National Support Programs for Single-Industry Towns Development in the Russia Federation: Retrospective Analysis of Efficiency

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Abstract. The priority of the balanced socio-economic development of single-industry towns for the economic policy of the Russian Federation explains the active usage by the Government of the Russian Federation of mechanisms for adapting single-industry towns to changes in the external environment, involving large-scale and systematic federal resource support, i.e. government programs. However, often the planned values of indicators of state programs for the socio-economic development of single-industry towns are formally formulated and do not allow judging the degree of achievement of their goals. The listed circumstances determine the need for scientific research, within the framework of which a retrospective analysis of the efficiency of state programs to support their development was carried out using the example of single-industry towns of the Chelyabinsk oblast of the Russian Federation.

The article presents the results of the study of target indicators system that allow to carry out a retrospective analysis of the efficiency of state programs to support the development of single-industry towns, and the results of testing the identified criteria for the program "Integrated development of single-industry towns in the Chelyabinsk oblast".

1. Introduction

1.1. The importance of the issue

The well-balanced socio-economic development of single-industry towns is one of the most important priorities of the Russian Federation economic policy in the long term. That is explained by the following significant issues:

- firstly, a tenth of the country’s population lives in towns of this type;
- secondly, the proportion of output of town-forming enterprises in the national GDP reaches 40.0% [3];
- thirdly, at the moment the number of single-industry towns is 319 units or 29.0% of the total number of towns in the Russian Federation [15];
- fourthly, modern realities demonstrate the specificity of the problems of single-industry towns, that is the remoteness from the main economic centers and underdeveloped transport infrastructure, high dependence of the budgets of municipalities on tax payments of town-forming enterprises, excessive environmental load on the territory where the town-forming enterprises are located, as well as the risks of their management [5].

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Significant values of indicators of the total number of single-industry towns, the population living in them, the product manufactured, as well as increased vulnerability to various kinds of shocks, which can cause a "domino effect", determine the active use by the Russian Federation Government since 2010 in the framework of anti-crisis actions of mechanisms of adaptability to changes in the external environment, involving large-scale and systematic federal resource support, i.e. state programs for the comprehensive socio-economic development of single-industry towns. In 2016, the priority program "Integrated development of single-industry towns" was developed, which was designed until 2025 and was aimed at reducing the dependence of towns of the indicated type on the activities of town-forming enterprises by creating new workplaces that are not related to the activities of town-forming enterprises, and, as a result, decrease in the number of single-industry towns. However, already in 2019, the operation of a key state program for the comprehensive socio-economic development of single-industry towns was finished before to the scheduled date due to its inefficiency.

The above circumstances determined the relevance and practical significance of scientific research, within the framework of which a retrospective analysis of the efficiency of state programs to support their development was carried out using the example of single-industry towns in the Chelyabinsk oblast of the Russian Federation. The rationality of the choice of the research site is determined by the region's leadership in the concentration of monotowns with a population of more than 20.0% of the total population of the territory. It should be noted that on the Chelyabinsk oblast territory at the moment, 16 municipalities have the status of a single-industry town, which are quite differentiated in terms of socio-economic development, 7 of them are attributed to the first category of single-industry towns with the most difficult socio-economic situation, 5 of them to single-industry towns, in which there are risks of deterioration of the socio-economic situation, and only 4 of them to single-industry towns with a stable economic situation (table 1) [14].

**Table 1.** Leading regions in terms of concentration of single-industry towns with a population of more than 20.0% of the total population of the territory.

| Constituent entity of the Russian Federation | Percentage of population in monotowns, % | Number of monotowns, units | Category 1. Monotowns with most difficult socio-economic situation | Category 2. Monotowns with risks of the socio-economic situation deterioration | Category 3. Monotowns with stable economic situation |
|--------------------------------------------|----------------------------------------|---------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------|
| Kemerovskaya oblast                        | 60.2                                   | 24                        | 9                                                             | 11                                                                              | 4                                                    |
| Chelyabinskaya oblast                      | 32.3                                   | 16                        | 7                                                             | 5                                                                               | 4                                                    |
| Volgodskaya oblast                         | 30.7                                   | 4                         | 3                                                             | 1                                                                               | -                                                   |
| Republic of Khakassia                      | 29.2                                   | 6                         | 2                                                             | 4                                                                               | -                                                   |
| Sverdlovskaya oblast                       | 28.9                                   | 17                        | 5                                                             | 6                                                                               | 6                                                    |
| Republic of Tatarstan                      | 26.7                                   | 7                         | 2                                                             | 4                                                                               | 1                                                    |
| Arkhangelskaya oblast                      | 25.3                                   | 7                         | 2                                                             | 3                                                                               | 2                                                    |
| Samarskaya Oblast                          | 24.5                                   | 2                         | 1                                                             | -                                                                               | 1                                                    |
| Republic of                              | 22.7                                   | 11                        | 6                                                             | 5                                                                               | -                                                   |
1.2. The extent of the problem elaboration

The publications on the research problem are presented, first of all, by scientific works reflecting the fundamental theoretical concepts of the formation of state support and diversification of Russian single-industry towns, increasing their investment attractiveness, employment and social partnership [9, 11, 12, 13, 18]. At the same time, it was revealed that to date, there are no publications devoted to reflecting the results of evaluating the efficiency of approbation of state programs for the integrated socio-economic development of single-industry towns.

Thus, while highly evaluating the results obtained in scientific research devoted to the problems of the functioning and development of monotowns (single-industry towns), we consider it necessary to note that there are still many aspects that require in-depth analysis, amendments and refinement.

2. Methods

In the system of target indicators that make it possible to carry out a retrospective analysis of the efficiency of the mechanisms used by the government to adapt single-industry towns to changes in the external environment, the developers of the priority program "Integrated Development of Single-Industry Towns", approved by the results of the meeting of the Presidium of the Council under the President of Russia for Strategic Development and priority projects on November 30, 2016, the following terms are proposed:

- the number of new workplaces created not related to the activities of the town-forming enterprise, in thousand units;
- the decrease in the number of municipalities belonging to single-industry towns;
- the volume of investments in fixed assets, in billion rubles;
- the lowering dependence of single-industry towns on the activities of town-forming enterprises by reducing the number of employees of town-forming enterprises, people.

It is curious that the idea of the “mono-town” category is revealed with the help of numerical characteristics, which at first glance seem formal, but they are important indicators of urban development. This kind of quantitative approach is discussed by E.G. Animitsa [1], G.I. Berdnikov [2], N.V. Gritskikh [6], L.V. Zdorovtsova and O.A. Kolesnikova [17], N.S. Ivashina and N.A. Ulyakina [7], V.V. Ruvinsky [10], D.Yu. Faykov [4], A.V. Yakimov [16] and others. In the definitions of the most influential representatives of the quantitative approach, the following are proposed as key criteria for the definition of monotowns:

- the proportion of the town-forming enterprise in the gross territorial product / industrial output of all enterprises of the municipality;
- the proportion of employment at the town-forming enterprise in the total employment of the economically active population of the territory;
- the proportion of tax revenues from the town-forming enterprise in the total amount of tax revenues of the municipal budget.

Despite the popularity of the quantitative approach in studying the problem of the development of single-industry towns, it has its drawbacks. The main disadvantages of the system of target indicators reflecting the efficiency of government programs to support the development of single-industry towns are the following:

- the complexity of establishing universal absolute threshold values of quantitative criteria for local or national scales and long time intervals;
- the use of predominantly absolute indicators in the absence of complex performance indicators, average per capita indicators, indices;
- ignoring the indicators of the level and quality of life of the population, the ecological situation, as well as indicators characterizing the level of management of a single-industry town.
It should be noted that at the very core of retrospective analysis of the results of the priority program implementation "Comprehensive development of single-industry towns" is, first of all, assessment of the dynamics of target indicators over time, the establishment of their absolute changes and growth rates:

- the absolute change in the indicator is calculated by the formula (1):
  \[ \Delta x = x_1 - x_0, \]
  where \( \Delta x \) - absolute change in target indicator;
  \( x_1 \) - indicator value in the reporting period;
  \( x_0 \) - indicator value in the base period.

- the growth rate of the indicator is calculated by the formula (2):
  \[ Tr(x) = \frac{x_1}{x_0}, \]
  where \( Tr(x) \) - target growth rate.

3. Results

A necessary condition for the success of the priority program "Comprehensive development of single-industry towns", approved at the meeting of the Presidium of the Council under the President of Russia for Strategic Development and Priority Projects on November 30, 2016, was the coordination of efforts of all interested parties - federal and regional authorities, as well as public involvement. The development of regional programs for the development of single-industry towns was recognized as a key tool for coordinating the efforts of all interested parties. In particular, the permanent collegial coordinating body under the Governor of the Chelyabinsk oblast - the Regional Strategic Committee proposed and approved on August 14, 2017 the program "Integrated development of single-industry towns in the Chelyabinsk oblast", which assumed:

- creation by the end of 2018 of at least 15,225 new workplaces not related to the activities of the town-forming enterprises;
- 137.3 billion rubles of investments in fixed assets by the end of 2018 and, as a result, increasing the investment attractiveness of single-industry towns;
- by the end of 2018 dependence decrease of single-industry towns on the activities of town-forming enterprises due to a decrease in the number of employees of town-forming enterprises.

The focus of a retrospective analysis of the results of the program "Comprehensive development of single-industry towns of the Chelyabinsk oblast" implementation is the indicator - the creation of new workplaces that are not related to the activities of town-forming enterprises (Table 2). To calculate the number of workplaces created, the payroll number of employees of organizations was used, which includes employees who work under an employment contract and perform permanent, temporary or seasonal work for one day or more, as well as working owners of organizations who receive salaries in this organization [8].

### Table 2. Analysis of the implementation of the target indicator of the program "Comprehensive development of single-industry towns of the Chelyabinsk oblast" - the number of new workplaces created not related to the activities of the town-forming enterprise for 2017-2018.

| Monotown name | Number of new workplaces created not related to the activities of the town-forming enterprise, units | Absolute change, units | Growth rate, % |
|---------------|-------------------------------------------------------------------------------------------------|-----------------------|----------------|
The data in Table 2 allow us to confirm that the target indicator for the implementation of the program "Comprehensive development of single-industry towns in the Chelyabinsk oblast" is the number of new workplaces created, not related to the activities of the town-forming enterprise, for 2017-2018. In the oblast not only has not been achieved, but is also characterized by negative dynamics. The number of workplaces not related to the activities of the town-forming enterprise on the territory of the Chelyabinsk oblast during the analyzed period decreased by 9170 units. The reduction in the number of workplaces not related to the activities of the town-forming enterprise in the single-industry towns of the oblast is due both to the intensification of procedures for releasing labour as a result of structural and technological changes that entail the termination of labour relations at the initiative of the employer, and to the refusal of potential investors to participate in the implementation of the “Comprehensive development of single-industry towns of the Chelyabinsk oblast”, their unwillingness to create infrastructure for themselves. Curiously that the negative tendency is minimally expressed, and sometimes even has the opposite character in the monotowns of the first category - mono-profile municipalities with the most difficult socio-economic situation (Asha, Karabash, Ust-Katav), and the second category - single-industry municipalities, in which there are risks of deterioration of the socio-economic situation (Chebarkul).

The degree of achievement of the target indicator of the program "Comprehensive development of single-industry towns of the Chelyabinsk oblast" - the volume of investments in fixed assets is reflected in Table 3 and is characterized by the fulfillment of planned values in full for 3 single-industry towns (Minyar, Sim, Bakal), overfulfillment of planned values for 4 single-industry towns (Asha, Verkhniy Ufaley, Satka, Snezhinsk) and non-fulfillment of planned values for 9 single-industry towns of the oblast (Zlatoust, Karabash, Magnitogorsk, Miass, Nyazepetrovsk, Ozersk, Bakal, Trekhgorny, Ust-Katav, Chebarkul). Failure to meet the planned values of the analyzed indicator of the program "Comprehensive development of single-industry towns in the Chelyabinsk oblast" is explained not only by the increase in uncertainty observed in recent years and in this regard a decrease in the subjective propensity to invest, but also by a banal decrease in financial sources of investment.
Table 3. Analysis of the implementation of the target indicator of the program "Comprehensive development of single-industry towns of the Chelyabinsk oblast" - the volume of investments in fixed assets, for 2017-2018.

| Single-industry town name | The volume of investments in fixed assets, million rubles | Absolute change, million rubles | Growth rate, % |
|---------------------------|----------------------------------------------------------|---------------------------------|----------------|
| Asha                      | 728.4                                                    | 1216.8                          | 167.0          |
| Minyar                    | 124.0                                                    | 124.0                           | 100.0          |
| Sim                       | 0                                                        | 0                               | -              |
| Verkhny-Ufaley            | 570.0                                                    | 632.2                           | 110.9          |
| Zlatoust                  | 4233.5                                                   | 1034.6                          | 24.4           |
| Karabash                  | 6965.7                                                   | 2177.2                          | 31.3           |
| Magnitogorsk              | 80050.0                                                  | 41897.0                         | 52.3           |
| Miass                     | 5555.2                                                   | 2445.6                          | 44.0           |
| Nyazepetrovsk             | 582.0                                                    | 238.7                           | 41.0           |
| Ozersk                    | 14558.1                                                  | 4574.0                          | 31.4           |
| Bakal                     | 652.8                                                    | 652.8                           | 100.0          |
| Satka                     | 770.6                                                    | 5267.5                          | 683.6          |
| Snezhinsk                 | 3551.0                                                   | 3780.0                          | 106.4          |
| Trekhgorny                | 9938.5                                                   | 2570.0                          | 25.9           |
| Ust-Katav                 | 7189.4                                                   | 2456.5                          | 34.2           |
| Chebarkul                 | 1809.9                                                   | 581.4                           | 32.1           |
| Total                     | 137279.1                                                 | 68871.5                         | 50.2           |

The values of the following program indicator, which makes it possible to carry out a retrospective analysis of the efficiency of the mechanisms used by the government for adapting single-industry towns to changes in the external environment, i.e. the specific gravity of employees of a town-forming enterprise in the average number of employees of all enterprises operating in the territory of the municipality, are presented in Table 4. The values of the indicator allow us to assert that the labour market of a single-industry town serves, first of all, the needs of the town-forming enterprise, which dominates as a subject of highly specialized demand for labour. At the same time, it’s necessary to note the inactive, but still the transfer of single-industry towns (mainly of the first category - single-industry municipalities with the most difficult socio-economic situation - Asha, Bakal, Karabash, Minyar, Nyazepetrovsk) from a purely industrial specialization to diversification, which is natural in the context of a monotown's aspiration to fulfill an integrative role [15].

Table 4. Dynamics of the target indicator of the program "Comprehensive development of single-industry towns of the Chelyabinsk oblast" - specific gravity of employees of a town-forming enterprise in the average number of employees of all enterprises operating in the territory of single-industry towns of the Chelyabinsk oblast in 2017-2018.

| Single-industry town name | Average number of employees in all enterprises, people | The average number of employees of the town-forming enterprise, people | Specific gravity, % |
|---------------------------|-------------------------------------------------------|---------------------------------------------------------------|-------------------|
| Asha                      |                                                       |                                                               |                   |
| Minyar                    |                                                       |                                                               |                   |
| Sim                       |                                                       |                                                               |                   |
| Verkhny-Ufaley            |                                                       |                                                               |                   |
| Zlatoust                  |                                                       |                                                               |                   |
| Karabash                  |                                                       |                                                               |                   |
| Magnitogorsk              |                                                       |                                                               |                   |
| Miass                     |                                                       |                                                               |                   |
| Nyazepetrovsk             |                                                       |                                                               |                   |
| Ozersk                    |                                                       |                                                               |                   |
| Bakal                     |                                                       |                                                               |                   |
| Satka                     |                                                       |                                                               |                   |
| Snezhinsk                 |                                                       |                                                               |                   |
| Trekhgorny                |                                                       |                                                               |                   |
| Ust-Katav                 |                                                       |                                                               |                   |
| Chebarkul                 |                                                       |                                                               |                   |
| Total                     | 137279.1                                              | 68871.5                                                      |                   |
A retrospective analysis of the efficiency of state programs to support the development of single-industry towns, based on the system of target indicators of the program "Integrated development of single-industry towns in the Chelyabinsk oblast", allows us to note the following.

Firstly, despite the fact that the procedure for the development and implementation of targeted state programs provides for the inclusion of the expected final results of the implementation of program activities in their justification, this requirement is often met only formally. The planned values of the indicators of state programs for the integrated socio-economic development of single-industry towns are formulated in such a way that they do not lend themselves or do not lend themselves well to accurate quantitative assessment and do not allow judging the degree of achievement of their goals.

Secondly, the activities of the regional program "Comprehensive development of single-industry towns of the Chelyabinsk oblast", developed on the basis of the provisions of the priority program "Comprehensive development of single-industry towns", did not contribute to the diversification of the economy and an increase in the level and quality of life of the population, in particular:

- target indicator "the number of new workplaces created not related to the activities of the town-forming enterprise" for 2017-2018. in the oblast is not only not achieved, but is also characterized by negative dynamics;
- target indicator "volume of investments in fixed assets" for 2017-2018. is characterized by full implementation and overfulfillment of planned values only in 7 single-industry towns;
- the target indicator "the proportion of employees of a town-forming enterprise in the average number of employees of all enterprises operating in the territory of the municipality" indicates the narrowness of the professional structure of demand, determined by the needs of the key buyer of labor - the town-forming enterprise, and, consequently, narrowing of the professional structure of labor supply, low diversification of employment spheres.

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|                  | 2017  | 2018  | 2017  | 2018  | 2017  | 2018  |
|------------------|-------|-------|-------|-------|-------|-------|
| Asha             | 10404 | 10268 | 4213  | 4173  | 40.5  | 40.6  |
| Minyar           | 2716  | 2682  | 1046  | 1042  | 38.5  | 38.9  |
| Sim              | 7682  | 7018  | 679   | 40    | 8.8   | 0.6   |
| Verkhniy Ufailey | 41160 | 38593 | 3979  | 3660  | 9.7   | 9.5   |
| Zlatoust         | 3069  | 3075  | 1388  | 1403  | 45.2  | 45.6  |
| Karabash         | 149941| 146536| 18465 | 18391 | 12.3  | 12.6  |
| Magnitogorsk     | 53527 | 53823 | 4721  | 4626  | 8.8   | 8.6   |
| Miass            | 1242  | 1446  | 543   | 554   | 43.7  | 38.3  |
| Nyazepetrovsk    | 2977  | 2926  | 560   | 572   | 18.8  | 19.5  |
| Ozersk           | 31709 | 31557 | -     | -     | -     | -     |
| Bakal            | 17969 | 17630 | 2793  | 2782  | 15.5  | 15.8  |
| Satka            | 3775  | 3701  | 2414  | 2382  | 63.9  | 64.4  |
| Snezhinsk        | 20114 | 19750 | -     | -     | -     | -     |
| Trekhgorny       | 13840 | 13526 | -     | -     | -     | -     |
| Ust-Katav        | 8444  | 7567  | 3614  | 3313  | 42.8  | 43.8  |
| Chebarkul        | 11708 | 11355 | 2077  | 2348  | 17.7  | 20.7  |

*Statistical information on Ozersk, Snezhinsk, Trekhgorny is not available in free access, due to their status - a closed administrative-territorial entity*
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