



Regional Diversity

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Highlights

- The population of Russia is extremely unevenly distributed over its territory. The average population density as of 1 January 2021 was 8.54 people per square kilometre. The majority of the population (68.53%) lives in the European part of Russia, which constitutes one-fifth (20.82%) of Russia's territory and has the most favourable climatic conditions.
- The foremost modern spatial development trend in Russia is the steady migration of the factors of production—from the east and north to the west, south, and centre of the country. This has led to the spatial concentration of economic development in a small number of federal

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entities and, consequently, to a high level of interregional socio-economic disparities.

- In the 2010s, there has been a reduction in interregional socio-economic disparities as a result of the state's policy of regional development. However, a high level of interregional socio-economic inequality remains.

11.1 DEMOGRAPHIC AND SOCIAL DIVERSITY OF THE RUSSIAN REGIONS

The population of Russia is extremely unevenly distributed over its territory. The average population density as of 1 January 2022 was 8.49 people per square kilometre (km²).¹ The majority of the population (68.53%) lives in the European part of Russia, which constitutes one-fifth (20.82%) of Russia's territory and has the most favourable climatic conditions. The remaining population is largely dispersed across southern Siberia and the Far East—in particular, along the Trans-Siberian Railway.²

The lowest population density (0.07 persons/km²) among federal entities of the Russian Federation is in the Chukotka Autonomous Okrug (AO), which is located in the Russian Far East in the Far North. The highest population density is found in the two federal capital cities of Moscow (4933 people/km²) and St. Petersburg (3832 people/km²).

The influence of natural resources and environmental factors on the settlement of people in contemporary Russia is discussed in detail in Sect. 1.4 of Chapter 1.

Foreign and internal migration began to play an important role in the Russian demographic situation in the 1990s. The main inflow of immigrants came from the former Soviet Union (FSU) and the Baltic countries. Foreign migration made it possible to compensate partly for the natural loss of population and to replenish approximately three million people during this decade (Vishnevskiy, 2000). At the same time, intra-Russia population migration, which was centripetal in nature—from the north and east to the west, centre, and south of the country—increased significantly. In addition to the traditional form of migration associated with a change of permanent residence, temporary labour migration also developed (Karachurina, 2007).

Since 2000, Russian regions have experienced different situations in terms of population dynamics (Leontief Centre, 2020). Only 23 regions out of 83 experienced stable population growth. Population growth, mainly due to internal and external migration, occurred in economically developed territories as well as in those with good natural and climactic conditions: Moscow

¹ Calculated using Federal State Statistics Service (Rosstat) data.

² The Trans-Siberian Railway is a railroad between Chelyabinsk and Vladivostok built during 1891–1916, connecting the European part of Russia with the largest East Siberian and Far Eastern industrial cities.

and St. Petersburg's urban agglomerations, Krasnodar Krai, Belgorod Oblast, the Ural part of Tyumen Oblast, and the Karachay-Cherkess Republic. Natural population growth (see Chapter 2) occurred mainly in the national republics and autonomous *okrugs* (districts, AOs)—for example, in northern European Russia (Nenets AO), the North Caucasus (Chechnya, Ingushetia, and Dagestan), and Siberia and the Far East (Tyva, Altai, Yamalo-Nenets, Khanty-Mansi, and Sakha [Yakutia]).

Fifty-three regions recorded population decreases, usually due to negative population growth combined with migratory outflows. These regions are predominantly territories with unfavourable climactic conditions as well as deindustrialised or old industrialised regions with limited economic restructuring. The leaders in terms of migration outflows are the northern regions of European Russia (Komi Republic, Murmansk Oblast, and Arkhangelsk Oblast), the regions of the Far East (Magadan Oblast, Chukotka AO, Kamchatka Krai, and the Jewish Autonomous Oblast), the Republic of Kalmykia near the Caspian Sea, and the Kurgan Oblast in the West Siberian Plain. In the remaining seven regions, there was no clear trend of population change.

Despite a population decline, the process of urbanisation continues. The population is growing in the cities located in the south of European Russia and in large urban agglomerations. At the same time, there is a steady decline in the population of cities with less than 100 thousand people and in rural areas. Gradual changes in the urban system are determined by both market and nonmarket factors: the size and structure of the potential market, the level of specialisation, infrastructure, the administrative status of the city, and its geographical location (Kolomak, 2021).

Demographic changes result in growing disparities in territorial dispersion and the economic development of territories. These trends, combined with the general European trends of declining birth rates and population ageing, entail a growing demographic burden on the working-age population (see Chapter 2) and imbalances in regional labour markets (see Chapter 17).

Greater heterogeneity in the ethno-demographic structure of the populations of individual regions is positively associated with their productivity and innovation (Limonov & Nesena, 2016).

The highest values of this indicator are in the rich oil and gas-producing northern Yamalo-Nenets AO, as well as in the capital cities of Moscow and St. Petersburg, where it is more than four times higher. In another 15 economically developed regions, it exceeds the subsistence level more than three times. On the opposite end of the spectrum (the right-hand side of Fig. 11.1), there are regions where it barely doubled: the Republic of Ingushetia, the Karachay-Cherkess Republic, the Kabardino-Balkarian Republic, the Republic of Tyva, and the Jewish Autonomous Oblast.

As a result of a government policy to support poor regions, the gap between the rich and poor regions more than halved between 2003 and 2020—from 7.5 times in 2003 to 3.3 times in 2020, and the coefficient of variation

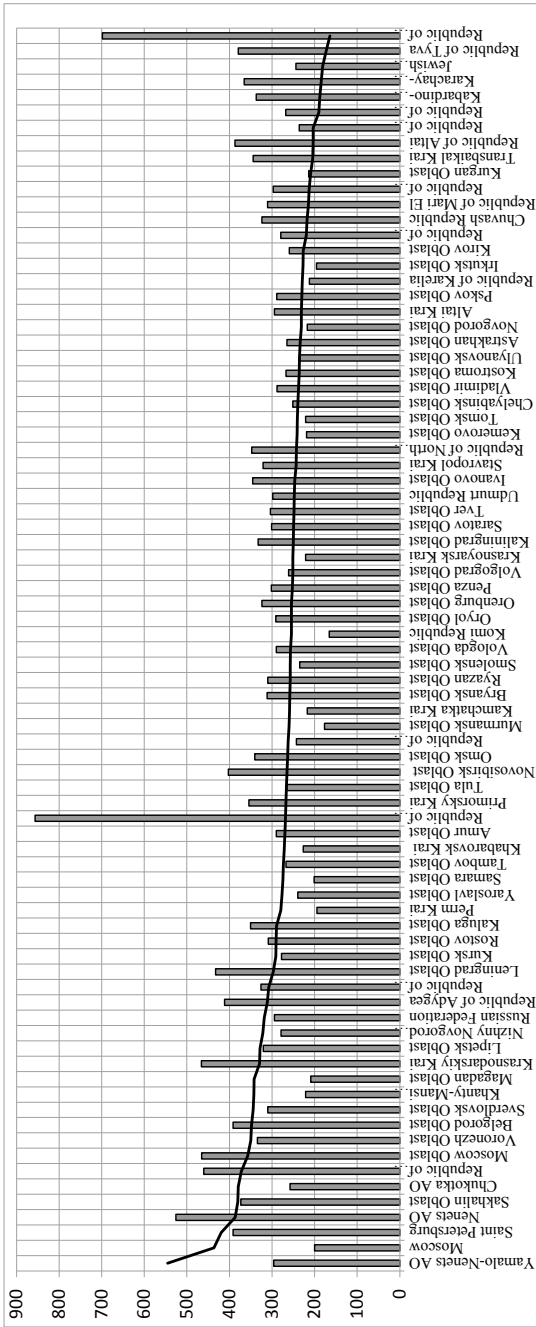


Fig. 11.1 Growth of real monetary incomes of the population in 2020 against 1999, % (bars) (Note: The ratio of the population's average nominal monetary income to the subsistence level in 2020, % (line). Note: AO—autonomous okrug (district). Source: authors' calculations based on the Federal State Statistics Service [Rosstat] data)

Table 11.1 Interregional differences in the ratio of the average per capita cash income to the subsistence level, %, 2003–2020

<i>Indicator</i>	<i>2003</i>	<i>2007</i>	<i>2013</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>
Average value of the index in the Russian Federation	243.8	324.6	351.7	323.3	324.9	318.2
Minimum value of the index	71.1	135.7	169.3	157.4	158.3	164.1
Maximum value of the index	531.0	598.4	530.3	500.6	510.5	545.0
Ratio of the maximum value of the index to the minimum value	7.5	4.4	3.1	3.2	3.2	3.3
Coefficient of variation, %	36.1	31.0	22.3	22	22.9	23.3

Source Authors' calculations based on the Federal State Statistics Service (Rosstat) data

decreased by more than 1.5 times (from 36.1% to 23.3%)—that is, interregional disparities decreased (Table 11.1). However, the coefficient of variation, despite its decline, continues to be significant.

Between 2003 and 2020, life expectancy at birth in Russia grew by more than six years on average (Table 11.2). Despite reducing the differences, the gap between the best and worst performing regions in regard to life expectancy at birth in 2020 was still more than 15 years. The infant mortality rate decreased by more than three times on average (from 15.3 to 4.5). However, interregional differences have grown and are significant. Differences in housing and healthcare infrastructure (number of hospital beds, outpatient clinics, and doctors) have diminished.

11.2 ECONOMIC DIVERSITY

In this section, we analyse interregional economic differences since 2000. The early and mid-2000s was a period of fairly intensive growth, which was facilitated by a slowdown in inflation, strengthening monetary policy, and the situation of the world commodity markets (see Chapter 15). The key economic indicators illustrating regional economic performance are gross regional product (GRP)³ and investment in fixed capital.

11.2.1 Differences in Gross Regional Product

Between 2000 and 2018, GRP growth in comparable (2000) prices amounted to almost 200% in Russia (Table 11.3). However, this growth rate gradually slowed down and was largely dependent on external shocks, such as the global financial crisis (GFC), changes in commodity prices, and geopolitical conflicts. In particular, growth was interrupted in 2009 and during 2015–2016.

³ Gross Regional Product (GRP) is defined as the sum of value added contributed by economic agents residing in a given region.

Table 11.2 Dynamics of interregional disparities in socio-demographic indicators

<i>Indicator</i>	2000	2007	2013	2018	2019	2020
Life expectancy at birth, total population (number of years)						
Average value for Russia	65.34	67.61	70.76	72.91	73.34	71.54
Minimum value of the index	55.16	58.83	61.79	63.58	67.57	65.82
Maximum value of the index	71.98	75.19	78.84	82.41	83.40	81.48
Ratio of the maximum value of the index to the minimum value, times	1.3	1.3	1.3	1.3	1.2	1.2
Infant mortality rate (number of deaths per 1,000 live births)						
Average value of the index in the Russian Federation	15.3	9.4	8.2	5.1	4.9	4.5
Minimum value of the index	9.4	4.3	4.4	1.6	1.4	2.1
Maximum value of the index	33.0	21.4	23.9	12.7	10.9	14.7
Ratio of the maximum value of the index to the minimum value, times	3.5	5	5.4	7.9	7.8	7
Number of hospital beds, per 10,000 population (at the end of the year; beds)						
Average value of the index in the Russian Federation	115.0	106.6	90.6	79.9	80	81.3
Minimum value of the index	43	50.6	46.1	44.4	44.1	48.7
Maximum value of the index	241.4	230	148.9	131.3	126.9	128.8
Ratio of the maximum value of the index to the minimum value, times	5.6	4.5	3.2	3.0	2.9	2.6
Capacity of outpatient and polyclinic organisations, per 10,000 population (at the end of the year; visits per shift)						
Average value of the index in the Russian Federation	243.2	257.4	264.5	272.4	277.5	283.7
Minimum value of the index	79	111.4	113.1	124.1	119.6	181.2
Maximum value of the index	481.1	562.8	483.6	471.6	476.5	487.6
Ratio of the maximum value of the index to the minimum value, times	6.1	5.1	4.3	3.8	4.0	2.7

<i>Indicator</i>	2000	2007	2013	2018	2019	2020
Number of doctors of all specialties, per 10,000 people (people)						
Average value of the index in the Russian Federation	46.5	49.6	48.9	47.9	48.7	50.4
Minimum value of the index	20.5	22.8	27.0	29.3	29.3	28.9
Maximum value of the index	74.5	79.1	81.2	81.2	84.9	89.3
Ratio of the maximum value of the index to the minimum value, times	3.6	3.5	3.0	2.8	2.9	3.1
Total area of residential premises per inhabitant on average (at the end of the year; square metres)	19.2	21.4	23.4	25.8	26.3	26.9
Average value of the index in the Russian Federation	6.9	5.0	12.9	14.1	14.2	14.3
Minimum value of the index	28.9	28.0	29.0	32.7	33.5	34.2
Maximum value of the index	4.2	5.6	2.2	2.3	2.4	2.4

Source authors' calculations based on Federal State Statistics Service (Rosstat) data

Table 11.3 GRP by federal district in 2000 prices, RUB billions, 2018–2000

<i>Federal district</i>	<i>2000</i>	<i>2018</i>	<i>Rate of growth 2018 to 2000, %</i>
Russian Federation, total	5753.7	11,264.5	196
Central Federal District	1841.5	3651.4	198
North-Western Federal District	578.5	1170.2	202
Southern Federal District	329.7	703.0	213
North Caucasus Federal District	105.2	278.6	265
Volga Federal District	1036.8	1923.5	186
Ural Federal District	866.1	1666.5	192
Siberian Federal District	635.5	1210.7	191
Far Eastern Federal District	360.4	651.7	181

Source Authors' calculations based on the Federal State Statistics Service (Rosstat) data

Analysing the dynamics of GRP, we can distinguish regions with high and low growth rates. In the first group, GRP growth between 2000 and 2018 amounted to 250% or more. This group included.

- Regions that are part of the largest agglomerations, excluding the city of Moscow: St. Petersburg (255%), Leningrad Oblast (282%), and Moscow Oblast (250%). The city of Moscow ranked 40th with a growth rate of 189%, which is slightly below the national average.
- Regions with a developed manufacturing industry and a diversified economic structure: Kaluga (250%), Kaliningrad (252%), and Belgorod (287%) oblasts; in Belgorod, along with industry, mineral resources (more than 40% of the country's proven iron ore reserves) play a significant role in GRP growth.
- Selected republics in the North Caucasus and southern regions: the Republic of Dagestan (429% by 2000), the Republic of Adygea (260%), and Rostov Oblast (268%). It should be noted that the North Caucasus and Southern Federal Districts as a whole show GRP growth that exceeded the Russian average (Table 11.3)—265% and 213%, respectively. Such high growth was due to a number of factors, including the development of agriculture and the growth of domestic demand in the southern regions and, in the North Caucasus, the effects of federal fiscal support and a low initial base (i.e., Dagestan).
- Two Far Eastern regions—Sakhalin Oblast (322%) and the Chukotka AO (265%)—thanks to the development of natural resource deposits (gold and hydrocarbons) (Tables 11.4 and 11.5).

The regions lagging behind the national average belong to two categories: (i) deindustrialised peripheral regions such as the Republic of Buryatia, the Republic of Kalmykia, the Republic of Komi, and Kamchatka Krai; and (ii)

Table 11.4 Regions with the highest and lowest cumulative GRP growth rates, 2000–2018

<i>Regions</i>	<i>GRP in RUB billion</i>		<i>Change in %</i> 2018/2000
	2000	2018	
Regions with the highest GRP growth (250% or more)			
Republic of Dagestan	20.9	89.8	429
Sakhalin Oblast	34.8	112.1	322
Belgorod Oblast	42.1	120.8	287
Leningrad Oblast	56.0	157.8	282
Rostov Oblast	89.0	238.0	268
Chukotka AO	3.9	10.4	265
Republic of Adygea	5.5	14.4	260
St. Petersburg	188.2	480.8	255
Kaliningrad Oblast	23.3	58.7	252
Kaluga Oblast	23.9	59.7	250
Moscow Oblast	176.7	441.2	250
Regions with the lowest GRP growth (less than 150%)			
Republic of Buryatia	21.6	32.2	149
Kurgan Oblast	18.7	27.9	149
Kostroma Oblast	16.7	24.1	145
Kamchatka Krai	18.1	25.9	143
Vologda Oblast	69.2	97.9	142
Pskov Oblast	16.2	22.8	141
Kemerovo Oblast	88.7	123.4	139
Magadan Oblast	13.0	17.7	136
Republic of Karelia	28.2	37.1	131
Kirov Oblast	35.8	46.7	131
Ivanovo Oblast	16.9	21.3	126
Republic of Komi	59.5	72.5	122
Murmansk Oblast	55.1	59.9	109
Republic of Kalmykia	6.2	5.6	90

Source Authors' calculations based on the Federal State Statistics Service (Rosstat) data

old industrial regions in the centre and the north of the European part of Russia: Kirov, Murmansk, Vologda, Kostroma, and Ivanovo oblasts.

Between 2000 and 2018, changes in the group of regions with the highest absolute values of GRP were insignificant. In 2000, the cities of Moscow and St. Petersburg; the Tyumen, Moscow, Sverdlovsk, and Samara oblasts; the Republics of Tatarstan and Bashkortostan; and Krasnoyarsk and Krasnodar krajs were the top 10 regions by GRP value. In 2018, only one region, the Samara Oblast, dropped out of this list. At the same time, the contributions of the city of Moscow, the Tyumen Oblast, and Krasnoyarsk Krai to the national GRP slightly decreased. The remaining regions, on the contrary, strengthened their positions. The shares of St. Petersburg (+1 percentage point [pp]), the

Table 11.5 The largest regions by contribution to national GRP, %

<i>Region</i>	<i>Rank</i>		<i>Share in GRP</i>		<i>Change between 2018 and 2000, in pp, %</i>
	<i>2000</i>	<i>2018</i>	<i>2000</i>	<i>2018</i>	
Moscow	1	1	20.14	19.42	-0.72
Tyumen Oblast	2	2	9.92	9.70	-0.23
Krasnoyarsk Krai	3	5	3.73	3.63	-0.10
St. Petersburg	4	3	3.27	4.27	1.00
Republic of Tatarstan	5	6	3.24	3.61	0.37
Moscow Oblast	6	4	3.07	3.92	0.85
Sverdlovsk Oblast	7	7	2.71	3.09	0.38
Republic of Bashkortostan	8	8	2.52	2.86	0.34
Samara Oblast	9	-	2.44	-	-0.55
Krasnodar Krai	10	9	2.38	2.52	0.14
Rostov Oblast	-	10	-	2.11	0.57
Total			53.43	55.13	1.7

Note A dash denotes the absence of the region in the top 10 in a given year

Source Authors' calculations based on the Federal State Statistics Service (Rosstat) data

Moscow Oblast (+0.85% pp), and the Rostov Oblast (+0.57 pp) increased most significantly, which allowed the latter to join the group of the top 10 regions.

As of 2009, the differences in GRP between regions have been decreasing. This is largely due to smaller contributions from two federal entities (the city of Moscow and the Tyumen Oblast, including its AOs) as a result of the GFC and the decline in hydrocarbon prices during 2014–2015. Between 2008–2018, their share in the national GRP decreased by 3 pp, but still remains high at 29.1%.

If one excludes these two federal entities from the calculation, the differences in the remaining group of regions continued to increase, although at a lower rate. In the analysed period, the top 10 regions accounted for 53% to 56% of the national GRP.

11.2.2 GRP Per Capita

GRP per capita is used to compare differences between regions in the level of economic development. However, the dynamic of national GRP per capita does not differ substantially from that of GRP due to insignificant changes in the size of the population. As a result, during 2000–2018, the national GRP per capita in comparable prices also nearly doubled. Differences in GRP per capita between regions increased during 2000–2003, which was then followed by a long-term downward trend; exceptions occurred post-financial crisis in 2009 and in 2018.

We can identify a number of regions where the average level of GRP per capita exceeds 1.5 or more. In addition to the capital city (Moscow), these are the main resource-producing territories: the Tyumen Oblast, the Republic of Sakha, Krasnoyarsk Krai, the Magadan Oblast, and the Sakhalin Oblast.

These regions maintained their positions throughout the period under consideration. In 2000, the Murmansk and Vologda oblasts as well as the Republic of Komi were among the top 10 regions by this indicator; however, this later changed (Table 11.6). The Arkhangelsk and Irkutsk oblasts as well as the Republic of Tatarstan were able to increase their GRP per capita significantly.

The regions with the lowest GRP per capita are found in the deindustrialised areas of the south and east of the country as well as in the Volga region. In the Republic of Ingushetia, in 2018, the GRP per capita was only 12% of the national average, 5 pp worse than in 2000.

Only two regions were able to graduate from the list of the 10 regions with the lowest GRP per capita during the analysed period—the Republic of Mari El and the Kabardino-Balkarian Republic. In 2018, their per capita GRP increased by 231% and 224%, respectively, relative to 2000. Their places on the list were taken by the Chuvash Republic and the Republic of Kalmykia, where in 2018 their GRP per capita amounted to 174% and 102%, respectively, relative to 2000. Dagestan, despite a rapid increase of almost 3.5 times, remained on the list of the 10 regions with the lowest GRP per capita.

A comparison of GRP per capita across Russia's regions with the level of GDP of other countries in terms of purchasing power parity (PPP) can serve as an illustration of the scale of regional differences in the level of economic development. Before the devaluation of the rouble in 2014, the GRP per capita of the Tyumen and Sakhalin oblasts (in PPP terms) reached more than USD 70 thousand, which roughly corresponded to the GDP per capita of Norway, while the GRP per capita of Ingushetia was only USD 5.3 thousand, similar to India, Uzbekistan, and Vietnam. Meanwhile, Moscow's GRP per capita was USD 51 thousand per capita, on par with the United States.

11.2.3 Capital Investment Dynamics and Variation Across Regions

Between 2000 and 2018, investment in fixed assets in comparable prices increased 2.8 times. However, this growth trend was interrupted twice: in 2009 and 2015. In the first period, between 2000 and 2008, investment increased 2.7 times. In 2009, as a result of the GFC, the volume of investments fell by 13.5% from the previous year. Growth resumed in 2010 and continued until 2012, after which there was a period of stagnation. In 2015, a fall of 10% from the 2014 level was recorded, after which growth resumed again in 2017.

The highest ratio of investment to GRP (32%) was reached in 2012 (Fig. 11.2). The ratio then decreased until 2016, after which it then began to

Table 11.6 Regions with the highest and lowest levels of GRP per capita, 2000 and 2018

<i>Regions</i>	<i>Rank</i>		<i>GRP per capita, RUB thousands, in 2000 prices</i>		<i>In % to the national average, %</i>		<i>Growth 2000–2018, %</i>
	2000	2018	2000	2018	2000	2018	
<i>Regions with the highest level of GRP per capita</i>							
Tyumen Oblast	1	1	176.9	294.5	448	384	166
Moscow	2	4	115.6	174.2	292	227	151
Republic of Sakha (Yakutia)	3	5	85.4	150.4	216	196	176
Krasnoyarsk Krai	4	6	71.3	142.3	180	185	200
Chukotka AO	5	3	66.0	210.2	167	274	319
Magadan Oblast	6	7	65.7	124.3	166	162	189
Sakhalin Oblast	7	2	61.6	228.9	156	298	372
Murmansk Oblast	8	(18)	59.2	79.7	150	104	135
Komi Republic	9	(12)	56.6	86.7	143	113	153
Vologda Oblast	10	(14)	53.4	83.5	135	109	156
Arkhangelsk Oblast	(13)	8	44.8	115.7	113	151	258
Republic of Tatarstan	(11)	9	49.1	104.4	124	136	212
Irkutsk Oblast	(18)	10	39.1	97.3	99	127	249
<i>Regions with the lowest level of GRP per capita</i>							
Republic of Ingushetia	1	1	6.7	9.5	17	12	143
Republic of Dagestan	2	8	8.5	29.2	21	38	344
Republic of Tyva	3	2	11.7	18.8	30	24	160
Republic of North Ossetia-Alania	4	5	12.0	21.7	30	28	181

Regions	Rank		GRP per capita, RUB thousands, in 2000 prices		In % to the national average, %		Growth 2000–2018, %
	2000	2018	2000	2018	2000	2018	
	Republic of Adygea	5	10	12.3	31.7	31	
Karachay-Cherkess Republic	6	6	12.4	22.9	31	30	184
Republic of Altay	7	7	13.5	24.3	34	32	180
Ivanovo Oblast	8	4	14.2	21.1	36	28	148
Republic of Mari El	9	(13)	15.1	34.8	38	45	231
Kabardino-Balkarian Republic	10	(14)	15.9	35.8	40	47	224
Chuvash Republic	(12)	9	17.3	30.1	44	39	174
Republic of Kalmykia	(21)	3	20.2	20.5	51	27	102

Note: Data for regions that were not included in a given category in an analysed year are shown in parentheses
Source: Authors' calculations based on the Federal State Statistics Service (Rosstat) data

grow. In 2018, it amounted to 29% of GRP—an increase of 9 pp as compared to 2000.

The list of the top 10 regions in terms of per capita investment includes those with extractive industries and major agglomerations, with the exception of the Moscow Oblast, which ranked only 32nd in terms of average per capita investment (Table 11.7).

The lowest levels of fixed capital investment per capita are recorded in the republics of the North Caucasus, the old industrialised and deindustrialised regions of Siberia, the Volga region, and in the north of the country.

During 2000–2018, the 10 regions with the largest investment stock accounted for slightly more than half of the total volume of national investment (50.6%). The leaders were the largest Russian agglomerations as well as the industrially developed and export-oriented extractive regions. Low levels of accumulated investment were recorded in the economically weak regions, particularly in the republics of the North Caucasus and the remote deindustrialised regions.

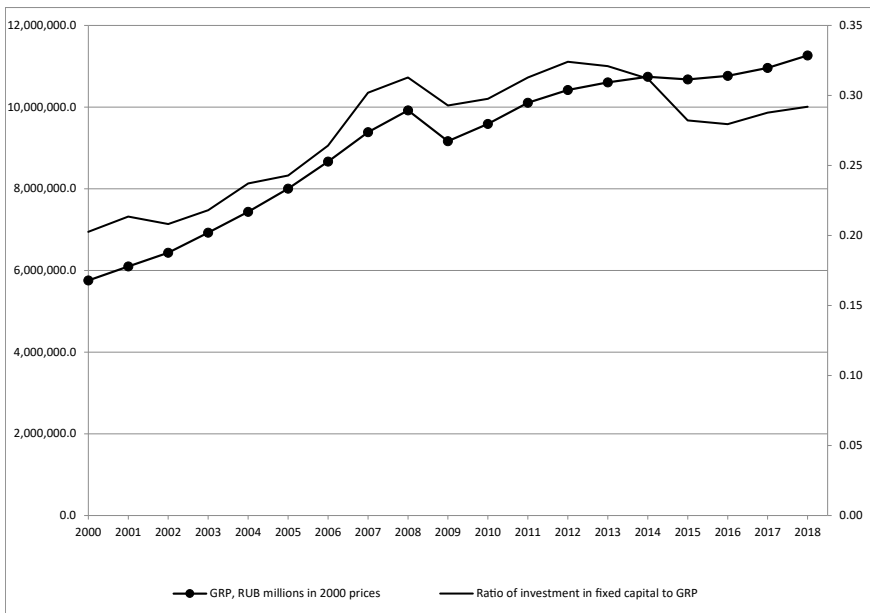


Fig. 11.2 Ratio of investment in fixed capital to GRP, in %, 2000–2018 (Source Authors’ calculations based on the Federal State Statistics Service [Rosstat] data)

Table 11.7 Regions with the highest and lowest levels of investment per capita (average for the period 2000–2018)

<i>Region</i>	<i>Investment in fixed capital, average per capita, 2000–2018</i>		<i>Investment in fixed capital, total for 2000–2018</i>		
	<i>Rank</i>	<i>RUB in 2000 prices</i>	<i>Rank</i>	<i>RUB millions in 2000 prices</i>	<i>share in national total, %</i>
Regions with the highest level of investment per capita					
Tyumen Oblast	1	116.8	1	7157.0	14.7
Sakhalin Oblast	2	103.6	9	1111.6	2.3
Chukotka AO	3	54.2	74	61.4	0.1
Republic of Sakha (Yakutia)	4	52.5	12	956.9	2.0
Republic of Komi	5	34.7	20	692.9	1.4
Leningrad Oblast	6	32.9	10	1052.7	2.2
Magadan Oblast	7	31.1	66	117.1	0.2
Krasnoyarsk Krai	8	27.0	7	1547.5	3.2
Moscow	9	25.2	2	4799.7	9.9
St. Petersburg	10	24.1	3	2169.7	4.5
Regions with the lowest level of investment per capita					
Ivanovo Oblast	1	4.9	67	109.7	0.2
Karachay-Cherkess Republic	2	5.5	77	45.9	0.1
Republic of Ingushetia	3	5.5	79	41.0	0.1
Kabardino-Balkarian Republic	4	5.6	70	94.2	0.2
Kurgan Oblast	5	6.0	65	120.9	0.2
Altai Krai	6	6.1	42	308.2	0.6
Pskov Oblast	7	6.1	71	91.8	0.2
Kostroma Oblast	8	6.9	68	99.9	0.2
Republic of Dagestan	9	7.1	39	331.5	0.7
Bryansk Oblast	10	7.2	58	194.2	0.4

Source Authors' calculations based on the Federal State Statistics Service (Rosstat) data

11.3 CHALLENGES OF SPATIAL DEVELOPMENT AND REGIONAL POLICY OF RUSSIA

The centralised management of the Soviet period caused a shift of productive forces to the east and north as well as a decrease in the spatial concentration of economic activity. The market reforms of the 1990s, in the absence of a targeted spatial policy, initiated a move in the opposite direction. The major trend of Russia's modern spatial development is the steady migration of the factors and results of production from the east and north to the west,

Table 11.8 Regions with the largest and smallest stock of investments for the period 2000–2018

<i>Region</i>	<i>Investment in fixed capital, total for 2000–2018</i>			<i>Investment in fixed capital, average per capita for 2000–2018</i>	
	<i>Rank</i>	<i>RUB millions in 2000 prices</i>	<i>Share in national total, %</i>	<i>Rank</i>	<i>RUB in 2000 prices</i>
Regions with the highest values of accumulated investment					
Tyumen Oblast	1	7157.0	14.7	1	116.8
Moscow	2	4799.7	9.9	9	25.2
St. Petersburg	3	2169.7	4.5	10	24.1
Krasnodar Oblast	4	1943.0	4.0	18	19.9
Moscow Oblast	5	1776.0	3.7	32	14.1
Republic of Tatarstan	6	1683.2	3.5	12	23.4
Krasnoyarsk Krai	7	1547.5	3.2	8	27.0
Sverdlovsk Oblast	8	1294.9	2.7	29	14.9
Sakhalin Oblast	9	1111.6	2.3	2	103.6
Leningrad Oblast	10	1052.7	2.2	6	32.9
Regions with the lowest values of accumulated investment					
Republic of Altai	1	35.4	0.1	56	9.2
Republic of Ingushetia	2	41.0	0.1	78	5.5
Republic of Tyva	3	44.2	0.1	68	7.6
Karachay-Cherkess Republic	4	45.9	0.1	79	5.5
Republic of Kalmykia	5	52.8	0.1	58	9.0
Jewish Autonomous Oblast	6	59.7	0.1	23	16.2
Chukotka AO	7	61.4	0.1	3	54.2
Republic of Adygea	8	71.7	0.1	63	8.4
Republic of Khakassia	9	85.8	0.2	66	8.1
Pskov Oblast	10	91.8	0.2	74	6.1

Source Authors' calculations based on the Federal State Statistics Service (Rosstat) data

south, and centre of the country, which has led to the spatial concentration of economic development in a small number of federal entities and consequently to a high level of interregional socio-economic inequality (Kryukov & Kolomak, 2021).

Government policy in the sphere of spatial and regional development is defined by a diverse set of legal acts, the most important of which is the Strategy of spatial development of the Russian Federation for the period up

to 2025.⁴ According to this document, spatial development is understood as improving the settlement system and territorial organisation of the economy, including through an effective government policy of regional development. The goal is to ensure the sustainable and balanced spatial development of the country, aimed at reducing interregional differences in the level and quality of life of the population, and accelerating the pace of economic growth and technological development. Another document guiding regional policy in Russia is the Main provisions of the state policy of regional development of the Russian Federation for the period up to 2025.⁵

Federal support for Russia's regions is regulated by a number of normative legal acts, which outline the three main forms of federal support: intergovernmental transfers, federal budget expenditures earmarked for regional development, and federal tax benefits for select territories (Klimanov et al., 2017).

11.3.1 *Intergovernmental Transfers*

The purpose of intergovernmental transfers is to either ensure the fiscal equalisation of territories or stimulate their economic development. This type of transfer is used in a country with a federal form of government. However, federal states differ significantly based on the degree of centralisation of their budget revenues and expenditures and by the principles and mechanisms of the distribution of transfers (Hueglin & Fenna, 2006; Wallack & Spinivasan, 2006). The need to reduce interregional differences is the primary justification for the high centralisation of public finances and large-scale intergovernmental redistributions.

One of the foremost reasons for vertical transfers is the budget inequality of the federal entities and the need to finance the public goods and services guaranteed by the state, the provision of which should not differ greatly among territorial units. Regions have comparable expenditure commitments; however, as a rule, they have different economic opportunities to finance these expenditures from their own revenues. Such gaps in available revenues and necessary expenditures are partially compensated by transfers from the central government.

The main revenue items of regional budgets are tax revenues, non-tax revenues, and transfers, largely from the federal budget. The level of independence of regional budgets can be characterised by the share of tax and non-tax revenue in their total revenue.

⁴ Strategy for the Spatial Development of the Russian Federation for the period up to 2025. Approved by the Decree of the Government of the Russian Federation of February 13, 2019. N 207-r.

⁵ Main provisions of the state policy of regional development of the Russian Federation for the period up to 2025. Approved by the Decree of the President of the Russian Federation of January 16, 2017. N 13.

The dependence of Russian regions on non-repayable transfers from the federal government varies greatly. In 2018, the share of federal transfers ranged from 10 to 40% for most regions (56 out of 85) (Kolomak & Sumskaya, 2020). Between 2012 and 2018, the number of regions whose budgets saw a reduction in the share of transfers increased. However, in 2018, the share of federal transfers in the budget revenues of 12 regions was over 50%. The concentration of financial resources at the federal level and active transfer activity indicates the excessive centralisation of budget resources in Russia, which does not correspond to the principle of fiscal federalism. The revenues of a large number of regions are unstable and dependent on federal transfers. This makes it difficult for regional authorities to work out long-term development programmes, since the budgetary resources available for their implementation are uncertain. The budgetary policy pursued in the pre-pandemic period did not solve the problem of Russia's significant interregional inequality.

During the 2020 crisis caused by the coronavirus pandemic, a number of researchers (Klimanov et al., 2020; Zubarevich, 2021) pointed out that federal transfers became the leading factor of regional budget stability. At the same time, the share of own tax and non-tax revenues decreased, which indicates an increasing level of fiscal centralisation in Russia. Thus, fiscal decentralisation faces significant limitations in Russia. In the future, fiscal decentralisation will be determined by how long crisis phenomena last and the course of economic and political transformations (Klimanov & Mikhailova, 2021).

11.3.2 Federal Budget Expenditures in the Regions

Direct federal budget expenditures in the regions are implemented in accordance with the programme-targeted method of management via the development and implementation of government programmes, including those focused on the socio-economic development of individual macro-regions and federal entities, for example in the Far East and Baikal region, the North Caucasian Federal District, the Kaliningrad Oblast, and the Arctic zone. The main activities under these programmes are the construction of engineering, transport, and social infrastructure. Most programmes are sectoral, but they also include measures aimed at regional development. For example, as part of the government's 'Economic development and innovation economy' programme, 26 clusters in 21 regions were approved to be subsidised. Additionally, the 'Development of industry and increasing its competitiveness' programme included support for individual industrial parks (Klimanov et al., 2017).

11.3.3 Federal Tax Incentives in Selected Territories

Federal transfers to less developed regions, while ensuring high growth rates, were insufficient to overcome the development gap. Meanwhile, the growth of

the Russian economy as a whole slowed down considerably in the second half of the 2010s (see Chapter 15). The period of high prices for hydrocarbons, which was one of the main drivers of growth, ended and the emerging restrictions in international relations became a significant obstacle to the inflow of investment and technological innovation. Under these conditions, improving regional policy with an emphasis on the use of stimulating instruments has become particularly urgent.

Stimulating instruments include, among others, special economic zones (SEZs), special administrative regions (SARs), and priority social and economic development areas (PSEDAs). These territories enjoy special economic regimes which are intended to support the development of the individual territories. In particular, they aim to stimulate investment inflow, industry creation, infrastructure development (transport, energy, and social), job creation, and structural diversification as well as solve the further socio-economic problems of a given territory.

Special economic zones (SEZs) began operating in 2005. SEZs aim to attract direct investment in priority economic activities. As of October 2021, a total of 39 SEZs were operating in Russia in four areas: industrial production (20 SEZs), technology and innovation (7), tourism and recreational (10), and port-area (2).

Investors in SEZs receive infrastructure support at the expense of budgetary funds as well as special tax and customs treatment. There are also a number of benefits for SEZ residents related to social insurance contributions, personal income tax, and exemption from property and land tax for five years or more. The size of benefits may vary depending on the type of zone. Additional preferences may be associated with the special customs regime, for example: (i) exemption from customs duties and VAT for the placement and use of imported goods and (ii) exemption from adhering to selected prohibitions and restrictions in force in Russia.

Between 2005 and 2020, more than 778 resident companies registered in SEZs—this includes more than 144 companies with foreign capital from 41 different countries. The total volume of investments in SEZs amounted to more than RUB 440 billion. Furthermore, over 38 thousand jobs were created and approximately RUB 100 billion were paid in taxes, customs payments, and deductions to non-budgetary funds.

Special administrative regions (SARs) are areas which offer flexible tax and foreign exchange regulations for companies which have decided to relocate to Russia from a foreign jurisdiction.

Priority social and economic development areas (PSEDAs) are another federally initiated mechanism for regional development. The first PSEDAs were created in 2015 in the Far Eastern regions. Subsequently, these areas spread to single-industry towns with complex social and economic conditions. As a result, by 2020, two-thirds of the federal entities took advantage of the opportunity to create PSEDAs; the total number of such areas exceeded 110.

About one-half of all existing PSEDAs are concentrated in 15 regions. The Republic of Tatarstan, Bashkortostan, and the Chelyabinsk Oblast have the most PSEDAs—five each. In the beginning of 2020, there were 639 registered companies in PSEDAs, which created more than 27 thousand jobs and attracted more than RUB 69 billion in investment; the revenue of their residents amounted to more than RUB 149 billion.⁶

However, many of these PSEDAs are not yet able to assume the role of the driver of economic growth and attract sustainable investment. Furthermore, in a number of regions where PSEDAs have been established, there has been a decline in investment for several years in a row. Investment activity in existing PSEDAs is heterogeneous, with investors primarily looking towards large industrial cities. As a result, the top 10 largest PSEDAs (excluding the Far East) are home to more than half of the registered companies, with the leading PSEDAs operating in Togliatti, Naberezhnye Chelny, and Novokuznetsk (Zubova, 2019).

If we consider the experience of the creation and functioning of territories with special status, their main shortcomings are the following:

- Operational management is excessively centralised and conducted by government bodies against the foreign practice of involving commercial management companies;
- A high degree of centralisation constrains local initiatives and limits opportunities for representatives of the business community to participate;
- Territories with special status are often located in relatively prosperous and investment-attractive regions, which leads to the increased concentration of economic activity;
- Privileges enjoyed by territories with special status boost intraregional competition, but do not always have a positive influence on economic development;
- Diversity among the types of territories with special status and the lack of a unified system of evaluation criteria make it difficult to fully assess them.

At the same time, examples of successful sites testify to the sustainability of such tools of territorial development.

11.4 SUMMARY

To summarise, several conclusions arise. The level of economic inequality among regions is largely predetermined by the heterogeneity of space. The rate of economic growth is largely influenced by the capacity of the consumer

⁶ Ministry of Economic Development. https://www.economy.gov.ru/material/directions/regionalnoe_razvitiye/instrumenty_razvitiya_territoriy/tor/.

market, the diversification and development of the production base, the degree of its export orientation, and, of course, the presence of natural resources that are in demand on international commodity markets.

In the first two decades of the twenty-first century, one saw the formation of fairly stable groups of both highly developed regions, with above-average national growth rates of GRP per capita and investment, and lagging regions. At the same time, the gap between the most economically developed and the lagging regions remains substantial. Export-oriented resource-producing regions, major agglomerations, and regions with a developed manufacturing industry and diversified economic structure can be counted as the most economically successful. The lagging regions are the deindustrialised and old industrial regions and cities located in the north and east of the country as well as in the North Caucasus region. At the same time, many lagging regions have strategic importance. These are primarily the regions located on the periphery of the country and, in particular, in the Far East.

Questions for Students

1. What are the differences between Russian regions in terms of population density?
2. What was the situation in Russian regions during the first 20 years of the twenty-first century in terms of population dynamics?
3. How do Russian regions differ in terms of income level and basic socio-demographic indicators?
4. What are the main forms of federal support for Russian regions?

REFERENCES

- Hueglin, T., & Fenna, A. (2006). *Comparative federalism: A systematic inquiry*. Broadview Press.
- Karachurina, L. (2007). Regional'nye osobennosti rossijskoj demograficheskoy situacii [Regional peculiarities of the Russian demographic situation]. *Demoscope Weekly*, pp. 273–274. <http://www.demoscope.ru/weekly/2007/0273/analit05.php>
- Klimanov, V. V., Ivas'ko, E. V., & Nedopivtseva, D. A. (2017). Inventarizaciya aktual'nyh form federal'noj podderzhki regionov [Inventory of current forms of federal support for regions]. *Gosudarstvennyi audit. Pravo. Ekonomika (State Audit. Law. Economy)*, 2, 47–51.
- Klimanov, V., Kazakova, S., Mikhaylova, A., & Safina, A. (2020). Fiscal resilience of Russia's regions in the face of COVID-19. *Journal of Public Budgeting, Accounting & Financial Management*, 33(1), 87–94. <https://doi.org/10.1108/JPBAFM-07-2020-0123>
- Klimanov, V. V., & Mikhailova, A. A. (2021). Budgetary decentralization in pandemic and post-pandemic conditions. *Journal of the New Economic Association*, 3(51), 218–226.

- Kolomak, E. A., & Sumskeya, T. V. (2020). Assessing federal transfers' role in the subnational budget system of the Russian Federation. *Economic and Social Changes: Facts, Trends, Forecast*, 13(2), 89–105. <https://doi.org/10.15838/esc.2020.2.68.6>
- Kolomak, E. (2021). The urban system of Russia from 1991–2020: Gradual development instead of radical transformation. *Area Development and Policy*. <https://doi.org/10.1080/23792949.2021.2002168>
- Kryukov, V. A., & Kolomak, E. A. (2021). Prostranstvennoe razvitie Rossii: Osnovnye problemy i podkhody k ikh preodoleniyu [Spatial development of Russia: Main problems and approaches to overcoming them]. *Nauchnye Trudy Vol'nogo Ekonomicheskogo Obshchestva Rossii [scientific Proceedings of the Free Economic Society of Russia]*, 227(1), 92–114.
- Leontief Centre. (2020). *Report on the research work "Features of Spatial Development of Russia in the XXI Century: Growth Drivers, Challenges for Territories and State Regional Policy"*. International Centre for Social and Economic Research.
- Limonov, L., & Nesena, M. (2016). Regional cultural diversity in Russia: Does it matter for regional economic performance? *Area Development and Policy*, 1(1), 63–93. <https://doi.org/10.1080/23792949.2016.1164016>
- Vishnevskiy, A. (Ed.). (2000) *Naselenie Rossii 1999. Sed'moj ezhegodnyj demograficheskij doklad* [Population of Russia 1999: Seventh annual demographic report]. http://www.demoscope.ru/weekly/knigi/ns_r99/sod_r.html Accessed 15 March 2022
- Wallack, J., & Spinivasan, T. N. (2006). *Federalism and economic reform: International perspectives*. Cambridge University Press.
- Zubarevich, N. V. (2021) Vozmozhnosti decentralizacii v god pandemii: chto pokazyvaet byudzhetnyj analiz? [Possibility of decentralization during the year of pandemic: What does the analysis of public budgets reveal?] *Regional Studies*, 1, 46–57. DOI: <https://doi.org/10.5922/1994-5280-2021-1-4>
- Zubova, Y. (2019). *Territorii operezhayushchego razvitiya buksuyut* [Territories of advanced development are stalled]. Akademiya gorodskikh tekhnologii SREDA [Academy of urban technologies SREDA]. <https://sreda-academy.ru/showcase/territorii-operezhayushchego-razvitiya-buksuyut/>