

Regional aspects of industrialization of the economic system of the Russian Federation

Vladimir Kovarda

Department of Customs Affairs and Global Economics
Southwest State University
Kursk, Russia

Abstract— The paper analyzes statistical data which characterize the level of industrialization of the Russian economy compared to that in other countries: GDP growth rate and gross fixed capital formation increase rate. Moreover, changes in occupational pattern in regards to areas of economic activity.

Analysis results allow justification of necessity for the development of the industrialization process, classification of main causes of industrialization lag between Russia and other countries, including lack of elaborated regional industrial development policy.

The paper describes main mechanisms of stimulating regional industrial development emphasizing the advantages of territories with special legal status where there are special preferences for business.

In conclusion, the paper notes the necessity of complex industrial development policy and state regional policy to re-industrialize and put constituent territories of the Russian Federation into alignment in terms of social and economic development, and China's experience is interesting in such a context.

Keywords— *region, regional development, industrialization, re-industrialization, economic potential*

I. INTRODUCTION

Nowadays, industrialization of economic systems is the most important growth driver and guarantee of economic security of any country. New industrialization step based on sustainable development and energy saving principles is in progress, R&D intensity and human potential quality are critical to the competitiveness of a national economy. Only countries with favorable conditions for scientific and technical progress can win the global competition.

A.I. Tatarkin and O.A. Romanova [1] justify ephemerality of postindustrial economy as a principal trend of

global economic development using evidence from USA and UK, where an active transfer of manufacturing into developing countries resulted in significant decrease in a role of real economy, and note the necessity of implementation of new industrialization policy.

V.L. Inozemtsev [2] notes that postindustrial societies accentuate service area. It grew out excessively and its products became very overrated. Under the conditions of globalization, goods and services which can't be provided globally became the most expensive ones. All while, developed countries became for developing ones not only providers of goods and technologies but providers of symbolic values and financial services. Finally, in the 1990s, the postindustrial world produced not unlimited wealth but a prerequisite for it. It created technologies to push back the limits drastically, but didn't use them – it transferred them to other countries and became service economy and financial center. This de-industrialization changed the global economic configuration: the postindustrial world used only a thousandth part of its creations.

II. NEW INDUSTRIALIZATION

Spasskaya [3] noted that the new industrialization can be an effective alternative to existing economic policies, which will create high performance and competitive Russian economy based on real values and with high potential for innovation.

However, now the lag between Russia and BRICS countries as well as some other countries (e. g., Turkey) in terms of production rate is obvious, as evidenced by the data presented in Table 1 which shows the dynamics of GDP at constant prices, both in general and per capita.

TABLE I. GROWTH RATE OF GROSS DOMESTIC PRODUCT (AT CONSTANT PRICES) [4]

	<i>Total</i>				<i>Per capita</i>				<i>Total</i>	<i>Per capita</i>
	2010	2014	2015	2016	2010	2014	2015	2016	2016/ 2010	2016/ 2010
Russia	119	106.3	103.3	100.3	119.6	104	100.8	100.4	84.29	83.95
<i>Brazil</i>	125	137	131	127	117	124	118	113	101.60	96.58
India	149	192	207	221	139	170	182	192	148.32	138.13
China	170	233	249	266	167	223	237	252	156.47	150.90
<i>The Republic of South Africa</i>	117	128	130	130	109	113	112	111	111.11	101.83
<i>Germany</i>	106	113	115	117	107	115	117	118	110.38	110.28
<i>Mexico</i>	110	123	127	130	103	110	112	114	118.18	110.68
<i>Norway</i>	105	112	114	115	99	101	102	102	109.52	103.03
<i>The Republic of Korea</i>	122	138	142	146	119	132	135	138	119.67	115.97
<i>USA</i>	104	112	115	117	99	104	106	107	112.50	108.08
Turkey	117	156	165	170	116	146	153	156	145.30	134.48
<i>Japan</i>	100.5	104	106	107	100.2	105	106	107	106.47	106.79

Table 1 shows that Mexico, Germany, China and India, and a number of countries increase the volume of production despite the crises in the global economy. In Russia, GDP growth rate had tended to decrease since 2010, which increases the gap between Russia and newly industrializing countries.

Additional confirmation of the above is gross fixed capital formation increase rate in Russia which is lag far behind that in advanced newly industrializing countries (Table 2) despite the overall positive dynamics (growing).

TABLE II. GROSS FIXED CAPITAL FORMATION INCREASE RATE (AT CONSTANT PRICES)

	2010	2014	2015	2016	2015/2010, %
Russia	143	163	147	144	102.8
<i>Brazil</i>	155	160	137	...	88.4
India	170	210	217	...	127.6
China	193	268	286	...	148.2
<i>The Republic of South Africa</i>	129	152	156	150	120.9
Germany	108	117	119	122	110.2
Mexico	111	127	133	...	119.8
Norway	107	131	126	126	117.8
<i>The Republic of Korea</i>	114	122	127	...	111.4
<i>USA</i>	84	99.9	104	104	123.8
Turkey	115	176	192	...	167.0
<i>Japan</i>	87	95	95	...	109.2

In addition to the above and for further confirmation of the de-industrialization of Russia, please refer Table 3. 2000 through 2016, the share of employment in manufacturing declined from 19.1% to 14.2%, in education - from 9.3% to 7.7%, in agriculture and forestry - from 13.9% to 7.5%, in research and development - from 1.9% to 1.3%. On the

contrary, employment increases in the service sector. E.g. in wholesale and retail trade, repair of motor vehicles, motorcycles, household products and items for personal use, percentage of the average number of employees has increased from 13.7% in 2000 to 18.9% in 2016, in operations with the real estate, rent and services - from 7% to 9.9%, and so on.

A decline in the proportion of real sector workers, in part, can be justified by the change in technology, resulting in increased productivity. However, according to the data of Rosstat, capital investments in the real sector of the economy

practically didn't change and sometimes had a negative trend (e.g., in manufacturing production, investments were 2084.6, 2172.6, 2123.7 billion rubles at actual prices in 2014, 2015, 2016, respectively).

TABLE III. AVERAGE ANNUAL NUMBER OF EMPLOYEES BY LINES OF BUSINESS

	2000	2010	2014	2015	2016	2016/2010	2016/2000
	As a percentage of the total						
Total	100	100	100	100	100		
including the following lines of business:							
agriculture, hunting, and forestry	13.9	9.8	9.2	7.5	7.5	76.53	53.96
fishing, fish farming	0.2	0.2	0.2	0.2	0.2	100.0	100.0
mining	1.7	1.6	1.6	1.5	1.6	100.0	94.12
manufacturing	19.1	15.2	14.6	14.2	14.2	93.42	74.35
Production and distribution of electricity, gas, and water	2.9	2.9	2.8	2.7	2.8	96.55	96.55
construction	6.7	8	8.4	8.8	8.6	107.5	128.4
Wholesale and retail trade; repair of vehicles, motorcycles, household products, and items for personal use	13.7	17.9	18.7	18.9	18.9	105.6	138
hotels and restaurants	1.5	1.8	1.9	2.2	2.3	127.8	153.3
transport and communications	7.8	7.9	8	8.2	8.3	105.1	106.4
finances	1	1.7	1.9	2	2	117.7	200.0
operations with real estate, rent, and services	7	8	8.7	9.9	9.9	123.8	141.4
research and development	1.9	1.3	1.3	1.2	1.3	100.0	68.42
State management and defense; social insurance	4.8	5.8	5.5	5.2	5.2	89.66	108.3
education	9.3	8.7	8.1	7.7	7.7	88.51	82.80
healthcare and social services	6.8	6.8	6.6	6.4	6.4	94.12	94.12
other public, social and personal services	3.6	3.7	3.7	4.3	4.4	118.9	122.2

Thus, contrasted with the industrialization of the world economies (China, India, Mexico, Germany), Russia continues the process of de-industrialization. However, Russian government authorities attempt to develop new high-tech industries, but this process is episodic in nature and not acquired systemic nature.

The main causes of re-industrialization lag are presented in Fig. 1. These causes can be notionally divided into external and internal ones.

External causes are due to the behavior of Russia's foreign counterparties which are interested in maintaining the status of Russia as a supplier of resources for economically developed and rapidly developing countries as well as the marketing outlet for industrial products and agricultural products from these countries.

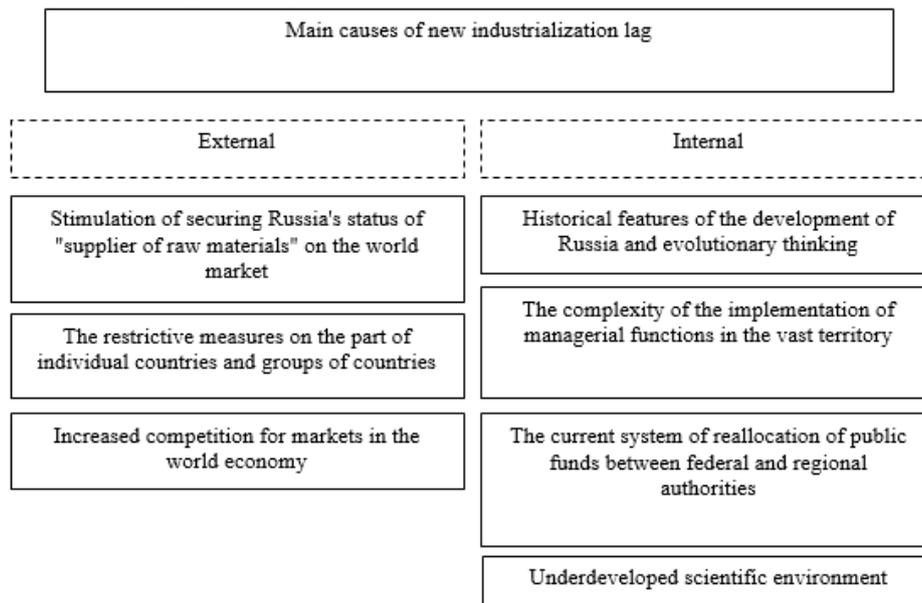


Figure 1. Main causes of re-industrialization lag

Sanctions against Russia exacerbate these external causes, resulting in limited access of some of the major Russian companies to foreign technologies and financial resources.

Internal reasons include the changes in the Russian economy which are sometimes revolutionary because the country became industrialized very fast then gradually lost the scientific potential of a number of industries (except space, military and nuclear) gradually turning to the export of raw material products as the main source of income. Thereat, some believe that Russia retained the industrial potential of the USSR which can be returned promptly. It should be noted that it is nothing near so because the Soviet equipment is obsolete and worn-out as well as energy-intensive and may not comply with the requirements of environmental safety. As a result, on the foundation of the economic potential of the past years, it is impossible to fully implement the policy of re-industrialization of Russia's economy which requires investment and human resources as the main component of the development and consumption of innovative products.

Furthermore, a large territory is both advantage and the source of additional requirements for effective management which is comprehensively formulated in the state regional policy. Region income redistribution system draws particular attention. On the one hand, some subsidized regions can be self-sufficient if income redistribution will be not the same as the current one. On the other hand, the government developed mechanisms allowing constituent entities of the Russian Federation to implement regional social and economic

development program based on stimulating the growth of the real sector of the economy.

Belomestnov [5] notes that industrialization is one of the main mechanisms of accelerated regional development. However, the endogenous nature of economic growth, feedback, and lagged dependences should be taken into account at the regional level [6].

So, the latter of the above reasons are related to the regional policies of the federal government of Russia.

Decree No. 13 "On the Approval of the Fundamentals of the State Policy of Regional Development of the Russian Federation for the Period until 2025" of the President of the Russian Federation d/d January 16, 2017 formulates the fundamentals of the state policy of regional development [7]. This regulation notes that the state policy in the field of regional development is implemented in accordance with the following principles: a differentiated approach to implementation of state support of regions and municipal units depending on their social, economic and geographic features and securing sustained economic growth and R&D, increasing competitiveness on international markets.

It also notes the necessity for an increase in regions' autonomy. Within the framework of improvement of stimulating constituent entities of the Russian Federation and municipal units, it is planned to create additional stimuli to gain economic potential and increase autonomy in terms of choices of leverages using targeted inter-budget transfers. Among the main mechanisms, there are the mechanisms listed in Fig. 2.

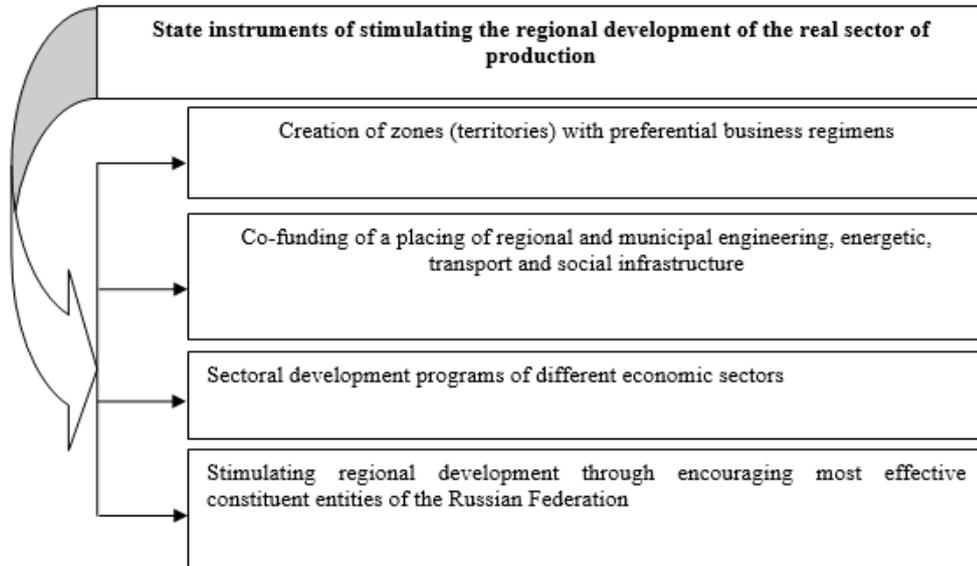


Figure 2. State instruments of stimulating the regional development of the real sector of production

Creation of the territories with special legal status implies formation of such territories under the Federal Law No. 116-FZ "On Special Economic Zones in the Russian Federation" d/d July 22, 2005 and the Federal Law No. 473-FZ "On priority social and economic development areas in the Russian Federation" d/d December 29, 2014.

" Tgulf gpw'qh'uwej 'vgttkqtkgu'j cxg'c'pwo dgt'qh'dgpgkku' cpf " r tghgtgpegu" y j lej " ecp" dg" r tguqpvf " cu" vj g" uej go g" cu" gzgo r nkgf "d{ "RUGFC"05+"; : 0

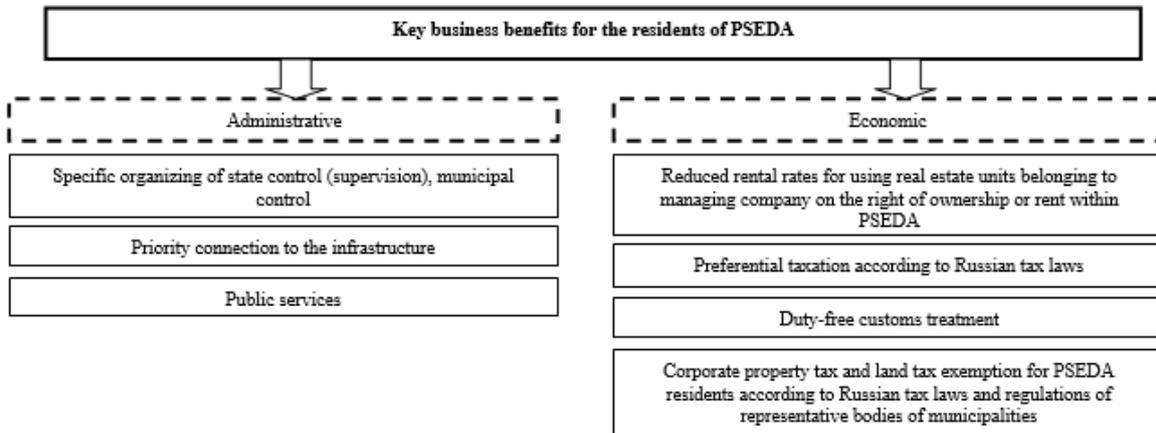


Figure 3. Key business benefits for the residents of priority social and economic development areas (PSEDA)

There are the following preferences for special economic zones (Table 4).

TABLE IV. MAIN FEATURES OF CONDUCTING A BUSINESS IN RUSSIA ON THE USUAL TERMS AND IN SPECIAL ECONOMIC ZONES (SEZ)

	Russia	Special economic zone (SEZ)	Validity
Profit tax, %	20	0-15.5	Till SEZ is valid
Property tax, %	2.2	0	10 yrs
Land tax, %	1.5	0	5 yrs (10 yrs)
Transport tax (euro/h.p.)	0.1-3.5	0	10 yrs
Social taxes and payments, %	30	21	till 01.01.2019
		28	till 01.01.2020
Land acquisition cost	100% of market price	4-50% of land cadastral value	Till SEZ is valid

Also, SEZ residents can apply duty-free customs treatment to the goods imported into EEU resulting in saving of 30% of the value of imported goods.

Sectoral programs of economic development can be exemplified by the state program No. 328 "The development of industry and increase in its competitiveness" d/d April 15, 2014, as well as the Order No. 96 of the Ministry of Communications on approval of the plan for import substitution for software" d/d February 1, 2015.

Promoting regional development through the promotion of most effective constituent entities of the Russian Federation is especially stated by the RF Government Regulation No. 472 "On the implementation of the measures for the administration of state policy in the field of evaluation of the effectiveness of the activities of the executive authorities of constituent entities of the Russian Federation..." d/d April 19, 2018. This regulation states that 40 constituent entities of the Russian Federation depending on their effectiveness and economic (tax) potential increase rate will be funded with grants proportionally to their ratings [9, 10]. Thus, the government tries to stimulate the development of regions, encouraging 40 out of the 85 constituent entities of the Russian Federation.

In conclusion, it should be noted that currently the regional policy is structured by management level but vaguely limited in terms of complex approach and economic development strategy in view of industrialization. Distribution into large macro-regions proposed by the Ministry of Economic Development of the Russian Federation or under the principle of federal districts make sense only in the case of united systemic approach to industrial development, and integration of highly urbanized and industrially developed cities and underdeveloped provinces in China would be an example.

References

- [1] Tatarkin A.I., Romanova O.A. (2013). *On the possibilities and the mechanism of the neoindustrialization of old industrial regions*, Economist, No. 1, p. 21-38.
- [2] Inozemtsev V.L. (2011). *The Re-establishment of the industrial world*, Russia in global politics.
- [3] Spasskaya N.V. (2015). *Possibilities of Russia's economy industrialization in the context of modern regional policy*, Vestnik Permskogo universiteta. Seria Ekonomika = Perm University Herald. Economy, No. 2(25), p. 89–98.
- [4] Russian statistics yearbook. Rosstat. [Electronic source]. Retrieved from <http://www.gks.ru>
- [5] Belomestnov V.G., Yabzhanova T.G. (2015). *The industrialization of the economy as a basis for the accelerated regional development*, Bulletin of ZabGU, No.11 (126), p. 73-78.
- [6] Isaev A.G. (2018). *Regional aspects of investment processes: an empirical analysis of the distribution of capital resources in the Far Eastern Federal District*. Economic and Social Changes: Facts, Trends, Forecast, Vol. 11, No. 4, pp. 63-76. DOI: 10.15838/esc.2018.4.58.4
- [7] Decree No. 13 (2017). On the Approval of the Fundamentals of the State Policy of Regional Development of the Russian Federation for the Period until 2025 of the President of the Russian Federation d/d January 16. [Electronic source]. Retrieved from http://www.consultant.ru/document/cons_doc_LAW_210967/
- [8] Kovarda V.V. (2018). *Analysis of possibilities of increasing autonomy of regional authorities regarding the issues of the social and economic development of the territories*, Financial Economics, No. 5. p. 61-67.
- [9] Decree No. 548 (2017). About efficiency evaluation of activities of executive bodies of subjects of the Russian Federation of the President of the Russian Federation d/d November 14, [Electronic source]. Retrieved from http://www.consultant.ru/document/cons_doc_LAW_282702/
- [10] RF Government Regulation No. 472 (2018). On the implementation of the measures for the administration of state policy in the field of evaluation of the effectiveness of the activities of the executive authorities of constituent entities of the Russian Federation... d/d April 19, [Electronic source]. Retrieved from http://www.consultant.ru/document/cons_doc_LAW_296443/