

The Russian economic space:

evolution during periods of reform, growth and crisis (1990-2010)

Abstract

The aim of the article is to identify the main tendencies in the dynamics of interregional disparities in the level of socio-economic development in Russia during periods of economic growth and crisis. These trends have been identified on the basis of an analysis of the regional coefficient of asymmetry of key per-capita indicators (GDP, investment in fixed capital etc.) as well as indicators of spatial concentration in Russia and deviations from the average (for GDP, per capita GDP and investments) at the federal district and regional levels.

The main factors driving the dynamics of these disparities were the economic crisis, government anti-crisis measures and measures of social support. Comparison of the level of interregional disproportions in Russia and abroad indicated that the differences between levels of socio-economic development at the federal level are comparable with differences in EU countries, but at the level of regions – with countries of the world.

Keywords

Russian regional economy • regional disparities • spatial concentration and differentiation of socio-economic development of regions • regional policy • regional asymmetries • deviation from the average

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Introduction

Natural inequalities and the history of economic development leads to the concentration of economic activity and population in certain areas where conditions are most favourable and as a result, regions with competitive advantages (geographical site and situation, resourses, human capital) have rapid economic growth.

The population and economic activity in Russia are mainly concentrated in the European and southern parts, while the resources (fuels, mines, water, forests and land) are in the sparsely inhabited Asian and north-eastern parts of Russia which experience extreme climatic conditions and inadequate levels of infrastructure development.

Paul Krugman, the Nobel laureate (2008), brilliantly illustrated the mechanisms whereby firms try to place production capacities in the largest regions (in terms of area or population) to reduce transportation costs and achieve economies of scale, as most manufactured goods are consumed by local markets (Fujita, Krugman & Venables, 1999). This in turn increases the range

of manufactured goods, the concentration of production in certain regions ("centers") and increases migration flows from the "periphery" which leads to the decline of economic activity there (Krugman & Venables 1995).

We observe a similar situation in the modern Russian economy. Spatial concentration of production ensures maximum efficiency but leads to greater territorial imbalances and causes social and political tension among social groups and regions. Strong interregional contrasts can become particularly dangerous if disparities coincide with political, religious and ethnic differences. The growing marginalization of regions causes social and economic instability, limits the possibility of regulating migratory flows and leads to further concentration of human activity in certain limited areas. The worst case scenario for such development is the collapse of economic space, the economy and even of the state. The establishment of the Ministry of Regional Development in early 2005 reflects the attention paid to the problems of spatial inequalities of economic growth.

Table 1. Dynamics of regional differentiation in Russia 1990-2009, main socio-economic indicators (in current prices, rubles)

Years	1990	1995	2000	2005	2006	2007	2008	2009
GRP per capita, scale of regional asymmetries, times	*	20,0	26,5	43,6	41,5	24,2	24,2	25,4
Fixed capital investments per capita; scale of regional asymmetries, times	25,6	49,3	179,8	127,5	186,7	281,5	264,5	64,2
Per capita income per month, scale of regional asymmetries, times Среднедушевые денежные доходы населения	2,7	13,9	13,8	10,4	9,9	9,5	8,7	7,6

^{*} Calculation GRP since 1994. Source: own calculations (Federal State Statistics Service, 1991-2010)

Regional disparities in Russia: reasons and history

The problems of regional development in Russia have been a eature since Soviet times but during the times of an administrative-command system and planned economy, they were solved by the redistribution of resources and the export earnings of military-industrial production through the national budget and investments that were carried out in proportion to the population of the regions. By 1990, the average differences in per capita income of the poorest and richest regions tripled and the difference in investment in fixed capital per worker was 260 times higher in the richest regions than in the poorest. The old instruments of regional policy did not work properly during the years of economic reforms and as a result, the disparities in regional development increased (Table 1).

The Russian academic Granberg, Chief of The Council of Distribution of Productive Forces (Russian Academy of Sciences), stressed that the economic and political reforms of the 1990s, which aimed to establish an open market economy, resulted in differences in the extent to which regions adapted to new market conditions. As a result, two categories of regions emerged in Russia; those that are more vulnerable and those with competitive advantages (Гранберг 2006). The market reforms of the 1990s (most significantly, privatization) led to the decline of production in many branches of the economy and also led to a ecline in quality of life.

The largest decline was observed in regions that had specialized in production for the military-industrial complex. The machinery and consumer goods that they produced could not compete with imported analogues in the remote regions affected by emigration flows and high transport tariffs (which, during Soviet times, had received significant budgetary subsidies). The most favorable conditions were found in regions producing raw materials (e.g. Tyumenskaya oblast and especially Yamalo-Nenets autonomous district, Nenets autonomous district, Sakhalinskaya Oblast, Komi Republic, etc.) especially oil and gas, due to in-

creasing prices of these commodities on the global markets between 2000 and 2009, as well as regions where financial and commercial services and foreign (and also national) investment flows were concentrated (namely the two "capitals" – Moscow and St. Petersburg). The republics of the Northern Caucasus, Kalmykia, Tyva, Ivanovskaya oblast and the Republic of Mari El became outsiders.

Measurement of regional asymmetrie

The highly unequal distribution of investment in fixed capital in the period 1990 to 2000 led to a drastic reduction in the number of "rich" regions and an increase in the number of "poor" ones. During this period, the scale of regional asymmetries of per capita variables grew by a factor of 8 for fixed capital investments, a factor of 5 for average per capita income and a factor of 26.5 (!) for Gross Regional Product. So at the beginning of the 21st century, the fundamental problems of regional development became evident: strengthening interregional disparities in socio-economic development, a narrowing specialization of the economy in most regions and a concentration in production and investment in several leading regions (Table 2).

Between 2000 and 2007, favorable world market prices for oil and metals led to the growth of the Russian economy but caused negative changes in its structural proportions and more acute problems of regional development. The export of raw materials grew considerably (in 2009, 64.1% of the fuel and energy sector was already accounted for by exports) while sectors oriented towards internal consumption – trade, housing, food industry – enjoyed the most rapid development. The tendency of simplifying the structure of manufacturing grew and as a result, the share of mechanical engineering and chemical industry decreased while food processing, oil refining and production of coke grew (Миронова 2009).

Table 2. Gross regional product per capita by Russian regions (leaders and laggards), 1995-2008, % of the average in Russia

Region, 1995	%, 1995	Region, 2000	%, 2000	Region, 2006	%, 2006	Region, 2008	%, 2008
Tyumenskaya oblast	342	Tyumenskaya oblast	448	Tyumenskaya oblast	500	Tyumenskaya oblast	379
Republic of Sakha (Yakutia)	216	Moscow	292	Moscow	315	Moscow	330
Komi Republic	175	Republic of Sakha (Yakutia)	216	Sakhalinskaya oblast	198	Sakhalinskaya oblast	272
Chukotka automomous district	168	Krasnoyarski Krai	180	Chukotka automomous district	185	Chukotka automomous district	261
Magadanskaya oblast	160	Chukotka automomous district	167	Republic of Sakha (Yakutia)	139	Republic of Sakha (Yakutia)	133
The Russian Federation	100	The Russian Federation	100	The Russian Federation	100	The Russian Federation	100
North Ossetia-Alania Republic	39	Adygea Republic	31	Kabardino-Balkar Republic	30	Tyva Republic	32
Kabardino-Balkar Republic	36	North Ossetia-Alania Republic	30	Dagestan Republic	29	Kalmykia Republic	30
Kalmykia Republic	31	Tyva Republic	30	Kalmykia Republic	27	Kabardino-Balkar Republic	27
Dagestan Republic	22	Dagestan Republic	21	Chechen Republic	16	Chechen Republic	21
Ingushetia Republic	17	Ingushetia Republic	17	Ingushetia Republic	11	Ingushetia Republic	15

Source: (Federal State Statistics service 2010)

The period of economic growth was accompanied by further polarization of regions - prosperous regions became even wealthier and poor regions became even poorer. During the period between 1995 and 2009, the number of regions with GDP per capita lower than the national average grew from 54 to 66 (in 2009 only 17 regions, which accounted for just 15% of the Russian population, had GDP per capita lower than the national average). Regional asymmetries of key indicators grew further: the volume of investment in fixed capital per capita in the richest regions was 187 times that of the poorest, while gross regional product per capita was 41.5 times higher. At the same time, interregional disparities of per capita income decreased slightly so that the richest regions had a per capita income of 10 times that of the poorest, mainly due to the fact that the government raised the salaries of medical workers, teachers and pensions. At the same time there was a distinct trend of asymmetrical growth of GRP per capita between the 10 poorest and richest regions: in 1995 the difference was 4.9 times, in 2000 it had increased to 6.6 times higher and by 2006 it was 7.1 times higher. Tax receipts from Moscow accounted for 30% of the budget while another 30% came from the Tuymenskaya oblast (the main oil and gas producing region).

Four fifths of bank capital is concentrated in Moscow. According to official statistics, by 2009 the total populations of the Moscow and St. Petersburg agglomerations reached 20 million people (14% of the total population) and the share of employed workers reached 18% (these regions occupy 0.77% of the total land area).

The outflow of financial and human resources from the peripheral territories made it difficult for any innovation to occur in their development and it also weakened their social and cultural fabric. Regional development follows the growing concentrations of financial, business, labor and other resources in metropolitan centers (mainly in Moscow and St. Petersburg) and resource regions and there are contrasting low rates of growth in peripheral areas. In 1995-2009, Moscow's share of Russian GRP increased from 12% to 25% (and if the Moscowskaya Oblast is included – to 30%) (Table 3).

A similar picture is painted by the federal budget tax structure, as 29% of the taxes came from Moscow and another 29% came from the Tyumen region. The most important taxes – VAT, mining and export - are paid to the federal budget, but revenue tax, which is linked to economic cycles, is paid to regional budgets (Зубаревич 2010).

Table 3. The concentration of the Russian economy (share of GRP of leading regions), 1995-2008

Region	1995	2000	2004	2008
Moscow	12.2	21.0	19.0	24.6
Tuymenskaya oblast	9.4	9.9	13.0	9.2
Moscowskaya oblast	3.6	3.2	3.8	4.9
St.Petersburg	3.4	3.3	3.6	4.1
Tatarstan (Republic)	3.0	3.3	2.8	2.7
Krasnoyarskiy Krai	3.0	3.5	2.6	2.1
Sverdlovskaya oblast	3.5	2.7	2.5	2.8
Samarskaya oblast	3.1	2.5	2.4	2.0
Bashkortostan (Republic)	2.9	2.6	2.3	2.2
Krasnodarkiy krai	2.3	2.4	2.2	2.4
Total for10 regions	46.4	54.4	54.2	57.0

Source: Own calculations based on Federal State Statistics Service 2010

In the period between 2008 and 2009, the global financial crisis influenced many branches of the Russian economy, especially the automotive, steel and iron industries located in the most developed Russian regions. The government's anti-crisis programs supported the core enterprises and tried to reduce unemployment by introducing public works, retraining programs and stimulation of small business. This led to a slight decline in interregional disparities in socio-economic development, especially of GRP per capita.

The concentration of financial resources in Moscow and St. Petersburg led to the active privatization of regional enterprises (such as mining, retail chains, transport) by financial-industrial conglomerates headquartered in these cities. The privatization of enterprises which are technologically tied with each other "in parts" caused risks for regional economies, especially when the new owners made business decisions without taking into account the interests of suppliers and vendors. The re-registration of enterprises in Moscow and St. Petersburg or offshore zones following privatization led to a reduction in revenues (and therefore social payments) for regional budgets.

Monocities in Russian economy

An important foundation for economic development in many Russian regions are cities with narrow specializations – the so-called "monocities". These number 460 cities and 332 settlements and they are of great importance to the economy of Russia as 25% of the economically active population of the country

provides nearly 50% of the manufacturing output. During Soviet times, these cities and settlements developed together with state-owned enterprises, which were also responsible for the social infrastructure – kindergartens, housing construction and maintenance, clinics, educational facilities. During perestroika, state enterprises were privatized and urban development became directly dependent on business growth and global markets. Big businesses were burdened with these mentioned social functions, which reduced their profitability.

The world crisis in 2008-2010 mostly affected the metallurgy, coal, oil, paper and chemical industries which happened also to be the key specializations of "monocities". Reduced profits forced cuts in salaries and workers to be laid off. For example, between 2008 and 2009 Severstal, a metallurgical company in the city of Cherepovets, made 9,000 employees redundant, the Ural enterprise (Miass, Chelyabinskaya oblast) laid off 3,600 people and the Magnitogorsk metallurgical complex laid off 3,000 workers. A further 3,000 people lost their jobs at Balakovo in the Saratovskaya Oblast and 2,300 people were laid off at Altai Tractor (Rubtsovsk, Altaiski krai). This led to protests and social tension in the regions (Родионова 2009).

The government is particularly concerned about 17 towns experiencing high social tension as business owners there are not interested in renovating old enterprises. These include Pikalevo, Voskresensk (Moscowskaya oblast), Gavrilov Yam, Baikalsk, Cherepovets, Nizhniy Tagil, Magnitogorsk, Zlatoust, Gornoaltaysk, Svetlogorsk, Semiluki, Yarovoye and Ivanovo among others.

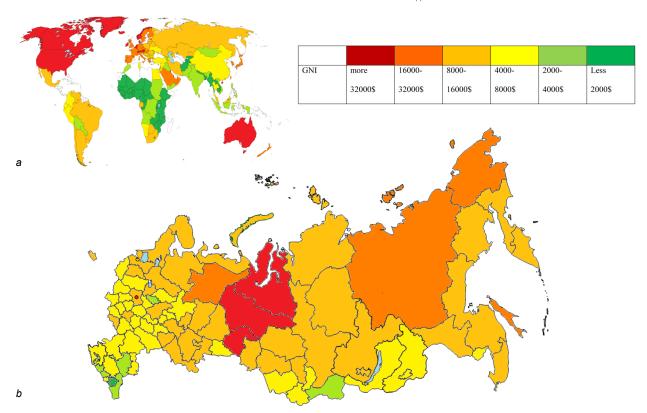


Fig. 1 (a,b) GNI comparation: Russian regions and countries of the world, 2009. Source: Own elaboration based on (World Bank 2010)

GNI per capita: comparation - countries of the world and Russian regions

Today's regional disparities in Russia are very obvious. For some regions, GRP per capita is comparable to the GDP of advanced economies (over \$32,000), while others are comparable to the least developed countries in Africa and Asia. For example, the GRP per capita income of Moscow and Tyumenskaya oblast is similar to that of Norway, Belgium, Switzerland, Holland, world financial centers such as Singapore, Hong Kong, Luxembourg, USA, Canada, Australia, as well as the oil-producing countries (Brunei, Qatar, Kuwait).

Northern mining regions (such as the Chukotka autonomous district, the Republic of Sakha and the steadily developing Komi and Sakhalin) are in the middle with GRP per capita incomes of \$16,000 to \$32,000, comparable to the Czech Republic, Greece, Spain and newly industrialized Asian economies of Taiwan and the Republic of Korea.

Some regions such as Krasnoyarskiy Krai, St. Petersburg, Republic of Tatarstan, have GRP per capita incomes of of \$8,000 to 16,000, the same as Eastern European countries, large developing countries in Latin America (Brazil, Argentina, Mexico) as well as Kazakhstan and Belarus.

The regions of the Central Federal District, the regions bordering China and the agricultural regions in the south of Russia have GRP per capita incomes of \$4,000 to \$8,000, similar to those of the developing countries from all continents (e.g., Peru, Thailand, Albania, Namibia, the Maldives). Annual incomes of \$2,000 to \$4,000 are found in such regions as the Republic of Tuva, Ivanovo and most North Caucasian republics. This is comparable

with Georgia, Armenia and Moldova and the majority of countries in Asia, Africa and Latin America (Pakistan, Morocco, Bolivia).

The lowest income (less than \$2,000) is found in the two most problematic regions of the Chechen and Ingush Republics, along with the least developed countries of Africa and Asia (e.g. Nigeria, Ghana, Mali, Nepal, Bangladesh, Laos, Kyrgyzstan and Tajikistan) (Figure 1a, b).

Regional policy in Russia

The institutional factors that influence economic development are increasingly important in the modern era. In the 1990s regional policy was directed to eliminate marked regional contrasts while in the 2000s, the focus of attention was on regions with competitive advantages – special economic zones.

At the turn of the 20th century the main instruments of regional policy were interbudgetary relations and a policy of budget fiscal federalism has been pursued in Russia since 1994. The main criterion governerning aid to the regions is the per capita tax revenue (if it is below the national average), as well as direct and indirect transfers (i.e. money transfers and direct federal taxes to regional budgets respectively).

Financial problems limit self-government in most regions of the country and only 12 out of 83 Russian regions have high levels of fiscal autonomy. These are the oil and gas producing regions (Khanty-Mansiyskiy, Yamalo-Nenets autonomous district and the Komi Republic), regions with heavy industry including those producing fuel (the Republics of Udmurtia, Tatarstan, Bashkortostan,

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Orenburg and Samara Oblast) and finally, the major financial centers (Moscow and St.Petersburg). In effect, they are the only donors to the federal budget. In Leningradskaja, Riazanskaja and Saratovskaja oblast the level of budget spending is covered by their own tax capacity which is slightly below the national average.

However the majority of Russian regions (60%) are net recipients and the highest transfers are directed to those regions with weak socio-economic development such as the republics of the Northern Caucasus where agricultural production predominates, as well as the underdeveloped regions of the Far East and Siberia (Зубаревич 2010).

Regional policy always starts by identifying problem areas and four main categories of problem regions are mentioned in the "Special Federal Target Programs of Regional Development" document; border regions, depressive and underdeveloped regions, regions with political conflicts and regions with a high risk of environmental disasters. The corresponding programs aim at solving specific problems that threaten socio-economic development of the country as a whole. Two programs were among the top ten with the highest volume of financing in 2010: "Economic And Social Development Of The Far Eastern And Baikal Regions Until 2013" (2nd place – 225.7bn rubles) and "Socio-Economic Development Of Social Sphere Of The Chechen Republic In 2008-2011" (9th place, 15.1bn rubles). (Федеральные целевые программы России 2010)

These facts testify to the importance of solving regional development problems to the Russian government. "The Concept Of Improving Regional Policy In The Russian Federation" aims to introduce changes in federal laws and normative acts of the President and the Government of the country as well as the development of new laws. It requires radical improvement of fiscal instruments of regional policy, strategic planning of socio-economic development of regions and local self-governance.

The Concept also implies the necessity of changes to be made in tax policy in fiscal relations. The problem today is that the most profitable budget sources are concentrated at the federal level and are increasing the share of "mobile" taxes (primarily income and revenue taxes) in regional budgets. This leads to an unpredictable shift of taxes between regions and the growth of

differentiation in the level of budget balance.

There is a need for coordination of the instruments of regional development (inter-budgetary transfers, federal target programs, investment funds etc.) and the elimination of growing imbalance of the socio-economic situation of Russian regions that are being compensated by inter-budgetary transfers (ie. financial aid to regional budgets from the federal budget). In 2004 the volume of inter-budgetary transfers (excluding subventions) was 343bn rubles and by 2008 it was already 762.5bn rubles (Министерство регионального развития России 2009).

It is also important that new principles of fiscal relations are applied and incentives to be introduced in order to improve the efficiency of regional public authorities by providing them with effective laws and implementing the principles of local self-governing. This would help to solve the problems caused by regional disparities and unbalanced territorial development.

Conclusions

Territorial inequalities are typical for all countries (even small ones) but they are particularly significant in Russia which is the largest country in the world in area and has unevenly distributed population and resources. The period of economic reform between 1990 and 2000 was accompanied by the polarization of Russian regions and as a result, the "successful" regions become similar to the advanced countries of Western Europe in terms macroeconomic indicators, while the indicators for the "unsuccessful" regions became comparable those of the least developed countries in Asia and Africa. At the same time the process of concentration of economic activities around Moscow and St. Petersburg and the resulting regional disparities has increased dramatically which threatens social stability. During this time, regional policy was focused on budgetary transfers and helping the poor. The most difficult situation was faced by the monocities - cities with narrow industrial specializations - which were most severely affected by the global financial crisis of 2007 to 2010. Governmental regional policy changed during the economic crisis of 2007 to 2009 and the most important features were federal targeted programs that aimed to support regions with a potential of innovation-led growth.

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