of economic development is the leadership in production technologies, that lie at the basis of any technological state.

In the framework of formation of quantitative indicators of evaluating national competitiveness it is necessary to integrate the indicators of changes in the increase/decrease of industrial production. In order to achieve this, we can use simple instruments - the system of production functions, as it is necessary to know the optimal volume of labor and capital in order to produce competitive production with optimal resource usage. Having indicated the production priorities on the basis of strategy of scientific and technological development, it is necessary to accept the plan of industrial development of prioritized factories, stating resources, responsible individuals and deadlines. In case of formation of indicative factors, it is necessary to account for quantitative valuation of factors of production involved, and not only the resulting indicators of production process.

At the moment scientific development, national innovative system and technologies implied as one of the directions of development of competitiveness of the 2020-Concept, has earned support in the context of scientific personnel endorsement in the strategy for national security. Labor resources are the most important components of production process. Human resources aspect of the socio-economic development is reflected in the Strategy of scientific and technological development of the Russian Federation as of 1st of December 2015 №642 p. 31.

Regarding human resources and human capital and in accordance to the proposed strategy it is important to form competitive communities through long-term planning of scientific and technological projects, repetitional mechanisms, development of systems of technological art from the younger members of the society, support for

young scientists, and creation of infrastructure alongside with the leading science organizations for mobility of the participants.

In the framework of the existing documents, including the Executive Orders by the President, it is important to point out different ways to address the labor force problem in science. One of such problems is insufficient attention towards the main tendency in the labor market: in the freely competitive market, the main factor affecting the movement of labor is income. Due to the fact that highest paid industry is finance, it is difficult to attract the young population to go into science.

Orders aim to address the income situation, however the need to report the median value will eliminate the positive effects. The need to report the modular median will change the situation, and will address the problem more effectively. Given the availability of labor resources, documents don't include the indicators that address the level of required training, pre-training and external sources of labor force, necessary to qualify for strategic industries.

#### **4. Conclusion and recommendations**

In order to formulate the following indicators it is possible to introduce the agent-orientated models in a number of planning directions. The resulting data can be used to formulate economic indicators, aimed at restructuring and re-industrialization. Highlighting the importance of digital economy development it is necessary to address the qualitative aspect of these factors. It is necessary to rethink the attitude towards educational and social spheres, create the opportunities for long-term planning in business, such as vague understanding of development perspectives, which doesn't allow to project the planning horizons. Mechanism to achieve the set targets in the documents of strategic planning points towards the minimum economic and administrative action with the aim to change the structure of the economy, which will result in very weak results and will not allow to achieve the set targets.

The system of economic planning requires serious improvements in the methodology and the methods of strategic management, which is especially important in the development of competitive industrial production. Otherwise we are in a situation, where business is satisfied, but there are no results in the form of improvement of national economic competitiveness.

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