

DIVERGING FORTUNES: RECENT DEVELOPMENTS IN INCOME INEQUALITY ACROSS RUSSIAN REGIONS

By Christian Mahler

Russia's regions¹ have been experiencing increasing inequality in per capita income after transition, with spatial inequality accounting for one-third of total inequality which constitutes the highest level of spatial inequality within Europe (Yemtsov). While inequality is not uncommon in large and versatile countries with heterogeneous ethnicities and vast differences in economic capability (Gerry and Mickiewicz), the entrenchment of inequality poses questions regarding the ability and intent of Russian institutions in tackling this divergence. Much research has been done on the issue of inequality in Russia in recent years; this paper will discuss the causes that drive increasing spatial inequality after the transition from command to market economy, and will look at the more recent developments and trends in spatial inequality in Russia.

Kanbur and Venables recognize Purchasing Power Parity (PPP) as an important means for measuring spatial inequality. It may be defined as the deviation from the average national per capita income, with due consideration for differences in local prices. In other words, increasing spatial inequality constitutes diverging patterns of economic growth across regions – while some regions experience growth, others are left behind and often trapped in poverty. Kolenikov and Shorrocks add much understanding to the variations in poverty dynamics across Russian regions.

It is important to clarify that spatial inequality constitutes just one dimension of total inequality. Intra-regional inequality is another dimension and is usually found to contribute the largest share to total inequality. Spatial inequality in Russia, however, is a major driver of total inequality. Using Theil's T entropy index, Yemtsov finds spatial inequality between 1994 and 2000 responsible for 85 per cent of increases in total inequality.

The magnitude of increase in spatial inequality notwithstanding, it could be argued that this dimension is of minor concern as within-region inequality is much higher and thus more important to deal with. Hanson, however, highlights the importance of the spatial dimension by sounding a note of caution on spatial inequality leading to 'political and social fragmentation' (ibid, 199) of a country.

Inequality post transition

The question arising from growing disparity after transition is whether inequality is a rather new phenomenon in Russia and has only arisen after the breakdown of the Soviet Union. In fact, Commander et al. report inequality extant in the Soviet Union but argue that those were masked by a system of cross-regional transfers and subsidies and only became obvious over the course of price liberalisations and economic reforms. Yemtsov makes a similar point in elaborating on strong regional differences in cost of living for the year 1985.

Past the breakdown of the Soviet Union, the old system of delusive equality did not work any longer. Fedorov, Solanko and Commander et al. report steeply-rising inequality after transition.

¹ The Russian Federation comprises 83 federal subjects that can be classified into 21 autonomous republics, 46 oblasts, 9 krais, 1 autonomous oblast, 4 autonomous okrugs and 2 federal cities.

Only in 1998, when Russia was facing a severe economic crisis, did inequality drop sharply, but it reached pre-crisis levels again shortly after. Hanson suggests that the drop was due to the strong devaluation of the rouble, which in turn led to a resurgence of the geographically-dispersed Russian manufacturing industry. This is a reasonable explanation if one considers the high dependency of the Russian economy on revenues from the sale of natural resources. While the rouble was dropping and leading to diminishing returns from oil and gas, the manufacturing sector gained new competitiveness.

Solanka finds income convergence during the first years of transition primarily taking place between regions that were initially better off after transition. She argues that convergence among initially poorer regions has been only observed in recent years, which points towards club convergence and explains the high dimension of spatial inequality. Yemtsov as well as Adrienko and Guriev elaborate on this issue as well, and project the absolute majority of Russia's poor to be living in a few permanently impoverished regions while relatively well-off regions are expected to become almost free of poverty in the near future. Gerry et al. extend the argument by suggesting that urban poverty has been decreasing twice as fast as rural poverty. Accordingly, club convergence can be seen as masking the real dimension of heterogeneity in the country.

Recent trends

It has been mentioned that PPP is a good means of measuring spatial inequality. The problem, however, is the comparability and reliability of data. Solanka and others highlight the changing measurements of regional data for which consistent time series are only pre- and post- 2000, which makes long-term comparisons somewhat difficult. Furthermore, Commander and Yemtsov express their concern about income data not being price-adjusted. They argue that it is not clear how (or even if) Goskomstat deflates regional income data.

Analysis is carried out for the period 2002 -2008 by employing Theil's T statistics for 81 regions.² Theil's T is an appropriate measurement of spatial inequality as, unlike measurements like GINI, it does not only account for the upper and lower bound but for hierarchies as well. This suits our intentions of assessing inequality across regions. In order to account for differences in price levels and determine real wages after redistribution, Yemtsov and Hanson suggest deflating Gross Regional Product (GRP) by the regional poverty line which is measured by the price of a basket of a fixed amount of goods, as established in 2001 by Goskomstat Rossii. However, Glushenko meticulously discusses methods to adjust for PPP and sounds a note of caution regarding the use of minimum subsistence allowance, as this basket not only overemphasizes the consumption of food but also contains different products across regions. Interestingly, Goskomstat maintains a consumer price index (CPI) that adjusts for price differences in goods and services for the regions in comparison with the national average cost of living since 2002. This basket is more balanced with regards to the food/service composition, and Glushenko finds this indicator 'fairly representative' (ibid. 50). GRPs are deflated in accordance with our purposes. The Theil equation is shown below.

If we decompose Russia into m subgroups (represented by the regions) with T representing the income share of a subgroup and the population share we arrive at the Theil index for each region:

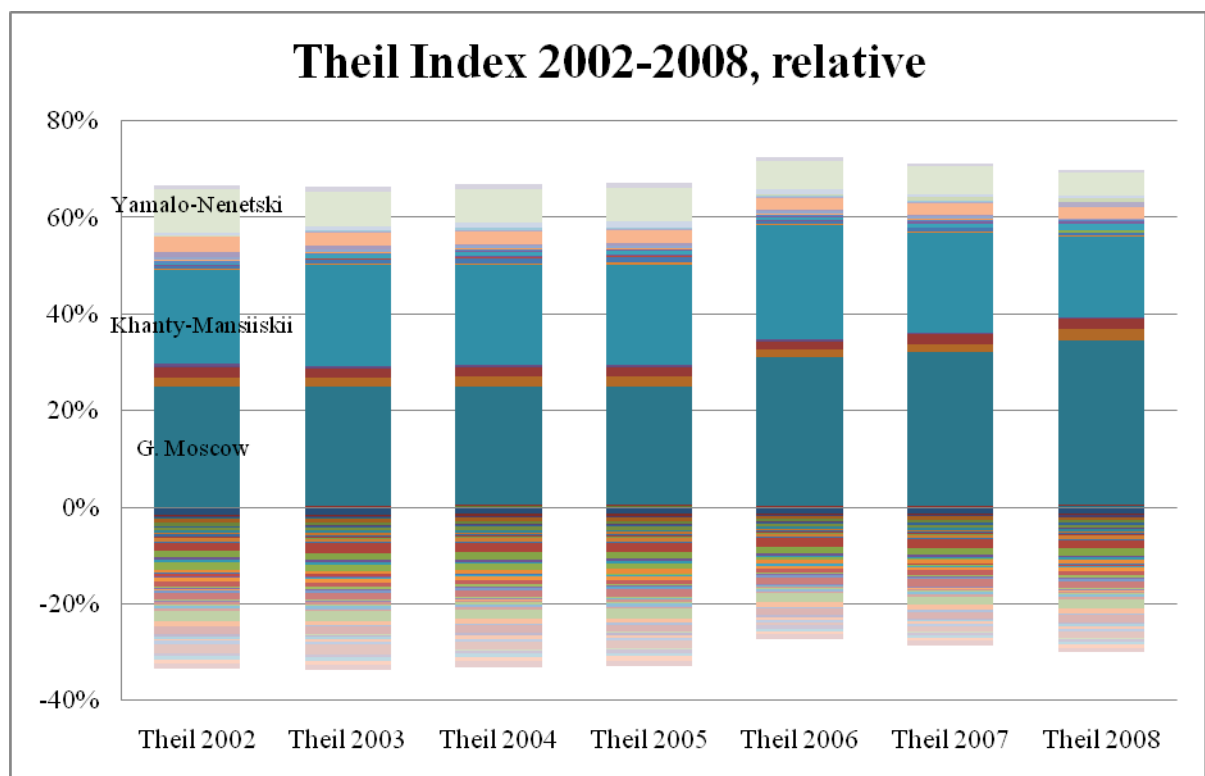
² Khanty-Mansiiskii and Yamalo-Nenetski Autonomous Okrug are examined separately from Tyumen Oblast in order to control for inequality in these regions as they represent the main sources of oil (the former) and gas extraction (the latter). Chechnya is not taken into consideration as no data exist.

$$T' = \sum_{i=1}^m w_i \log \frac{w_i}{n_i}$$

In following Buccellato and Mickiewicz (2009) the application of the Theil formula is as follows:³

$$\text{Theil} = \ln \left(\frac{\text{Average Regional Income}}{\text{Average Country Income}} \right) \times \left(\frac{\text{Average Regional Income}}{\text{Average Country Income}} \right) \times \left(\frac{\text{Regional Population}}{\text{Total Population}} \right)$$

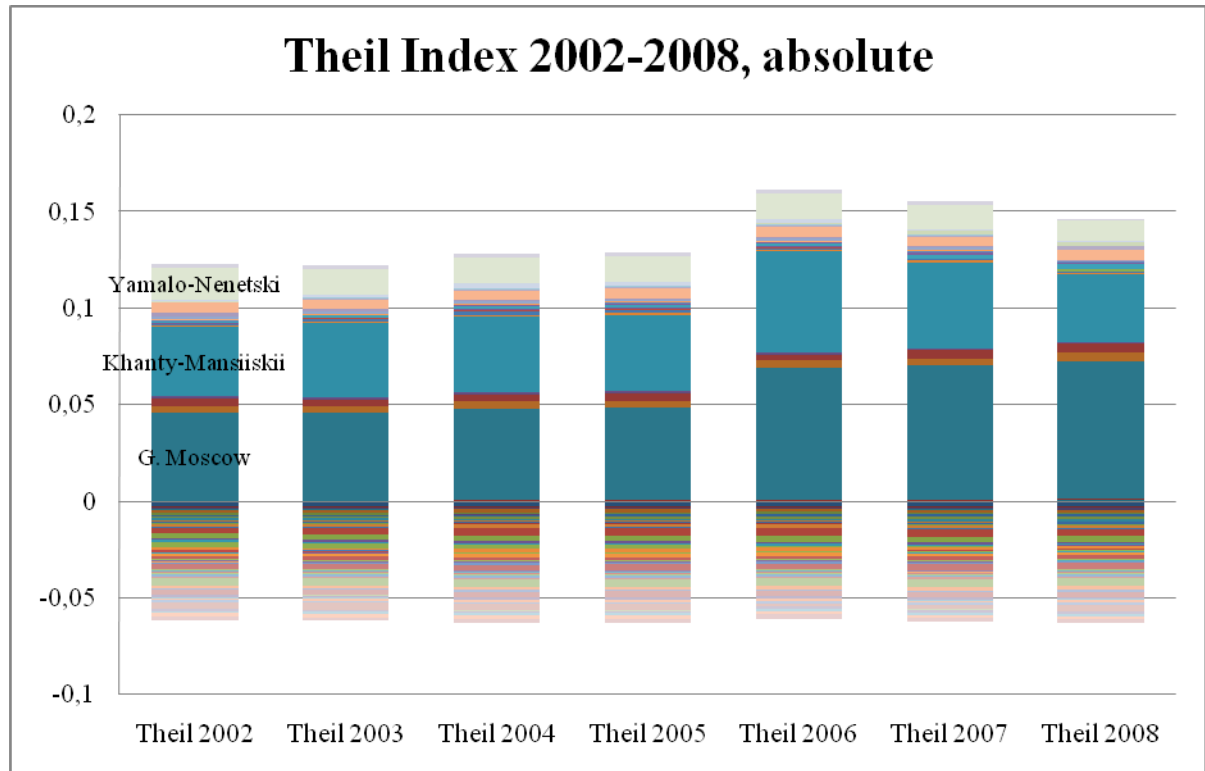
Graph 1: Theil T-Statistics for Russian Regions, relative



Data Source: Goskomstat Rossii (2010)

³ It can be calculated by dividing average per capita regional income to regional poverty line ratio by average per capita country income to country poverty line and multiply it with the natural logarithm of the same fraction. It is further multiplied by the regional populations share relative to the country's population.

Graph 2: Theil T-Statistics for Russian Regions, absolute



Data Source: Goskomstat Rossii (2010)

Graph 1 and 2 disclose relative and absolute values of inequality across Russian regions between 2002 and 2008, and reveal the large contributions of a few regions to spatial inequality. While inequality remains relatively stable up to 2005, results for that year exhibit a surge in divergence, which accelerates before levelling off again. First and foremost, Moscow and the regions well-endowed with natural resources have been contributing to inequality. Khanty-Mansiiskii and Yamalo-Nenetski are the major sources of oil and gas, and account quantitatively for around 20 per cent of inequality. They have, however, been experiencing a decrease in recent years, while Moscow's share is constantly increasing, reaching more than 30 per cent of total inequality in 2008. This is especially noteworthy in the context of increasing oil and gas revenues (Central Bank of Russia, 'Crude oil exports'), and contradicts the expectation that rising incomes ameliorate inequality.

The creation of the Russian Stabilisation Fund in 2004 offers a coherent elucidation to the paradox of decreasing real incomes of the Khanty-Mansiiskii region in the aftermath of the Fund's inception. The Fund is part of the federal budget and was established '...to balance the federal budget at the time when oil price falls below a cut-off price, currently set up at \$27 per barrel' (Budget code of the Russian Federation, Chapter 13.1, Article 96.1, 96.2). For the year 2005 the Russian Ministry of Finance (2007) reports spending of \$23.67 billion for repayment of debts as well as for the balancing of pension deficits. The set up of the Fund thus suggests that excessive liquidity has been absorbed from the regions rich in oil, which can consequently explain their reduction in contributions to inequality.

Having offered an explanation to this paradox, we are still left puzzled by Moscow's strong contribution to spatial inequality. Most research dismisses Moscow as an outlier. But what lies

behind this relatively strong growth compared to that of other regions? A general but coherent explanation is that it is richly endowed with both investment and human capital. Moreover, Pickup and White find that the prevalence of a thriving private sector in Moscow's urban areas accelerates growth. Research (Buccellato, Kholodillin et al.) employing a spatial lag approach presents another account, and finds that spatial proximity is crucial to regional convergence. These studies prove that spill-over effects and factor mobility of technology, capital and human capital constitute crucial drivers in fostering local growth.

Despite Moscow's increasing contribution to inequality, natural resources still constitute an important determinant of economic prosperity and spatial inequality. Mickiewicz and Buccellato outline strong regional disparities resulting from the endowment of natural resources, which show how little has been done in other industry sectors to aim for higher competitiveness. Unlike the 1998 crisis, when the Russian manufacturing regained competitiveness, today's manufacturing hotspots such as Samara or Tatarstan merely scrape through to achieve average national income.

Fiscal Federalism

Wealth redistribution by means of raising taxes is crucial in the alleviation of inequality and poverty between regions (Gerry and Mickiewicz). While the Stabilisation Fund seems to fulfil its role as one instrument for redistribution (in the case of oil), other fiscal tools employed in addressing the issue of inequality across Russian regions do not work properly in the federal system. In fact, the Russian federal system has played a determining role in increasing spatial inequality after transition. Commander et al. find that spending on social assistance and allied subsidies decreased in the aftermath of market economy reforms, and Hanson describes assistance from the centre to sub-national budgets until 2001 as a complicated system of subsidies, subventions and transfers. Only in 2001, when Vladimir Putin re-centralised fiscal control, was a system of cross-regional funds put into place. According to Afanas'ev's description, there now exists a system of five funds:

1. Fund for financial support of the regions (FFPR), for the reduction of differences in budgetary funds;
2. Compensation fund (FK), to finance centrally-decreed spending obligations or federal mandates;
3. Fund for the co-finance of social spending (FSSR), to share spending on priority social programs;
4. Regional development fund (FRR) to finance approved regional investments,
5. Fund for the reform of regional finances (FRRF), which is more of a prize, awarded every two years for excellence in transparency and management of regional finances.

Nevertheless, some of the old tools of subsidies and subventions persist. The possible benefits of cross-regional transfers notwithstanding, Hanson criticises re-centralisation of fiscal control, given the 'weak or perverse effects on the incentives for sub-national governments to [...] cultivate their local economies' (Hanson 207). He stresses the importance of fiscal competition, whereby regions compete for investment and human capital to facilitate long term growth by increasing their tax base, which, in turn, encourages efficiency in tax-collection. However, Hanson admits that an even distribution of tax capacity across the country is highly unlikely, acknowledging that some intra-regional transfers must occur. The Ministry of Finance Economic Expert Group reports that in 2003, 63 regions were left in deficit and subsequently compensated by borrowing from the centre. This raises doubts about the effectiveness of Putin's re-centralisation reforms.

The phenomenon of migration flows can also be seen as both a symptom and a cause of the malfunctioning federal system. People vote with their feet to escape precarious living conditions. In their work on interregional mobility in Russia, Andrienko and Guriev examine migration flows from less to more affluent regions, using data from between 1992 and 1999. While residence permits for certain areas (such as Moscow) represent one obstacle, lack of liquidity is also a determining constraint in labour migration, leading to regional lock-ins that keep people trapped in poverty.

Given the substantive financial dependency of the majority of regions, it seems necessary to put them under direct federal control (Hanson), to ensure provision of subsistence allowance and public goods, and to control the local governments. Recognizing the necessity of central support while regional tax bases are built up to foster economic growth may be a prerequisite to the regions eventually being independent of transfers from the centre.

State capture and rent seeking

Given the problem of regional governments incapable of collecting taxes and sustaining economic growth, one is struck by the systems of state capture and rent seeking often widely prevalent in local administrations. Alexeev finds that short-term incentives for rent-seeking and micro-meddling far outweigh the longer-term benefits of fostering a system of sustainable public finance. The idea behind stronger central fiscal control becomes thus more comprehensible in the light of these problems.

Sonin and Hellman et al. discuss how companies manage to gain influence over regional governments. Firstly, they distinguish between large, incumbent Soviet and often state-owned firms with inherent property rights and strong ties to the government, and large *de novo* firms that capture the state by means of bribing local officials. Hellman et al. argue that too much attention was paid during transition to reducing the state's influence over market mechanisms, but too little to maintaining the independence of civil institutions themselves. They stress that within the context of a weak state, the influence of the incumbent firms has a powerful impact on determining and shaping reforms and institutions. Sonin observes in his work on provincial protectionism that, in such circumstances, high barriers of entry (lowered only in exchange for rents and political support) stagnate growth. Volitional excess employment assures the continuance of inefficiencies and thwarts the emergence of small and medium enterprises. Sonin also demonstrates that governors of developed regions often protect their enterprises from paying federal taxes. These conditions constitute serious reversals in the development of a sustainable fiscal federalism and exact large social costs, lower welfare, and diminish competition.

The weak protection of property rights is closely connected to the problem of state capture, which benefits large *de novo* firms that gain market power by offering rents to local officials. Sonin reasons that weak protection of property rights forces agents with no political power to allocate a considerable amount of productive capital toward the protection of property, which in turn lowers the attractiveness of production and ultimately the willingness to invest or accumulate capital. This not only has implications on the labour market, but also on barriers of entry for small and medium enterprises. Technological innovation is less likely to develop in such environments. Hellman et al. distinguish between large-capital economies, where public officials have created a private market for property rights, and lower-capital economies, where influence exists, but only to a limited extent. Research by Gerry and Mickiewicz indicates a similar tendency. They consistently find faster restructuring and outsider privatization and greater fiscal equality between the state and private sector in conjunction with a more generous welfare provision, resulting in lower long-term inequality.

Concluding remarks

The underlying causes that drive spatial inequality across Russian regions are manifold and miscellaneous. It has been shown that contributions of regions endowed with natural resources to spatial inequality have been less significant in recent years. This might be related to the establishment of the Stabilisation Fund in 2004, which seems to fulfil its role in redistributing oil revenues; however, further research is necessary to validate this assumption. Moscow stands out amongst other regions, proving that the system is in serious need of further measures to overcome poverty, despite Putin's federal reforms. It is ubiquitous poverty, and not the wealth of Moscow and a handful of other regions, which should attract the Russian government's notice. Given the level of state capture and the unsatisfactory economic conditions of small and medium enterprises, reforms that do not address the issue of corruption and micro-meddling are condemned to failure. It is the government's responsibility to obligate local governments to build up institutions that foster sustainable public finances and safeguard the protection of property rights, urgently needed for increasing the share of the private sector in markets. Gerry and Mickiewicz show that stable democracies feature decreasing inequality in the long-term; the Russian Federation is still far from achieving this level of stability.

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