Socio-economic development of the Kaliningrad region

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Abstract. The scientific article is devoted to the research analysis of the features and trends of the socio-economic development of the Kaliningrad region in the modern period. The relevance of the study is due to the spread of the Covid-19 coronavirus infection pandemic, which negatively affects the economic security of the regional constituent entities of the Russian Federation, including the Kaliningrad region. The article provides a chronological analysis of the dynamics of the level of socio-economic development of the Kaliningrad region. A comparative analysis of the Kaliningrad region with other regions of the Northwestern Federal District is carried out. The main problems and threats to the socio-economic development of the Kaliningrad region have been identified and described. Directions and measures have been developed and proposed that are aimed at neutralizing threats and stimulating further socio-economic development of the Kaliningrad region. In the conclusion of the scientific article, the author found that the current prospects for the socio-economic development of the Kaliningrad region are affected by national problems, including the shadow sector of the economy, deficit of budgetary funds, poor development of regional market infrastructure for sustainable development of social production, insufficient level of state support for innovative activity of economic entities, slow pace of digital transformation in the authorities of the regional government, principle of budgetary federalism and regional protectionism.

1 Introduction

One of the urgent tasks of the Government of the Russian Federation today is to create conditions for solving the main problems of uneven development of economic systems in regions of our country, which strongly differ both in social and economic indicators.

The current conditions of the global economy, including the spread of the COVID-19 coronavirus pandemic and the collapse of prices in the energy market, cause the sustainability of the market situation to deteriorate. Such crisis phenomena are less threatening for the state as a whole than for individual regions. Most of the constituent entities of the Russian Federation have problems in managing their finances and investment attractiveness.

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In turn, this negatively affects the implementation of their strategy of integrated socio-economic development, which leads to difficulties in ensuring the economic security of the region.

The list of such regions also includes the Kaliningrad region, whose socio-economic development trends form the system of ensuring regional security and the level of quality of life of the local population.

The relevance of the scientific research on the topic of "socio-economic development of the Kaliningrad region" is due to the spread of the Covid-19 coronavirus infection pandemic, which negatively affects the economic security of the regional constituent entities of the Russian Federation, including the Kaliningrad region.

Accordingly, the purpose of the scientific article is to conduct a research analysis of the features and trends of the socio-economic development of the Kaliningrad region in the modern period.

For this purpose, it is necessary to solve the following urgent tasks within the framework of the scientific research:

− to conduct a chronological analysis of the dynamics of the level of socio-economic development of the Kaliningrad region;
− to conduct a comparative analysis of the level of socio-economic development of the Kaliningrad region with other regions of the Northwestern Federal Okrug;
− to identify and describe the main problems and threats to the socio-economic development of the Kaliningrad region;
− to develop and propose directions and measures that are aimed at neutralizing threats and stimulating the further socio-economic development of the Kaliningrad region.

2 Materials and Methods

The Kaliningrad region is among the regions of the Russian Federation with developed industrial production [4].

More detailed information on the structure of the gross regional product of the Kaliningrad region is shown in the diagram of Figure 1.

![Fig. 1. The structure of the gross regional product of the Kaliningrad region, as a % of the total share [4].](image-url)
To conduct a chronological analysis of the dynamics of the level of socio-economic development of the Kaliningrad region, we refer to the data in Table 1, which contains the dynamics of statistics from 2016 to 2020 on main socio-economic indicators of regional development of this constituent entity of the Russian Federation.

**Table 1.** Main socio-economic indicators of the Kaliningrad region in 2016-2020 [5].

<table>
<thead>
<tr>
<th>Indicator/year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial production index, %</td>
<td>92.2</td>
<td>96.5</td>
<td>102.3</td>
<td>102.7</td>
<td>93.5</td>
</tr>
<tr>
<td>Consumer price index, %</td>
<td>111.7</td>
<td>101.3</td>
<td>101.4</td>
<td>105</td>
<td>103.6</td>
</tr>
<tr>
<td>Average monthly real accrued salary of one employee, %</td>
<td>90.1</td>
<td>90.8</td>
<td>103.7</td>
<td>99.7</td>
<td>100.7</td>
</tr>
<tr>
<td>Number of officially Registered unemployed at the end of the period, ths. people</td>
<td>5</td>
<td>5.2</td>
<td>4.3</td>
<td>4</td>
<td>30.7</td>
</tr>
</tbody>
</table>

Based on Table 1, we can conclude the following:

1. All main indicators of the socio-economic development of the Kaliningrad region demonstrate a diverse vector of change.
3. The consumer price index in 2016 showed a high rate of change, followed by 2 years of moderate inflation, which again turned into a zone of faster growth from 2019.
4. The average monthly real salaries of employees of enterprises in the Kaliningrad region often show a decrease, not counting 2018 (growth by 3.7%) and 2020 (growth by 0.7%).
5. The number of unemployed people gradually decreased from 2016 to 2019, until 2020 showing a sharp increase in unemployment due to the mass closure of enterprises under quarantine restrictions of the coronavirus pandemic.

Next, it is necessary to conduct a comparative analysis of the level of socio-economic development of the Kaliningrad region with other regions of the Northwestern Federal Okrug of the Russian Federation, which will be facilitated by the data from Figure 2.
Based on Figure 2, we can conclude the following:

1. The Kaliningrad region demonstrates more sustainable socio-economic development in terms of indicators such as the industrial production index.
2. Other regions of the Northwestern Federal Okrug demonstrate more stable socio-economic development than the Kaliningrad region separately in all other indicators.

The regional authorities have established the following priority areas within the framework of the socio-economic development of the Kaliningrad region [9]:
- ensuring the growth of the quality of life of the local population;
- stimulating integration processes between science, education, and production sector of the regional economy, by creating a positive climate of innovation activity;
- financial assistance to small-scale enterprises conducting innovative activities;
- creating regional infrastructure for the sustainable development of public production in the Kaliningrad region;
- digitalization of industry.

However, in the modern conditions of the Russian state, there are a number of factors that lead to the inhibition of the complex socio-economic development of most regional constituent entities of the Russian Federation, including the Kaliningrad region [1; 2; 7; 10]:
- shadow sector of the economy;
- budget deficit;
- poor development of market infrastructure in remote regions of the country;
- insufficient level of state support for innovative activity of economic entities;
- slow pace of digital transformation in regional government authorities;
- socio-economic imbalance in development between regions;
- principle of fiscal federalism and regional protectionism.

Also, a separate category of problems is the negative impact of the consequences of the spread of the coronavirus infection pandemic. According to the survey conducted by RBC together with SAP, approximately 62% of domestic enterprises felt a negative impact due to the consequences of the spread of the coronavirus pandemic and the adoption of quarantine measures by the Government of the Russian Federation [8].

At the same time, the main factors that negatively affected the efficiency of business activities of Russian companies are [3]:
- quarantine measures restricting the actions and activities of people (56% according to respondents), which leads to disruption of socio-economic processes in remote regions of Russia;
- decrease in the purchasing power of the population (54% according to respondents), since according to Rosstat, the real disposable income of the population in the second quarter of 2020 fell by 8.4% in annual terms [11];
- changes in the structure of the consumer basket of the population (39% according to respondents). Data from Russian retail chains indicate that Russians still spend more on food than a year earlier (+4.1% on a year-on-year basis) and increasingly reduce spending on non-food goods and services [6];
- increasing devaluation risks of the Russian ruble exchange rate (36% according to respondents).

3 Results and Discussion

In our opinion, as part of the formation of a new vector of integrated socio-economic development of the Kaliningrad region, it is necessary to solve the following tasks:
- optimization of regional budget expenditure items;
- creation of free economic zones and programs for simulating investments in fixed assets to support economic entities whose activities increase tax revenues (income) to the regional budget;
- active use of the instruments of the domestic municipal debt market to cover the budget deficit;
- use of regional-private and municipal-private partnership tools in the implementation of strategic infrastructure projects to optimize budget expenditures.

Taking into account that the most relevant trend of the current stage of socio-economic development of the Kaliningrad region, as well as other regional constituent entities of Russia, is their digital transformation, it is necessary to propose a number of the following recommendations with regard to improving the prospects for the development of the innovative economy, which will enable to create more comfortable conditions for innovation and promote the development of the regional innovation system:

- formation and development of infrastructure for the integration of the region, large businesses, small businesses, and education sector to create regional-private innovation projects and innovation clusters;
- attracting extra-budgetary and private investments in research and education;
- formation of regional grants and programs for universities, technology parks, and innovative enterprises to finance their project activities;
- tightening of the legislation and the legal framework for the protection of intellectual property.

The process of digitalization of the Kaliningrad region's industry can be classified into 3 key areas:

1. Digitalization of the customer service, which includes the digitalization procedure to better understand the needs of customers and increase revenue by increasing sales of goods and services.
2. Digitalization of the operational process, which includes automation of operational activities and performance management using digital technologies.
3. Digitalization of the business model and management system, which includes the procedure for introducing new management and organizational technologies, as well as the integration of new digital business models that expand the activities of industrial enterprises.

The implementation of such a strategy is impossible without the formation of a decent level of regional infrastructure for the sustainable development of public production in the Kaliningrad region. This regional infrastructure includes the following institutions and elements:

- human resources, which includes educational institutions;
- production and technology group, which includes business incubators, technology platforms, clusters, and parks;
- financial group, which includes banks, venture funds, business angels, and crowdfunding platforms;
- information resources, which include analytical centers, expert agencies.

### 4 Conclusions

Thus, summing up the results of the scientific work, we can conclude the following:

1. The main socio-economic indicators of the Kaliningrad region give a reason to form a positive assessment of the current trends in the development of the region, but they are inferior to the general indicators of other regions of the Northwestern Federal Okrug.
2. The prospects for the socio-economic development of the Kaliningrad region are affected by national problems, including the shadow sector of the economy, deficit of budgetary funds, poor development of market infrastructure, insufficient level of state support for innovative activity of economic entities, slow pace of digital transformation in the authorities of the regional government, principle of budgetary federalism and regional protectionism.

3. The prospects for the socio-economic development of the Kaliningrad region will depend on the implementation of the following actions: optimization of regional budget expenditure items; creation of free economic zones and programs for simulating investments in fixed assets; active use of the instruments of the domestic municipal debt market; use of regional-private and municipal-private partnership tools in the implementation of strategic infrastructure projects to optimize budget expenditures, as well as stimulating the development of the regional innovation system.

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