The success and failure of Russian SEZs: some policy lessons

Alexey Kuznetsov and Olga Kuznetsova*

This paper examines the economic efficiency of Russian special economic zones (SEZs) established by federal authorities since 2005. The results are mixed: the payback of SEZs is low, but they continue to attract residents; SEZs have greater attractiveness for foreign investment, but their sectoral structure is fundamentally no better than the country-wide structure; SEZs' enterprises have higher labour productivity than the country, but mainly owing to their recent creation. The common bottlenecks of SEZ development are the instability of legislation on SEZs, the low level of federal authorities' activity in SEZ development before the economic crisis, competition with other preferential regimes for investors and the long period of searching for the optimal system of SEZ management. Differences in the efficiency of particular SEZs are explained by the peculiarities of the territories where SEZs are established. SEZs are successful if they are created on sites that enjoy a favourable geographic position and in regions that have advanced levels of industrial development.

Keywords: Special economic zones, SEZs, Russia, foreign residents of SEZs, efficiency of SEZs

1. Introduction

Special economic zones (SEZs) have been established in many countries. There are many different types, which vary significantly in terms of countries' level of economic development, GDP structure, specialization in international trade, and sectoral factors. Many studies on SEZs have been conducted. We remember, for example, a long list of articles and even books on the rather successful experience of Chinese SEZs. Nevertheless, the Russian experience with SEZs is rather poorly studied. This fact can be explained by at least three reasons. First, the Russian

* Alexey Kuznetsov is at the MGIMO-University, Moscow and Olga Kuznetsova is at the Lomonosov Moscow State University. Both authors are also affiliated with the Russian Academy of Sciences, where Alexey Kuznetsov is a corresponding member and the acting director of the Institute of Scientific Information for Social Sciences (INION RAN) and Olga Kuznetsova is a professor and the chief researcher of the Institute of System Analysis. The corresponding author is Olga Kuznetsova (kouznetsova_olga@mail.ru).

Federation had an inefficient policy on SEZs for a decade and a half, not unusual both for the world and for the group of post-socialist countries. However, the Russian Federation did manage to introduce a new, more workable system of SEZs after 2005, which can be a source of experience for other countries. Second, the country combines many features of both high-income developed countries and developing and emerging economies. The models of SEZs also demonstrate a mix of very different economic and political features. It is interesting to follow the logic of economic policy in one of the "great powers" through the analysis of such a universal economic instrument as SEZs. Third, even the rather successful results of some Russian SEZs received strong official and public criticism. That led to the dismantling of some SEZs and the elaboration of new forms of territorial incentives for investors, especially in the far eastern region of the Russian Federation.

These considerations ultimately determine the structure of this article. First of all, we conduct a literature review, which shows gaps in the analysis of Russian SEZs. Then we present a short history of Russian SEZs. The main part of the paper is devoted to the results and efficiency of Russian SEZs and the reasons for these. We investigate only the federal SEZs established in accordance with the federal law of 2005. Thus, we do not study such unique cases as the SEZ in the Kaliningrad Oblast (it has existed in this Russian exclave since 1991 but special laws for it have been changed many times) and the SEZ in the Magadan Oblast (a de facto exclave due to the logistical gap with other Far East territories), the free economic zone in the Republic of Crimea and City of Sevastopol (established for both political and economic reasons after the re-unification of these territories with the Russian Federation in 2014) and the Innovation Center Skolkovo in Moscow (it was introduced by special federal law in 2010 and its regime resembles an SEZ regime, but it was never a part of the Russian SEZ legislative system). We also do not study preferential regimes for investors that are very close to SEZs and can be considered as such – territories of advanced social and economic development and free ports in the Far East. The federal laws on such regimes came into force only in 2015, and it is too early to talk about the results of this economic policy instrument. We consider only the federal policy of SEZ creation. Federal SEZs have a priori higher results than regional analogues, as they are created with the participation of authorities at all levels. Then we explain the contrasts between various SEZs. Lastly, we introduce some conclusions on the future development of Russian SEZs and main lessons for other countries.

2. Literature review

It is typical for the Russian Federation that the majority of articles on SEZs are in Russian and only a few studies are published in English. Nevertheless, we will cite

predominantly English-language publications for the convenience of the readership. Exceptions are made to include the most important studies or where coverage of a particular topic is poor.

Assessments of Russian SEZs' efficiency in the 1990s were usually negative (e.g. Shekhovtsov et al. 2000; Kuznetsova 2002). Only the SEZ in the Kaliningrad Oblast could be seen as a special case (e.g. Zhdanov et al., 2002, Gareev 2013) and that is why we do not address its evolution, which was contradictory during the period observed. Foreign researchers came to the same conclusion about standard Russian SEZs before 2005: it was shown even by econometric methods that many free economic zones became mere shells and had very weak influence on the regional distribution of foreign direct investment (FDI) in the country (Iwasaki and Suganuma, 2005). As a result, many publications before 2005 were devoted to promoting the foreign experience as ideal for the imperfect Russian reality (Smorodinskaya and Kapustin, 1994; Zimenkov, 2005).

After the introduction of a new system of Russian SEZs in 2005, there was a boom in Russian-language articles. Unfortunately, the majority of them are devoted to general information on the legislative regimes and economic features in SEZs of different types (e.g. Karchova and Kunakov, 2007). The most popular aspect of serious analysis is the role of SEZs in the Russian Federation's regional economic policy. Among Russian economists there is a general idea that SEZs affect only their local economies. A well-known Russian regionalist made a statement that all her attempts to estimate the direct influence of state support in SEZs on the dynamics of regional macroeconomic indicators had failed. Such estimates included testing correlations with industrial production in regions, total investment in regions, volumes of their foreign trade and intensity of R&D (Mikheeva and Anan'eva, 2011).

Another well-known Russian regionalist presented a good bibliography of Russian studies on SEZs but maintained that SEZs should be poles of economic development, however, had failed to achieve this task (Shvetsov, 2016). The most sophisticated analysis, which was based on a detailed comparison with foreign experience and case studies with semi-structured interviews of managers of five Russian SEZs of the industrial type (in the Tatarstan Republic, and the Sverdlovsk, Lipetsk, Samara and Pskov Oblasts) also showed that Russian SEZs (as well as industrial parks) cannot quickly form new industrial clusters (Sosnovskikh, 2017). But it is necessary to mention that Russian SEZs were not seen by the federal authorities as a means of cluster development only. Building technology chains, deepening processing, and localizing production (in the case of the automotive industry) were seen as no less important tasks.

Some experts follow the official methodology in their assessments of Russian SEZ efficiency (e.g. Yankov et al., 2016), which is only a comparison of official statistical aims with the current results of different SEZs. There is also a poorly done short

English-language article with good citations from other experts, in which two pages of analysis led to erratic findings (Maslikhina, 2016). Negative assessments of the real economic results of SEZs are explained to a certain extent by the lack of coherent statistics in the country, especially at the local level. Some Russian experts (e.g. Pavlov, 2009) have suggested interesting approaches to the evaluation of SEZ efficiency but have not managed to put them into practice.

We support alternative ideas. First, it seems incorrect to assess SEZs as a whole. SEZs differ greatly by their type and incentives for investors, their geographical position and the time of their creation. The real efficiency of SEZs can be calculated only for long-term periods, but the majority of Russian SEZs are only a few years old. We introduced a different approach three years ago (Kuznetsova, 2016b), in line with the newest international approaches in which SEZ performance evaluation considers three aspects: (i) SEZ programme (incentives package, requirements and programme characteristics), (ii) SEZ characteristics (maturity, size, operator and industry focus as well as distance to ports and largest cities, power supply in the zone and administrative support) and (iii) contextual factors such as institutional quality, access and proximity to markets, previous level of industrialization, income level and human capital (Frick et al., 2019).

Second, SEZs are an instrument of federal investment policy, they are the grounds for additional state investments in infrastructure and a sign of special attention by the federal authorities to the investment climate in the region of an SEZ's location. Limited efficiency of state investment policy is better than the total absence of such policy. Moreover, the role of SEZs should be assessed in comparison with other regional instruments of support for private investors (Leonov, 2017).

Unfortunately, SEZs are sometimes mixed with other territorially localized instruments of federal policy, especially by foreign analysts. First, federal SEZs should be separated from "territories of advanced social and economic development" (whose Russian abbreviation is TOSER), which were introduced by federal law in the spring of 2015. SEZs provide infrastructure and tax and customs incentives for greenfield projects in empty locations that should find residents. In contrast, TOSERs are established when state authorities can find particular investors. However, the establishment of SEZs can be a result of lobbying by companies from certain industries, such as car manufacturers and the SEZ in the Samara Oblast or titanium producers and the SEZ in the Sverdlovsk Oblast. Second, SEZs differ from technology or industrial parks, which provide no special federal tax incentives. Third, SEZs differ from several "gambling zones" (in Altai Krai, in Primorsky Krai, among others). The latter instrument has a social function rather than an economic one – to allow casinos, which were forbidden in other parts of the Russian Federation on 1 July 2009.

It should also be stressed that SEZs stimulate FDI and as such they are incentives for both regional development and foreign economic relations. Unfortunately, the connection of Russian SEZs with FDI is rarely investigated. The first thorough research was done by a well-known Finnish specialist in FDI who introduced SWOT (strengths, weaknesses, opportunities and threats) analysis of Russian SEZs in 2009 (Liuhto, 2009). His assessments were not very optimistic because announced tax incentives lowered investment barriers for foreigners, but the benefits alone were not sufficient to overcome foreign investor skepticism about negative features of the Russian investment climate.

It goes without saying that there are also some other aspects of the assessment of Russian SEZs. For instance, it is possible to look at SEZs not only as an economic instrument but also as an experimental area for legislation (Bublik and Gubareva, 2016). However, we will concentrate our analysis on the economic aspects of Russian SEZs.

3. The establishment of SEZs in the Russian Federation

Prior to analysis of the efficiency of SEZs in the Russian Federation, it is necessary to describe in brief the history of SEZ creation in the country. Initial attempts to create free economic zones were made by the federal authorities in the early 1990s, but the overwhelming majority of the zones created did not really operate for obvious reasons:

- There was no budget to invest in free economic zone infrastructure because of the desperate economic situation.
- The federal authorities very quickly refused to provide investors with tax benefits owing to the inability to administer these benefits at that time.
- The majority of free economic zones were created in regions with very low investment attractiveness, which meant investing there was not feasible in the period of economic crisis.

The only exception was a free, then special economic zone[1] in the territory of the Kaliningrad Oblast. A special regime of economic activity in this region was introduced to compensate the exclave geographical location of the region.[2] This

[1] In Russia “free economic zones” and “special economic zones” are synonyms. The term “free economic zones” was more common in the 1990s; nowadays economic zones are usually termed “special”.

[2] The Kaliningrad Oblast is the westernmost Russian region, separated from the rest of Russia by the territories of other states and international waters.

regime has been revised several times, but the SEZ in the Kaliningrad Oblast continues to function and is still justified by the need to ensure the dynamic economic development of the exclave Russian region.

Attempts to adopt a general federal law on free (or special) economic zones began in the late 1990s, but the federal law "On Special Economic Zones in the Russian Federation" and related amendments to the Russian Federation Tax Code were adopted only in the summer of 2005. The reason for such a long discussion on SEZ law was the dominance of liberal views on state regulation of the economy. Any preferential regimes for potential investors were denied even as instruments of regional policy (and there was almost no regional policy in Russia in the first half of the 2000s). Such liberal views on state regulation of the economy were also reflected in a number of features of SEZs: tax incentives for SEZ residents were initially insignificant and the number of SEZs was very small.

The preferential regime for investors in Russian SEZs is based on generally accepted approaches and consists of three elements: infrastructure construction for investment projects, tax and customs privileges, and simplification of the administrative regime (reduction of administrative barriers). The size of an SEZ depends on its type: the maximum size of industrial SEZ is 40 square kilometers, and of a technology SEZ 4 square kilometers. An SEZ can be located on several land plots, either in close proximity or in different parts of the region.

SEZ legislation in Russia has been revised many times. Even the federal law on SEZs has been changed more than 20 times. One important change was the increase in types of SEZs. In the first edition of the law there were two types – industrial and technology. In 2006-2007, the types of SEZs were supplemented with tourism and logistics SEZs (the latter can be created at seaports, river ports and airports).

By the beginning of 2019, the federal authorities had decided to create 11 industrial, six technology, 17 tourism and three logistics SEZs (the creation of each SEZ is formalized by government decree). However, of these 37 SEZs, 11 have been closed, and only 26 SEZs continue to operate. The possibility of early liquidation is allowed by the law if an SEZ does not secure occupants within three years of its creation. Most of the early liquidations were in ones for tourism, owing to inflated expectations about tourism development and the negligible incentives offered to investors.

On the whole, the changes in SEZ constitution reflect the general transformation of the federal economic policy. With the economic crisis that began in late 2008, the federal authorities abandoned their liberal views on state regulation of the economy and began to support entrepreneurs and investments much more actively. With respect to SEZs, the decision-making procedure for creating an SEZ was simplified, the number of SEZs significantly increased, requirements for the investment volume

of SEZ residents were reduced (such requirements are imposed on residents of industrial and logistics SEZs) and tax privileges for SEZ residents were expanded.

All these changes can be considered justified, but there are two negative points. The first is the instability of the SEZ legislation, which can cause concerns among investors. The second is that years of economic growth were lost, when more budget resources could have been spent to create SEZ infrastructure and when more investors could have been attracted. The federal authorities refused to make federal investments in the infrastructure of SEZs created since 2015 (such investments are made only at the expense of regional budgets or even in private industrial parks). The lack of investment by SEZ residents is particularly visible in the logistics SEZs, where significant investments are needed. As a result, only one SEZ of this type remains.

The Russian experience shows that, on the one hand, it is necessary to work out carefully the policy of SEZ implementation, so that there is no need to constantly adjust it. On the other hand, the process of developing and implementing SEZs as a tool to attract investors should not be delayed much in order not to miss a favourable economic situation.

4. The results and efficiency of Russian SEZs

Russian SEZs are administered by the Ministry of Economic Development, which publishes annual reports on their results. Data are published with some delay,[3] and there is a clear lack of information for comparing domestic and foreign investments. The ministry itself evaluates SEZ efficiency according to the methodology approved by the government, but we do not consider this evaluation meaningful. It is based on the comparison of actual and planned values of indicators and thus depends not only on actual SEZ results, but also on the quality of planning in the Russian Federation. The latter, as is well known, is far from satisfactory.

We evaluate SEZ operation on the number of SEZ residents, including those with the participation of foreign capital (it is the only indicator by which single SEZs can be compared); returns on the budget funds invested in SEZ infrastructure; the place of the SEZ in the country's economy and features of the SEZ in comparison with general economic parameters. As touristm and logistics SEZs are not particularly successful, we consider in detail only industrial and technology SEZs (table 1), which are also more typical of other countries.

[3] The report on the activities of SEZ residents in 2017 was published on 29 June 2018 (http://economy.gov.ru/minec/about/structure/depOsobEcZone/2018290632).

Table 1. Results of Russian SEZ operations at the beginning of 2018 (cumulative data from the start of SEZ operation)

SEZ	Date of creation	Number of SEZ residents		Share of foreign investors in total residents (%)	Number of jobs created by SEZ residents	Ratio of capital investments of SEZ residents to budget investments in the SEZ	Ratio of tax and customs payments of SEZ residents to budget investments in the SEZ
		Total (1)	Number of foreign investors (2)				
Industrial SEZs total		197	80	41	13 315	3.0	0.72
Industrial SEZs in:							
Tatarstan Republic	21/12/2005	64	28	44	6 389	4.2	1.36
Lipetsk Oblast	21/12/2005	52	26	50	3 624	3.3	0.57
Samara Oblast	12/08/2010	20	8	40	1 077	1.3	0.15
Sverdlovsk Oblast	16/12/2010	14	2	14	133	1.5	0.03
Pskov Oblast	19/07/2012	9	7	78	77	0.3	0.02
Kaluga Oblast	28/12/2012	14	3	21	1 136	1.9	0.02
Astrakhan Oblast	18/11/2014	8	2	25	216	0.6	0.54
Moscow Oblast	08/08/2015	8	4	50	69	--	--
Tula Oblast	14/04/2016	8	0	0	594	3.7	0.02
Voronezh Oblast	30/12/2018	0	0	--	--	--	--
Technology SEZs total		374	39	10	14 464	0.5	0.22
Technology SEZs in:							
Moscow	21/12/2005	44	5	11	5 191	0.4	0.18
Saint Petersburg	21/12/2005	46	7	15	2 712	1.2	0.67
Moscow Oblast, Dubna city	21/12/2005	137	9	7	3 383	0.8	0.09
Tomsk Oblast	21/12/2005	72	10	14	2 045	0.2	0.20
Tatarstan Republic	01/11/2012	61	6	10	959	0.0	0.01
Moscow Oblast, Fryazino city	31/12/2015	14	2	14	174	--	--

-- = Budgetary investments in the SEZ infrastructure have not been made and/or SEZ residents have not yet begun to use tax and customs privileges.

Source: Compiled from legal database (http://www.consultant.ru), data of the Ministry of Economic Development of Russia (http://economy.gov.ru/minec/about/structure/depOsobEcZone/2018290632).

In general, Russian SEZs show mixed or even contradictory results.

The ratio of SEZ residents' investments to budget investments in SEZ infrastructure is relatively good only in the first two industrial SEZs – in the Tatarstan Republic and the Lipetsk Oblast. Except in these two, the volume of SEZ residents' investments exceeds the volume of federal budget investments only in the technology SEZ in St. Petersburg. Budget investments are "paid back" only in one industrial SEZ – in the Tatarstan Republic (where the volume of tax and customs payments of SEZ residents exceeds the volume of budget investments in SEZ infrastructure).

At the same time, the majority of SEZs are far from achieving a standard payback period. Moreover, several SEZs were increased in size and in some cases the new land plots are situated relatively far from the original ones, which inevitably implies the need to build new infrastructure for SEZ residents (for example, in July 2015 it was decided to create the second SEZ site in the Lipetsk Oblast some 30 kilometers away from the first site). The results of Russian SEZ operation are also not static as new residents continue to register in SEZs, including those created in 2005. Not all SEZ residents have managed to start production or even construction of plants. So, at the beginning of 2018, only about 42 per cent of SEZ residents had reached the stage of operating activities and a little more than 10 per cent of the projects were at the construction stage. Almost half of SEZ residents were at the design stage and land management (26 per cent) or even at the initial stage of the project (22 per cent).[4]

The role of foreign capital in SEZs is higher than in the Russian economy as a whole. In the country as a whole, foreign investors have increased their interest since 1999, when economic growth began. Since 2000 the share of Russian property has fluctuated around 80 per cent, and that of foreign and joint (Russian and foreign) property around 20 per cent. Foreign and joint forms of ownership peaked in 2005-2006 (about 25 per cent of total) and decreased during the years of economic crisis (to 15-17 per cent in some years). It is worth noting that sanctions did not have a major impact on the investment structure.

At the beginning of 2018, investments of SEZ residents with Russian capital amounted to only 39.7 per cent of the total stock of SEZ residents' investments, while investments of SEZ residents with foreign participation amounted to 60.3 per cent. But the situation is different for different SEZs, and such differences are explained by general peculiarities of FDI in the Russian Federation.

The main reason for FDI inflows to the country is to gain access to the large domestic market (Kuznetsov, 2013). As a result, foreign investors' factories

[4] Calculations from data of Business Navigator for Special Economic Zones in Russia – 2018 (http://economy.gov.ru/minec/activity/sections/sez/201805121).

being built in the country are usually quite large enterprises for the production of consumer products. Industrial SEZs are very suitable for such large investment projects (before the crisis, the minimum volume of an SEZ resident's investments had to be at least €10 million; in the crisis of 2011 this volume was reduced to €3 million. Then the minimum requirement was set in roubles and, because of the devaluation of the rouble, it was reduced to €1.6-1.7 million). As a result, the share of residents with the participation of foreign capital in industrial SEZs as a whole exceeds 40 per cent.

The second important reason for FDI inflows to the country is to gain access to natural resources. However, raw materials production in SEZs is prohibited.

The inflow of foreign investors for the implementation of innovative projects is not typical for the Russian Federation. There are foreign investors in technology SEZs, but they are few and their projects, as a rule, are also relatively large-scale and produce for the domestic market. Technology SEZs usually have at least two sites: one for small companies in the form of business incubators and the second for industrial enterprises producing high-tech goods.

The national structure of FDI in SEZs has some similarities with the FDI stock structure, but there are also noticeable differences (table 2). In the structure of FDI, the role of offshore jurisdictions and flag-of-convenience countries is significant.

Table 2. Structure of SEZ residents' investment stock by country at the beginning of 2018

Country	Share of all SEZ residents' investments (%)	Share of investments of residents with foreign participation (%)	Share of FDI stock in the Russian Federation (%)	Country's rank in terms of FDI stock in the Russian Federation
Total	60.3	100.0	100.0	
Netherlands	21.9	36.3	8.6	3
Cyprus	6.7	11.0	32.7	1
Germany	5.6	9.3	3.6	8
United States	4.3	7.2	0.7	19
Switzerland	4.1	6.8	2.8	11
Japan	3.4	5.7	0.4	22
Turkey	2.5	4.1	0.3	24
Denmark	1.8	3.0	0.2	30
Belgium	1.7	2.9	0.2	28
Italy	1.0	1.6	0.9	16
Rest	7.3	12.1	49.6	

Source: Based on data from the Central Bank of Russia and Business Navigator for Special Economic Zones in Russia – 2018 (http://economy.gov.ru/minec/activity/sections/sez/201805121).

The share of such countries is more than 75 per cent (Cyprus, Luxembourg, the Netherlands, Bermuda, Ireland, the Bahamas, and the United Kingdom are the leaders; Switzerland, British Virgin Islands, and Jersey are also in the top 20). In the structure of SEZ residents' investments, the share of such capital is lower, and the obvious offshore location, Cyprus, occupies the second place. The role of countries with real investments, by contrast, is significantly higher. The shares of different countries in SEZ investments and in the FDI stock in Russia as a whole are different, but it is hardly possible to explain these differences.

Russian legislation on SEZs does not differentiate Russian and foreign investors. In creating SEZs, a focus on foreign investors has never been declared. The official registers of SEZ residents do not even indicate the origin of capital (in the table we have provided all available information on foreign investments in SEZs).

The contribution of SEZs to the entire Russian economy obviously cannot be high owing to the very small number of SEZs, especially those that have been operating for a long period. The contribution of SEZs to the economy of regions where they have been created is more noticeable (table 3) but not dominant. At the same time, labour productivity in SEZ enterprises is on average double the rate than in overall manufacturing (both in the country and in the regions where SEZs are created). This indicator is 2.6 times in the Tatarstan Republic, where the SEZ was established more than 10 years ago and developed in one district. In the Astrakhan Oblast the indicator is 6.5 times. Differences between SEZs are largely determined by the structure of the regional economy. Thus, in the Lipetsk Oblast, the quite prosperous

Table 3. Role of SEZs in manufacturing of regions where industrial SEZs are created

Subject of the Russian Federation where industrial SEZs are created	Number of jobs in manufacturing of the region, persons	Share of jobs created by SEZ residents in all jobs in the region (%)	Share of SEZ residents in manufacturing in 2017 (%)
Tatarstan Republic	345 780	1.85	4.88
Lipetsk Oblast	101 327	3.58	2.63
Samara Oblast	318 529	0.34	0.31
Sverdlovsk Oblast	413 676	0.03	0.09
Pskov Oblast	44 658	0.17	0.01
Kaluga Oblast	117 181	0.97	0.29
Astrakhan Oblast	44 159	0.49	3.21
Moscow Oblast	599 942	0.01	0.00
Tula Oblast	150 207	0.40	0.00
Cumulatively in specified regions	2 135 459	0.62	1.18
Total in Russia	10 173 196	0.13	0.26

Source: Authors' calculations based on data from Rosstat and the Ministry of Economic Development of Russia.

steel industry plant plays the dominant role in the economy, and in the Astrakhan Oblast, mineral mining dominates while manufacturing has a relatively low level of development.

The higher level of labour productivity in industrial SEZs in comparison with all manufacturing is explained mainly by the simple fact that all enterprises in SEZs are new and therefore have relatively modern equipment (all Russian SEZs are greenfield projects). The sectoral structure of SEZ enterprises does not play an important role. According to the federal law on SEZs, enterprises in industrial SEZs can produce almost any product. The only restrictions are on developing mineral resources and producing and processing excisable goods such as alcohol, tobacco, fuels and lubricants. As a result, the specialization of SEZs enterprises covers a very wide range, from simple activities to complicated ones (table 4). This makes it possible to attract the maximum number of investors. In the face of the economic sanctions against the Russian Federation, the federal authorities want to develop import substitution options and are ready to support production of a wide range of goods – not only for the sake of economic security but also to create new jobs. On the other hand, the federal and regional authorities are increasingly concerned about the support of investment projects, the implementation of which can lead to overproduction and, consequently, to problems for the enterprises themselves.

Thus, the results of SEZ operation are mixed: the payback of SEZs is low, but they continue to attract residents; SEZs are characterized by increased attractiveness for foreign investors and by a reduced role for offshore capital, but the sectoral structure of foreign investment is fundamentally no better than that of the whole country; and SEZ enterprises have higher labour productivity but mainly due to the recent terms of creation and to not including to high-tech industries.

5. The reasons for the success and failure of Russian SEZs

We believe that the mixed results of the Russian SEZs are owing to the fact that there have been both successful and disputable – or even incorrect – decisions in the Russian policy for creating SEZs.

In our opinion, the Russian authorities have made the right decision not to focus on foreign experience in supporting export-oriented industries in SEZs, since the Russian Federation is attractive to foreign investors primarily for its capacious consumer market. The country is not very competitive for the location of export-oriented production of TNCs – due to the relatively high level of wages, not very comfortable natural and climatic conditions (as the relatively cold climate leads to an increase in the cost of construction and heating of buildings) and the remoteness of

Table 4. Sectoral structure of projects of industrial SEZ residents

Sector	Total	Tatarstan Republic	Lipetsk Oblast	Samara Oblast	Sverdlovsk Oblast	Kaluga Oblast	Pskov Oblast	Astrakhan Oblast	Moscow Oblast
Total	195	64	57	21	12	16	9	8	8
Transport engineering	35	11	8	12	2			2	
Building materials and packaging	33	15	9	2	1	2	2	1	1
Chemical technology	25	12	6	1	1	3	1	-	1
Agricultural and food industry	24	6	9	-	-	2	2	2	3
Power industry	21	4	10	-	2	1	3	1	-
Metal industry	14	4	6	-	3	1	-	-	-
Consumer goods	14	7	1	1		2	-	-	3
Pharmaceutical and medical industry	10	1	-	3	2	2	1	1	-
Nanotechnology, new materials	7	1	3	1	1	1	-	-	-
Wood industry	4	1	-	1	-	2	-	-	-
Instrument making	3	1	2	-	-	-	-	-	-
Logistics	3	1	2	-	-	-	-	-	-
Information technology	2	-	1	-	-	-	-	1	-

Source: Compiled from SEZ passports, http://www.russez.ru/press/news?rid=24811&oo=1&fnid=68&newWin=0&apage=1&nm=120219&fxsl=view.xsl (published on 15 January 2018).

many regions from seaports. The geographic considerations of product deliveries from SEZs to the domestic market or for export are not discussed by the federal government. In the official assessment of SEZ efficiency there has never been an indicator for products exported outside the region where the SEZ is located.

This does not mean that the Russian experience with SEZs, focused on import substitution instead of export promotion, should be implemented in other countries. But this experience shows that for successful SEZ development, it is important to take into account the current features of the investment climate and economic potential of the country, as well as emerging trends of economic development. Otherwise, SEZs may produce no results. However, SEZs should contribute to significant changes in the economy. So SEZs should have ambitious but realistic objectives.

The conclusion about the importance of the potential for economic growth and attracting investors is also confirmed by the differences in results of separate Russian SEZs. They were created in areas which differed greatly by the level of economic development, economy structure and investment attractiveness. The motives for SEZ creation were also different. The Tatarstan Republic and the Lipetsk Oblast were selected as territories with the best conditions for investors. The SEZs in the Sverdlovsk and Samara Oblasts appeared within the framework of the federal anti-crisis policy to support single-industry towns. The SEZ in the Pskov Oblast and the early-liquidated SEZ in the Primorsky Krai, were established to support economically backward regions, while in the Kaluga Oblast the SEZ was a reward to the regional authorities, who demonstrated notable success with their investment policy. The SEZ in the Astrakhan Oblast was an import substitution project. The SEZs in the Moscow, Tula and Voronezh Oblasts were created in order to support industrial parks that already existed at the time of the relevant decisions.

An analysis of the results of industrial SEZs shows that they are successful when they have been established on sites with a favourable geographical position and in regions of advanced industrial development. For technology SEZs, innovation potential is also important.

The industrial structure of the region where the SEZ is created has an important impact on the SEZ results. Regional plants could be consumers of the SEZ products or, conversely, suppliers of raw materials or components. It is also important to have qualified staff in certain industries and appropriate training programmes in regional educational institutions. The most striking example is the SEZ in the Samara Oblast, which was created near the largest Russian car plant. Here, more than half of residents (12 of 21) specialize in the production of auto components (table 4). And among these 12 residents there is no one with Russian capital only, they are all either foreign investors or joint ventures.

Branch specialization of SEZ enterprises in the Tatarstan Republic and the Lipetsk Oblast is much more diverse. At the same time, in the Tatarstan Republic there are many enterprises in the car industry and in petrochemicals, which are the traditional industries in the region. A number of plants in the Lipetsk Oblast use the products of a large steel plant, NLMK (https://www.nlmk.com/en/). By contrast, the Pskov Oblast is notable for its low level of economic development. There are no complementary industrial enterprises there, and the SEZ has relatively poor results.

The importance of geographical location is best illustrated by the example of the Kaluga Oblast. This region is the generally recognized leader in the quality and success of the investment policy of the regional authorities.[5] By the time the SEZ was created, the Kaluga Oblast had already attracted a lot of investors, including foreign ones, also thanks to the proximity of a large Moscow sales market (the Kaluga Oblast bordered the so-called New Moscow). Investors had built their enterprises mainly either in or near Kaluga, or in areas bordering the capital region. For the SEZ, a peripheral area was chosen – Lyudinovo town and Lyudinovo district. This decision was theoretically impeccable because the regional authorities wanted to reduce the disparities in economic development of the municipalities. However, in practice, attracting investors to the SEZ turned out to be problematic. Unsatisfactory logistics were cited as the main reason for the unattractiveness of Lyudinovo for businessmen. As a result, in 2015, it was decided to create a second SEZ site, this time in the Borovsk district close to Moscow.

A similar situation exists in the Sverdlovsk Oblast. Here the SEZ was created almost 180 km from the administrative center of the region, which in itself is not particularly attractive to investors (especially foreign ones). This is a region of the Urals that is remote from seaports (important for the import of components) and situated on the periphery of the European part of Russia (the main market for consumer goods). Therefore, in August 2018, it was decided to create a new SEZ site – in Yekaterinburg (the administrative center of the Sverdlovsk Oblast, a city of a million plus) and its suburbs.

Such differences between territories with SEZs are possible because the federal law on SEZs does not have a clear answer to the question of how to choose the regions in which SEZs should be created. The law says only that the proposal to create an SEZ should contain a justification for the expediency and efficiency of its creation for solving problems of federal, regional and local significance. The lack of clearly defined criteria for the selection of regions came about because among

[5] This means that the failures of the SEZ cannot be explained by the inability of the authorities to work with investors (policy is often cited as a reason for the low investment attractiveness of some Russian regions).

experts there was no understanding of where SEZs should be. Studies of foreign experience showed different approaches between economically developed and developing countries:

- In developing countries, SEZs were created mainly to solve general economic problems and they were focused mainly on foreign investors. As a result, SEZs were located in regions with the highest investment potential (usually the most economically developed).
- In economically developed countries SEZs were more often an instrument of regional policy. Therefore, they were created in "problem" regions.

There was no evident answer to the question about which experience was more relevant for Russia. On the one hand, the Russian experience of the 1990s showed that free economic zones set up in problem regions had no effect in improving the situation of those regions, because they did not attract any investors. On the other hand, the economic situation of the first half of the 2000s differed greatly from that of the 1990s. Therefore, it was decided not to solve the issue in the federal law on SEZs. Most likely, this was the right decision, providing the necessary flexibility in decision-making in different periods of economic development.

When developing legislation on SEZs it is important to bear in mind that the conditions in the country can change in just a few years, therefore, the objectives of SEZ creation can also change. The legislation should give some flexibility in decision-making, and not only in terms of the choice of territories for SEZs. In the 2000s and even in the early 2010s, it was quite reasonable to provide state support for almost any kind of production (except mining, alcohol and tobacco). Then it was important to overcome the consequences of the crisis of the 1990s, to eliminate the deficit of domestic consumer goods. At the level of economic development the Russian Federation has enjoyed in recent years, it makes no sense to support production that has already been developed in the country and does not lead to the emergence of high technology and new industries. It is therefore necessary to make changes to the law on SEZs. It would be better if the activities supported were regulated by decisions on individual SEZs (in less developed regions state support of activities is still relevant). The lack of flexibility in Russian legislation on SEZs also led to the federal authorities having to create analogues of SEZs for specific regions, rendering the investment support system extremely complicated even for domestic investors, not to mention foreign ones.

The instability of the legislation on SEZs and the lack of consistency in SEZ policy reflect shortcomings on the part of the Russian federal authorities. Instability of legislation may worry investors and tracking the changes is onerous and time consuming.

Moreover, Russia has a negative experience of introducing economic policy instruments that compete with SEZs, with more attractive sites for investors created next to SEZs. This happened in the Far East region: it was decided to create three SEZs there, but all were liquidated early as territories of advanced development and free ports appeared. Such situations not only reduce investment attractiveness but also lead to inefficient use of resources. Even while the authorities did not invest in SEZ infrastructure they still carried out the costs of SEZ project preparation, management activities, and the like.

The flexibility of the legislation on SEZs does not preclude the need for thorough elaboration of individual SEZ projects, including proposed SEZ sectoral specialization, the formation of clusters, and the integration of SEZ enterprises into the economy of a region. In addition, the efforts of the authorities to find the first anchor investors for the SEZ are important. First, foreign investors often prefer to choose regions not on the basis of existing estimates of their investment attractiveness, but on the presence of foreign investors that are already active. Second, thanks to anchor investors, clusters or value chains are built even without much effort by state authorities. One example is the SEZ in the Lipetsk Oblast. First came the Belgian steel cord manufacturer Bekaert (attracted by NLMK of Russia), then the Japanese tyres manufacturer Yokohama, and then the Chinese automotive plant Lifan.

The attractiveness of the SEZ depends on the preferences provided to investors. Tax benefits are important for SEZ residents, but they do not matter much without the necessary infrastructure. This is especially true for those countries where investors face infrastructure constraints (such as the Russian Federation). In some cases infrastructure is even more important than tax benefits. Thus, in industrial SEZs tax benefits were not significant in the pre-crisis period. But the obvious advantage of such SEZs was the presence of land provided with all the necessary infrastructure for an industrial enterprise, and often with free grid connection (which does not not come standard in Russia). A negative factor for the SEZ development in the Sverdlovsk Oblast was the delay in the construction of its infrastructure (initially it was assumed that it could be completed without contribution from the federal budget but regional resources were clearly not enough and federal funds were allocated; however, this occurred only three years after the creation of the SEZ).

In this context, we can also cite the example of the wide-area SEZ in the Kaliningrad Oblast. In 2006, new legislation on this SEZ was adopted, providing large-scale tax benefits for investors. However, investment in the Kaliningrad region did not happen, and many potential investors (even those who registered as SEZ residents) commented about their inability to implement investment projects precisely because of the infrastructure constraints.

At the same time, as the Russian experience shows, there is not always a need to invest public funds in infrastructure. In recent years, SEZ projects in which the infrastructure is built at the expense of private investors have been quite successful, while the state provides only tax and customs benefits. In such cases SEZs are created in private industrial parks. This scheme allows private investment in industrial parks to pay off faster, as land and premises begin to enjoy higher demand among investors. However, for the implementation of such a scheme it should be private developers who invest in the creation of private industrial (or technology) parks.

The Russian experience also shows that in conditions of weak economic institutions, high levels of administrative barriers or even corruption, it is very important to introduce an effective SEZ management scheme in which the SEZ administration is truly interested in the success of the SEZ. In Russia, this problem could not be solved readily, and there was a long period of searching for the optimal model of SEZ management.

Initially, a special federal agency for SEZ management was created. The territorial units of this agency (i.e. federal officials) were responsible for the management of individual SEZs. This decision was explained by the need for federal control over federal investments in SEZ infrastructure and over the use of tax preferences, because there were concerns about the possible transformation of SEZs into domestic offshore centers. However, it quickly became clear that federal officials did not have enough interest in the development of regions. Then in 2010, the functions of SEZ administration were transferred to the 100 per cent state-owned JSC SEZ or, more precisely, to its subsidiaries and affiliates. But this decision was not the most reasonable, since state corporations were also not always interested in the development of territories (it was sometimes more profitable for them to store funds as bank deposits). Finally, management of individual SEZs was transferred to regional authorities as the entities most interested in the economic development of territories. Many experts believed that this decision should have occurred at the very beginning of the creation of new SEZs; however, this happened only in 2016.

When developing SEZs, it is important to establish effective cooperation between the national government and subnational (regional, local) authorities. This is especially important in those countries where subnational authorities have essential powers in the economic sphere, first of all in federal countries. The involvement of subnational authorities in SEZ development is important for several reasons:

- It is standardly accepted that “bottom-up” territorial development, for example, the elaboration of “smart specialization” is supposed to occur at the level of territorial authorities.
- Significant for investors, taxes are often revenues for subnational budgets, so it is important to establish tax benefits correctly in subnational legislation (subnational

authorities must agree on declining revenues). In the Russian Federation, SEZ residents receive benefits that include reductions on the profit tax, property and land taxes, and social dues for technological activities. The property tax is regional, the land tax is local, and the largest part of the profit tax is revenue for regional budgets.

- Regional authorities can work directly with foreign investors. For example, the SEZ in the Tatarstan Republic has established several enterprises with the participation of Turkish capital. This is owing to the special ties between Turkey and Tatarstan, based on their cultural and historical proximity[6] (and this is another, albeit particular, illustration of the influence of regional peculiarities on SEZ results).

Therefore, in the Russian Federation, the formal decision to create an SEZ is made by federal government decree. But the initiative to create an SEZ must necessarily come from regional authorities (together with local ones). After the adoption of the decree, an agreement is signed between the federal and regional authorities, in which the regional authorities undertake obligations for the development of the SEZ, including the establishment of tax benefits. Federal tax legislation establishes a minimum amount of tax benefits, and regional authorities can expand them (they must determine the profits tax rate, they may extend the term of benefits for property and land taxes, and they may provide benefits related to the transportation tax).

Additional contributions to the attraction of foreign investors can be provided by measures that do not seem directly related to investment support, but which make the SEZ more attractive. These primarily relate to an improvement in the comfort of life; this is not particularly relevant for economically developed countries (where the level of social development is high), but it is very important for lower-income countries. For example, in Dubna (in the Moscow Oblast), additional efforts by local authorities are being made to create comfortable conditions in rental housing for foreign specialists. A rental housing market exists, but there is practically no rental business, as apartments are rented by individuals and scattered throughout the housing stock. It is important to ensure that foreign specialists and their families have access to medical and educational services. For example, an international school is being created in Tatarstan.

Finally, to ensure a significant contribution of SEZs to the country's economy, the number and/or scale of SEZs should be appropriate. For a long time in Russia there were only two industrial SEZs and four technology ones. There are still only five technology SEZs. Of course, the results of these SEZs are miniscule given the scale of the Russian economy and the significant size of the territory. This is confirmed

[6] The detailed analysis of Turkish investment in the Russian Federation is in Kuznetsova (2016a).

by the fact that a number of foreign investors have several plants in Russia that produce products oriented to the markets of different macro-regions.[7]

6. Concluding remarks

The results of different Russian SEZs vary greatly. In general, success is achieved if the SEZ is created in territories attractive to investors. The state investment policy is based on successful actions in three areas: (1) providing investors with a plot of land with the necessary infrastructure, (2) extending financial support to investors (mainly through tax and customs benefits), and (3) enabling a comfortable administrative environment. Although we did not consider areas of state investment policy other than SEZs, the Russian experience shows that this rule of three generally applies for all its instruments at both the federal and regional levels (although forms of financial support may vary). Indeed, the failures of individual SEZs are associated with the absence of one or more of these conditions.

The experience of creating SEZs is important for countries with developing economies. It is an institution within which it is possible to solve, at least to a limited extent, the problems of insufficient investment attractiveness of countries: to concentrate funds on the development of infrastructure, the level of which is generally insufficient; to create more attractive financial conditions for investment, in the face of a lack of investment resources in the country; to overcome at least locally the problems of administrative barriers and even corruption. However, solving the latter problem requires the commitment of the SEZ management bodies.

The main lessons from the Russian experience with creating SEZs are the following:

- The policy of creating SEZs should be based on foreign experience but take into account the specific features of the host country, most of all the level of development and the structure of the economy. SEZs should be aimed at achieving new economic objectives, but these objectives should be realistic.
- The basic legislation on SEZs should be flexible, allowing for modification of the SEZs depending on the prevailing economic situation, the characteristics of a particular territory (for example, to develop relatively simple activities in economically backward regions and high-tech ones in relatively developed regions; to vary the scale of investor support depending on the development

[7] For example, one of the first SEZ residents in Tatarstan was Danish manufacturer of building materials Rockwool. By the time the decision was made to build a plant in the Volga region (where Tatarstan is located), Rockwool already had two plants near Moscow and St. Petersburg, two of the largest Russian cities. Now the company has one more plant in the Urals.

level of the regions). Plans for the development of individual SEZs should be well worked out.

- Plans for the development of specific SEZs should take into account the prevailing structure of the economy of the territory, which determines the availability of human resources and the possibility of clustering and building value chains. It is also important to plan for the search for anchor investors for SEZs.
- Consistency in the implementation of the SEZ development policy is necessary in order to ensure the stability of the conditions of investors' activity and to achieve maximum efficiency of state policy (in particular, competition of different preferential regimes is not justified).
- SEZ residents should enjoy a sufficient level of state support. At the same time, for countries where investors face infrastructure constraints, overcoming such constraints is even more important than offering tax and customs privileges.
- Budget investments are not always necessary for infrastructure development. It may be quite successful to extend tax and customs privileges and other preferential conditions for residents in private industrial or technology parks.
- In conditions of weak economic institutions, a high level of administrative barriers, or even corruption, it is very important to implement an effective scheme of SEZ management, in which the SEZ administration is truly interested in the successful development of the SEZ. In Russia the regional authorities appeared to be the most interested stakeholders in SEZ development, but in other countries the situation may be different.
- In large countries, it is also important to establish effective cooperation between the national government and subnational authorities to ensure the participation of the latter in the development of SEZs.
- In countries with an underdeveloped social sphere, social policy measures can make an additional contribution to attracting foreign investors by providing employees of foreign companies and their families with comfortable living conditions, quality medical care and educational services.
- To ensure a significant contribution by SEZs to the country's economy, the number and/or scale of SEZs should be appropriate.

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