

# *Stimulating regulatory environment for new industrialization*

Rakmeeva I.I.

Department of regional and municipal economy and management  
Ural State University of Economics (USUE)  
Ekaterinburg, Russia  
Smartreg66@gmail.com

**Abstract** — State regulation is critical factor to the formation of a new type of economy. In the context of the global transition to the fifth and sixth technological structures for Russia in order to ensure long-term economic growth, the creation of a regulatory environment that can stimulate the new industrialization, primarily in traditionally developed industrial areas, has special importance. The Ural macroregion with its high level of industrial, transport, logistics and intellectual potential could be such territory.

The study reveals the application of methods of legal impact on the economy in relation to the new industrialization at the regional level, describes their characteristics and level of administrative burden. Based on the division of competency between the levels of government provided by the Federal structure of the country, the possibility and necessity of taking into account regional aspects in the formation of the regulatory environment of the region is approved in the article. The key aspects of the new industrialization of the territory for accounting in the formation of the regional regulatory environment are systematized. Among them, author highlights the competent spatial placement of advanced industries that can ensure the formation of continuous chain education-science-technology-production-market as a key aspect.

**Keywords** — regional regulation; regulatory environment; new industrialization; state regulation of industrialization; regional economic growth

## I. INTRODUCTION

Discussions about the necessity for state intervention in economic activity (from classical liberalism through Keynesianism to the ideas of social market economy and the theory of public choice) have moved to the setting of the importance of state regulation and the search for the optimality of its volume to the end of the 20th century. Moreover, it should be noted that the economic rise in the economies of individual States (Singapore, Japan and China's "economic miracle") is inextricably linked to the change of political course and targeted economic policy. The opposite is similarly, because even Adam Smith wrote: "Great Nations are never impoverished because of the extravagance and imprudence of individuals, but they often

get poorer as a result of the extravagance and imprudence of the government" [1, p. 482]. This dependence is also observed in the study of rises and failures of industrialization in various countries and their regions (Y.P. Silin, Y.G. Animitsa, N.V. Novikova [2, p. 685], O.A. Romanova [3]).

The objective expression of state regulation of the economy is the regulatory environment. Thus, the purpose of the study is to identify the key features of the regulatory environment in the region that can generate and accelerate the processes of the new industrialization.

The object of the study is the regulatory environment of the region, and the subject – its aspects that provide and accelerate the new industrialization.

## II. REGULATORY ENVIRONMENT IN THE FOCUS OF RESEARCH OF NEW INDUSTRIALIZATION

New industrialization is an objective process observed in the formation and development of a new technological structure in the world<sup>1</sup>. It is important to keep up with global trends and overcome the growing technological gap to maintain and escalating Russia's economic position.

The locomotives of the new industrialization of the country, of course, are the regions that traditionally have a high industrial potential and the level of urbanization. The list of such regions includes the regions of the Ural microregion. That fact determines their choice as a polygon for this study.

Researches of the industrial revolution and the new industrialization are mainly concentrated at the national level (S.D. Bodrunov, S.Yu. Glazyev, S.S. Gubanov, V.M. Kulkov, K. Shvab, O.S. Suharev, J.M. Quigley). At the same time, attention to this issue of the schools of

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<sup>1</sup> Various concepts are used in the scientific literature at present (for example, "reindustrialization", "new industrialization", "neoindustrialization"). They are similar in content. The author of this article uses the term "new industrialization", the essence of which is revealed in the works of S.D. Bodrunov [4] and Y.P. Silin, Y.G. Animitsa, N.V. Novikova [2]

regional studies is increased. A significant contribution in this direction was made by the Ural school (V.V. Akberdina, Y.G. Animitsa, N.V. Novikova, O.A. Romanova, Y.P. Silin, A.I. Tatarin). Most of these researchers point to the important, and often dominant, role of the institutional environment and state intervention in the formation of the new industrialization. However, the issue of state regulation of the new industrialization at the regional level, which is at the junction of regional and institutional economy, theories of economic growth and innovative development, remains little investigated. Moreover, given the high degree of differentiation of Russian regions and their specificity, it is necessary to search for original solutions and radical rethinking of regulatory approaches used in other countries or at the national level for their successful transplantation. All that make the research topic relevant.

### III. METHODS OF REGIONAL REGULATION OF NEW INDUSTRIALIZATION

The regulatory environment of the region is a system of norms that determine the conditions for business and investment activities in the region. It is aimed at ensuring the socio-economic development of the territory. The norms that form the regulatory environment have a legal impact on the economy and the processes of the new industrialization.

Let's consider application of the adopted approach to the methods of legal impact on the economy (A.I. Tatarin [5], Yu.A. Tikhomirov [6]) directly to the support of the new industrialization at the regional level.

The first group of methods involves the establishment of general rules of economic activity and legalizing rules for the implementation of certain activities. It also entails the following block of control, inspection and accounting (related to the submission of reports) rules, implying in particular the right of the authorities to restrict and suspend the activities of entrepreneurs, to apply sanctions. The third group includes methods of normative and quantitative measurement, including standards, tariffs, taxes, etc.

These methods of regulation have the strongest regulatory impact and entail binding costs of administrative and financial resources of businessmen. At the same time, if such "additional costs are lower than the potential benefits of entrepreneurs, it gives stimulus to economic growth. The reverse situation leads to a decrease in the profitability of entrepreneurs and, as a result, to a decrease in their activity in the economy" [7].

Measures of control and supervision of business activities entails the highest level of administrative pressure and burden in Russia. On the one hand, it is necessary to reduce administrative barriers and costs of already high-cost innovative production to provide the development of entrepreneurship in the required directions. On the other hand, the establishment of certain restrictions and mandatory requirements, primarily affecting environmental safety, can form a minimum level of application of modern technologies, forcing technologically obsolete production to

modernize. It also corresponds to the ideology of "technology ecology", or eco-industrial development [8, 9].

The following group of methods is related to the adoption of strategic and policy documents (from general strategies of socio-economic development and targeted programs to the general plans of the territory). These acts create a common channel for the development of the economy and society. The scientific community recognizes their exceptional importance. Key national strategies of developed countries are focused on the transition to the new industrialization at present ("For European Industrial Renaissance" in the European Union, "Platform of Industry 4.0" in Germany, "Smart Factory" in the Netherlands, "Usine du Futur" in France, "High Value manufacturing Catapult" in the UK, "Fabbrica del Futuro" in Italy, "Made Different" in Belgium, "Made in China" in China, "Monozukuri" in Japan, "Industrial Internet Consortium" in the United States). Russian national strategic documents (long-term socio-economic development strategy, national technology initiative and relevant roadmaps, Federal law "About industrial policy in the Russian Federation", etc.) also contain elements of the transition to an innovative way of development, the spread of a new technological structure and informatization. Regional strategic documents, as a rule, are developed within the Federal framework, without taking into account the real potential of the territories.

However, the power of enforcement as a property of law for strategic documents is uncertain. It is shown, for example, in the failure of the Strategy-2020 in Russia and sub-national similar strategies.

The last group of methods is stimulation of the level of activity. This group includes, for example, loans, benefits, subsidies, public procurement, etc. Such methods do not incur administrative costs for entrepreneurs. But they can become effective only with proper allocation of budget funds. I.K. Shevchenko noticed that in Russian practice "subsidies and tax incentives are often provided in a passive form, and not on a selective basis" [10, p. 108]. It means that the principle of supporting efficient industries for the new industrialization is not implemented.

### IV. ASPECTS OF NEW INDUSTRIALIZATION FOR REGIONAL REGULATION

The academician of the Russian Academy of Sciences has rightly noted that "the state-legal regulator only then turns from a potential into a real economic... benefit, when in fact it directs the functioning of the regulated process or relation in the direction of satisfaction of the social needs of the development" [11].

First of all, the new industrialization is the new technologies. So, the author agrees with the statement of the E.V. Popov and the K. Hercegova that "the susceptibility of institutions to new requests is a very important aspect of the success of innovations" [12]. Authorities should be sensitive to the challenges and trends emerging in the global economic space and within the territory while they are forming of regulatory policy. At the same time, the Federal

structure of Russia and the fixed in the Constitution division of competency between the levels of government allow regional authorities to take into account local features in the process of generating regulatory legal acts.

What aspects of the new industrialization of the territory should appear in the acts that form the regional regulatory environment for its successful implementation?

1) Which key technologies are supported?

It is a widely accepted point of view on the exhaustion of the potential of commodity-based economy for economic growth, while “almost limitless opportunities for economic growth at the expense of the manufacturing industry for the most part underutilized” [10, p. 106]. The technology of the fifth technological mode and the growing power of the sixth technological mode, namely, biotechnology and nanotechnology, are the basis of the new industrialization in Russia [13, 14]. In addition, the new industrialization is a combination of the development of new industries with the modernization of traditional ones.

Therefore, support of high-tech competitive industries in such areas as the defense industry, heavy engineering (primarily metallurgical and mining and processing), energy and oil and gas engineering, integrated use of raw materials (including processing of man-made waste), pharmaceuticals, nuclear industry, etc., and the use of new technologies such as structural, packaging and nanomaterials with predetermined properties, additive technologies, nuclear medicine, robotics, Internet of things and big data become key for the Ural microregion [3].

2) Spatial distribution and logistics.

As noted earlier, regional authorities often do not take regional aspects into account when drafting strategic documents. “Numerous strategies of socio-economic development of the country and its regions suffer from fundamental incompleteness — they do not include the spatial dimension of the organization of productive forces in the foreseeable future” [2, p. 684].

The regions of the Ural macroregion traditionally have a high industrial potential, a well-developed logistics network, and act as transport hubs. These factors are key strengths in terms of spatial aspects to be taken into account in forming the regulatory environment.

The produce and development of transport corridors will always remain the prerogative of the state, and it is impossible to sell products and effective interaction of industrial enterprises involved in a single technological production chain without a developed transport and logistics network.

When planning the location and development of production of new industrialization, attention should be paid, on the one hand, to the already existing and emerging growth poles - territories of advanced development, nuclear cities, clusters, urban agglomerations of cities-millionaires (Yekaterinburg, Chelyabinsk, Perm, Ufa), on the other hand, to single-industry towns in dire need of new industrialization for recovery.

3) Focus on import substitution and export.

The application of the technology import strategy in the short term can contribute to the development of innovative potential of the economy through the absorption of new technologies, their introduction into production processes, the adoption of best management practices (example of China). But in the long term, such a strategy can not ensure economic growth, so a transition to the development and expanded reproduction of the full cycle of “science–production” with reducing the share of imports of new technologies and knowledge is required [10, p. 106]. Such a transition has not yet been implemented in Russia. Thus, in metallurgical production (key for the Ural macroregion) “the share of enterprises using the borrowing strategy is 92.4% in 2014, which is 18.6% higher than in 2006” [10, p. 114].

The intellectual potential of the Ural macroregion makes it possible to make this transition today, but it should be noted the tendency to its decrease.

4) Improving policy credibility and “neoliberalization of government”.

Years of experience of variability and instability of the regulatory environment, non-compliance with key strategic documents led to Russian entrepreneurs’ distrust of authorities, and hence the lack of coherence of political and private goals.

The digitalization of public administration, the introduction of platform solutions, modern management technologies and interaction with business and citizens form an additional demand for modern technologies within the country and the region and outline the practical orientation of the government on the course of the new industrialization. At the same time, O.A. Romanova points out that economic and political institutions of inclusive development [16] should play a dominant role in the new world economic structure and processes of the new industrialization in the regions to harmonization of “social and personal relations with the unconditional principle of behavior, which prescribes the combination of individual behavior with the requirements of social well-being [3, p. 285].

1) Support and development of human capital

We are talking about intellectual development and the provision of a new level of health care. For example, the experience of the USA is interesting. The increase of brain activity of the American residents is at the forefront in the field of health care. “According to experts, new health systems will be created within 10-15 years, that allows to restructure the economy and include the “silver age economy” as a productive part of economy. The Strategy of scientific and technological development of the Russian Federation until 2035 also notes the need to create a new quality of life for the elderly and solve the problem of active longevity” [3, p. 285]., Centers for early development of children and adolescents are actively forming in Russia and the Ural microregion. They impart modern competencies and skills in the field of robotics and biotechnology. However, single measures aimed at child prodigy or

prosperous categories of citizens, have little effectiveness without creating a comprehensive public education system that allows for continuous intellectual development “from the cradle” to old age, accessible to all segments of the population.

## V. CONCLUSION

The Ural macroregion with its high level of industrial and intellectual potential can become the center of the new industrialization of the country aimed at the transition to an innovative path of development on the basis of the fifth and sixth technological modes. It is necessary to create appropriate conditions, primarily of an institutional nature, to do this.

The aspects of state regulation of the new industrialization at the regional level are considered in the article.

The author reveals the application of the methods of the right impact on the economy in relation to the new industrialization at the regional level from the norms establishing the rules and requirements for the implementation of economic activities, bearing the maximum administrative burden, to the norms of strategic nature and financial support measures designed to stimulate and guide the development of the economy in the necessary technological direction.

Based on the division of competency between the levels of government provided by the Federal structure of the country, the possibility and necessity of taking into account regional aspects in the formation of the regulatory environment of the region is approved in the article. The author systematized the key aspects of the new industrialization of the territory, which, in his opinion, should be taken into account in the legal acts that form the regional regulatory environment: key technologies and industries, focus on export and import substitution, “neoliberalization of public administration”, the use of modern approaches to the development of human capital are among such aspects. From the point of view of the regional economy, a key factor in the successful development of the new industrialization is the competent spatial placement of advanced industries that can ensure the formation of continuous chains of education-science-technology-production-market.

Taking into account in forming of the regulatory environment such strengths of the regions of the Ural macroregion as high industrial, transport and logistics potential, the presence of a wide number of technological growth poles can accelerate the processes of new industrialization of the territory and long-term economic growth.

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