

# HOW CAN THE DEVELOPMENT OF SPECIAL ECONOMIC ZONES STIMULATE PRIVATE INVESTMENTS - THE CASE OF THE «LIPETSK» IN RUSSIA

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## **Abstract:**

*Russia has always had problems with the uneven development of regions. This is due to the country's large size, different socio-cultural factors, and the taxation system, which forces the regions to send most of the collected taxes to Moscow. This causes social tension, accelerates the widening of the economic gap between regions, and reduces the opportunities for regions in economic cooperation. This paper presents an assessment of the possibilities of correcting the current situation by creating special economic zones in the regions that can stimulate the development of the regional economy and infrastructure. The scientific novelty of the study is the development of a methodology for assessing the impact of SEZs on the regional economy by determining the share of SEZs in the economic indicators of the region, comparing them with those of other SEZs, and correlating the relationship between the volume of private investments of SEZs and various socio-economic indicators. The study's practical significance is to develop practical recommendations for developing and improving industrial-production-type SEZs to increase the rate of development of the Lipetsk region's economy.*

**Key words:** Special economic zones, regional economy, Lipetsk region.

**JEL classification:** L78, M20, M48.

## **1. INTRODUCTION**

Nowadays, the Russian Federation faces a rather severe socio-economic crisis that affects all regions and sectors of the population. In the current situation, the regional authorities must ensure conditions for the normalization of economic and economic activities and find internal drivers of economic growth and development.

Free economic zones, which are also called special economic zones (SEZs) in Russian legislation, are considered one of the economic institutions designed to intensify economic development processes at the regional level. Even though in foreign practice, free economic zones can act as drivers of economic growth, in the Russian Federation, the question of the expediency of maintaining and further development of special economic zones is of a debatable nature. Thus, in 2016, the federal authorities closed 8 SEZs, unable to prove their operational effectiveness. Indeed, some of the existing SEZs remain unattractive to investors, do not ensure the growth of production of goods and services, creation of new jobs. However, for their operation, significant funds have been spent from federal and regional budgets to create the necessary infrastructure, and the budget itself suffers significant losses due to lost amounts of tax payments.

This paper aims to develop SEZ development directions and study its impact on Russia's regional economy. In order to achieve this objective, the following tasks must be carried out:

- To consider the concept and essence of free economic zones and their role in regional economic development;
- Investigate the current state and effectiveness of the SEZ in the Russian Federation;
- Analyze existing approaches to assessing the impact of SEZs on the regional economy;
- Develop a methodology for assessing the impact of SEZs on the regional economy;
- Assess the impact of the activities of SEZ PPT Lipetsk on the regional economy;
- Identify the main problems and shortcomings in the functioning of SEZ in the Russian Federation (using the example of SEZ PPT Lipetsk);
- Develop proposals to improve the functioning of SEZ PPT Lipetsk;
- Assess the regional economy's growth potential if the SEZ's functioning is improved (on the example of SEZ PPT Lipetsk).

In general, in the domestic literature, the very problem of the functioning and development of the SEZ has found wide distribution; at the same time, the issues of the relationship between the activities of the residents of the SEZ and the pace of economic development remain not thoroughly studied, which determines the relevance of the selected topic of the study.

The scientific novelty of the study is the development of a methodology for assessing the impact of SEZs on the regional economy by determining the share of SEZs in the economic indicators of the region, comparing them with those of other SEZs, and correlating the relationship between the volume of private investments of SEZs and various socio-economic indicators. Based on this methodology, the work assessed the impact of SEZ PPT Lipetsk on the Lipetsk region's economy and gave a forecast of its socio-economic development. The work's theoretical significance is determined by the generalization of scientific knowledge on SEZ's impact on the regional economy. The study's practical significance is to develop practical recommendations for developing and improving industrial-production-type SEZs to increase the rate of development of the Lipetsk region's economy.

## **2. THE RESEARCH QUESTION AND METHODS OF WORK**

We set the following research question:

*How can special economic zones (SEZ) impact on the development of the regional economy and infrastructure to stimulate private investments?*

We will on a singular study of SEZ in Lipetsk region. The following research methods will be used - analysis, synthesis, generalization, comparison, classification, systematization, statistical analysis methods, correlation analysis methods, modeling, and forecasting.

## **3. THEORETICAL FOUNDATIONS FOR THE CREATION AND FUNCTIONING OF SEZ IN RUSSIA**

A special economic zone is a part of the territory of the Russian Federation, which is determined by the Government of the Russian Federation and on which there is a special regime for the conduct of business activities, as well as a customs procedure for a free customs zone, may be applied. The main task of creating SEZ is to accelerate the economic development of the country. Currently, 30 SEZs are operating in the Russian Federation.

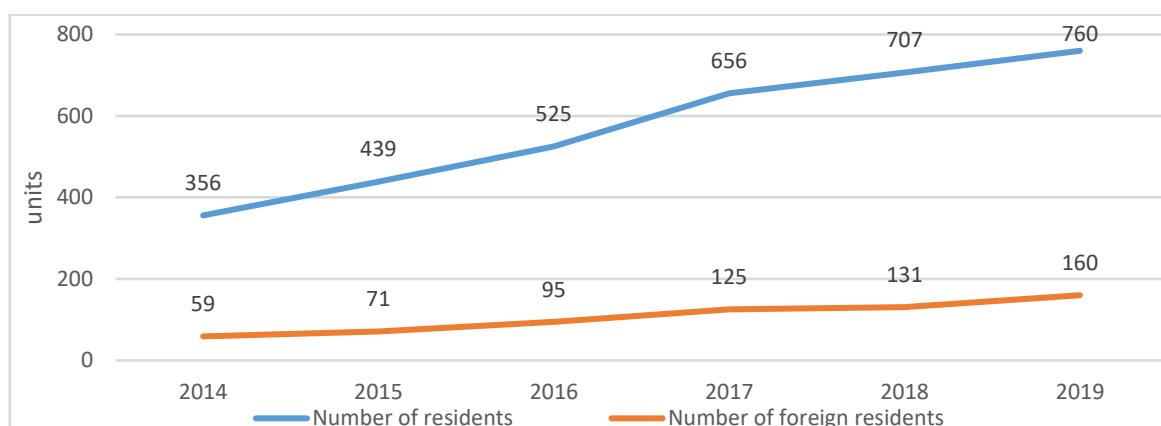
The use of special economic zones as a macroeconomic instrument is particularly relevant for Russia's developing economy. The export-commodity model of economic development developed in the post-transition era gave impetus to the development of large businesses, but at the same time caused several negative consequences for the State, such as monopolization of markets, deindustrialization, an outflow of intellectual and financial capital, a technological lag, a decline in the efficiency of social institutions and deep class stratification. In this regard, FEZs can be a

critical factor in attracting the investments needed for structural economic transformation, resuscitation of degraded industries, and reformatting the State government's apparatus.

The prerequisite for the creation of FEZ in the Russian Federation can be the broadest geography of the country - accessibility to maritime trade routes, availability of related borders with 18 states, including the world industrial center - China, as well as inherited from the USSR aviation infrastructure (Abakarov, 2015). In addition to particular zones in the Magadan region, which are essentially enclaves with controlled movement of goods to other Russian regions, there are 28 SEZs.

The preference packages in force in these zones are generally similar. They consist of tax incentives, simplification of administrative procedures, state guarantees, and special conditions of foreign citizens' stay, but each zone has its specifics related to regional legislation's peculiarities. In any case, the preferences in force in the zone apply exclusively to its official residents.

Any commercial organization (except a unitary enterprise) with registration in the territory and has a special agreement with local authorities can obtain residence status in the SEZ zone. The dynamics of the number of SEZ residents in Russia is shown in Figure 1.

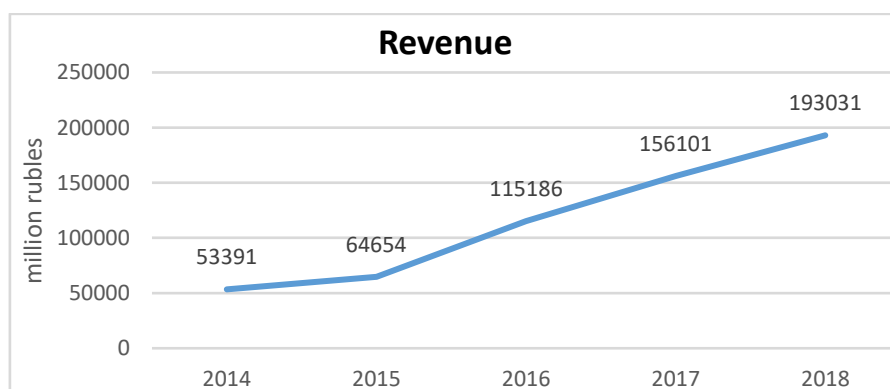


**Figure 1. Dynamics of the number of residents of the SEZ of the Russian Federation in 2014-2019**

Source: Afanasieva (2015, 137)

As can be seen from the above schedule, the number of SEZ residents has been steadily increasing since 2014. Simultaneously, the growth rate of the number of domestic residents is slightly lagging behind the growth rate of foreign residents. Thus, from 2014 to 2019, the number of Russian companies registered in the territories of special zones increased by 213% (average annual increase - 42%), while the number of registered foreign enterprises increased by 271% (average annual increase - 54%).

Another important indicator is the total revenue of enterprises received in the SEZ. Statistical data in the period 2014-2018 are presented in the form of a graph in Figure 2.



**Figure 2. Revenue of residents of SEZ of the Russian Federation in 2014-2018**

Source: Afanasieva (2015, 137)

The schedule mentioned above clearly demonstrates how domestic SEZs have adapted to the imposition of international sanctions. Thus, from 2014 to 2015, the growth of revenues of residents of zones is minimal - 11,236 million rubles (+ 21%). However, in the following years, the curve strives up sharply, showing an annual increase of 42,790 million rubles (+ 45%). It is possible to note the positive dynamics of SEZ's economic development during the last five years.

Simultaneously, the initially planned state support of SEZ for various reasons is not fully implemented. The development of zones is partly carried out at the expense of investments attracted by their activities. Primarily this concerns the construction of infrastructure facilities. Thus, during the entire period of existence of the SEZ, funding from the federal budget aimed at the construction of engineering facilities, repair, and construction of transport infrastructure and the creation of communication networks in the SEZ was carried out by only 94% (a total of 93,321 million rubles was spent). Moreover, in 2018, the planned financing deviation reached its maximum - the plan was fulfilled only for 67% (2,091.99 million rubles spent).

The plan for regional public investment in infrastructure is better implemented. Here for the whole period of SEZ existence, 63,656 million rubles have been allocated for these tasks (96% of the planned indicator), and in 2018 the plan was implemented for 98% (3,606.82 million rubles). Simultaneously, the level of State support for economic zones, even though some of the zone's tasks are carried out on their own, remains relatively high. During the whole period of SEZ's existence, it spent 23,795 million rubles on the construction of infrastructure facilities, while the total volume of state investments in this direction reaches 156,977 million rubles.

A total of 912 infrastructure facilities were built within special economic zones (12% exceeding the plan), of which 174 were built in 2018 (44% exceeding the plan). To demonstrate the positive effects of SEZs' existence on the State, statistics on contributions paid by zones to the State budget can be given (Ministry of Economic Development of the Russian Federation, 2020):

- Customs payments: 2018 million rubles were paid in 8,769.66 (exceeding the planned indicator for 217%), and 42,030 million rubles were transferred to the budget during the SEZ operation (18% more than planned);
- insurance payments: absolute values - 5,354.99 million rubles in 2018 and 16,474 million rubles for the whole period;
- taxes included in the budget, except for VAT reimbursed by the state: in 2018 - 9,418.03 million rubles (exceeding the 17% plan), for the whole existence of zones - 37,273 million rubles (5% more than the estimated value).

In general, for the whole period of existence of SEZ, they transferred to the budget of about 95,777 million rubles, including customs and insurance fees and tax payments. At the same time, for all components of contributions, the actual indicators exceeded the estimated indicators.

However, the situation is not so exact with the filling of regional budgets, where the volume of benefits received by economic zones has significantly exceeded the planned indicators. Thus, in 2018 SEZ received 42% more tax preferences from local budgets than planned (total - 4,477.30 million rubles). During its existence, regional budgets allocated SEZ as tax incentives for 44% more funds than expected (only 20,787 million rubles).

In the rest, the number of real tax preferences at the planned level or below the estimated figures (Musioenko, 2017, 57):

- the total volume of benefits received from the federal budget in 2018 did not exceed 31% of the planned indicator (total - 262.97 million rubles), and for the whole period of operation - stopped at 69% of the plan (1,409 million rubles);
- The benefits allocated by SEZ on customs fees in 2018 slightly exceeded (by 10%) the planned volume and amounted to 5,639.04 million rubles. During the whole period, the volume of the allocated customs benefits almost entirely corresponds to the plan - 27,513 million rubles (1% more than planned).
- Total insurance benefits for SEZ amounted to RUB 1,425,37 million for the 2018 year and RUB 5,627 million from their registration.

The approaches considered to analyze SEZs' functioning do not allow to assess the impact of territories with special legal regimes of economic activity on regional development. However, such an assessment is necessary to justify the feasibility of further budgetary financing for the development of SEZs and to develop measures to strengthen SEZs' impact on the socio-economic development of the regions.

## **4. RESEARCH**

### **4.1 Development of a methodology to assess the impact of SEZs on the regional economy**

In trying to assess the effectiveness and impact of SEZs on the regional economy, several policy points need to be considered. SEZs' creation's economic and social effects may be more extensive and smaller than planned (Business Navigator, 2019, 46):

- First, the particular zone's effectiveness is not immediately apparent; on average, 4-5 years after the zone enters the operation stage, as, in a shorter period, the invested investments do not pay off.
- Secondly, objective statistical indicators of SEZ performance do not always take into account such preferences as SEZ's ability to influence the acceleration of the transformation of the national economy into an open modern market; modernizing the impact on the national economy through demonstration and training effects; the possibility of experimenting with economic mechanisms and instruments (in the future appropriate, tested models can be used in other regions).  
However, the complex economic and social effects of a particular zone can have both positive and negative effects on the country's economy as a whole. Positive impacts tend to occur when the size and size of such zones reach a certain critical level, and the national economy and related legislation achieve the necessary stability. Otherwise, the impact of zones with special economic regimes may lead to significant differences in the regions' socio-economic development.
- Thirdly, the success of SEZs of any type is characterized not only by their profitability, measured by quantitative analysis of the ratio of results to costs but also by international competitiveness compared to other special zones located in different States.
- Fourthly, each type of zone must have an individual preferential complex that ensures optimal business operation in a particular zone, taking into account its specificity.

Based on an analysis of existing methods of assessing the impact of special economic zones on the regional economy, a review of literary sources on this topic, the author of the study concluded that the methodology of assessing the impact of SEZ on the rate of socio-economic development of the region should not be limited to a single set of indicators, but should be carried out comprehensively, considering various options for the impact of the functioning of SEZ and its residents on the situation of the region. According to the author, the impact assessment should:

- first, to assess the contribution of SEZs to various statistical indicators of socio-economic development, and the set of these indicators should be consistent with the type of SEZs and their objectives;
- secondly, a comparative analysis could be made of the impact of the various SEZs on the economies of the regions in which they are located;
- Thirdly, there is a need to track the evolution of SEZs and the region and identify the relationships between them based on correlation analysis.

Concerning the first line of assessment of the impact of SEZs, we propose to use an approach based on the calculation of the share of SEZs in regional development indicators to assess the impact of the SEZ's functioning on the regional economy. In particular, the impact of FEZ on the economy, labor market, and budget system should be considered. Thus, it is proposed to carry

out an increase in the shares of FEZ in the region's indicators where it is located. We propose to study the following leading indicators:

- 1) share of products produced by SEZ residents in the volume of produced products of enterprises of the region according to the formula:

$$Д_{\Pi} = \frac{ОП_{033}}{ОП_p} \times 100\%, (1)$$

$ОП_{033}$  - the volume of products produced by SEZ residents in the analyzed period;

$ОП_p$  - total volume of produced products by enterprises of the region in the analyzed period;

- 2) share of direct private investments of SEZ in the volume of investments in fixed assets of the region:

$$Д_{И} = \frac{И_{033}}{И_p} \times 100\%, (2)$$

$И_{033}$  - the volume of private direct investments by SEZ residents in the analyzed period;

$И_p$  - the volume of investments in fixed assets of the region in the analyzed period;

- 3) share of created SEZ jobs with the accumulated total in the total number of jobs of the region:

$$Д_{PM} = \frac{PM_{033}}{PM_p} \times 100\%, (3)$$

$PM_{033}$  - number of created jobs in SEZ accumulated total;

$PM_p$  - the average number of employees in the region's economy in the analyzed period;

- 4) the share of taxes paid by residents in the total amount of taxes and fees of the region:

$$Д_{H} = \frac{H_{033}}{H_p} \times 100\%, (4)$$

$H_{033}$  - the amount of taxes, fees, and payments paid by SEZ residents in the analyzed period;

$H_p$  - The amount of tax and fee revenues to the region's consolidated budget in the period under review.

At the same time, as already mentioned, it is recommended to carry out an analysis of the impact on the regional economy in the sectoral area depending on the type of SEZ - for production and industrial zones to consider their importance in the industrial production of the region, for technical and implementation - in research activities, in the production of high-tech products, for tourism - in the field of tourism, etc.

In the second stage of the analysis, it is proposed to compare the influence of the studied SEZ on the regional economy with the influence of the SEZ of the same type on the economy of the regions where the SEZ data are located. For this purpose, it is necessary to calculate all the relative indicators presented above of SEZ's share in the indicators of the regional economy and further comparison. It is also recommended to determine the average level of indicators for different SEZs, which will allow us to identify the role of the studied SEZ in the region's economy compared to similar zones.

The third area of analysis is the study of dynamic series, identifying the relationship and correlation between indicators of regional development and the development of SEZs. At the same time, we recommend choosing the volume of private investments of SEZ residents as an explaining variable, as this indicator reflects the real contribution to the economy of the region of resident companies.

Based on statistics, the relationship between the resulting (volume of goods and services output, taxes and fees received in the consolidated budget for the region, labor market indicators, etc.) and the explaining variable should be identified.

If a strong relationship between variables is found, the obtained data can be used for macroeconomic forecasting of SEZ's impact on the economic development of the region by calculating the expected effect of the increase in accumulated investments. That is, using data on planned additional private direct investment in SEZs, it will be possible to calculate how the research indicators of socio-economic development of the region will change.

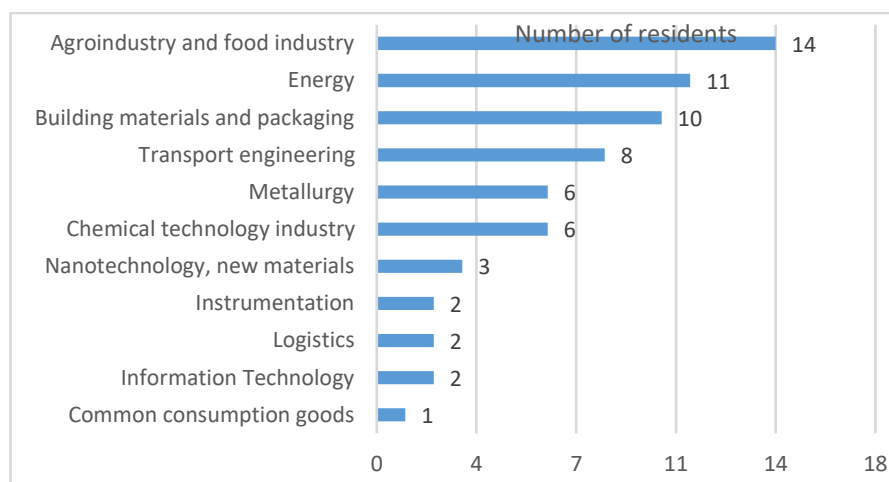
Thus, the proposed methodology is simple and easy to use, allows to identify the influence of the studied SEZ on regional economic development compared to the average level, and also makes it possible to predict the indicators of macroeconomic development in the future, which is necessary for making strategic decisions on the development of each particular SEZ or, on the contrary, to stop its activities in case of detection of the inefficiency of its functioning.

The presented evaluation procedure is tested on the example of SEZ PPT Lipetsk.

#### 4.2 Assessment of the impact of the activities of SEZ PPT Lipetsk on the regional economy

The industrial and production zone "Lipetsk" was established in 2005 in the territory of Kazinka village of the Lipetsk region, and the Government decision from 11.07.2015 expanded the land plot of the Elets district to a total area of 2,298.3 hectares (Territorial Authority, 2020). SEZ PPT "Lipetsk" is located 200 meters from the railway station "Kazinka" and a short distance from the large railway nodes "Mud-Oryol" (within 8 km) and "Lipetsk (20 km). There are also exits passing through regional roads to federal routes M4, M6, and P-119 (distance within 16-85 km). Convenient geographical location allows achieving one of the main goals of creating this zone - increase of logistics efficiency and acceleration of growth of essential industries for the region.

To date, 65 residents have been registered in the "Lipetsk" SEZ, of which 30 are foreign companies. Among the residents are such famous domestic enterprises as Lipetskiy Plant of Greenhouse Structures of LZTK, Lipetskiy Railway Building Plant of ANT, LLC "Russian Instrument," etc. and large foreign companies LLC "Yokohama R.P.Z" from Japan, LLC "Radalit Slumberge" from France, LLC "ABB Electrical Equipment" from Switzerland, etc. The sectoral structure of projects of residents of SEZ PPT Lipetsk is shown in Figure 3.



**Figure 3. Number of residents of SEZ PPT Lipetsk by industry**

Source: Territorial Authority (2020).

As we can see, the largest number of SEZ PPT Lipetsk residents belongs to the sphere of agro-industrial production and food industry, as well as quite a lot of companies in the field of energy, construction materials, and packaging, in transport engineering. In general, the sectoral structure of this SEZ is well-diversified, which is a positive factor.

In 2019, PPT companies received the status of residents of SEZ 8 Lipetsk. Two new residents entered the Elets PPT of the EPZ and 2019 in 2. This is LLC "Seed Plant KBS" (Germany) with the project "Construction of sugar beet seed processing plant" and LLC "Singenta Production" (Switzerland) with the project "Construction of plant protection plant."

In 2019, the PPT of electrical products, automation systems, fire detection systems, products, gas detectors, personal protective equipment, formwork and construction metal structures, coffee production, etc.

During the first five years of operation under the agreement, the resident of the zone is entirely exempt from transport and land tax and income and property tax. Besides, most preferences (except land tax and 5% income tax rate) will remain for the second five-year plan from the moment of registration. Also, on the territory of SEZ PPT Lipetsk, there are rules of free customs zone, all residents are exempt from payment of import customs duty and VAT.

Thanks to attractive investment conditions, about 4,300 new workers have been created in the SEZ PPT Lipetsk for 14 years. The volume of declared investments exceeds 206.7 billion rubles, of which more than 63.3 billion rubles have been used to date.

It should be noted that the growth rate of investments in SEZ and PPT is ahead of the registration rate of new residents. Thus, from 2014 to 2018, the zone's total volume of investment almost tripled - from 22,992 to 61,036 million rubles (average annual growth at 41%). During the same period, the number of registered residents almost doubled, from 36 to 62 campaigns (an average annual increase of 18 percent).

The total volume of accumulated investments by 2018 - 72105.5 million rubles, of which:

- extrabudgetary investments of residents 61036.2 million rubles (84.6%);
- federal budget funds - 7928.9 million rubles (11%);
- regional budget funds - 3,140.5 million rubles (4.4%).

Judging by the structure of total investments, the funds invested from the federal and regional budget to develop the SEZ infrastructure have paid off and have become an incentive for private investors to invest.

In 2019, SEZ was able to attract about 11 billion rubles of private investments. For 2018, the volume of taxes and customs payments paid by SEZ residents amounted to 1176.42 million rubles, the volume of tax incentives used by residents - 1290.11 million rubles. Labor productivity in SEZ's territory - 5.1 million rubles/person, which is 18.8% higher than the average in Russia.

SEZ- PPT is the repeated winner of the Global Free Zones of the Year rating of special economic zones of fDi Magazine (a division of the Financial Times). In 2018, according to the results of the rating of SEZ PPT, "Lipetsk" was recognized as the winner in two nominations ("SEZ of the Year for Project Expansion," "SEZ of the Year for Infrastructure Development"). Over the last five years, SEZ won in nominations of this rating 7 times 5. This SEZ is also one of the National Rating of Investment Attractiveness leaders of the SEZ of Russia. In the rating of 2019, SEZ PPT "Lipetsk" takes the second position. It is a member of the SEZ group with high investment attractiveness, exceptionally high estimates of this SEZ on indicators of investment attractiveness of the region, investment activity, and favorable activity conditions

According to the proposed method, let us consider the share of SEZ PPT Lipetsk in the regional indicators of the economic development of the Lipetsk region (Appendix 1).

According to the data of Appendix 1, we see that the participation of SEZ PPT Lipetsk in the volume of industrial production of the Lipetsk region is insignificant, in 2018 - only 2.8%. However, it is worth noting the positive trend of this indicator. In 2016, SEZ residents' share in the volume of shipped goods of own production performed works and services in-house by industrial enterprises amounted to 2,3%. Thus, in 3 years, the indicator increased by 0.5 p.p. It is also worth noting that the volume of production of SEZ residents in monetary terms has continuously increased during this period.

As for the share of SEZ residents in PPT investment processes, we see that SEZ does significantly impact the volume of investments in fixed assets in the Lipetsk region. If in 2016 the share of private investments of SEZ residents in the total volume of investments in fixed assets of enterprises of the region was only 7%, in 2017, more than 1/5 of all investments in fixed assets were provided by residents of SEZ, and in 2018 this indicator fell to 14.7%, which is also a rather good result.

An increase in the share of created SEZ jobs with the accumulated result in the industry's total number of jobs in the Lipetsk region. In the period under review, the indicator increased from 3.4% in 2016 to 4.6% in 2018. This is because the number of employees of industrial enterprises



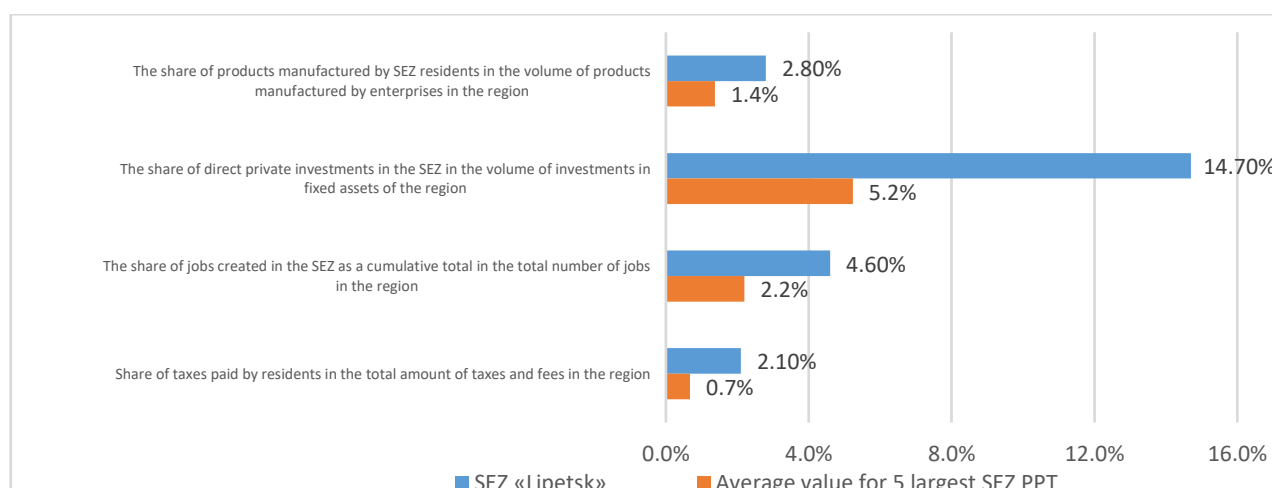
has decreased slightly in 3 years, while the number of created jobs in the SEZ of the PPT Lipetsk, on the contrary, has increased.

As for the influence of SEZ PPT Lipetsk on the Lipetsk region's budget system, the results are mixed. While in 2016, the share of taxes and payments paid by SEZ residents in the total amount of tax revenues and fees amounted to 4.0%, in 2017, it increased to 4.8%, in 2018, there was a decrease to 2.1%, which is due to the easing of taxation conditions for SEZ residents, while tax fees in the region as a whole increased

Based on the obtained relative indicators of the influence of SEZ PPT Lipetsk on the economy of the Lipetsk region, it can be stated that at the moment, the most significant impact of SEZ operation has on the inflow of investments to the region, and in other aspects plays a minor role. We will also carry out a comparative analysis of the impact of SEZ PPPT Lipetsk on the regional economy with other major SEZ of the production-industrial type. The relative indicators of SEZ's impact on the regional economy for 2018 will be reflected in Appendix 2.

Analyzing the indicators presented in Appendix 2, it can be noted that the role of SEZ PPT Lipetsk in the regional economy of the Lipetsk region is much more significant than in other regions. In 2018, only SEZ PPT "Alabama" contributed a higher share (3.3%) to the volume of industrial production of Tatarstan, where it is located, than the share of SEZ PPT "Lipetsk" in industrial production of the Lipetsk region (2.8%).

On the rest of the relative indicators of SEZ's impact on the regional economy of SEZ PPT "Lipetsk" leads. In Figure 4, we will present a comparison of the average values of indicators for all five largest SEZ of the production-industrial type of the Russian Federation and the indicators of SEZ PPT Lipetsk.

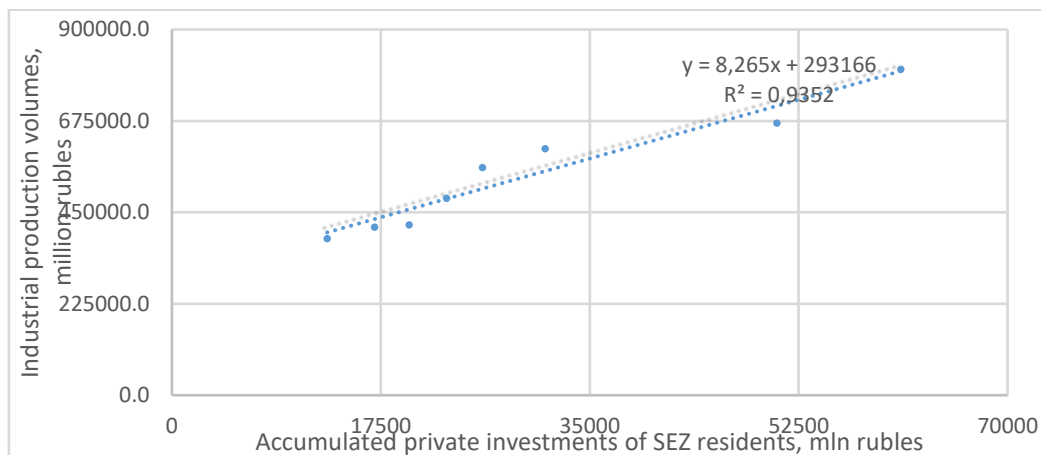


**Figure 4. Comparison of the average values of the relative indicators of the impact of SEZ on the economy of the region**

Source: Own calculations

As we can see, the PPT of SEZ and Lipetsk is much higher than the average. The resulting data can be interpreted in two ways. On the one hand, this indicates the SEZ operation's efficiency in the Lipetsk region, its investment attractiveness. On the other hand, some of the SEZ under consideration are located in larger industrial regions, which explains their minor role in the volume of production of industrial products and other indicators. Thus, the volume of production of residents PPT SEZ and "Alabama" is much higher than in SEZ PPT "Lipetsk," but the production of industrial products in Tatarstan is much higher than in the Lipetsk region. However, the Samara region's industrial production is more extensive than in Lipetskaya, but the revenues of residents of PPT and Tolyatti are five times lower than in PPT and Lipetsk. It is also possible to say about the comparison with SEZ PPT "Kaluga": in terms of the volume of industrial production, both Kaluzhskaya and Lipetskaya regions are equal, but the production of residents of SEZ PPT "Lipetsk" is much higher.

At the last stage of the study, we will present an analysis of the correlation between the volumes of private residents of SEZ PPT Lipetsk and various indicators of the Lipetsk region's economic development. Figure 5 shows the relationship between SEZ residents' private investments accumulated total and volumes of industrial production in the Lipetsk region from 2011 to 2018.



**Figure 5. Dependence between SEZ residents' private investments accumulated total and volumes of industrial production in the Lipetsk region from 2011 to 2018.**

Source: Own calculations

The correlation analysis results using Microsoft Office Excel software show a linear relationship between the indicators under consideration, as evidenced by a determination factor of 0.935, which, according to the Chaddock scale, means a very high relationship between the indicators.

Simultaneously, given the small share of SEZ PPT Lipetsk in the total volume of industrial production of the Lipetsk region, the author of the study believes that industrial production in the region cannot be due only to investments of SEZ residents. However, the fact of their implementation indicates a favorable economic environment, which contributes to economic growth, which is further supported by the functioning and development of SEZ PPT Lipetsk.

The authors of the study then analyzed the relationship between the private investments of SEZ residents and the accumulated outcome and labor market indicators of the Lipetsk region. Having analyzed the correlation between private investments of SEZ residents accumulated total and the average annual number of industrial organizations in the region in 2011-2018, the author of the study received ambiguous results, which are presented in Figure 6.



**Figure 6. Dependence between private investments of SEZ residents accumulated total and the average annual number of industrial organizations employees in the Lipetsk region from 2011 to 2018.**

Source: Own calculations

As we can see, the graph shows the inverse relationship between the indicators, but job creation cannot be the reason for the decline in the number of jobs in the region's industrial sector. Judging by the increase in the share of created SEZ jobs in the total number of industrial jobs in the Lipetsk region, SEZ's operation and development, on the contrary, was a factor that eased the trends of reduction of industrial jobs. Therefore, the authors of the study analyzed the relationship between private investments of SEZ residents accumulated total and the average annual number of employed in the Lipetsk region's economy. Correlation analysis results are shown in Figure 7.



**Figure 7. Dependence between private investments of SEZ residents accumulated total and the average annual number of employees in the economy in the Lipetsk region from 2011 to 2018**

Source: Own calculations

As we can see, there is a positive correlation relationship between these indicators and the close relationship between private investments of SEZ residents, the accumulated total, and the average annual number of employed in the economy in the Lipetsk region according to the Chaddock scale is noticeable. According to the author of the study, the results can be explained as follows: industrial-industrial SEZs have a positive impact on the number of jobs in the industry of the region, but global and all-Russian trends are such that the number and share of jobs in industry decrease every year. Nevertheless, the growth of investments of SEZ residents indirectly contributes to the growth of employment in other sectors of the economy.

The authors also conducted a correlation analysis of the relationship between SEZ residents' private investments accumulated total and revenues of taxes and fees to the consolidated budget in the Lipetsk region. The data are shown in Figure 8.



**Figure 8. Dependence between private investments of SEZ residents accumulated total and revenues of taxes and fees to the consolidated budget in the Lipetsk region from 2011 to 2018.**

Source: Own calculations

As we can see, there is also a positive linear relationship between these indicators, and the close relationship can be characterized as noticeable. Although SEZ residences play a small role in taxes and fees due to fiscal preferences, SEZ's operation does have an indirect impact on tax revenues through developed economic linkages with other business entities.

According to the results of the presented methodology on the PPT of SEZ-Lipetsk, it was concluded that the role of the zone in the regional economy is currently insignificant, except for the sphere of investment activity in the region, where residents of SEZ carry out a significant share of investments. However, compared to other large SEZs, Lipetsk's PPT area has a much larger role in the economy. The correlation analysis results showed that the link between industrial production volumes and frequent investments of SEZ residents is powerful, and the labor market and budget system of the SEZ region are indirectly influenced.

## **5. RESULTS AND DISCUSSION**

### **5.1 Identification of the main problems and shortcomings of SEZ functioning in the Russian Federation (on the example of SEZ PPT Lipetsk)**

An analysis of the impact of industrial-production-type SEZs on the regional economy showed that at the present stage of developing special economic zones are only small parts of the regional economy, despite preferential conditions, their impact on regional economic processes is minimal. Nevertheless, against the background of the remaining SEZ zones, the Lipetsk PPT shows quite good results, but it is necessary to consider the main problems and shortcomings that prevent the considered SEZ in the Lipetsk region and other SEZ from becoming real drivers of economic development in the region. Problems that affect SEZs' effectiveness and reduce their contribution to regional development can be divided into several major groups.

The first group of problems is legislative, related to the inefficiency of the regulatory and legal support for the SEZ activities. In particular, only in 2015, the Federal Law "On Special Economic Zones in the Russian Federation" introduced provisions that expand the powers of the executive authorities of the Russian Federation's constituent entities in terms of the management of special economic zones located on their territory. Before that, the management of the SEZ had been predominantly the prerogative of the federal authorities.

The federal authorities' inability to immediately propose the optimal management scheme of the SEZ (and it is not changing for the first time) is not yet evidence of the inefficiency of the SEZ as an instrument of investment policy as such. Besides, there are problems with overlapping functions and support measures for SEZs and other territories with special investment conditions (Deren, 2019, 437). The entanglement of the system of support, functions, and powers of regional and municipal authorities in SEZs' management reduces their investment attractiveness (Bulatov, 2017, 220).

We believe that the expansion of regional authorities' participation in the management of SEZ development is a positive trend. However, in 5 years, not all regions have seen the expansion and deepening of cooperation between the executive authorities of the regions and SEZ's managing companies. This problem is not so acute in the Lipetsk region, but the level of regional support for the SEZ is much lower than it could be. Moreover, it is not so much about financing and creating the necessary infrastructure, but about the role of regional power in the formation of an economic space around the SEZ from regional enterprises and organizations that, without being residents of the SEZ, would work closely with them both as suppliers and consumers of products.

Also, among the legislative problems should be that at the normative level in the Russian Federation, there are privileges and preferences for SEZ participants, which are significantly lower than the global practice. SEZ preferences are limited to reducing taxation and customs payments, but this is not enough to ensure a global competition of Russian SEZ to attract investors. For example, residents of Russian industrial-production-type SEZs are deprived of benefits for payment

of social contributions, which are valid in technical-implementation-type SEZs, however only for specialists in information communication technologies. Simultaneously, the need to pay social contributions has a significant impact on the wage fund of enterprises, which is a significant part of the cost of industrial products. Therefore, regulating wage deductions to revitalize residents and increase the number of jobs created remains open.

Also, among the shortcomings of the existing SEZs' legislative regulation is the lack of clear guidance in the regulations on the conditions under which a resident of the SEZ may be deprived of his or her status. Also, the executive authorities' responsibility of the federal and regional levels in case of a deterioration of the regulatory conditions for the work of SEZ residents has not been determined (Kozlova, 2018, 72).

All this indicates that despite the long existence of legislation on SEZ, so far, the Russian Federation has not established a system of protection against violation of the rights of residents or non-fulfillment of obligations under the agreement, which negatively affects the development of SEZ (Bulatov, 2017, 212).

The second group of problems is administrative problems related to the inefficient operational management of SEZs. For example, the existing procedures for obtaining SEZ resident status are highly forgotten. Potential investors are required to undergo many procedures, prepare a significant package of documents prepared on strict requirements for application forms and business plans, assess socio-economic effects, which is difficult and not always understandable, especially for foreign companies (Bulatov, 2017, 213). Although all SEZs have a single-window system, the project approval procedure can last up to 1 year. This problem is also common for SEZ PPT Lipetsk.

After signing a three-party agreement to obtain SEZ resident status, it must comply with a significant number of requirements and obligations. In case of non-compliance with them, the penalty may be the payment of fines and penalties and the return of unpaid funds when using tax and customs incentives, which reduces investors' interest to invest in SEZ (Bulatov, 2017, 214).

One of the most critical issues is the inefficiency of public-private partnerships within the SEZ. First of all, this applies to the processes of investment in infrastructure facilities of SEZ, when there may be a breakdown of construction and installation schedules, late transfer of funds for the performance of works, overvaluation of projects, imperfections of procedures for the selection of supported investment projects, etc.

For SEZ PPT "Lipetsk" as a sufficiently mature zone, this range of problems is already secondary, but for those zones where active infrastructure creation is taking place, this fact is the reason for the decline of economic efficiency and attractiveness for potential investors.

It should also be said that the services offered by SEZ managers are often minimal. In foreign practice, SEZ residents not only receive tax preferences, they can receive advisory support, much attention abroad is paid to centralized marketing of SEZ and its residents, and companies are offered additional financial support not only at the expense of benefits but also at the expense of the possibility to obtain borrowed funds at a lower interest rate with guarantees of the managing company, etc. In Russian practice, additional services of SEZ management companies, if declared, are limited. Thus, the system of indirect support for SEZ residents is fragile in the Russian Federation.

Furthermore, the third group of problems is economical, related to economic processes within the SEZ and in the region's territory and the country. Unfortunately, especially in the last few years, the Russian Federation's level of purchasing power has decreased, which has dramatically narrowed the national market. Lack of demand for products produced by SEZ residents is a significant limiting factor in attracting investments, even on the terms of the benefits granted (Lapteva, 2019, 253).

When planning the placement of special economic zones, the federal authorities must solve a dilemma - on the one hand, the SEZ should be located in regions where support for the development of entrepreneurship is a pressing problem, and the placement of the SEZ is justified to attract investors, on the other, appropriate infrastructure is needed (its creation solves this issue at

the expense of budgetary funds) and, most importantly, a market is needed for the products that residents will produce. Unfortunately, there is not always a marketing justification for the SEZ operation, which significantly affects investors' interest. So far, the Russian Federation has not developed comprehensive solutions to ensure market accessibility for SEZ residents, stimulate domestic and external demand for manufactured products (Lapteva, 2019, 254).

Among the specific problems of SEZ PPT Lipetsk, it should be noted that there is a shortage of qualified labor resources in the place of accommodation. This conclusion follows from the assessment of the National Rating of Investment Attractiveness of SEZ of Russia (Afanasieva, 2017). The region is located. The level of vocational education in the Lipetsk region is 10 thousand people. The population is 40.86, while in Tatarstan, where another large SEZ is located PPT "Alabama" this indicator is two times higher, in the Samara region (SEZ PPT "Tolyatti") - 1.5 times, also in Lipetsk region, it is quite a small population density, which affects both markets and availability of labor resources.

Another problematic block for SEZ PPT "Lipetsk" is an insufficient level of information openness. Even though almost half of this SEZ residents are foreign companies, the quality of the English-language version of the site is unsatisfactory, the Russian-language version is also insufficiently informative.

All the factors presented lead to a prolonged investment in SEZs. Thus, the SEZ PPT Lipetsk has been working for 15 years, but only 30.6% of the declared volume of private investments were made, and only 34.72% of the total usable area was occupied.

## **5.2. Proposals to improve the functioning of SEZ PPT Lipetsk**

First, we will present the main directions for improving SEZs' functioning in the Russian Federation, which is relevant for all SEZs of different types. Of course, the identified shortcomings of the legislative regulation of the functioning of the SEZ should be eliminated. In particular, it should:

- At the legislative level, distinguish precisely the powers of federal, regional, and municipal authorities to manage special economic zones, define responsibilities and performance indicators against which the performance of authorities at different levels should be assessed in the strategic and operational management of the SEZ (it is particularly important to specify indicators that reflect the impact of the operation of the SEZ on the economic development of the region). At the same time, the author of the study believes that while maintaining the general strategic direction of management, principles, and main preferences for residents of all SEZ of the Russian Federation, the central part of the powers should be transferred to the regions as local authorities can better choose the methods and tools of management of SEZ, monitor the progress of the necessary works. Of course, such autonomy must be compensated by a strict control system;
- The Law "On Special Economic Zones" should provide clear instructions on the conditions under which a resident of the SEZ may be deprived of his status and determine the responsibility of the executive authorities of the federal and regional levels in case of a deterioration of the regulatory conditions for the work of the residents of the SEZ.

The presented system of amendments to the regulations governing the SEZ activities will contribute to the improvement of the SEZ management system at all levels and increase the attractiveness for investors of this form.

Measures are also needed to eliminate existing administrative shortcomings in attracting investors. First, there is a need to strictly monitor the time frame for reviewing all documents at all stages of obtaining resident status. The same applies to the connection of residents to technological infrastructure. In order to encourage employees of the managing company to comply with all

deadlines and agreements, a system of penalties should be developed to prevent delays in the implementation of resident investment projects by the managing company.

In terms of additional services and support measures, consideration should be given to the possibility of organizing additional financial support measures for residents through a system of concessional lending and guarantee by the managing company and regional authorities' support. In general, of course, it is welcome when the investor has all the necessary amount to implement the project. However, in the negotiations before the conclusion of the tripartite agreement, there are cases when the regional authorities and the resident understand that the project could be implemented on a larger scale, and the potential investor does not have its financial resources. In such a case, additional financial support measures could enable more extensive and more complex projects to be implemented on the SEZ territory. As for economic problems, first of all, related to the small market in the Lipetsk region and the Russian Federation as a whole, in this case, the main direction of improvement is a large degree of integration of SEZ into the economic space of the region where it is located.

It is for this reason that we recommend to expand the powers of regional authorities in the field of SEZ management, as regional authorities can ensure the establishment of spruce, production, and economic ties between residents of SEZ and other enterprises of the region, which will allow all interested parties to benefit. For the economy, this will create a synergistic effect. The authorities of the region should, through such tools as round tables, seminars, exhibitions, newsletters, the involvement of various regional structures, such as the Lipetsk Chamber of Commerce and Industry Union, other measures of assistance should ensure the conclusion of agreements between residents and non-residents of the SEZ so that they can act both as sellers of produced goods and services and as consumers.

It is also essential to create a business service infrastructure on the territory of the SEZ, which may consist of branches of companies that provide financially, insurance, legal, logistics, and other services, which will allow the residents of the SEZ to focus on the most critical tasks, and for the service, companies will become a source of additional income.

In the face of a slowdown in business activity, regional authorities can also form a state order system for products produced by SEZ residents (of course, if there is a need for such products). As world practice shows, it is quite possible to negotiate with investors before concluding a tripartite agreement that after the implementation of the project, part of the products will be delivered to the state order (Zeng, 2020). The availability of a guaranteed volume of sales will significantly increase the attractiveness of SEZ and PPT.

It is also necessary to develop the services PPT, the managing company SEZ and Lipetsk, aiming to stimulate residents' products. In particular, it is possible to recommend that resident specialists be trained incompetent and effective in the system of State and commercial tenders. It is also possible to establish the interaction of the managing company with the structures of the executive authorities of Lipetskaya region, in particular, with the Export Support Center of Lipetskaya region, which assist in export operations, which will allow residents of SEZ PPT Lipetsk to develop the external market as well (especially in the low exchange rate of the Russian ruble, when the goods of Russian companies are quite competitive on the foreign market).

The task of the managing company SEZ- PPT is also to develop and implement a large-scale marketing strategy, which should be aimed both at attracting new investors and at popularizing the products of companies that are residents of SEZ among the target audience.

In order to implement the marketing approach to attract investors, first, it is necessary to eliminate the shortcomings of the official site, improve the English-language version, and the Chinese version of the site can be added, as, at this stage, there is an expansion of business ties between the Russian Federation and China. It is also necessary to increase information openness, at the request of potential investors to disclose data not only on the received revenues of SEZ residents but also on financial results, to provide calculations of profitability indicators of sales, the profitability of invested capital, etc., so that potential investors can understand the likely benefit from investments.

In terms of consumer marketing, it is recommended to use modern Internet technologies to promote SEZ PPT Lipetsk goods and products. For example, now on SEZ's official website, there is a page (<https://sezlipetsk.ru/about/rezidenty/>) where all residents are listed, but from the company's data - only the name, industry and volume of investments, in some cases, contact details. A solid list represents residents. There is no division by industry; user searches and filters are not provided. However, the SEZ site can be used as a business card of companies, give a link to the official sites of residents, present a more developed description of the products, and in the future, create a market place where residents who are focused on the production of consumer goods can sell their products online. Those who work in the B-2-B sector can create a funnel of sales by collecting potential clients' contacts.

It is possible to promote SEZ and its residents in social networks, which have long become an effective communication channel.

The problem of labor shortage can be solved in several directions. First, it is possible to consider abolishing or reducing social contributions for SEZ resident employees, as implemented for IT specialists in technology-implemented SEZ. If the federal authorities are unable to implement such a preference, the regional budget may cover some of the resident staff's contributions. Such a measure is necessary, as new high-tech plants are being created in SEZ, which require the availability of appropriate professional skills, and, in order to retain such specialists, an appropriate level of wages is needed. Also, the shortage of personnel can be solved by creating an engineering center at the SEZ, in which the resident during the construction of the facility can carry out training and retraining of employees for future work in the construction plant. Education is a strategic area of development (Nastase and Hodoroaba, 2011, 53). It is necessary to expand cooperation with universities and secondary educational institutions of the Lipetsk region in terms of professional training of personnel at the request of SEZ employers.



**Figure 9. The proposed system of EEZ support measures to accelerate regional economic development**

Source: Own construction.



Another solution to the shortage of staff is creating a staff outsourcing center, where residents will be able to hire workers engaged in service processes (accountants, lawyers, administrators, IT specialists, etc.) to perform the necessary functions short one-time. However, such a staff outsourcing center was said to be suitable for staffing support business processes.

Since the "Lipetsk" SEZ is some distance from the central city of the region, it is possible to recommend to improve the comfort of the employees of resident enterprises to organize the transportation of employees from the city to the SEZ and to provide other convenient conditions for the employees of the SEZ residents.

Summarizing the developed proposals to improve the functioning of SEZ PPT Lipetsk (and other SEZ of this type) in Figure 9, we will present a system of measures to support and stimulate the development of SEZ to accelerate the economic growth rate of the Lipetsk region.

### **5.3. Assessment of the growth potential of the regional economy in the event of improving the functioning of SEZs (on the example of SEZ PPT Lipetsk)**

Thus, as a result of the developed set of measures to improve the work of SEZ PPT Lipetsk, the investment attractiveness of SEZ PPT Lipetsk can be expected to grow due to the following results:

- reducing risks associated with imperfections in the legislation governing the functioning of SEZs;
- expediting and simplifying procedures for obtaining resident status;
- development of interaction with other regional structures providing support to economic entities;
- Improving the quality and range of services offered by the SEZ resident management company;
- Increasing domestic and external demand for goods and products produced by SEZ residents;
- increasing the level of integration into the economic space of the region, developing cooperation with enterprises and organizations;
- improving the staffing of SEZ residents, increasing staffing capacity, etc.

The authors believe that the implementation of the presented activities will contribute not only to the inflow of new private investments in the SEZ but also will ensure faster economic development.

In order to forecast the possible impact of the developed activities to improve the functioning of the SEZ, consider the data on the average annual investments of the SEZ residents. Over the past four years, the growth PPT investments of SEZ in Lipetsk have been exceptionally high, the number of projects implemented has significantly increased, so to determine the average size of SEZ residents' annual private investments, we will accept only data for 2016-2019. The average size of private investments of SEZ residents in this period was 11510 million rubles per year.

We will make a forecast of the volume PPT investments in SEZ and Lipetsk until 2025, taking into account the increase in investment attractiveness. The calculation data are presented in Table 1.

**Table 1. Forecast of private investments of residents of SEZ PPT Lipetsk**

Indicator	2020	2021	2022	2023	2024
Average private investment. Million rubles.	11508.5	11508.5	11508.5	11508.5	11508.5
Growth rate versus average investment, %	105%	109%	113%	117%	121%

Expected private investment by residents	12083.9	12544.3	13004.6	13464.9	13925.3
The volume of private investments with the coated flow, million rubles.	84114.9	96659.2	109663.8	123128.7	137054.0

Source: Own calculations.

Having used the equations of the dependence of indicators of social and economic development of the Lipetsk region on volumes of private investments of residents of the SEZ PPT "Lipetsk" received as a result of correlation research, we can also submit the forecast of industrial outputs in the Lipetsk region and also volumes of receipts of taxes and fees as on these indicators the positive linear dependence on volumes of private investments with the powerful and noticeable connection was found. We will not forecast the average annual number of employees in the Lipetsk region's economy, as the relationship between the indicators under consideration is not so obvious.

The values of the volume of shipped goods of own production, performed works, and services in-house by industrial enterprises will be found based on the following ratio:

$$O_{\text{III}} = 8,265 \times \text{И} + 293166, (5)$$

И - private investments of SEZ residents accumulated total

Revenues of taxes and fees in the Lipetsk region will be found according to the following ratio:

$$H = 0,5391 \times \text{И} + 22895. (6)$$

Calculation results are given in Table 2.

**Table 2. Forecast of indicators of social and economic development of Lipetskaya region in case of improvement of the functioning of SEZ PPT Lipetsk**

Indicator	2020	2021	2022	2023	2024
The volume of private investments with the coated flow, million rubles.	84114.9	96659.2	109663.8	123128.7	137054.0
The volume of goods shipped in-house performed works and services in-house by industrial enterprises	988375.6	1092054.3	1199537.3	1310824.7	1425917.3
The income of taxes and fees in the Lipetsk region	68241.3	75004.0	82014.8	89273.7	96780.8

Source: Own calculations.

So, according to the presented forecasts, in case of creation of more comfortable conditions for SEZ residents, expansion of their privileges and preferences, it is possible to expect not only growth of volumes of private investments in SEZ, but also an increase of volumes of industrial production and tax revenues to the consolidated budget.

At the same time, the authors note that only investments in SEZ cannot be a driver of economic growth, here we are talking about a mutual process - the growth of investments will indicate a high level of investment attractiveness of SEZ, which is determined by the general economic situation, in turn, new investments will contribute to the strengthening of positive economic trends.

## 6. CONCLUSION

The problems of the functioning of SEZ PPT Lipetsk (and other SEZ) can be divided into several groups - legislative, related to imperfections of the legislation that regulates the conditions

of the functioning and management of SEZ; administrative - related to shortcomings of SEZ administration; economic, due to the current state of the market, especially the lack of consumer demand for the products of SEZ residents. The lack of qualified personnel was considered a specific problem of the SEZ.

The main areas of elimination of the identified problems the author considers the following measures:

- Improvement of legislation in the sphere of distribution of powers and responsibility between the level of state power;
- Strengthening the guarantees of resident companies;
- Acceleration of all administrative procedures, reduction of technological connection time;
- Establishment of additional financial support measures;
- Development of business infrastructure, the attraction of non-resident companies to provide services to residents;
- Development of the state order system;
- Stimulating business linkages through activities. Cooperation with the Lipetskaya Chamber of Commerce and Industry Union;
- Consultations on participation in tenders;
- Cooperation with the Center for Export Support of Lipetsk Region;
- Comprehensive marketing of SEZ and its residents, including using Internet capabilities;
- Measures to reduce social contributions;
- Creation of an engineering center for early training and retraining of personnel, expansion of cooperation with universities;
- Establishment of a personnel outsourcing center;
- Improve living conditions for employees.

Due to the implementation of the proposed measures, it is possible to expect an increase in the inflow of investments in SEZ PPT Lipetsk. According to the correlation analysis results with a high probability, the growth of private investments of SEZ can become a factor in the increase of industrial production volumes in the Lipetsk region, as well as taxes and fees, respectively. Other parameters of the socio-economic situation of the region should improve due to the synergy effect. This will strengthen the role of SEZ in the regional economy.

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**Appendix 1:** Evaluation of the impact of SEZ PPT Lipetsk on the economy of the Lipetsk region

Indicator	2016			2017			2018		
	Area	SEZ	Share of SEZ in the indicator, %	Area	SEZ	Share of SEZ in the indicator, %	Area	SEZ	Share of SEZ in the indicator, %
The volume of shipped goods of own production performed works and services by own forces of industrial enterprises, million rubles	606751.0	13964.0	2.3%	670076.2	16532.0	2.5%	801970.6	22286.0	2.8%
Investments in fixed assets of enterprises, million rubles	74585.2	5249.0	7.0%	86785.1	19426.0	22.4%	70501.8	10364.0	14.7%
The average annual number of employees of organizations engaged in industrial activities, thousands of people.	95.5	3.26	3.4%	94.30	3.62	3.8%	95.10	4.36	4.6%
Revenues of taxes and fees in the Lipetsk region, million rubles	43002.7	1705.7	4.0%	43750.5	2080.1	4.8%	55989.3	1176.4	2.1%

Source: (Afanasieva, 2017 and Popov, 2019)

**Appendix 2:** Assessment of the impact of SEZ PPT on regional economies

Indicator	Region	SEZ	Share of SEZ in the indicator, %
1	2	3	4
SEZ PPT Lipetsk			
The volume of shipped goods of own production performed works and services by own forces of industrial enterprises, million rubles	801970.6	22286.0	2.8%
Investments in fixed assets of enterprises, million rubles	70501.8	10364.0	14.7%
The average annual number of employees of organizations engaged in industrial activities, thousands of people.	95.10	4.36	4.6%
Revenues of taxes and fees in the Lipetsk region, million rubles	55989.3	1176.4	2.1%
SEZ PPT "Alabama"			
The volume of shipped goods of own production performed works and services by own forces of industrial enterprises, million rubles	2804598.0	93114.4	3.3%
Investments in fixed assets of enterprises, million rubles	370757.9	13696.8	3.7%
The average annual number of employees of organizations engaged in industrial activities, thousands of people.	336.1	8.04	2.4%

Revenues of taxes and fees for the region, million rubles	772555.5	8916.3	1.2%
SEZ PPT Tolyatti			
The volume of shipped goods of own production performed works and services by own forces of industrial enterprises, million rubles	1629703.9	4475.8	0.3%
Investments in fixed assets of enterprises, million rubles	217439.5	1979	0.9%
The average annual number of employees of organizations engaged in industrial activities, thousands of people.	285.2	1.32	0.5%
Revenues of taxes and fees for the region, million rubles	513843.4	242.7	0.0%
SEZ PPT Kaluga			
The volume of shipped goods of own production performed works and services by own forces of industrial enterprises, million rubles	867954.0	3523.6	0.4%
Investments in fixed assets of enterprises, million rubles	75439.3	4774.3	6.3%
The average annual number of employees of organizations engaged in industrial activities, thousands of people.	110.1	1.78	1.6%
Revenues of taxes and fees for the region, million rubles	118337.8	86.6	0.1%
SEZ PPT Lotus			
The volume of shipped goods of own production performed works and services by own forces of industrial enterprises, million rubles	441883.3	347.4	0.1%
Investments in fixed assets of enterprises, million rubles	93799.5	504.9	0.5%
The average annual number of employees of organizations engaged in industrial activities, thousands of people.	38.9	0.752	1.9%
Revenues of taxes and fees for the region, million rubles	160662.6	13.87	0.0%

Source: Own calculation based on (Territorial Authority, 2020).