Program-Based Approach to the Industrial Policy Implementation in the Russian Far East: Efficiency and Limitations

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Abstract. The article analyzes the issues of industrial policy development in the Russian Far East. The development projects and programs implemented in the Far East region are reviewed. The works of Russian and foreign academics examining the project-oriented, program-based, and system approaches to the industrial policy implementation served as a theoretical background. The research methodology is based on the systematization of factors, measures and instruments enabling an assessment of the nature and probability of achieving the main results, as well as the potential consequences of applying various approaches to the industrial policy implementation in the Russian Far East. The conditions of the industrial policy implementation are analyzed. The effects of various approaches on the industrial capacity building in the Far Eastern region are specified. Priority focus of various approaches to the industrial policy implementation in the Russian Far East are defined, their means of accounting for the region-specific factors is determined. It was established that the industrial policy of the Russian Far East is limited to several key export orientation areas.

1. Introduction
Under present-day conditions of continuous transformation and search for new ways to develop economic relations, there arises a need to create novel projects for regional development. The fact that the Russian Far East has been declared the main geographical platform for the cooperation with the Asia-Pacific region resulted in the need to introduce certain systemic changes and to invest heavily in industry development assisted by new techniques.

The issues of the industrial policy development have received much attention in scientific and applied research [1-12]. The Far East is characterized by inconsistent industrial development. On the one hand, there are great logistic expenses associated with a scarce number of component suppliers in the region, which militates against the overall multiplicative effect for the economy. On the other hand, the financial result is not the only thing important. It is necessary to expand the competencies and develop high-technology production with high added value. To this end, unique facilities are being built in the region (Vostochny Cosmodrome, Far Eastern Federal University) and special environment is created to ease administrative and tax barriers.

2. Problem statement
The article examines the following subjects: economic development programs implemented in the Far East and Transbaikal of the Russian Federation. The research methodology is based on the

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systematization of the following: factors that enable an assessment of the nature and probability of achieving the main program-based indicators of economic growth; potential consequences and efficiency of measures in favor of fixed capital investment, and of various strategies and instruments of the industrial policy implementation in the Far East.

3. Findings

One of the first documents produced to support the development of the Far Eastern region was the state plan for the Far Eastern Republic development for the period of 1925-1935. The main targets of this document were to compose the Pacific Fleet and to form a commercial and strategic base in Petropavlovsk-Kamchatsky.

The plan implied a 245 million rub investment of which 20% was to be allocated to industry modernization, another 20% – to land settlement and development of agriculture, and the remaining 60% was to be allocated to the construction of the transport infrastructure (construction of ports, Amur Railway, roads) [12, p. 7]. The implementation of this development plan contributed to the creation of favorable conditions for the Pacific Fleet development and lead to an almost twofold increase in the GRP compared with the period of the development plan initiation.

In 1987, the State Planning Committee of the USSR enacted a comprehensive program for the Far East reclamation, referred to as the Long-Term State Program for the Overall Development of the Production Forces of the Far Eastern Economic Region, Buryat Autonomous Soviet Socialist Republic and the Chita Region for the Period up to 2000 [13]. The main targets of this program were as follows: priority economic and social development of the region based on the increase of natural resources development, construction and modernization of processing enterprises and energy infrastructure facilities. A threefold increase in exports to the Asia-Pacific countries was essentially unachieved. In 1996, a new development target program, Economic and Social Development of the Far East and Transbaikal in 1996-2005, was adopted [15]. The target of this program was economic stabilization based on the natural resources development and export. The volume of expenses related to the program implementation reached 88,430 million rub (at 2002 values). At this stage, the industrial policy focus was to provide direct support and benefits to the industrial production sector regardless of industry affiliation. The main industrial policy instruments were leasing, nontax privileges and tax relief schemes, government guarantees and financial aid mechanisms, including non-resource export support.

However, the two mentioned programs of the Far East development were inefficient. Over a period of 1987-1995, there was no inflow of investments; a drop in industrial output was 84.3% and intensified over the next five years reaching 86%. The most significant decline was in the processing industry with a 23.7% decrease between 1987 and 1995, and 24.6% decrease in the next 5 years. Together, the disinvestment in the Far Eastern economy and production decline over the period of 1987-2001 led to the GRP reduction by 12% and a shrinkage of international trade by 19.5%, which was accompanied by a rapid out migration and degradation of the demographic situation, whereby the population decline was over 1 million people.

In 2002, this program for the Far East and Transbaikal development was extended until 2010 and was renamed as Economic and Social Development of the Far East and Transbaikal in 1996-2005 and up to 2010 [17]. The industrial policy of this period underwent substantial transformation since new support instruments became available, such as the public private partnership instruments, which were especially important. The new industrial policy instruments were oriented towards a more efficient distribution of financing and improvement of labor efficiency and the industrial production quality. For the purpose of attracting new investors, creating a favorable environment for the industry-related business development, implementing innovation-based programs, releasing new industrial and high-technology products, special economic zones (SEZ) were created. Institutes for development were established to ensure financial and infrastructural support for the industry and investment. Following the implementation of this program the industrial sector of the Far East showed first signs of stabilization. The inflow of investment (an almost 10% increase over the period of 2002-2006)
reversed the downward trend in production, however, it did not stop the out migration, including brain drain.

At the end of 2007, a new federal target program, Economic and Social Development of the Far East and Transbaikal for the Period up to 2013 [18], was adopted, followed by the Strategy for the Socio-Economic Development of the Far East and Baikal Region for the Period up to 2025 [19]. These programs focused on supporting the investments into the Far Eastern economy development. The task of setting the stage for Russian monopolies of raw material to enter into new markets received a special status. The first program included three major subprograms: urban development of Vladivostok for the APEC Russia 2012 (project cost: 70% of the general program); establishment of a new resource base for export; construction of the main export network. The industrial policy was aimed at domestic demand generation. State procurement was implemented as a new support instrument. Upon that, such management functions used at the early stages as planning were reestablished, whereupon certain strategies along with medium-term and long-term development plans regained currency; new instruments for their implementation (roadmaps) were created. To stimulate the establishment of process-oriented industries, new institutes for development and financial aid were created, namely, engineering centers, business incubators, multipurpose centers, Russian Direct Investment Fund, and the Far East and Baikal Region Development Fund.

Throughout the program, the growth rate of fixed capital investment was in average 13.8% per annum. Between 2008 and 2012, the amount of public investment exceeded 380 billion rub, which was 76% of the total amount of federally funded capital investments. Active investment development in the Far East (gain in investment measured in volume exceeded 15%) led to an average annual growth of the GRP and industrial production by 2.5% and 10.3%, respectively. At the same time, the industrial production index reached 110.8%, this being its maximum growth over all the considered periods since 1987.

By early 2013, the main targets were achieved: facility complexes for the APEC Russia 2012 and a complex of infrastructure facilities ensuring transit to the Asia-Pacific countries were constructed. In the meantime, a significant increase in the cargo turnover volume carried by transport was registered: by the end of 2012, it had more than doubled against that of 2000.

Therefore, the established synergy of investment resources and instruments of support to industry and logistics investments, designed in the 2007-2012 program, ensured the achievement of its targets and shaped positive trends in the development of the Far Eastern industry and transport.

In 2013, to develop the obtained results of the Far Eastern economy growth further, two new programs were adopted: the target program, Economic and Social Development of the Far East and the Baikal Region for the Period up to 2018 [20], and the Russian Federation state-run program, Socio-Economic Development of the Far East and the Baikal Region [21]. A special emphasis was placed on transport infrastructure and logistics projects, above all else, the reconstruction of airports and roads, as well as the projects designed to improve the capacity of roads, ports and freight transit.

Development and establishment of forms and institutes for investment and business support created new instruments of industrial policy and investment support of business, and led to the application of new approaches to their use. Together, this ensured a systematization of the instrument portfolio construction to implement new forms and mechanisms of economic support of the Far East, primarily related to the investment into industrial development, construction and reconstruction of sustaining infrastructure facilities. Such portfolios include a broad range of support instruments and measures, rather than just a few, and include the following: infrastructure mortgage, PPP, GIIS, industrial Internet, state-run programs portal, new institutes for development, special investment contracts, regional development instruments (PDA, PSEDA, SEZ, industrial parks, regional SICs, regional FERs, industrial clusters, regional innovation clusters, a free port, regional guarantee organizations, regional institutes and support measures for SMEs and import substitution, etc.).

As a result, during the program implementation between 2014 and 2018, positive trends remained, however, their dynamics became substantially decelerated against the period of 2007-2012. The average annual increase in the GRP and fixed capital investment, as well as the industrial production
growth reached 0.7%, 0.9%, 2.8%, respectively, while the cargo turnover volume carried by transport decreased by an average of 0.2% between 2014 and 2017. A slowdown in the Far Eastern economy growth was accompanied by a significant decrease in the federal funding: during the period between 2014 and 2017, the volume of public investment was 93.4 billion rub, when the total investment amount was 141.7 billion rub.

4. Conclusion

Summing up, a complex of the subsequently developed programs did not retain the growth target of the industrial production and economic development set by the 2002-2012 programs. The program-specified development measures and instruments failed to ensure the expected investment performance in almost all production fields: the manufacturing and mining industries, production and distribution of electrical power, gas and water. At the same time, global financial and economic crises peaks, which lessened the influence of state-run programs for the Far Eastern economy development on the industrial sector growth, had a significant negative impact on reaching the program targets. This fact significantly diminished the efficiency of program measures and instruments of the Far Eastern economy development, reduced the return on investment associated with their implementation, and caused an irregular dynamics of the industrial sector rehabilitation and its slowdown in the last 5 years.

The implemented state-run programs did not help to remove the limitations of the efficient industry structuring and the promotion of the Far East economy in general. They supported, to a greater extent, capital raising from large monopolists focused on the development of the raw material economic sector, or companies involved in several key export areas. In addition, the central problems of the Far Eastern economy structure and its resourcing remained and even intensified. Here we mean a limited infrastructure and challenging logistics, the special aspects of the energy system and a lack of available financial and labor resources.

The search for new solutions to these problems continues. In June 2019, the National Program for the Development of the Far East up to 2025 and beyond up to 2035 [22] was designed. It is focused on the achievement of annual growth (up to 6%) with a breakdown into regional economies, assurance of competitiveness of the Far Eastern enterprises, and development of the transport infrastructure while increasing the capacity up to 210 million tons.

References

[1] Romanova O A, Ponomareva A O 2019 Theoretical, institutional and ethical foundations for the implementation of modern industrial policy Part I Economics of the region T 15 1 pp 13-28 DOI: 10.17059 / 2019-1-2
[2] Lau A K W, Lo W 2015 Regional innovation system, absorptive capacity and innovation performance: An empirical study Technological Forecasting and Social Change vol 92 pp 99–114 DOI: 10.1016 / j.techfore.2014.11.005
[3] Maslennikov M I 2017 Technological innovations and their impact on the economy Regional Economy T 13 4 pp 1221–1235 DOI: 10.17059 / 2017-4-20
[4] Ivanchenko O G, Ivanchenko E S, Titkova A Yu 2016 Tools to support the industrial and financial sectors of the economy in the conditions of its instability Power and management in the East of Russia 3(76) pp 41-51
[5] Ivanchenko O G, Ivanchenko E S 2017 Sources of financing for the development of the real economy Bulletin of the Pacific State University 3(46) pp 129-140
[6] Ivanchenko O G, Ivanchenko E S, Titkova A Yu 2018 The development of industrial policy instruments: the Far East vector Power and Management in the East of Russia 4(85) pp 50-61
[7] Simachev Yu V, Kuzyk M G, Pogrebnyak E 2018 Federal program policy: basic models and Russian practice Journal of the New Economic Association 3(39) pp 146-154 DOI: 10.31737 / 2221-2264-2018-39-3-8
[8] Minakir P A, Prokapalo O M 2018 Far Eastern priority: investment and institutional
combinations *Journal of the New Economic Association* 2(38) pp 146–155

[9] Leonov S N 2017 Instruments for the implementation of state regional policy in relation to the Russian Far East *Spatial Economic* 2 pp 41-67

[10] Dementiev V Ye 2019 The paradox of productivity in the regional dimension *Economics of the region* T 15 1 pp 43-56 DOI: 10.17059 / 2019-1-4

[11] Vorobyova I G, Valieva A Yu 2018 The impact of sanctions on industrial policy and the investment climate in Russia *Innovative technologies in mechanical engineering, education and the economy* vol 14 1-2 (7) pp 38-40

[12] Gamarnik Ya B 1925 Soviet colonization of the Far East *Economic life of the Far East* 9 p 7

[13] Resolution of the Central Committee of the CPSU Council of Ministers of the USSR of 08.19.1987 No. 958 “A long-term state program for the comprehensive development of the productive forces of the Far Eastern economic region. Buryat Autonomous Soviet Socialist Republic and the Chita Region for the period up to 2000” Consultant Plus Legislation. Non-commercial Internet version *Consultant Plus JSC* (M.)

[14] The All-Russian Population Census 2012 T 1 The number and distribution of the population Federal State Statistics Service http://www.gks.ru/ free_doc / new_site / perepis2010 / croc / perepis_itogil612.htm

[15] Decree of the Government of the Russian Federation of April 15, 1996 No. 480 “Economic and social development of the Far East and Transbaikalia for 1996-2005” Consultant Plus Legislation Non-commercial Internet version *Consultant Plus JSC* (M.)

[16] EMISS URL: https://fedstat.ru/

[17] Decree of the Government of the Russian Federation of March 19, 2002 No 169 “Economic and social development of the Far East and Transbaikalia for 1996-2005 and until 2010” Consultant Plus Legislation Non-commercial Internet version *Consultant Plus JSC* (M.)

[18] Decree of the Government of the Russian Federation of November 21, 2007 No 801 “Economic and social development of the Far East and Transbaikalia for the period until 2013” Consultant Plus Legislation Non-commercial Internet version *Consultant Plus JSC* (M.)

[19] Decree of the Government of the Russian Federation of December 28, 2009 No. 2094-r "Strategy for the socio-economic development of the Far East and the Baikal region for the period until 2025.” Consultant Plus. Legislation. Non-commercial Internet version *Consultant Plus JSC* (M.)

[20] Decree of the Government of the Russian Federation dated December 6 2013 No 1128 “Economic and social development of the Far East and the Baikal region for the period until 2018” Consultant Plus Legislation Non-commercial Internet version *Consultant Plus JSC* (M.)

[21] Decree of the Government of the Russian Federation of April 15, 2014 No 308 “Socio-economic development of the Far East and the Baikal region” (2014 edition) Consultant Plus Legislation Non-commercial Internet version *Consultant Plus JSC* (M.)

[22] The draft "National Program for the Development of the Far East until 2025 and for the future until 2035" Consultant Plus Legislation Non-commercial Internet version *Consultant Plus JSC* (M.)