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Economic, Social, and Budget Problems of the Russian Regions in 2013-16†

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Abstract: The purpose of this study is to shed light on the dynamics of the contemporary Russian crisis of 2013-16 and the regional uniqueness by examining basic socio-economic and budget indicators. The study shows that the Russian industrial sector and regional labour markets swiftly adapted to the crisis conditions. It analyses adaptation factors such as the impact of industrial specialisation of the Russian regions and the demographic and institutional factors influencing the regional labour markets. In addition, three major socio-economic problems of the recent Russian crisis are investigated: 1) the sharp decrease in household income and consumption; 2) the regional decline in investments and concentration of investments in the most competitive regions causing the problem of polarisation of territorial development; and 3) the regional budget imbalances (a sharp increase in budget deficits, and regional and municipal debts). The study also provides an overview of the federal government's redistribution policy during the crisis and finds that after federal transfer allocations, significant fiscal (budget) capacity discrepancies exist among the Russian regions. In addition, it examines the impact of lobbying and geo-political priorities on the volume of such federal transfer allocations. The differences in policy priorities among the regions, with different levels of fiscal capacity per capita, is also highlighted. In conclusion, the study identifies the basic policy directions for budget cost optimisation in the Russian regions during the period of crisis and provides a classification of the regions on the basis of the policy priorities of the respective regional authorities.

Keywords: Socio-economic crisis in Russian regions, regional development, regional budget revenues and expenditures, budget deficit and debts

JEL Classification Numbers: O18, P25

1. Introduction

The literature on Russian crises is rather extensive; however, studies focusing on regional aspects of crises are limited, particularly the analysis of the recent crisis of 2013-16. This could be owing to the difficulties that several researchers encounter in Russia. First, Russia has several regions (83 regions without Crimea) that are different in terms of economic development, industrial structure, social and demographic characteristics, resettlement issues, and inclusion into globalisation processes. Thus, versatile factors are accountable for the impact of the crisis among the Russian regions and it is rather challenging to identify the predominant factor. Second, it is rather difficult to evaluate the depth of the crisis in the regions due to the inconsistent fluctuations of various indicators; thus, researchers are forced

to implement a detailed analysis, monitoring the indicators essential for the identification of regional crisis peculiarities. In the present study, we aim to conduct a complete analysis of the contemporary crisis in all the Russian regions, by examining the basic socio-economic development indicators and changes in the regional budget structures.

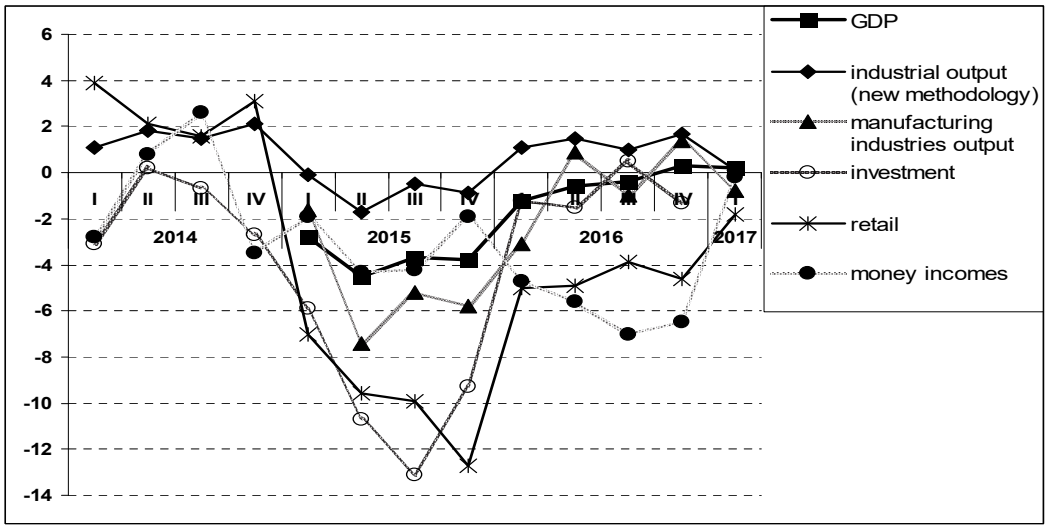
Post-Soviet Russia has experienced four large economic crises, which are rather unique when compared to each other. The most destructive crisis of the early 1990s was caused by domestic problems due to the transition from a planned to a market economy. This crisis resulted in a twofold decline in economic growth and decreased household income by twice as much when compared to the Soviet period, thus having a profound impact on all the Russian regions (Rosstat data). The crises of 1998 and 2008-9 were caused by external factors, which were global in nature, and Russia was among the most affected countries. In 1998, due to the budget default and rouble devaluation, household incomes decreased by more than a quarter. However, the economic decline was rather short term. Conversely, in 2009, Russia experienced a 7% negative economic growth rate and 11% decrease in the industrial production growth rate (Rosstat data). However, by virtue of extensive government support, household income remained at almost the same level. The geographical scale of these two crises was also different. The crisis of 1998 had a severe negative impact on Moscow City due to the over-concentration of the banking institutions and high consumption of import goods within the region, while the crisis of 2008-9 had a negative profound impact mostly on industrial regions, particularly those specialising in metallurgy and engineering (machine building).

The recent crisis that emerged in 2012 differs from the previous ones, as Russia experienced negative economic growth rates despite high petroleum prices. In 2013, the economic turmoil was certain. The economic growth rate was at a minimum and industrial production and investments were non-existent. The economic growth model of the 2000s, which aimed at accelerating economic growth through skyrocketing petroleum prices, instantly exhausted itself when the petroleum prices decreased. New problems emerged in the second half of 2014, such as a steep decline in world petroleum prices, and Crimea's annexation aggravated the pre-existing domestic issues. Thus, Russia experienced a sharp economic decline that continued until 2016.

The two distinct features that differentiate the crisis of 2013-16 from the two previous ones are its gradual emergence and long-lasting character. The quarterly dynamics of the basic indicators show that Russia's economic decline started only in the end of 2016, when the Russian economy gradually entered the period of stagnation (Figure 1). The crisis of 2013-16 also differs in terms of the problems that it presented. As mentioned earlier, the crisis of 2008-9 resulted in a steep decline in industrial growth (11% in 2009) and an increase in the unemployment rate (from 6.2% in 2008 to 8.3% in 2009[1]); however, the household income remained almost unchanged (Rosstat data). The major challenges of the crisis were a large and protracted decline in household income and consumption rates, decline in investments or four consequent years, and regional budget destabilisation that emerged in 2013 (the federal budget problems were evident only in 2015 due to the decline in petroleum prices). These 'painful points' are the subject

of the present study.

Figure 1. Basic economic indicators in Russia (% to the quarter of the previous year)



Source: Rosstat data

2. Crisis adaptation: Industrial sector and regional labour markets

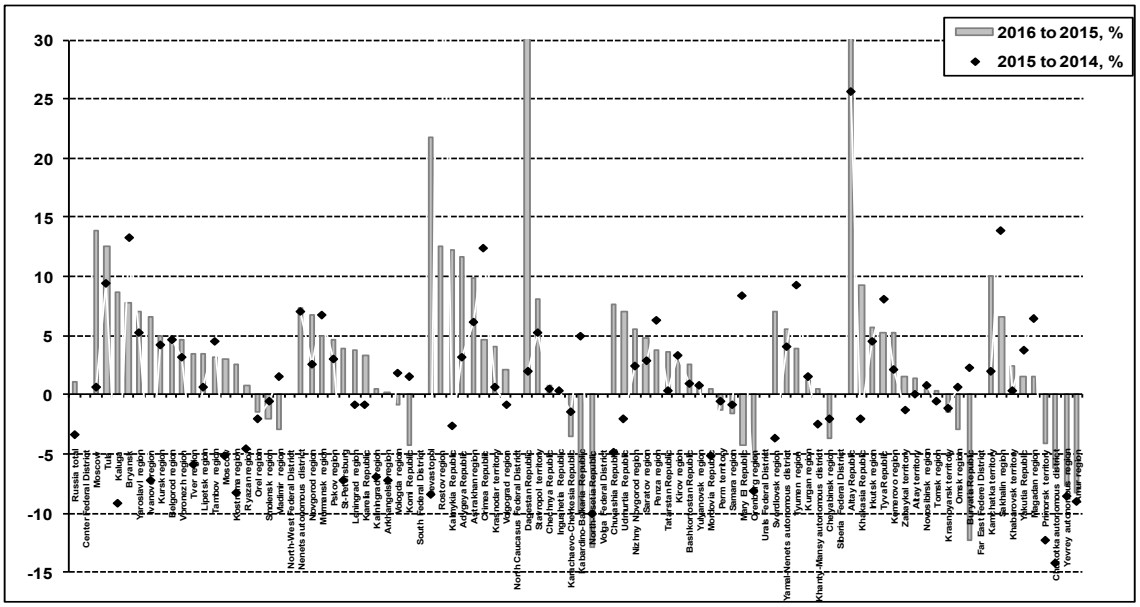
Considering the economic sectors that have already adapted to the crisis, as mentioned in section 1, the decline in industrial production was rather moderate (-3.4% in 2015 according to the old calculation methodology of Rosstat[2]) and intensified in the first half of 2015, and consequently caused economic turmoil in the summer of 2016. The industrial production decline was not universal as the volume of industrial production decreased only in 40% of the Russian regions and in case of the manufacturing sector, in 50% of the regions. In 2015, the industrial growth rate increased by 1.1%. A total of 20 regions, accounting for 18% share of the Russian manufacturing sector, experienced a slight decline in industrial growth.

It is possible to distinguish the three groups of regions where industrial production saw a steady growth during the years of the first two crises (Figure 2). First are the regions that specialise in the food industry, namely Stavropol, Rostov, Belgorod, Kursk, Voronezh, and Tambov. Devaluation of the rouble and counter-sanctions significantly reduced food imports, thus triggering domestic food production by Russian companies, which also resulted in increased prices for products due to declining domestic competition. However, the growth of the food industry was temporary as the solvent (effective) demand of the population was declining.

Second, industrial growth was apparent in the petroleum- and gas- extraction regions, such as

Yamalo-Nenets, Nenets, Sakhalin, and Irkutsk. These regions had invested in the petroleum- and gas-extraction industries before the crisis, and could thus maintain positive industrial production growth rates.

Figure 2. Industrial production, % to the previous year



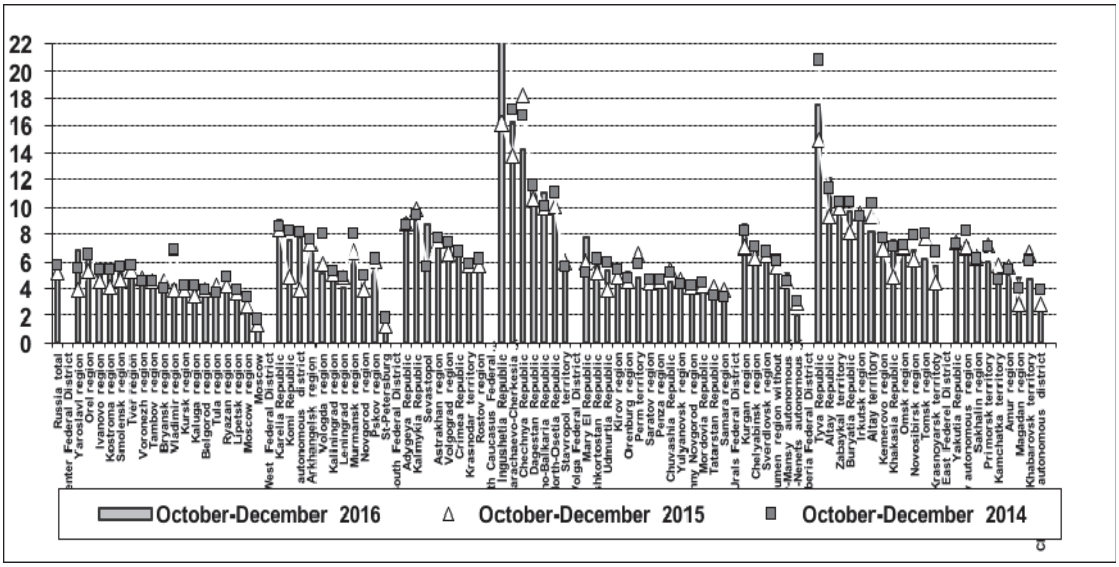
Source: Rosstat data

Third, the regions specialising in the defence sector, particularly Tula, Bryansk, and Yaroslavl, demonstrated positive industrial production growth rates during the crisis, and this was not a typical trend when compared to the previous crises as the federal budget expenditures for the defence sector increased during the crisis of 2013-16. For instance, expenditures on national defence increased by 28% in 2015 and by 19% in 2016. Thus, the share of military and defence expenditures in the total expenditure structure of the federal budget amounted to 22% in 2015 and 34% in 2016, and is comparable to their respective shares during the wartime. Federal budget revenues for 2015-16 have consequently decreased causing the budget deficit of RUB 2 trillion in 2015 and RUB 3 trillion in 2016 (Federal Treasure data). Thus, there remains a high possibility that the demand for military and defence sectors would shrink in the next few years due to the lack of defence financing, and this could negatively influence regions specialising in the defence and military sectors.

The geographical distribution of the industrial production decline is unstable, and the dynamics of 2015 and 2016 do not often correspond. In the less developed regions, high volatility is explained by the base effect (the low volume of industrial production), while in the more industrially developed regions

versatile factors are presumably accountable for the production decline. The regions specialising in automobile manufacturing, such as Kaluga and Kaliningrad, experienced significant industrial production decline due to a shrink in the solvent demand of the households. Generally, the industrial production decline is steeper for the regions specialising in engineering (machine building) and textiles owing to a low level of competition in such industries. Orenburg and Omsk experienced a more severe decline caused by the policy changes in the regional taxation system that resulted in profitability and volume reductions of the petroleum refining industry.

Figure 3. Unemployment rate measured by the ILO methodology, %



Source: Rosstat data

The processing industry declined until 2016; however, the growth rate for this industry remained negative in 31 regions. For instance, large industrial regions, such as Samara, Orenburg, Chelyabinsk, Perm, and Krasnoyarsk, demonstrated negative growth rates. Generally, despite the fact that the Russian industry adapted to the negative market conditions, this did not generate a positive industrial production growth, and rather marginally mitigated the stagnation level.

The crisis had almost no impact on the unemployment rate measured by the method designed by the International Labour Organization. During the three years of crisis, the unemployment rate did not change at the country level (5.4% for October-December 2016) or the regional levels (Figure 3). The Russian labour market adapted to the crisis conditions through wage reductions rather than employment reductions and lay-offs as Russian companies generally use the underemployment mechanism (part-time work and unpaid vacation). The highest underemployment rates were registered in regions that specialised in automobile manufacturing, such as Samara, Kaluga, and Nizhny Novgorod, as well as

in the regions specialising in mechanical engineering industries. In 2016, the share of the underemployed in the number of employees on payroll marginally decreased from 3.4% to 3.1%, together with the share of employees on unpaid vacations, from 7.5% to 7.2%, respectively. Thus, the labour market crisis has not ended and one of its consequences is not the increase in the unemployment rates and rather the increase of underemployment.

Another long-term problem in Russia's economy is the steady increase of those employed in the informal sector, which reached 20% of the total employment (Rosstat data). The overflow of employed workers into the informal sector has continued since 1990s and is not directly caused by the current crisis. Informal employment is less paid and provides no social security, though it allows many Russian workers to survive. As other research studies show, the Russian labour market model is very specific. In conditions of low unemployment benefits and high barriers for geographical labour mobility, people seek employment in the informal sector without relying on any government support (Gimpelson et al., 2017). The crisis of 2013-16 has once again demonstrated that this model is retained, stabilising the regional unemployment indicators. Regional differentiation is not stipulated by the crisis, and is rather restricted by the long-term demographic, geographical, structural, and economic factors.

3. Geographical distribution of investments: Government and business priorities

The chronic problem of underinvestment of the Russian economy is familiar. The steepest investment decline was observed during the transformation period in the 1990s, and by 1998, investments decreased by more than five times (up to 17% of the 1990 level). In 2014, the investment level recovered by only 61% of the 1990 level. In comparison, the industrial production of 1998 declined by 48% and in 2014 it recovered to 92% of the 1990 level (Rosstat data).

Crises negatively impact investment activity and the recent crisis of 2013-16 was no exception to this trend. Though investment growth rate was already minimal in 2013 (0.8%), it further declined by 1.5% in 2014 and reached -8.4% in 2015. In 2016, investment decline almost stopped (-0.9% when compared to the previous year). However, in real terms, investments decreased by 12% during 2013-16.

During conditions of crisis, businesses tend to reduce their investment activities and only invest in the most competitive projects. Investments for the federal and regional budgets are also reduced in crisis years, and the authorities are forced to constrict the number of investment projects or distribute a smaller investment amount among several projects that results in the increase of 'construction in progress'.

During the recent crisis, research studies on investment activity in the Russian regions were not undertaken. Only one study focused on the issue (Kuznetsova, 2016). This study considers the type of investment policy implemented in the Russian regions during the years of crisis.

In 2013-16, there was a growth in investments in the petroleum- and gas-extracting regions as well as in the federal cities (Table 1). The share of the two autonomous regions of Tyumen Oblast in the total investments of Russia in 2016 was 13%, and for Moscow City, it amounted to 12%. Thus, these three

federal subjects constituted 25% of the total investments of the country. Statistics show that during the crisis years, investments accumulated in the regions that had the most important competitive advantages, namely resource and agglomeration advantages, thus enhancing spatial polarisation of the regions.

The investment dynamics in the new petroleum- and gas-extracting regions located in eastern Russian, excluding Yakutia, are unstable and investments in Sakhalin are actually decreasing. In most large regions located in the Urals and Siberia, the investment decline was rather profound and prolonged – it continued until 2016. It will inevitably impede the development of the Ural and Siberia regions in the near future. The investment dynamics are marginally better for some developed regions in the European part of Russia, such as Bashkortostan, Tatarstan, and Voronezh, as the authorities of these regions are implementing active investment policies.

Three other regions in Russia, the Far East, Crimea, and North Caucasus, are considered to be geopolitically prioritised and receive special federal government support. However, the investment dynamics in these regions were different during the years of crisis. Investments in the development of the Russian Far East contracted as the 'shift to the East', which was proclaimed by the Russian government, remains a challenge. The share of the Far East in the total investments in Russia is only 6.7% and is marginally higher than its share in the total population (4.5%) (Rosstat data). Considering the fact that the Far Eastern Federal District occupies one-third of the Russian territory, the volume of investments is insignificant. The investment peak in the region was registered in 2011 (9%), burgeoned by the preparations for the Asia-Pacific Economic Cooperation and the construction of the Eastern Siberia—Pacific Ocean oil pipeline. These investments were primarily undertaken by the federal government and the state corporations. Thus, when large investment projects were completed, investments into the region declined and this tendency was further aggravated during the crisis. Considering Russian businesses, companies were not prepared to invest into the Russian Far East due to high transaction costs.

The Russian propaganda presents the Republic of Crimea as a territory for advanced development and highlights the fact that it is a strategically important region for the federal government. However, the share of this region in the total investments is less than 0.5% and its share in the total population is 1.6%. The construction of the Kerch Strait Bridge is not included in the above-mentioned statistics and despite the crisis, it is directly financed from the federal budget. Another investment priority for the government is the underdeveloped and virulent North Caucasus Federal District. However, its share in the total investments is 3% and only the Republic of Dagestan has been receiving significant investments from the federal budget and the state corporations.

Corporate businesses remain the main investors in Russia with a share of 52% (their own corporate funds), with a decline in government investment activity being observed. In the 2000s, budget investment amounted to 21%, and reduced to 18%, 17%, and 16% in 2012, 2014, and 2016, respectively. The share of the budget investments is the biggest in the underdeveloped Republic of Ingushetia amounting to 91%, and in other republics of the North Caucasian Federal District, the Republic of

Table 1. Investments into the Russian regions with the share of more than 1% of the total Russian investments

	Growth rate, %		Share, %		Growth rate, %		Share, %
	2013-16	2015-16	2016		2013-16	2015-16	2016
Russian Federation	-11.7	-0.9	100	*North-Western Federal District*	-9.0	8.3	11.3
Central Federal District	-5.6	-1.3	25,9	Saint-Petersburg	1.8	12.4	4,0
Moscow City	2.4	0.7	11,6	Leningrad Oblast	-19.1	11.6	1.8
Moscow Oblast	-14.5	-2.8	4,3	Komi Republic	-12.8	12.8	1.4
Voronezh Oblast	8.4	0.1	1.9	*Siberian Federal District*	-23.2	-4.2	9.6
Ural Federal District	5.5	8.8	18.7	Krasnoyarsk Krai	-15.0	0.9	2.9
Yamalo-Nenets Autonomous Okrug	20.0	22.5	7.5	Irkutsk Oblast	-4.4	17.5	1.8
Khanty-Mansi Autonomous Okrug	4.9	2.6	5.5	Kemerovo Oblast	-43.0	-13.4	1.1
Sverdlovsk Oblast	-20.0	-8.9	2.4	Novosibirsk Oblast	-44.2	-18.9	1.0
Tumen Oblast*	1.7	14.5	1.8	*Southern Federal District*	-42.9	-16.4	7.6
Chelyabinsk Oblast	-29.4	-15.3	1.3	Krasnodar Krai	-62.6	-29.3	2.9
Volga Federal District	-15.6	-7.7	16.6	Rostov Oblast	-12.7	-12.2	2.0
Tatarstan, Republic of	0.0	0.0	4.4	Volgograd Oblast	4.5	-9.1	1.2
Bashkortostan, Republic of	8.7	4.2	2.5	*Far Eastern Federal District*	-11.1	-2.9	6.7
Samara Oblast	-27.2	-21.7	1.8	Sakha (Yakutia) Republic	32.3	28.8	1.9
Perm Krai	-27.1	-3.3	1.6	Sakhalin Oblast	-5.8	-18.8	1.7
Nizhny Novgorod Oblast	-38.6	-14.2	1.5	*North Caucasian Federal District*	-2.0	-3.7	3.3
Orenburg Oblast	-11.6	-10.4	1.1	Dagestan, Republic of	13.2	0.8	1.4

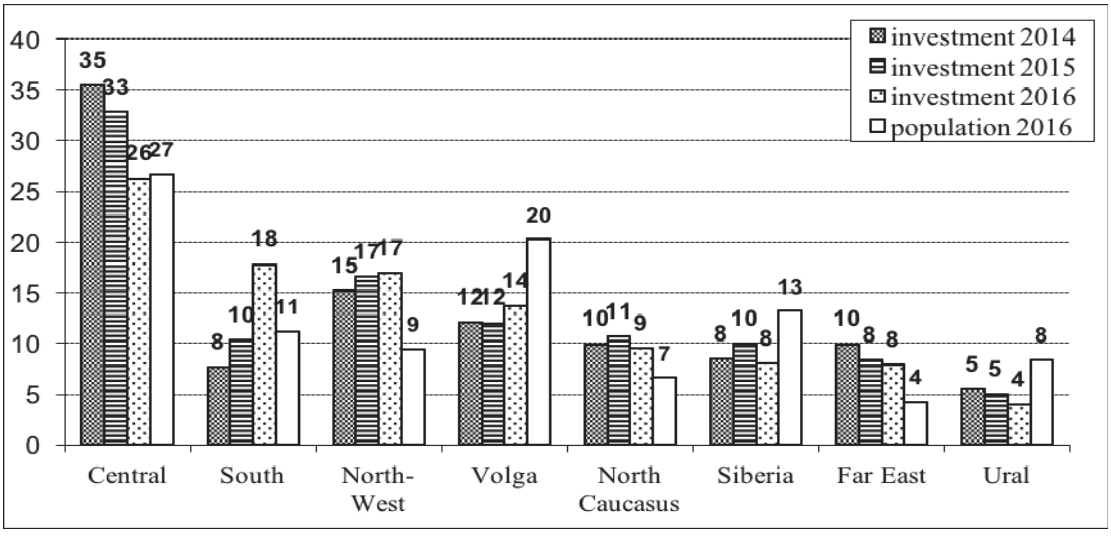
* without autonomous regions

Source: Calculated by the author based on the Rosstat data

Kalmykia, the Tuva Republic, the Altai Republic, and the Republic of Crimea fluctuating between 45 and 75% (Calculated by the author based on the Rosstat data). The second group of regions with a high share of budget investments are the regions with new projects in the electric power and transport infrastructure, being directly financed by the government and state corporations. During 2015-16, 12-13 regions gained a high share of budget investments of 30-50%. The third group represents the Moscow City, with budget investments constituting 29%, and the city government providing 21% of the investments. In addition, the share of budget investments in Saint Petersburg was only 16%.

It is essential to understand the investment priorities of the federal and regional authorities during the crisis. The share of federal investments in fixed capital for 2014-16 was 9-10% of all investments. Rosstat data enables the calculation of the distribution of these investments in terms of the federal districts and regions. The geographical distribution of investments contradicts the fact that the Russian government tends to support less developed and 'geopolitically important' regions during the crisis. One-third or one-fourth of all investments are accumulated in the Central Federal District, particularly in Moscow City (Figure 4). The North-Western Federal District was second, and Saint-Petersburg did not accumulate majority of the budget investments. In addition, Murmansk, Novgorod, and Kaliningrad were comparable in terms of investments.

Figure 4. Share of federal budget investments in fixed capital and population by federal districts (all investment from federal budget=100%)



Source: Calculated by the author based on the Rosstat data

The North Caucasian and Far Eastern Federal Districts continue to receive 9-10% of the federal budget investments and remain the priority of the federal government (Calculated by the author based on

the Rosstat data). The share of the Far-Eastern Federal District is gradually declining despite the 'shift to the East' proclaimed by the federal government. In 2016, federal budget investments increased in the Southern Federal District, particularly in Krasnodar and Rostov, thus demonstrating the expansion of federal government investment priorities to the south (Table 2). The increase in investments was stipulated by the consequent implementation of investment projects in military and defence sectors, the construction of sporting facilities and the Rostov airport for the Soccer World Cup, and the construction of the Kerch Strait Bridge from Krasnodar Krai.

Table 2. Top regions with high shares in federal budget investments, % (total federal budget investments=100%)

	2014		2015		2016
Moscow City	18.2	Moscow City	14.9	Moscow City	10.6
Moscow Oblast	4.9	Voronezh Oblast	4.9	Krasnodar Krai	7.7
Voronezh Oblast	4.3	Moscow Oblast	4.8	Rostov Oblast	5.7
Krasnodar Krai	4.2	Saint-Petersburg City	4.8	Moscow Oblast	3.7
Saint-Petersburg City	4.1	Dagestan, Republic of	4.8	Voronezh Oblast	3.5
Dagestan, Republic of	3.8	Krasnodar Krai	4.6	Dagestan, Republic of	3.3
Primorsky Krai	3.4	Murmansk Oblast	2.9	Novgorod Oblast	3.1
Sverdlovsk Oblast	3.1	Amursk Oblast	2.9	Murmansk Oblast	3.0
Leningrad Oblast	2.2	Rostov Oblast	2.7	Nizhny Novgorod Oblast	2.9
Tatarstan, Republic of	2.0	Novgorod Oblast	2.5	Irkutsk Oblast	2.7
Murmansk Oblast	2.0	Nizhny Novgorod Oblast	2.4	Saint-Petersburg City	2.6
Amur Oblast	2.0	Leningrad Oblast	2.3	Kaliningrad Oblast	2.3
Arkhangelsk Oblast	1.9	Primorsky Krai	2.1	Leningrad Oblast	2.2
Tver Oblast	1.9	Tatarstan, Republic of	2.1	Primorsky Krai	2.1
Novgorod Oblast	1.8	Chelyabinsk Oblast	1.8	Tver Oblast	2.1

Source: Calculated by the author based on the Rosstat data

Despite a higher share in terms of total population, Volga, Siberia, and the Ural Federal Districts received a significantly lower amounts of federal budget investments. The Ural Federal District was considered an outsider due to the concentration of petroleum- and gas-extracting industries in Tyumen, where the inflow of investments was minimal.

The distribution of federal budget investments in terms of the regions allows for a better understanding of the priorities of the federal government investment. Moscow City remains the top investment priority and its share never fell below 9-10% (Table 2). The increase of investments during 2014-15 in Moscow was stipulated by additional financing from the federal budget for the development of transport infrastructure in the capital. In addition, the shares of Saint-Petersburg, Moscow Oblast, and other regions are lower and not stable. Furthermore, the large industrial regions of the Ural and Siberia receive insufficient attention of the federal authorities.

The investment activities of the regions have considerably declined when compared with the investment activity of the federal authorities. It is only the regions with a high fiscal capacity that have enough investment resources during the periods of crisis. For instance, the budget of Moscow City increased by RUB 190 billion and amounted to RUB 1.86 trillion in 2016, and thus, the budget expenditures of the region to support the national economy increased by 18%. In fact, this budget expenditure item (investments into the national economy) increased by 28% of the total budget of Moscow. In addition, Moscow's share in budget expenditures for the national economy amounts to approximately 25%. The second wealthy region is Sakhalin, with a 46% share of expenditures for national economy in its budget for 2015 (Federal Treasure data). The budget revenues of Sakhalin increased due to the taxes and royalties from the petroleum and gas companies, which are paid under the framework of product sharing agreements. The transfer of petroleum and gas rents is not allowed under the present product sharing agreement mechanisms. Thus, the rents remain in the region and are spent for various purposes, including investment activities.

Table 3 shows that the share of Moscow City was 35-38% of the budget investments of all Russian regions. Saint-Petersburg lags four to five times behind Moscow due to the fact that its budget is 3.8 times lower and as the city authorities are implementing a less active investment policy. Thus, the Russian capital could maintain investment potential during the crisis. A more active investment policy is

Table 3. Top regions with high shares in total federal budget investments, % (total federal budget investments=100%)

	2014		2015		2016
Moscow City	36.9	Moscow City	38.2	Moscow City	35.2
Saint-Petersburg City	7.8	Saint-Petersburg City	9.4	Dagestan, republic of	8.0
Dagestan, republic of	3.8	Dagestan, republic of	8.8	Saint-Petersburg City	5.7
Tatarstan, republic of	3.5	Tatarstan, republic of	5.0	Moscow oblast	5.4
Tumen oblast (excluding autonomous regions)	3.4	Sakhalin oblast	3.0	Tatarstan, republic of	4.3
Bashkortostan, republic of	2.9	Bashkortostan, republic of	2.5	Sakhalin oblast	2.9
Sakhalin oblast	2.8	Sverdlovsk oblast	2.5	Sverdlovsk oblast	2.3
Khanty-Mansi autonomous okrug	2.7	Tumen oblast (excluding autonomous regions)	2.3	Bashkortostan, republic of	2.2
Sverdlovsk oblast	2.1	Khanty-Mansi autonomous okrug	2.3	Khanty-Mansi autonomous okrug	2.0
Amalog-Nenets autonomous okrug	2.1	Rostov oblast	1.9	Sakha (Yakutia) republic	2.0

Source: Calculated by the author based on the Rosstat data

implemented in the Republic of Tatarstan, a wealthy Tyumen Oblast, and its autonomous *okrugs*.

The Republic of Dagestan was among the top three regions in 2015-16, after it received significant federal subsidies to finance infrastructural projects (hydro-energy plant and sea port construction).

Thus, investment priorities of businesses in the conditions of crisis are concentrated in regions with obvious competitive advantages, such as regions specialising in petroleum and gas industries, and regions with a powerful agglomeration affect (the largest agglomerations of federal cities). This supports the contemporary theories of spatial development, emphasising the agglomeration advantages (Fujita et al., 1999). A decline in investments is observed in most large industrial regions which impede their further development in the middle term.

Though the investment growth forecasts remain unclear, the analysis of investment dynamics allows us to conclude that the polarisation of spatial development in Russia is expected to be intensified. This trend will have a profound negative impact on Ural, Siberia, and Volga regions, which are likely to lose their competitive advantages in conditions of insufficient investment inflows.

4. Income and consumption: Declining trends in Russian regions

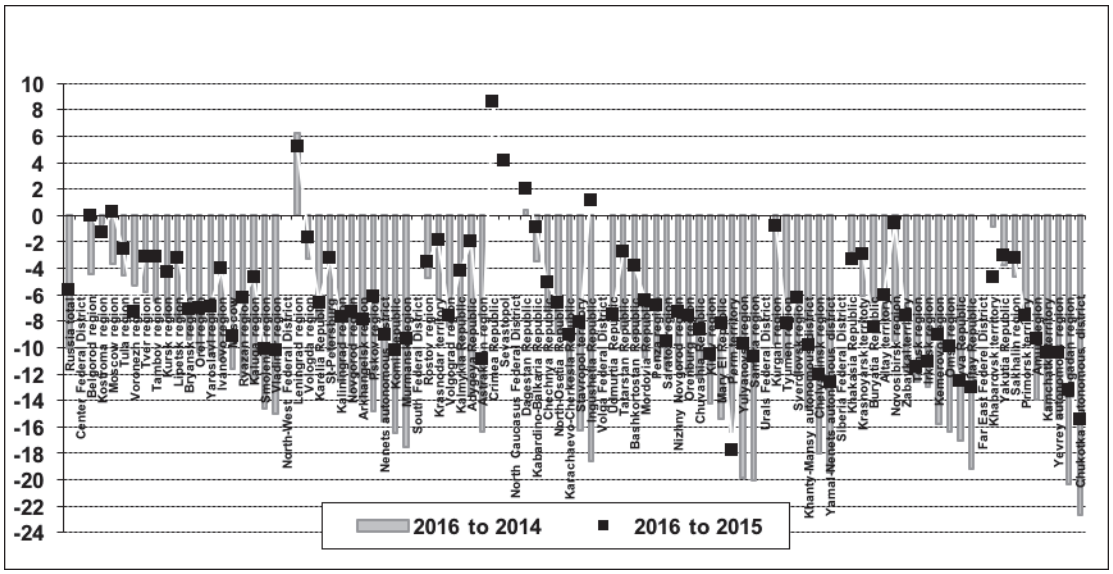
Besides an investment decline, the second 'painful point' is the decline in income and consumption. Household income has been decreasing for the last three years, with 2016 witnessing a higher decline rate than 2015 (-5.6% and -4.1%, respectively). During January-April 2017, the decline persisted (-2%). The results of incremental measurement show that during 2014-16, the real income of the population decreased by 10% and is comparable to the level of 2011 (Calculated by the author based on the Rosstat data).

Due to the problems in statistical accounting, regional discrepancies in income dynamics cannot be measured accurately. In Russia, due to the high share of 'shadow income', particularly in the regions, statistical data on income, wages, and consumption remain unreliable. However, it is possible to define a few regional trends. The regions of Ural, Volga, and the North-western Federal District demonstrate the worst dynamics, where income decline rates in majority of the federal subjects were higher than the country-average. In addition, Siberia and the Far East regions, constituted half of the income decline rates, however, in the Central Federal District the decline rate was less severe (Figure 5). The income growth rates in Leningrad Oblast, and in the republics of Dagestan and Ingushetia are explained by the defects in statistical accounting.

The income structure is comprised of subsidies to the population (19%) and pensions (70%), which were not indexed in 2016, thus hindering the recovery dynamics of household income (Rosstat data). In addition, income from business activities, property income, and wage income, including the 'shadow component' also declined. The legal wages of company employees constitute 45% of the total household income and its fluctuation significantly impacts the real household income. The real wage income in 2016 increased by 0.7%, after a sharp decline of 8.4% in 2015; in January-April 2017, it

increased by 2.4%. By 2016, the real wage increased in 66 regions (December 2015 to December 2016). Although wage and pension increases planned by the government in 2017 are expected to improve household income, the growth forecasted is very moderate.

Figure 5. Income of the population, %



Source: Calculated by the author based on the Rosstat

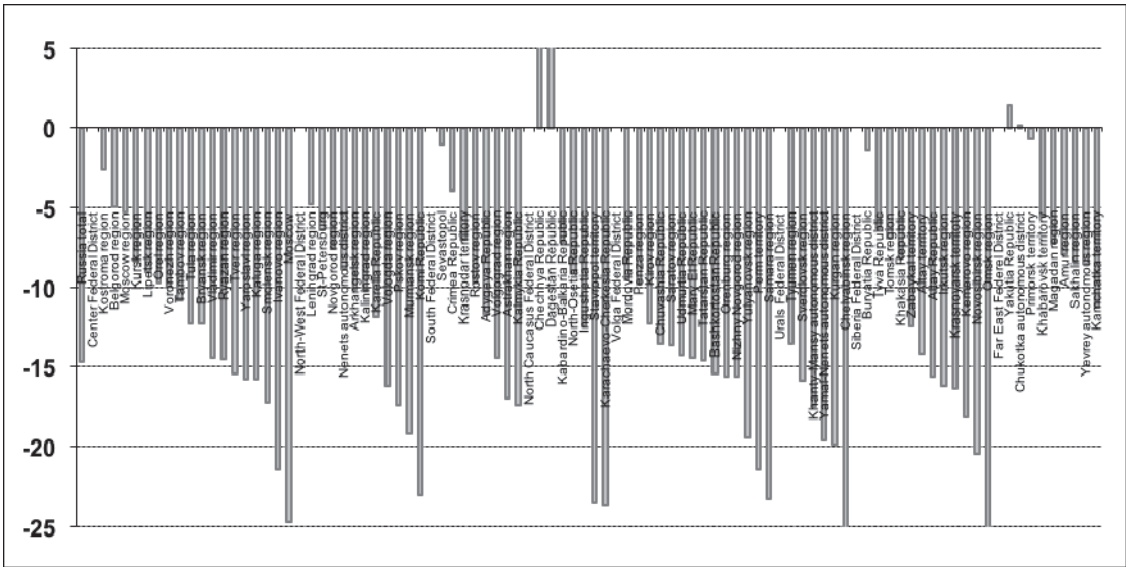
The poverty rate has increased from 10.7% in 2012 to 13.3% in 2015 as a result of declining income rates, while the data for 2016 is yet to be published. The number of people with income below the minimum subsistence level increased by 3.8 million and stood at 20 million (Rosstat data).

The income decline rates had an immediate negative impact on consumption. The Russians are adapting to the income decline caused by the crisis using the traditional approach of 'tightening the belts'. In 2015, retail trade decline (-10%) was two times higher than the income decline. In 2016, the decline rates gradually slowed down to 5.2%, and for January-April 2017, this rate was -1.4%. It is highly probable that the retail trade decline will stop in the second half of 2017, and it is unlikely to rapidly grow in the near future. The income and consumption crises, as well as the investment crisis, are slowly entering the stagnation phase.

In 2014-16, the accumulated retail trade volume decreased by approximately 15%. Although the decline rate in the regions was omnipresent, statistical data fail to show the complete picture. The reliability of trade income statistics is rather low, particularly in regions with several primitive markets. A large proportion of retail trade in the open markets is 'in shadow', thus making it challenging to assess the sales volume. Although the regional statistical agencies are applying methods of reappraisal of the

sales volume, the reliability of these methods remain low. The open market trade is particularly widespread in North Caucasian and Far Eastern Federal Districts. Figure 6 shows that retail trade in these regions has not significantly declined, and that it has actually increased in the republics of Dagestan and Chechnya. This atypical dynamic is probably explained by the low-quality regional statistics.

Figure 6. Retail trade in 2014-16, %



Source: Calculated by the author based on the Rosstat data

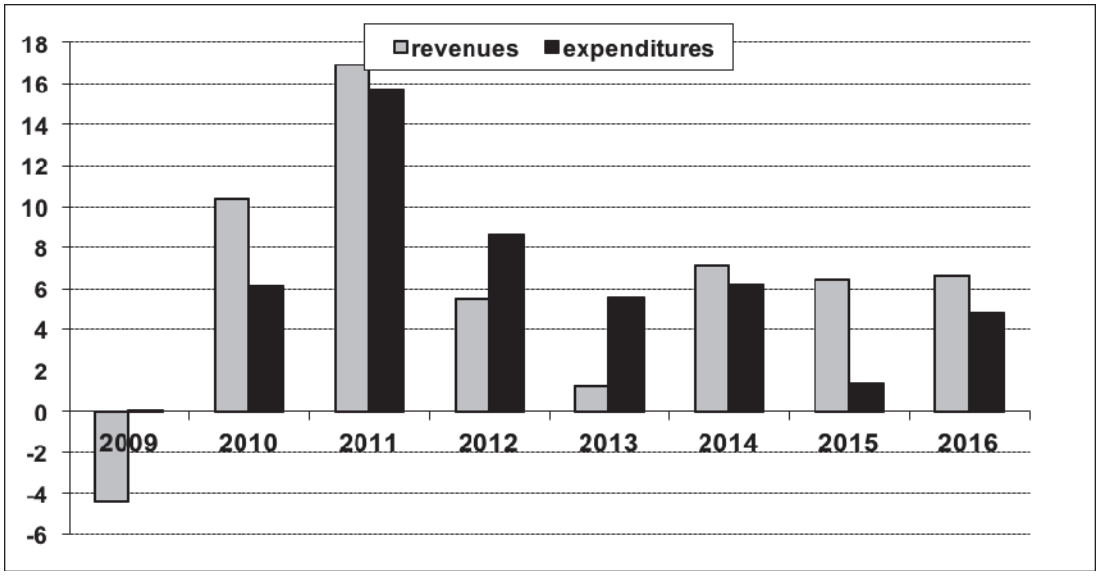
5. Regional budget problems during the crisis

The third 'painful point' is the regional budget. Budget issues were evident even before the crisis. However, the professed May presidential decrees on wage increase in the public sector was the primary reason for budget destabilisation. The implementation of these decrees burdened regions that had to spend 70-80% of the essential funds from their regional budgets, while the rest was financed by the federal budget in the form of budget transfers. The regions had to bear additional expenditures in conditions of low income growth rates starting from 2013, due the economic stagnation followed by an economic decline. The petroleum price decline had a small impact on regions as the petroleum rent was directly accumulated by the federal budget.[2]

The most challenging year for regional authorities was 2013 as budget revenues did not grow, though budget expenditures had to be increased to meet the conditions of the May presidential decrees (Figure 7). The revenue and expenditure gaps were as strong as they were during the economic crisis of 2009. Starting from 2014, budget revenues grew faster owing to the revenues from corporate income taxes

paid by large exporting companies and banks. In 2016, the nominal budget revenues of the Russian regions increased by 6.6%, primarily due to the increased tax income from excise duties of 36%, as the result of the duty rate increase; personal income tax of 8%; and corporate income tax. The budget revenues declined in only 10 regions with the steepest decline registered in regions receiving the petroleum resource rents, which were Sakhalin (-30%), Nenets (-21%), and Khanty-Mansi (-11%) (Federal Treasure data).

Figure 7. Nominal consolidated budget revenues and expenditures, % to the previous year (without Crimea region)



Source: Calculated by the author based on the Federal Treasury statistics

The budget revenues of Moscow City for 2016 increased by 11% and amounted to RUB 1.86 trillion. Moscow constitutes a 16% share of all regional budgets, thus the high budget revenue growth in Moscow had a significantly positive impact on other regional budgets. For instance, Moscow's budget revenues in 2016 increased by RUB 190 billion, which is comparable to the total budget revenues of regions such as the Republic of Bashkortostan and Rostov, each with a four million population. Budget revenues in the capital of Russia expanded due to an increase in corporate income tax revenues of 18% and personal income tax revenues of 8%. Russian banks, a state-owned Sberbank in particular, are accountable for the lion's share of corporate income tax revenue increase. In addition, Moscow has the highest wage levels, particularly in the public and security sectors. Thus, Moscow received a supposed additional capital rent even during the crisis: Headquarters of large exporting companies and banks are located here and it has the largest employment rates with the highest wage levels. Owing to the capital

rent and competitive advantages of being the largest agglomeration in Russia, Moscow had a large budget surplus in 2015-16 and a minimum debt burden.

The Russian regions launched expenditure optimisation policies only in 2014. However, by then, they had already accumulated significant amounts of debt. The regions adapted to the budget crisis of 2013-16 in several stages. During 2013-14, majority of the regions decreased non-social expenses, such as expenditures on national economy and housing and communal utilities (Table 4). Social expenditures reduced only in 2015. The additional reasons for budget reductions after the Crimea's annexation were international and counter-sanctions imposed by the Russian government (import embargo for food products from the West). Government authorities launched the import-substitution policy and in order to implement this policy they increased the level of regional subsidies for the import-substitution development. Federal subsidies were to be co-financed by regional budgets, and therefore, regional authorities were forced to reduce social expenditures. The budget optimisation of 2015-16 included the optimisation of education, culture, and health revenues and expenditures. In 2015, 51 regions reduced education expenditures and 54 regions decreased expenditures on culture, and in 2016, 53 regions reduced health care expenditures (Federal Treasure data). The health sector was not only financed from the regional budgets, but also from the territorial funds of compulsory medical insurance, which constitute 52% of the total expenditures on regional health sectors. The health sector became another 'painful point' in 2016 as the budgets of regions and territorial funds of compulsory medical insurance were reduced in 44 regions.

The only social expenditure that the regional authorities are reluctant to optimise is the social welfare expenses that mostly comprised of social benefits to the people. Social benefits grew during all the four crisis years, particularly in 2016 when it increased by 10.5% as the State Duma elections were held (Federal Treasure data). Prior to elections, the Russian government tends to increase the amount of social benefits and pensions, and are followed by actions such as strong budget optimisation policies, immediately after the elections. The impact of the election cycle can be easily demonstrated by the social expenditure dynamics of 2013. Approximately a quarter of the Russian regions reduced social expenditures, and in most cases, these regions had increased social expenditures in 2012 when Russia held the presidential elections. The next presidential elections are scheduled for March 2018, thus making social expenditure reductions on the eve of elections politically risky. Despite the request of federal authorities to optimise regional budgets, the regions are unlikely to reduce social expenditures as social stability and 'correct' federal election results are more important for regional authorities.

Table 4 shows the budget expenditure dynamics for all regions, including the dynamics without Moscow City. Moscow's budget policy has a profound impact on the overall dynamics because the share of Moscow in the total budget expenditures of all regions is 17% (Federal Treasure data). Moreover, the government authorities in Moscow often implement policies divergent from the ones implemented by other regional authorities, particularly when it comes to non-social expenditures. In 2016, Moscow significantly increased national economy expenditures by 19% for the implementation of an expensive

transport infrastructure modernisation plan (Federal Treasure data).

Table 4. Consolidated regional budget expenditures in 2013-16

Expenditures	% change to the previous year				Number of regions with budget expenditure reductions*			
	2013	2014	2015	2016	2013	2014	2015	2016
Total expenditures	5.6	6.2	1.4	4.8	7	16	31	21
excluding Moscow City	6.9	6.5	2.6	3.0				
National economy	7.8	1.6	6.1	7.3	19	53	31	24
excluding Moscow City	7.5	-2.4	10.2	4.3				
Housing and communal utilities	2.3	-0.1	-5.1	9.5	36	40	51	37
excluding Moscow City	1.2	0.7	-2.6	3.0				
Education	14.0	5.1	0.8	3.0	1	8	48	22
excluding Moscow City	16.6	6.4	1.6	2.8				
Health care (including TFMCI**)	8.0	11.3	11.5	-1.4	10	3	0	44
excluding Moscow City	10.6	11.8	13.3	-2.5				
Social welfare	3.0	7.8	5.8	10.5	21	10	16	14
excluding Moscow City	4.1	9.3	5.8	11.3				
Culture and cinema	12.1	10.6	-2.5	9.8	11	16	54	34
excluding Moscow City	11.9	8.8	0.8	4.5				

* Total amount of regions (federal subjects of the Russian Federation) - 85

** TFCMI– territorial funds of compulsory medical insurance

Source: Calculated by the author based on the Federal Treasury statistics

The increase of consolidated budget expenditures for housing and communal utilities in 2016 is also stipulated by Moscow's high contribution. Moscow's budget for housing and communal utilities increased by 28%, and in particular, the expenses for public services improvement increased by 41%. As a result, 10% of Moscow's budget (RUB 189 billion) for 2016 was spent on urban infrastructure improvement, which was higher than schooling expenses for all the schools in Moscow (RUB 162 billion) (Federal Treasure data). During the crisis, the 'wealth of the capital' became more obvious. The urban infrastructure development expenses were comparable to the budgets of Rostov Oblast or the Republic of Bashkortostan, although Moscow's population (12 million people) was only three times higher than the population in each of the regions.

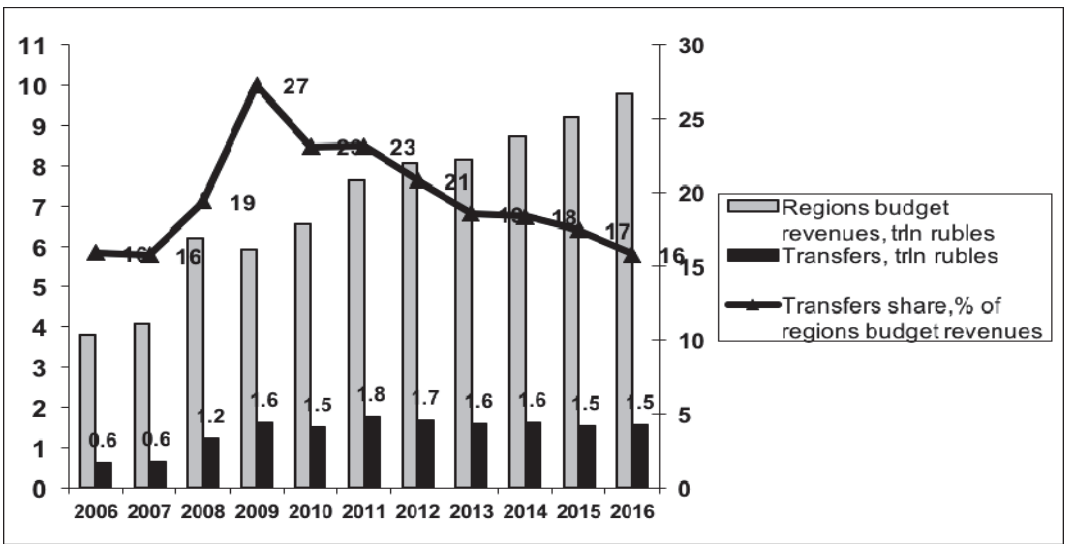
Although Moscow is the wealthiest region in Russia, its authorities were the first to initiate a human capital-oriented social expenses optimisation policy. In 2013-15, education and medical expenditures gradually decreased, while social welfare expenditures, increased, except in 2013 (post-elections effect). On the one hand, certain budget optimisations of ineffective social expenditures were necessary,

particularly in the social welfare system, and on the other hand, a significant increase in urban infrastructure development expenditures, that are often criticised as being ineffective and corrupt, in fact substituted the decrease of social expenditures. It can be deduced that severe social expenditure optimisation increases the potential political risk for Moscow's government.

In contrast to Moscow, majority of the Russian regions were rather slow in adapting their budget expenditure policies. Regional discrepancies are relatively pronounced, however, their dynamics are unstable. Thus, it is possible to conclude that regions lack long-term policy and simply react to market fluctuations. Imprudent optimisation risks potentially bear negative repercussions, but the regions have no other choice due to intense budget deficit issues.

Several regions delayed budget optimisation policies as they counted on receiving federal government support. These expectations were grounded on the fact that during the crisis of 2009 many regions received federal support, where federal transfers increased by one-third and their share in regional budgets increased from 19% to 21% (Figure 8). In 2011, the federal government allocated additional transfers for the modernisation of regional health care sectors. However, federal support was rather moderate during the implementation stage of the May presidential decrees. As a result, federal transfers to the regions steadily reduced from 2012. In 2016, the Russian regions received 3% less federal transfers in nominal terms (4% less if Crimea is excluded) (Federal Treasure data). These were mostly investment subsides from the federal budget and their reductions exerted a negative influence on the regional investment dynamics.

Figure 8. Budget revenues, federal transfers (RUB trillion), and the share of federal transfers in consolidated budget revenues, % (excluding Crimea region)

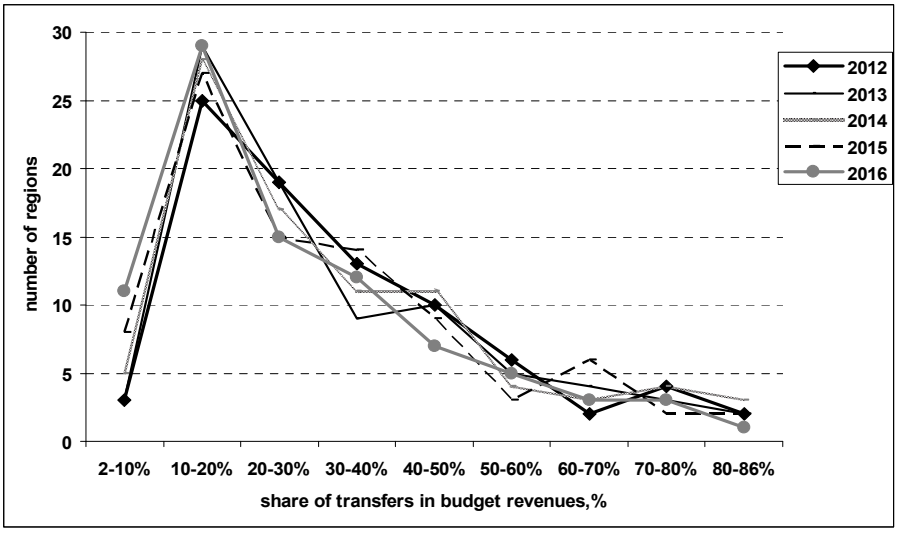


Source: Calculated by the author based on the Federal Treasury statistics

The level of dependency on federal support by the regions is stipulated by the long-term development factors, thus creating a tax base inequality. The regions with the highest dependency levels are less developed republics of Chechnya and Ingushetia (79-86%) in the North Caucasian Federal District as well as the regions of the Siberian South, namely Tuva and Altai (70-76%). The share of federal transfers is also high in some Far Eastern regions, such as Kamchatka (60%) and Chukotka (50%) (Calculated by the author based on the Federal Treasury data). The largest urban agglomerations of Moscow, Moscow Oblast, Saint-Petersburg, and Leningrad Oblast as well as petroleum- and gas-extracting regions, namely, Tyumen Oblast and its autonomous *okrugs*, and Sakhalin Oblast, are less dependent on federal transfers. The budget statistics confirm that the petroleum and gas export resource endowment and the agglomeration effect are the two competitive advantages exerting the highest impact on regional economy as they stipulate high concentration of businesses and the population.

During the years of crisis, the dependency on federal transfers has insignificantly changed, though it is possible to depict the following trends. First, the number of regions with a minimum or rather low share of federal transfers in budget revenues has increased (Figure 9). Second, the number of regions with a high federal transfer dependency has decreased. Third, the number of regions with the highest dependency on federal transfers remained unchanged. Thus, in contrast to the less subsidised regions, federal support to the highly subsided regions (less developed republics and Crimea) has not decreased.

Figure 9. Distribution of regions by share of federal transfers in the regional budget revenues



Source: Calculated by the author based on the Federal Treasury statistics

The lobbying activity and political decisions exert strong influence on the distribution of federal transfers even during the period of crisis. For instance, in 2016, federal transfers to the Republic of

Crimea and the Republic of Ingushetia increased by 18% and 19%, respectively. Due to the instability in federal support, the regions cannot forecast the volume of federal transfers in the near future. This defect of the inter-governmental fiscal relations has prolonged for several years and its impact enhanced during the period of crisis.

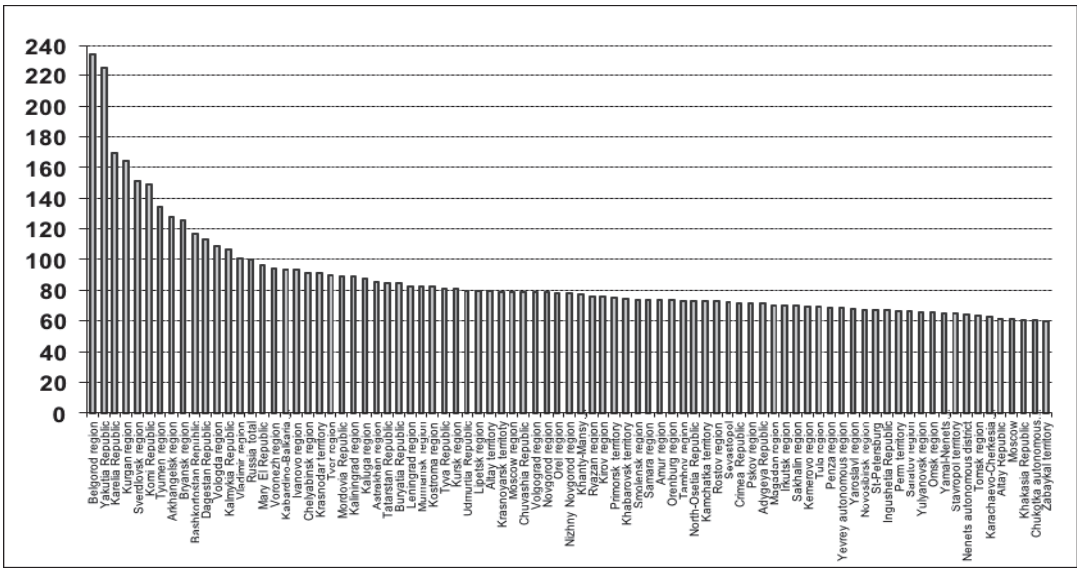
In 2016, Kaliningrad Oblast, Sevastopol City, and the Crimea Republic approached the leading positions; however, their budget revenues were subject to federal transfer fluctuations. Government support for these regions is geopolitically oriented. The positions of both Ingushetia and Chechen republics are also pronounced due to the political decisions, even though the Chechen Republic lost its advantages in the late 2000s. While it is challenging to achieve sustainable development primarily based on the high federal transfer dependency, government support for these regions is likely to be preserved, despite the huge federal budget deficit. All other regions demonstrate no significant differences in budget expenditures per capita.

Thus, it is possible to classify the Russian regions into the following two uneven groups: a small group of regions with a steady high fiscal (budget) capacity comprised of their own budget funds; and a group of all other regions with low fiscal capacity that insignificantly differ from each other. A large-scale budget equalisation hinders the economic development of the regions, thus delaying crisis recovery.

However, the policy of equalising regional budget revenues remains a priority for the Russian government. Subsequent to federal transfer allocations, discrepancies in budget revenues per capita are rather insignificant (Figure 10). Regions with higher budget revenues per capita are the ones with a large tax base, namely Moscow City and Sakhalin Oblast (in fact, Sakhalin Oblast is approaching Moscow City's level due to the increase in petroleum and gas budget revenues in 2016). Saint Petersburg, Tyumen Oblast with its autonomous okrugs, and Nenets Autonomous Okrug (despite a sharp decline in 2016) are ranked second, followed by Leningrad Oblast and the Republic of Tatarstan. Thus, the largest federal cities and their agglomerations, together with the petroleum- and gas-extracting regions, have sustainable advantages when compared to other regions.

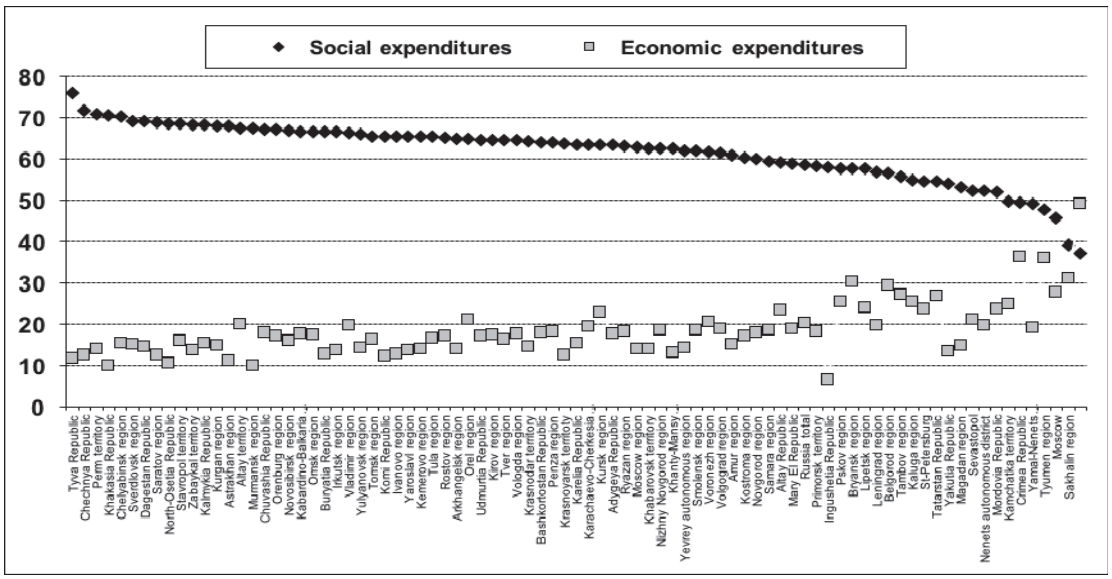
The fiscal capacity of the regions exerts a significant impact on regional policies, however, the priorities of regional authorities are no less significant. The priorities of the regional governments are pronounced in the budget expenditure structures, however, they are not significantly different from Russia's average. Social expenditures[4] are the most important for majority of the regions, with an average share of 60-62% in 2013-16 (Calculated by the author based on the Federal Treasury statistics). However, there are significant differences among the regions. In Tuva Republic and Chechen Republic, social expenditures in 2016 constituted 76% and 72% of the total budget expenditures, respectively, while for Chukotka Autonomous Okrug, Kaliningrad Oblast, and Sakhalin Oblast the share was 33-37% (Figure 11). The high share of social expenditures is explained by the scarcity of budget funds for other purposes rather than by government priorities. High social expenditures are not only typical for the less developed regions, but also for the developed ones, as regional authorities are unwilling to risk budget reductions that can fuel social tensions and protests.

Figure 10. Consolidated budget revenues per capita in 2016 adjusted by the budget expenditure index, % to the average of Russian regions



Source: Calculated by the author based on the Federal Treasury statistics

Figure 11. Social expenditures and national economy expenditures, % in total budget expenditures of Russian regions in 2016



Source: Calculated by the author based on the Federal Treasury statistics

Less than a quarter of the Russian regions have attempted to stimulate economic, industrial, and infrastructure development by allocating budget funds. These regions have a high share of economic expenditures that is above the country's average of 20% and include the following:

1. 'Wealthy regions' with high fiscal capacity that could allow budget funds to be spent for the development of the national economy even during the period of crisis, namely Sakhalin, Tyumen, Moscow, Saint-Petersburg, and Tatarstan;
2. Regions with an average fiscal capacity that have been actively involved in the development of the national economy for the past decade and are trying to maintain this trend even in conditions of crisis, namely the Republic of Mordovia, Belgorod, Kaluga, Tambov, Lipetsk, and Bryansk;
3. Regions with a high proportion of federal transfers in their budget revenues, namely Chukotka, Kaliningrad, Kamchatka Krai, and Crimea.

This list of regions remained unchanged during the period of crisis, thus demonstrating the priority goals of the regional authorities. The last two groups of regions have to reduce their social expenditures, in order to maintain public financing for economic growth and development.

The basic budget indicators for the Russian regions are rather homogeneous. The budget policy is often a simple passive adaptation to the crisis. In order to improve regional budgets, regional authorities compete for federal transfers. In conditions of rigid 'vertical power', this is more advantageous than the stimulation of economic development that can potentially generate additional budget revenues.

An increase in expenditure liabilities in conditions of sluggish economic growth caused the expansion of regional budget deficits. Budget deficits reached their maximum in 2013 (Table 5) when the wages of those employed in the education, and medical and healthcare sectors increased, while regional budget revenues remained unchanged. Budget deficits gradually decreased every consequent year, however, the number of regions with budget deficits in 2013-15 remained rather high between 75 and 77 (Federal Treasury statistics). The consolidated budget deficit reached a minimum only in 2016, balanced by Moscow's budget surplus. The number of regions with budget deficits reduced to 55, though it still comprises the majority. However, regional authorities' policies aimed at balancing budget revenues and expenditures gradually brought positive results. However, some regions, including the republics of Khakassia and Mordovia, Udmurt, Crimea, Sevastopol, Kostroma, and Orlov, are unable to implement the budget balance policies and had large budget deficits (-10 to -27%). The budget deficit in Nenets Autonomous Okrug amounted to -23% and was caused by a drastic decline in budget revenues of 21% (Federal Treasury statistics).

In order to finance budget deficits, the regions are forced to increase the amount of regional and municipal debts. Consolidated regional and municipal debts in the beginning of 2012 amounted to RUB 1.3 trillion and by the end of 2016, they reached RUB 2.7 trillion. Regional and municipal debts in 2015 reached a maximum and constituted 35% of their own budget revenues[5] of the Russian regions. The negative growth slowed down only in 2016, when the debt burden declined due to an increase in budget

revenues and was 32% of their own budget revenues.

Table 5. Budget balance of Russian regions and the amount of regional and municipal debts

	2012	2013	2014	2015	2016
Budget deficit of all regions, billion RUB	-278.5	-642. 0	-447.8	-171.6	-12.6
including budget surplus/deficit of Moscow, billion RUB	-45.9	-47.9	-54.3	144.4	115.6
Consolidated deficit of all regions to the amount of consolidated regional budget revenues, %	-3.4	-7.9	-5.1	-1.8	-0.1
Regional and municipal debts, billion RUB	1596.7	2026.4	2402.7	2659.9	2717.5

Source: Calculated by the author based on the Federal Treasury and Ministy of Finance statistics

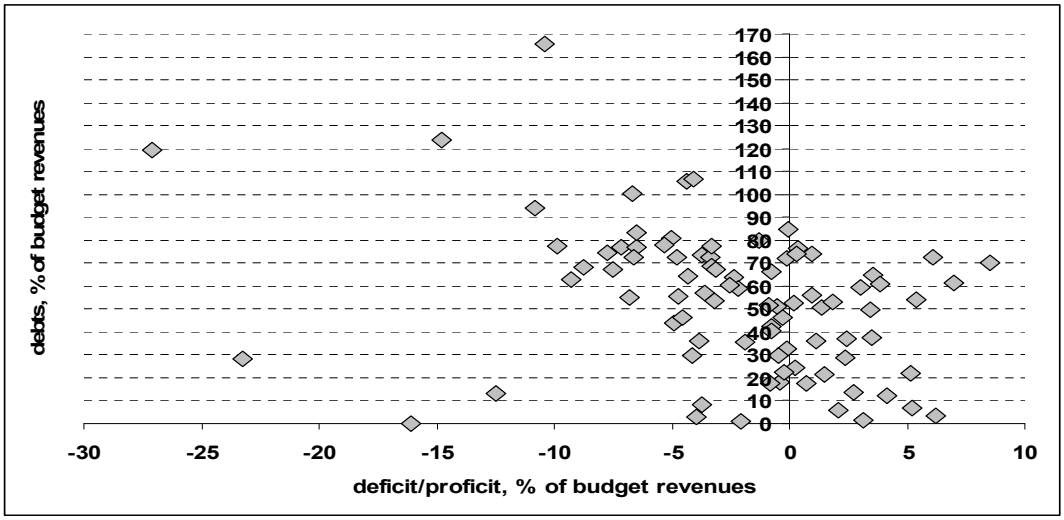
In 2016, the Ministry of Finance of the Russian Federation provided budgetary credits of RUB 300 billion at a low interest rate of 0.1%, thus mitigating the debt structure of the Russian regions. As a result, the share of budgetary credits (38%) almost equalled the share of more expensive bank loans (40%).

However, the problem of regional and municipal debts has not been resolved and has rather 'mothballed'. In half of the regions, the public debt burden of regional and municipal authorities exceeds 50% of their own budget tax and non-tax revenues. Considering the republics of Mordovia and Khakassia, Kostroma, Astrakhan, and Smolensk regions, the budget deficits in these regions actually exceed their budget revenues (Figure 12). In 19 regions, debt constitutes 70-99% of their own budget revenues. Large debts significantly destabilise regional budgets. In some regions, including Ivano, Kostroma, Yaroslavl, Astrakhan, the republics of Khakassia, Mordovia and Mari El, and Udmurtia, expenditures for serving regional and municipal debts was 5-6% of all budget expenditures due to a large share of bank loans in the total debt structure (Calculated by the author based on the Federal Treasury statistics).

Some regions continue to accumulate regional and municipal debts while banking on budgetary credits and federal budget transfers. These irresponsible policies are rather risky considering that according to the federal law on the 'Federal Budget of the Russian Federation' budgetary loans to regions are planned to be reduced by twofold; and federal transfers are also expected to decrease. However, during previous crises, federal authorities provided additional support to the regions with large budget deficits and huge amounts of accumulated debts. It is expected that the federal government will assist the regions again due to the upcoming presidential elections of 2018, considering that the government always fail to impose stricter budget regulations before the elections. However, the risks for the regions with high amounts of accumulated debts and irresponsible budget policies are likely to

increase after the elections, and most probably, they will be forced to implement budget optimisation policies. This means that the budget crisis would continue.

Figure 12. Distribution of regions by budget deficit (% of budget revenues) and debt burden levels (% of own budget revenues) in 2016



Source: Calculated by the author based on the Federal Treasury and Ministy of Finance statistics

6. Conclusions

The analysis of the socio-economic development in the Russian regions shows that the socio-economic crisis is on-going. The three important problems, namely income and consumption decline, investment crisis, and regional budget destabilisation, are yet to be addressed by the authorities.

The real income of the population declined from 2014 until the spring of 2017 in almost all the regions. The real wage decline stopped only in 2016, and a moderate growth was registered in two-thirds of the regions. Consumption is not the primary driving force of economic development due to a decline in real incomes by 10% and the volume of inflation-adjusted retail trade by 15% in 2014-16.

The decline in investments is gradually ceasing, but this is mostly due to the regions with maximum competitive advantages – federal city agglomerations and leading petroleum- and gas-extracting regions. In all the other industrial regions, the investment decline rates are rather high (15-28%). Regional budget investments aggravate regional inequality, with Moscow being at the top of the list of regions injecting investments.

Income, consumption, and investment declines are expected to stop by the end of 2017; however, experts predict that these will be replaced by stagnation and sluggish economic growth rates. Russia and

its regions will lag behind the developed countries, gradually losing competitive advantages.

Can regional authorities take individual decisions in order to adapt to the crisis conditions and stimulate economic growth? In fact, their freedom has declined while their political responsibilities have significantly increased in recent years. Governors are responsible for the social problems and the stimulation of economic growth during the crisis. With political risks increasing in recent years, some governors have been arrested and corruption cases filed against them. As a result, several regional governors do not show initiative and merely wait for the crisis to pass.

However, it is possible to define a few regional policy priorities. First, regions aim to maintain social and economic stability, rather than stimulate economic growth. This is the reason social expenditures increased. Election cycles, and not the crisis itself, are accountable for the social expenditure fluctuations. Second, regional human capital expenditures have declined in the past two years, thus aggravating the risks of social degradation as regional budgets finance 75-80% of all expenditures on education and public health. Public health expenditure reductions in 2016 resulted in low accessibility to medical and health care services for the people in the regions, even though the demand for such services is growing due to population ageing. Third, regional budget deficits and large regional and municipal debts increase the federal support dependency ratio of the regions. The Ministry of Finance allocates federal transfers by imposing stricter conditions of regional budget optimisation policies. Decisions on what and how to optimise are made at the federal level. Most regions merely follow federal orders and do not implement their own regional budget policies.

As a result, the majority of the regional authorities fail to implement impactful budget policies. The most important task for the regional governors is to maintain their political positions and power, rather than to stimulate regional economic development. In order to maintain power, it is necessary to successfully implement the federal orders and to minimise anti-government protests. These tasks often contradict each other, thus annually increasing the political risks for regional governors.

The crisis of 2013-16 once again revealed the inefficiency of an over-centralised system of governance, with a non-transparent distribution mechanism of federal support to the regions. The existing 'power vertical' hinders regional economic development and can lead to a political turmoil in case of prolonged economic stagnation.

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Notes

[1] During the peak of the crisis in February 2009, the unemployment rate was 9.5%.

[2] In 2016, Rosstat changed the industrial output calculation methodology, and the recalculated decline rates decreased (-0.8% in 2014-15).

[3] Excluding regions where foreign companies conduct business under product sharing agreements, namely Sakhalin Oblast, Nenets Autonomous Okrug. The royalty and tax payments under such agreements are subject to petroleum price fluctuations.

[4] Education, medical and health care, culture, and social welfare expenditures.

[5] Tax and non-tax budget revenues without federal transfers.

[6] Ivanovo Oblast, Kostroma Oblast, Yaroslavl Oblast, Astrakhan Oblast, Khakasia Republic, Mordovia Republic, Mary El Republic and Udmurti Republic.

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