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# Russia in Post-Transition: New Frontiers†

Vasiliy A. ANIKIN *

* *National Research University Higher School of Economics, Federal Centre of Theoretical and Applied Sociology of the Russian Academy of Sciences, Russia; vanikin@hse.ru*

**Abstract:** The present paper exploits new headwinds blowing against the post-transition of Russia. It is argued that the new goal for Russia is an effective transition to a post-industrial stage of development. The author considers five main frontiers that challenge the successful achievement of this goal: 1) over-education and low investment in training, 2) poverty of the working population, 3) high inequalities and unfair distribution of incomes, 4) low rates of growth in human development, and 5) neoliberalism and growing alienation in contemporary Russia.

**Keywords:** transition, post-industrial economy, working poor, generic labour, inequality, human capital, human development, neoliberalism

**JEL Classification Numbers:** I25, I26, I31, I32, J83, O14, O15, P16, P26

## 1. Introduction

The world has changed dramatically over the past three decades. The extraordinary economic potential and actual economic achievements of Brazil, India, China, and Russia since the 1980s[1] have caused these countries to be commonly grouped under the well-known acronym 'BRIC' or 'BRICS' (if South Africa is included). Rapid economic growth, higher-than-average natural endowments, structural reforms, and institutional and technological modernisation promoted by the national governments were supposed to bring these countries to the frontier of economic development, or at least to 'catch up' (Krasilshchikov, 2008) with societies 'of advanced industrialism' (Grusky, 2001). However, this catching-up has yet to occur in these countries. The most notorious example of this is Russia.

Almost 30 years passed since Russia started its transition from a state socialist 'planned' economy to a market economy. Although there are signs that this transition has been completed, scholars are still in doubt about the 'quality' of this transition, on the one hand, and the somewhat predictable future of a sustainable development on the other (Gimpelson & Lippoldt, 2001). Since the transition to the market-based economy is no longer a target, the desired destination of a post-transition society needs to be clarified in broader socioeconomical terms and understood as a much more complex reality than before. The complexity of the goals set at the post-transition period implies the complexity of the frontiers on the way towards a new society. How do we understand the goal of post-transition societies? What are the outcomes of the post-transition period and what are the challenges of post-transition of

Russia? All these questions are targeted in the present paper.

## 2. Post-industrial development: A new goal for transition societies

In the early 1990s, Russia began 'shock therapy' reforms that were primarily focused on diminishing the state's socialist socioeconomic system and on transitioning to a market economy through means of liberalisation and privatisation (Gerber & Hout, 1998). It was premised that these reforms would constitute a fruitful ground for further socioeconomic development, that is, that Russia would successfully go through a transition to 'modern capitalism' (Lane, 2007), based on a 'competitive system' and meritocracy (Davis & Moore, 1945) or at least would build its own version of capitalism (Wood & Lane, 2012).

However, inefficient transformations and a protracted transition to meritocracy (Anikin, 2013; Shkaratan, 2007) have lead some critics to argue that Russia is experiencing an involuntary transition to merchant capitalism (Burawoy, 2002), Weberian political capitalism (Hanson & Teague, 2007), 'Marx's account of the development of capitalism' (Clarke, 2007), or a resource-based economy socially supported by estates rather than classes (Kordonsky, 2016). In such an economy, human capital (Becker, 1975; Kaare, 1965) does not play a significant role.

Successful catching-up implies increasing the role of human capital in development (Becker, 2002; Handel, 2013; Krasilshchikov, 2008; Nelson, 2015; OECD, 2017; Romer, 1990). This involves creating structures and institutions that can effectively 'organize and manage modern technologies' so that developing countries will be able to 'not simply copy the technology and practices of the countries at the frontier but 'to develop technologies suited to their own conditions' (Nelson, 2015, pp. 331-332). Successful examples of catch-up development, such as those of Japan, South Korea, Singapore, and Taiwan, shows that these countries managed to make human capital a cornerstone of socioeconomic development; they created a nationwide system for the development of human capital that was based on advanced training and continuing education, analogous to that of Western countries (O'Connell, 1999; Sala & Silva, 2013).

In other words, these countries succeeded in the transition towards societies based on knowledge and post-industrial development. Post-industrialism is, therefore, a new goal for societies in post-transition like Russia and other BRICS countries. The principal assets in such societies are knowledge, expertise, and occupation-specific skills.[2] It implies the creation of a corresponding occupational structure, with a bigger share of intellectual 'self-programmable' labour (Castells, 2000) and skilled professionals highly demanded in international labour markets. It also requires institutional arrangements that strongly support and foster investment in human capital in earlier ages (Heckman, 2006; Heckman & Carneiro, 2003) and non-cognitive skills (Heckman & Rubinstein, 2001). Nowadays, global competition challenges countries to grow a labour force of a particular quality. The very goal of a post-transition country is not simply to reach the phase of post-industrialism, but – and this is more important – to be competitive in the international markets through the means of developing and capitalising cutting-edge technologies, intellectual property, high-end skills, and 'new work' culture (Karacharovskiy, Shkaratan & Yastrebov, 2016).

However, a transition to an intellectual economy can be quite challenging. Besides the usual challenges faced by any country, Russia faces five specific headwinds that are blowing against its transition to a post-industrial mode of development:

1. Over-education, low incidence of training, and non-competitive institutional arrangements
2. Poverty of the working population
3. High inequalities and unfair distribution of incomes
4. Low rates of growth in human development
5. Neoliberalism, exploitation, and social alienation

Although the outlined headwinds do not present a complete list of issues that challenge the process of transition of Russia, these are the major ones. The following sections present a closer look at each of these positions.

## 3. Over-education, low incidence of training, and non-competitive institutional arrangements

In Russia, education and enlightenment are traditionally of high significance, regardless of the returns for them (Anikin, 2017a; Didenko, 2015; Strumilin, 1966). This explains why Russia is on one of the top educated countries in the world. According to the Organisation for Economic Co-operation and Development (OECD, 2016), Russia is in the second place in the world regarding the relative number of people with tertiary education. Historically, education in Russia has a cultural value. People consider it a channel of socialisation rather than a valuable asset that can be exploited in the labour market. In light of this, mass investments in human capital of workers and their children (considering both training and primary education) happened in Russia in the early XX century (Chugunov, 2001).

Russian scholars speak a lot on the issue of over-education. They highlight that human capital is not required by the Russian economy (Gimpelson, 2016), returns to tenure (job-specific experience) are close to zero (Gimpelson, Kapeliushnikov, & Oshchepkov, 2016) and, ultimately, returns to adult education have decreased since the collapse of the Soviet Union (Kosyakova, 2016). The role of intensive factors – that is, human capital – in the recent growth (between 2000 and 2013) and productivity of the Russian economy remained minimal. Connolly (2012) and Timmer and Voskoboynikov (2014) suggest that the only industries for which human capital can be a factor of growth are the finance and business services sectors, even though these industries do not necessarily encourage undertaking training, because much of their productive performance 'is of some basic catching-up character' (Timmer & Voskoboynikov, 2014, p. S418).

Excessive accumulation of general human capital was accompanied by low investments in specific human capital, low incentives to undertake training (more than 90% of the working population in Russia normally does not receive formal training), low innovation potential of human capital, and misuse of it (Lukiyanova & Kapeliushnikov, 2010). Despite over-education, Russian firms – particularly, innovative companies and those experiencing strong competitive pressure – report a shortage of cognitive skills (primarily, problem-solving ability) in their employees (Vasiliev et al., 2013). A deficit of advanced human capital (basic and high-level skills) is more important than its excessive surplus, and this is considered a major issue that hinders economic development in Russia and other catching-up societies.

What does hamper investments in training and skills acquisition in Russia? Gimpelson and Kapeliushnikov (2013) and Gimpelson, Kapeliushnikov, and Lukiyanova (2010) suggest that incentives to upgrade human capital are hardly promoted by institutional arrangements on the Russian labour market that allow low productivity firms to survive and hire workers with relatively low levels of human capital, thus producing significant skills mismatches (Demmou & Wörgötter, 2015).

These insufficient institutional arrangements support so-called 'bad jobs' and low demand for human capital in most Russian organisations (traditional companies). Employees occupying these jobs are not encouraged to develop their human capital because they perform simple and routine tasks, which do not require updating of acquired knowledge and skills. At the same time, additional training is not something that can principally change workers' life chances or boost their careers. Ultimately, long-term employment at this sort of job leads to the sociocultural and economic preservation of workers in disadvantaged labour market lacunas or backwards classes. They gradually become a part of so called 'generic' – that is, routine, interchangeable and disposable – labour (Castells, 2000).

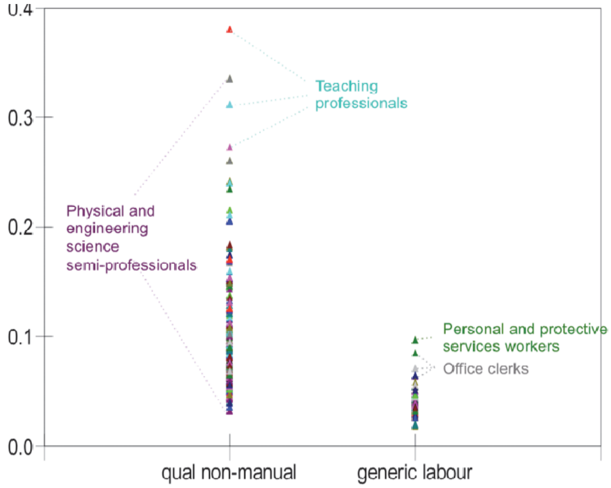
Generic workers deal with 'menial tasks' and instructions, representing moderate- and low-skilled occupations, such as clerks, sales and service workers, operators, drivers, labourers, unskilled farmhands, and related trades. In Russia, these categories of workers comprise up to 60% of the labour force. Based on Figure 1, most of them have almost zero (and very congregate 0-0.1) probability of training so that scarce training is something that these employees have in common, as they gain returns to their simple capacity to work rather than human capital.

A non-zero probability of training, though with a very disperse variation in its incidence, is observed among managerial positions and professionals and semi-professional vocations. In other words, skills training in Russia is highly concentrated in very confined but human-capital–intensive niches of the labour market and found in employment in skilled non-manual occupations, which constitute the social core of the Russian middle class. However, this relationship is not that optimistic, as most managers, professionals, and associate professionals work in a quaternary sector of the economy.[3]

Because of the outlined institutional inefficiency, the Russian economy responds to a crisis by shrinking employment and eliminating benefits in a quaternary sector (Anikin & Tikhonova, 2016b). During the recent 2014–2016 crisis, Russian companies, even those with foreign ownership, were closing positions in marketing and consulting and cutting real wages and social benefits for professionals, which is dramatically affecting the investments in human capital in the Russian middle class (Ibid.).

This is a crucial headwind against Russian transition towards knowledge-intensive economy since the middle class is the only social group in Russia that is highly motivated to develop human capital and to demand for various channels of skills acquisition and, moreover, for the creation of these channels (Gorshkov & Tikhonova, 2016b).

**Figure 1. Probability of training in two occupational classes of Russia**




Source: The RLMS-HSE data, 2012 (representative sample). Author's calculations from the Bayesian two-level logistic regression of the probability of training. A more detailed information on regressors and estimation procedures is available from Anikin (2017b).

Note: Based on ISCO-88 major occupational groups, 'generic labour' comprises clerks, sales workers, and manual workers, whereas 'qualified non-manual workers' consist of managers, professionals, and semi-professionals.[4]

Another remarkable factor that hampers human capital development in Russia relates to the issue of low payoffs for vast categories of workers and particularly for skilled professionals such as health professionals and nurses, school teachers and university lecturers, and academic researchers and socially important workers providing cultural services and working in sports (Kuzminov, Ovcharova, & Jakobson, 2016). The recent studies show that low wages dispatched from qualifications are the main factor discouraging industrial workers from upgrading their skills (Karavay, 2016).

## 4. Poverty of the working population

Low payoffs cannot be seen a competitive advantage of the Russian labour force as low wages in Russia contradict the relatively high and costly living standards, particularly in big cities. Low payoffs are one of the main factors that cause poverty in Russia (Anikin & Tikhonova, 2016a). What categories of workers in Russia have lower salaries and why?

The above-mentioned specific institutional arrangements are not the only reason that enterprises pay workers low wages. Another remarkable reason is an oversupply of the low-skilled and medium-skilled workforce in both manual and non-manual (e.g. retail, sales, and personal service) jobs. In Russia, the excess supply of low-skilled and medium-skilled workers is driven by two main factors: a) growing labour immigration from former Soviet republics and some Asian countries; and b) the shrinking number of high-skilled workers (see Table 1)[5], who are much restricted in their chances to find a job according to their old speciality and, therefore, are ready to downgrade their status and social class.

**Table 1. Occupational structure of Russia, 1994-2014**

| Occupations | 1994 | 2000 | 2005 | 2010 | 2014 |
|---|---|---|---|---|---|
| High-skilled 'white collars' (managers and professionals) | 18.8 | 18.2 | 17.1 | 19 | 19.5 |
| Medium- and low-skilled 'white collars' (semi-professionals and clerks) | 20.3 | 22.1 | 23.9 | 26 | 27 |
| Routine sales and personal service workers | 8.2 | 10.3 | 10.7 | 12.3 | 11.9 |
| Skilled manual workers (Crafters and industrial workers) | 38.2 | 35.6 | 33.7 | 28.5 | 27.8 |
| Unskilled manual workers (elementary occupations) | 14.5 | 13.8 | 14.6 | 14.2 | 13.8 |

Source: The RLMS-HSE data (representative samples). Author's calculations.

Note: Percentage of working population is shown. Grey areas show dynamics: increasing share of medium- and low-skilled workers and decreasing number of skilled manual labour in industry.

These two factors boost labour market excess supply and therefore competition for low- and medium-skilled jobs. As a result, salaries related to these jobs are unacceptably low, sometimes even lower than an official subsistence level. Consequently, the main social group suffering from low wages in Russia is generic labour; that is, low-skilled and medium-skilled workers, from both manual and non-manual occupations, predominately constitute the poor population in Russia (see Table 2).

The poverty caused by low salaries and wages is called 'industrial poverty', which was common for all industrially advanced societies. Industrial poverty comprises the predominantly working poor, with very few unemployed people.[6] According to survey data estimations, based on the absolute approach[7], poverty in Russia affects 25% of the working population. According to studies, up to 30% of the working poor in Russia are low-skilled and medium-skilled manual workers, and almost 36% are their non-manual peers. The relative share of low-skilled and unskilled labourers in non-poor populations is twice less (6%) than in the working poor (13%); additionally, the percentage of skilled workers, both manual and non-manual, among non-poor, is 53% (Table 2). Generally, semi-skilled and routine workers – that is, the social core of generic labour – are more likely to be in poverty than their educated and skilled counterparts (Figure 2).

Figure 2 shows that ceteris paribus, the probability of being poor statistically is twice higher for Russians with lower education and low skills than for their more educated and skilled counterparts; and this difference is salient enough across cohorts of economically active ages (25–45).

**Table 2. Occupational composition of poor population in Russia**

| Occupations | Poor | Non-poor |
|---|---|---|
| Entrepreneurs with employees and self-employed | 1 | 1 |
| Managers | 3 | 6 |
| Professionals | 15 | 30 |
| Medium- and low-skilled 'white collars' (semi-professionals and clerks) | 18 | 16 |
| Routine sales and personal service workers | 18 | 12 |
| High-skilled manual workers (5$^{th}$ qualification grade and higher) | 15 | 16 |
| Medium-skilled manual workers (3-4$^{th}$ qualification grade) | 17 | 12 |
| Low-skilled and unskilled manual workers (1-2$^{nd}$ qualification grade and without qualification) | 13 | 6 |
| Total | 100 | 100 |

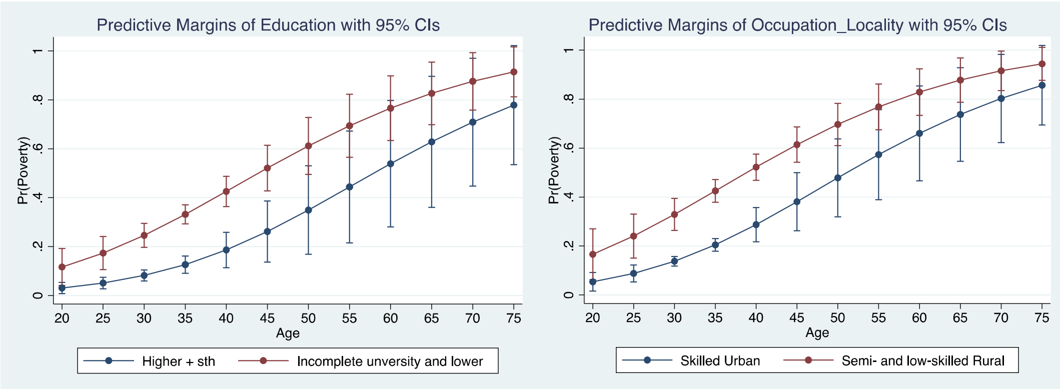
Source: The IS RAS 2015 monitoring wave (representative sample). Author's calculations.

Note: Poverty is estimated in absolute terms, in according to a substance level. Percentage of working population is shown. Grey areas show occupations with highest likelihood of being poor or non-poor.

At the same time, the estimated predictive margins of education in older age cohorts are more volatile and less steep than the analogous effects of occupations and skills in the same ages. That is, the lowest probability of being poor for a 60-year-old professional is about 0.55 (the lowest bound of the confidence interval), compared to 0.36 for educated seniors (all other things being equal); however, the highest probabilities for same aged people are very close (0.93 and 0.9, respectively). In other words, in contemporary Russia, occupation is a more important factor of socioeconomic outcomes than education, taking into account the fact that people in Russia often misuse their higher education working at lower-skilled jobs.

Since occupations are linked to different skills levels, they predetermine the power of workers to monopolise their influence in the organisation and control their labour (e.g. high skilled professionals) and the labour of others (managers). Most generic labour jobs abandon power and control. This poses another important issue for industrial poverty – a high level of labour exploitation. In Russia, most low- and medium-skilled workers lack negotiation power and are forced to accept the rules imposed by employers (Anikin & Tikhonova, 2014). The diminished power of labour unions and reduced government support of workers put the latter under the total control of owners and high-level management, increasing the domination and exploitation of their employees. Industrial poverty is thus the poverty of exploited population. It is quite widespread in Russia, and it has lasted decades. It is not by chance that the power assets correlated to authority, influence, and privileges became the most deficit and demanded resources in Russian society (Tikhonova, 2014). All these issues led to the sociocultural preservation of working poor and broader risks for social degradation and economic devaluation of the vast labour resources in Russia.

**Figure 2. Probability of poverty in different age cohorts, by education and occupation**




Source: The IS RAS 2015 monitoring wave (representative sample). Author's calculations. Hereafter, estimations are obtained from a Logistic model of poverty, regressed on dependants, education, occupation status, type of enterprise's ownership, power at work, bad habits, location, gender, age and multiple interactions. A more detailed information on regressors and estimation procedures is available from Slobodenyuk and Anikin (2018).

Note: 'Skilled urban' comprise managers and professionals who live and work in urban area. 'Semi- and low-skilled Rural' denotes semi-professionals, clerks and sales workers and manual workers who live and work in rural area. Delta-method standard errors are applied. CIs = confidence intervals. Pr (Poverty) = probability of being poor (measured in absolute terms, according to the substance level).

## 5. High inequalities and unfair distribution of incomes

Why has this situation been kept unchanged over years? The main reason is high monetary (income based) and non-monetary (based on possessions and ascription) inequalities in Russia. Perhaps this is one of the most important headwinds that significantly affects life chances and effective motivational structures in Russia.

Income inequality in Russia is much higher than in Western European countries, but it is lower than in some BRICS countries like Brazil or South Africa and higher than in India. The Russian model of inequality is much closer to that in China. The distribution of incomes in Russia hardly relates to the Latin America scenario. However, this does not mean that the Russian model of inequality is efficient and fair. For example, shares of national income obtained by bottom deciles are still far from the level of the 1990s and 1980s (see Table 3). Ultimately, the income shares of the third quintile declined by 20%, from 18.8% in 1990 to 15.1% in 2015. This, thus, shows that the past 25 years brought about a *relative* impoverishment of not just a lower-income population, but also of the middle-income groups.

**Table 3. Income inequalities in Russia**

| Year | Quantiles (every 20% of the population), shares in total income, % | | | | | Decile ratio | Gini coefficient |
|---|---|---|---|---|---|---|---|
| | 1st (bottom quintile) | 2nd | 3rd | 4th | 5th (top quintile) | | |
| 1970 | 7.8 | 14.8 | 18.0 | 22.6 | 36.8 | ... | ... |
| 1980 | 10.1 | 14.8 | 18.6 | 23.1 | 33.4 | ... | ... |
| 1990 | 9.8 | 14.9 | 18.8 | 23.8 | 32.7 | ... | ... |
| 1995 | 6.1 | 10.8 | 15.2 | 21.6 | 46.3 | 13.5 | 0.387 |
| 2000 | 5.9 | 10.4 | 15.1 | 21.9 | 46.7 | 13.9 | 0.395 |
| 2005 | 5.4 | 10.1 | 15.1 | 22.7 | 46.7 | 15.2 | 0.409 |
| 2010 | 5.2 | 9.8 | 14.8 | 22.5 | 47.7 | 16.6 | 0.421 |
| 2012 | 5.2 | 9.8 | 14.9 | 22.5 | 47.6 | 16.4 | 0.420 |
| 2014 | 5.2 | 9.9 | 14.9 | 22.6 | 47.4 | 16.0 | 0.416 |
| 2015 | 5.3 | 10.0 | 15.1 | 22.6 | 47.1 | 15.7 | 0.413 |
| 2016 | 5.3 | 10.0 | 15.0 | 22.6 | 47.1 | 15.7 | 0.414 |

Source: The Federal State Statistics Service of Russia. http://www.gks.ru/free_doc/new_site/population/bednost/tabl/1-2-2.doc. Accessed 19.12.2017

Note: Grey area shows prosperous years of economic growth in Russia, roughly between 2000 and 2013.

Although 'Perestroika' remarkably boosted income inequalities in Russia, the recent period of economic growth in Russia (roughly between 2000 and 2013) has also contributed significantly to the inequality and even to the polarisation of the Russian income structure. That is, between 2000 and 2012, the Gini coefficient (which shows the degree of inequality in a society and particularly within the middle-income strata) increased by 6% from 0.395 to 0.420, while the decile ratio (indicating polarisation) grew by 18% from 13.9 to 16.4. The recent economic growth was accompanied by a substantial widening of pay differentials a) between managers and other workers and b) between middle- and high-level management of enterprises and state bureaucracies (Clark, 2014). As a result, the recent economic growth deepened the deprivation and social exclusion of lower-income groups Gorshkov & Tikhonova, 2014) and favoured the growing wealthy upper classes.

In general, we can say that the Russian model of inequality has the following features: 1) high, as compared to European standards, inequality of income distribution in the Russian society seen in high (more than 0.4) values of the Gini coefficient, which is somewhat typical for other BRIC-like countries; 2) low incomes of middle strata (a median income equals just 74% of an average per capita income, and its modal value – to 40.5% (Anikin & Tikhonova, 2016a)); and 3) stably low levels of incomes of bottom strata, which became much poorer after 'Perestroika' (in addition to high decile ratio, the income level of the bottom 20% of the population is approximately nine times lower than that in the top quintile).

Although monetary inequality in Russia is not as high as in BRICS, comparison of the bottom populations in Russia and other BRICS countries shows that industrial poverty in Russia predominantly affects moderately educated urban employees performing routine and low-skilled tasks and duties in contrast to 'pre-industrial' poverty in other BRICS countries that affects the uneducated and unskilled population in the countryside (India, Brazil, and South Africa), or lower urban masses of poorly skilled labour migrants (China). As in China, labour migration in Russia has a lot of issues and is not always as gainful as expected.

Industrial poverty in Russia is easily found in small urban communities with migrants coming from rural areas for the sake of better life. Aside from higher education, they lack social connections and marketable skills and thus earn extremely low wages. However, Russian villages do not provide any alternatives, as higher education institutions and gainful employment niches are located in big cities and metropolitan areas. The rural population is sinking into poverty because the villages are dying, thus increasing the risks of widening pre-industrial poverty in Russia. Villagers who gradually quit farming and have no other skills and jobs to work with have become marginalised. This type of poverty is frequently observed in Russia's Non-Black Soil Zone and in the country's northwest region, where most villagers do not own any land or cattle.

Ultimately, the Russian population, even the median-income strata, is vulnerable to poverty because of non-economic factors such as illness, disability, being divorced with young children, or the death of the breadwinner. Low pay and inadequate family support policies place many families at risk of poverty just by having young children and even more so if a crisis occurs, such as a serious illness of a family member (Ibid). Poor health triples the risk of low-income poverty and increases fivefold the risk of chronic poverty; having children in the family increases 2-1.7 times the risk of poverty in 30–35 age cohorts.

The prevailing system of inequalities in Russia is the result of the rapid relative impoverishment of the majority of the population, while the bottom quintile has sunk into absolute poverty over a comparatively short period. The grounds of a sharply deepened social differentiation from the perspective of the vast majority of the population are illegitimate – they do not associate the wealth of the most prosperous groups with their labour efforts and merits (Mareeva & Tikhonova, 2016). That is why, despite the relatively optimistic picture of inequalities in Russia compared to BRICS countries, given the late-industrial mode of development and prior historical experience of the Russian population, both the specific poverty situation and inequality issues are not satisfactory at all. Moreover, the situation is even dangerous, given that the income stratification profile of Russian society is similar to that of Western European countries (Anikin et al., 2016).

The headwind of unfair inequalities in Russia has led to growing dissatisfaction among Russians with the widening inequalities in the country, leading to growing social tension and fears of social and political instability in the future. However, given that Russians appreciate social stability and coherence

(Anikin, 2016), the most crucial hazard of high and unfair inequalities today is revealed in the risk of stagnation of human development, which is traditionally correlated to inequality.

## 6. Slow rates of growth in human development

Human development is one of the most important indicators of socioeconomic development. The quality of Russia's transition should be understood and reassessed through the lens of human development. This is one the key arguments developed in the recent book on transformations of Russia (Shkaratan & Yastrebov, 2016) and particularly in David Lane's chapter (Lane, 2016). Although Russia (and other post-socialist countries) recovered the levels of their gross national incomes (GNI) by 2010s, high and unfair inequalities eliminated these effects, as the benefits of the economic growth were not distributed among the mass population.

The social dimension of economic development was conceptualised by Amartya Sen, who was awarded the Nobel Memorial Prize in Economic Sciences in 1998 for his work in welfare economics. Based on his ideas, the United Nations Development Program (UNDP) has been drawing the attention of both academics and politicians to the issue of the human-oriented economy since 1991; at the centre of such an economy should be placed the human being rather than abstract financial figures. To capture the achievements of various countries in the field of human development, the UNDP proposed the so-called Human Development Index (HDI).

Table 4 summarises the HDI estimations for the period from 1990 to 2014.[8] The average achievements in human development of catching-up countries vary a lot – from very high (Singapore, Honk-Kong, South Korea, Japan, and states like Estonia, Latvia, and Hungary) and high (Brazil and China) to median (South Africa and India) and low (e.g. Nigeria and the African Republic). Among BRICS and CIS, Russia's HDI rank was and remain the highest; in the overall ratings out of 188, it was at the 50th place in 2014, which it shared with Belarus (Brazil's rank was 75, China was at the 90th place, South Africa – 116th, India's rank was number 130).

Having achieved in 2014 the value of HDI at 0,798, Russia left behind not only BRICS countries but also some of the European nations such as Serbia (0.777, 66th rank) and Bulgaria (0.782, 59th rank). In 2014, Russia was nearing Kuwait (0.816, 48th rank), a Persian Gulf country that traditionally invests a lot in the nation's human capital.[9] Over the period from 1990 to 2014, Russia had shown the best dynamics in HDI rank change among industrially advanced societies; however, the rates of growth in human development in Russia were much lower than in Singapore, Saudi Arabia, Turkey, and China. In 2015, a five-year change in Russia's HDI rank dropped to 5, from 8 as of 2014. Taking into account the issue of over-education and drop in the real wages of Russians caused by the economic turmoil of 2014-2016 in Russia, we may expect a further slowdown of the rates of growth in human development, or even stagnation in human development in the nearest future.

**Table 4. Human Development Index, 1990-2014**

| HDI rank | Country | HDI value 1990 | 2000 | 2010 | 2014 | Change in HDI rank 2009–2014 |
|---|---|---|---|---|---|---|
| ***Very High Human Development*** | | | | | | |
| 1 | Norway | 0.849 | 0.917 | 0.940 | 0.944 | 0 |
| 6 | Germany | 0.801 | 0.855 | 0.906 | 0.916 | 3 |
| 8 | United States | 0.859 | 0.883 | 0.909 | 0.915 | -3 |
| 11 | Singapore | 0.718 | 0.819 | 0.897 | 0.912 | 11 |
| 12 | Hong Kong | 0.781 | 0.825 | 0.898 | 0.910 | 2 |
| 14 | Sweden | 0.815 | 0.897 | 0.901 | 0.907 | -1 |
| 14 | United Kingdom | 0.773 | 0.865 | 0.906 | 0.907 | -2 |
| 17 | Korea (Republic of) | 0.731 | 0.821 | 0.886 | 0.898 | 0 |
| 20 | Japan | 0.814 | 0.857 | 0.884 | 0.891 | -3 |
| 30 | Estonia | 0.726 | 0.780 | 0.838 | 0.861 | 3 |
| 39 | Saudi Arabia | 0.690 | 0.744 | 0.805 | 0.837 | 10 |
| 41 | United Arab Emirates | 0.726 | 0.797 | 0.828 | 0.835 | -6 |
| 44 | Hungary | 0.703 | 0.769 | 0.821 | 0.828 | -4 |
| 46 | Latvia | 0.692 | 0.727 | 0.811 | 0.819 | -5 |
| 48 | Kuwait | 0.715 | 0.804 | 0.809 | 0.816 | -3 |
| ***High Human Development*** | | | | | | |
| 50 | Belarus | .. | 0.683 | 0.786 | 0.798 | 4 |
| 50 | Russian Federation | 0.729 | 0.717 | 0.783 | 0.798 | 8 |
| 52 | Romania | 0.703 | 0.706 | 0.784 | 0.793 | -1 |
| 59 | Bulgaria | 0.695 | 0.713 | 0.773 | 0.782 | 0 |
| 66 | Serbia | 0.714 | 0.710 | 0.757 | 0.771 | -1 |
| 72 | Turkey | 0.576 | 0.653 | 0.738 | 0.761 | 16 |
| 75 | Brazil | 0.608 | 0.683 | 0.737 | 0.755 | 3 |
| 81 | Ukraine | 0.705 | 0.668 | 0.732 | 0.747 | 2 |
| 90 | China | 0.501 | 0.588 | 0.699 | 0.727 | 13 |
| ***Median Human Development*** | | | | | | |
| 107 | Moldova (Republic of) | 0.652 | 0.597 | 0.672 | 0.693 | 2 |
| 116 | South Africa | 0.621 | 0.632 | 0.643 | 0.666 | 4 |
| 130 | India | 0.428 | 0.496 | 0.586 | 0.609 | 6 |
| ***Low Human Development*** | | | | | | |
| 145 | Kenya | 0.473 | 0.447 | 0.529 | 0.548 | 0 |
| 152 | Nigeria | .. | .. | 0.493 | 0.514 | 2 |
| 187 | Central African Republic | 0.314 | 0.310 | 0.362 | 0.350 | 0 |

Source: The UNDP data. For a broader list of countries see: http://hdr.undp.org/en/composite/trends. Accessed 30.01.2017.

Russia did not use all the opportunities offered by recent economic growth. Economic development in Russia (and in China) was not oriented to increasing the opportunities and economic prosperity of the mass population. Ultimately, the resource curse of Russia became more salient and inertial. This shows that the market alone is not an optimal mechanism for desired achievements in human development, or at least for reproducing the social welfare of state socialism (Lane, 2016). The cases of successful transition of post-socialist countries (like Poland or Belorussia) reveal the exclusive role of the state. However, the Russian state failed to meet the goal of balanced transition and escaped from its social obligations – with both trends getting worse over time.

## 7. Neoliberalism, exploitation, and social alienation

The neoliberal regime is the fifth and perhaps the most powerful headwind against Russia (see Shkaratan and Yastrebov (2016)). The Russian state is gradually escaping from the social sphere, and primarily from education and health care – spheres, which are principal for human capital formation of a nation. Monetisation of social support and benefits, cutting unemployment benefits, resentment toward mass decrease of living standards and increase of inequality, independent regulation of labour market and high norms of exploitation – all these are just a few examples of the neoliberal course gradually established in Russia.

**Table 5. Federal spending structure in 2011-2016, % of the total expenditures**

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|
| National issues | 7.1 | 6.3 | 6.4 | 6.3 | 7.1 | 6.7 |
| National defence | 13.9 | 14.0 | 15.8 | 16.7 | 20.4 | 23.0 |
| National security and law enforcement | 11.5 | 14.3 | 15.4 | 14.1 | 12.6 | 11.6 |
| National economy | 16.4 | 15.3 | 13.9 | 20.6 | 14.9 | 14.0 |
| Housing and utilities | 2.6 | 1.8 | 1.3 | 0.8 | 0.9 | 0.4 |
| Environmental protection and ecology | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 |
| Education | 5.0 | 4.7 | 5.0 | 4.3 | 3.9 | 3.6 |
| Culture and cinematography | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 |
| Health care | 4.6 | 4.8 | 3.8 | 3.6 | 3.3 | 3.1 |
| Social policy | 28.6 | 29.9 | 28.7 | 23.3 | 27.3 | 27.9 |
| Physical culture and sport | 0.4 | 0.3 | 0.5 | 0.5 | 0.5 | 0.4 |
| Mass media | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 |
| Public debt service | 2.4 | 2.5 | 2.7 | 2.8 | 3.3 | 3.8 |
| Inter-budget transfers | 6.0 | 4.6 | 5.0 | 5.5 | 4.4 | 4.1 |

Source: The Federal Treasure of Russia data. http://datamarts.roskazna.ru/razdely/rashody/rashody-po-razdelam-podrazdelam/rashody-po-razdelam-i-podrazdelam/?paramPeriod=2015. Accessed 19.12.2017

Concurrently, Russia is cutting spending on spheres strategically important to develop the knowledge-based economy and advanced human potential of the population. According to Table 5, Russia has a very limited budget for education. During the period of economic growth, the federal spending on education in total expenditure was about 5%. However, during the period of economic crisis 2014-2016, it dropped drastically (to 3.6% in 2016). Notwithstanding the over-education trend in Russia, these figures are extremely low if compared with those for industrially advanced economies like Germany, Great Britain, Norway, or the US. According to the Federal Treasury data, the educational expenditures of Russia includes pre-school spending, the relative share of which is extremely low, around 0.1% in 2016 (instead, the Russian government prioritises education spending on higher and post-university education, which counts for 81.3% of all the education expenditures). However, these particular investments in pre-school development programs should be of a primary interest to industrially developed states (Heckman, 2000).

The expenditure on health care system is also very tiny, the smallest among industrially developed countries. Despite additional transfers from the Health Insurance Fund, the spending on health care in total federal expenditures continued to decrease so that it was around 3.1% in 2016. Given that Russia has not yet performed the so-called epidemiological revolution (De Flora, Quaglia, Bennicelli, & Vercelli, 2005), this figure unambiguously indicates the lack of institutional investments in human beings and, consequently, explains lower rates of life expectancy and higher mortality rates from preindustrial diseases even in big cities. Moreover, the Russian government has suspended deductions to the contributory portion of pensions and reduced the economic security of the working people, as they are forced now to secure their old age using private funds. As a result, spending on social policy in 2014 decreased to 23.3%. Although, Russia slightly increased spending on pension provision, the overall share of government expenditures on social policy is still below 2013.

Furthermore, the public discourse supported by the government remains neoliberal. In drafting the most recent budget, the Finance Ministry made efforts 'to optimize the cost structure' (to cut budgets) by proposing the idea of not paying the base part of the retirement pensions to working pensioners. Because of high public resistance, the government refused to support this and other initiatives of the Finance Ministry.

Another remarkable indicator of state escapism is the high level of socioeconomic insecurity of Russian employees and its positive elasticity to economic shocks (see Table 6). At the beginning of the present turmoil period, only 56% of the working population could say that their legal labour rights were abided. Between 2014 and 2015, we registered a sharp decrease in this number to 47% in 2015 (i.e. a 16% relative change). Although the situation in this sphere slightly improved in 2016 – primarily regarding the key positions such as the prompt payment of salary and official employment – their values just returned to the starting points.

**Table 6. The socio-economic security of Russians at their workplaces, 2014-2016**

| Indicators | 2014 | 2015 | 2016 |
|---|---|---|---|
| The prompt payment of a salary | 92 | 89 | 91 |
| Officially employed | 76 | 70 | 75 |
| “White” salary | 66 | 63 | 62 |
| Paid holidays and sick leave | 68 | 60 | 59 |
| All these labour rights are abided | 56 | 47 | 49 |
| Additional social benefits are provided | 15 | 6 | 5 |

Source: The IS RAS monitoring waves, 2014-2016. Author’s calculations.

Note: Figures represent the percentages of the working population.

In most cases, legal labour rights are more likely to be abused in generic labour. The labour rights of professionals and managers were slightly affected during the crisis; however, they almost lost additional social benefits provided widely before 2014. According to Table 6, the relative share of those received additional benefits has shrunken three times (from 15% in 2014 to 5% in 2016). Since the major recipients of these benefits are managers and skilled professionals, this may lead to the risk of demotivation and alienation of the most qualified categories of the Russian working force.

## 8. Conclusion

We have briefly outlined five main frontiers that obstruct Russia’s transition toward a new economic age. This age implies the high significance of human capital and human-oriented development supported by moderate inequalities based on merits, low absolute poverty, and the active role of the state in a post-transition period. All of these are violated in contemporary Russia, framing the new frontiers of Russia’s successful transition to a post-industrial stage of development. The present paper shows that human capital is scarcely appreciated by the Russian economy at large and Russian employees in particular. Training is concentrated in confined niches of the labour market – the urban high middle-class, presented by skilled professionals and managers. The rest of the employees are in generic labour, occupying ‘bad’ jobs and facing the risks of unstable employment and low salaries.

The latter is the main driver of poverty in Russia, which constitutes much of the working poor. This preserves at least 25% of the Russian working population in a backwards class situation in small urban communities engaging in routine and low-skilled tasks and duties. Since low salaries boost poverty in Russia, the zone of the potential poor is wider; that is, the risks of absolute poverty increase twice for 30-year-old Russians with children. Thus, in Russia, even skilled professionals and managers can sink into absolute poverty. However, the relative impoverishment is much wider, comprising 60% of the population – this is a result of high-income inequality and unfair distributions of the benefits gained from ‘Perestroika’ and the recent economic growth. The Russian society has failed to use all the possible opportunities offered by years of economic prosperity, which has affected the rates of growth in human development.

The aggravating factor affecting human development in Russia is neoliberalism and state escapism from social welfare. This has resulted in a high rate of exploitation of the Russian labour, extremely low salaries, and risks of absolute poverty for social beneficiaries. The present paper presents just a short overview of the principal frontiers faced by the Russian economy and society. Although this list of five headwinds is not the only one available, we find the chosen challenges applicable and relevant to the specific case of Russia. The future goals of Russia cannot be understood through the linear logic of optimising financial figures, such as targeting inflation or rates of GDP growth, but should be realised as a complex multilayered socioeconomic task based on population activities.

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## Notes

[1] The 1980s was a prominent decade for many important countries and regions, such as the United States, Russia, South Korea, India, China, and Brazil. To 'examine politics, economics, and social change' in such countries over the past three decades, the Cambridge University Press designed the series 'The World since 1980'. See http://admin.cambridge.org/sb/academic/subjects/politics-international-relations/politics-general-interest/series/world-1980.

[2] We do not argue here that post-industrial state is a panacea. We also admit that there are some antinomies of this stage of development. However, society should be aware of the post-transitional vector and be prepared for these challenges.

[3] We apply the following view on divisions of sectors of the national economy: primary (extracting, agriculture, fishery and related activities), secondary (industrial production), tertiary (service economy), and quaternary (information and images services).

[4] Hereafter, when using the RLMS-HSE data, we apply an adapted version of ISCO-88 to match the reality of Russian labour market and get rid of classification mismatches. Regarding mismatches of coding occupations in RLMS-HSE (Sabirianova, 2002). In the adapted version of ISCO-88, we attribute as professionals only those specialists who have a university degree or a related equivalent. By this, we consider that the number of years of education in Russia is less important than formal credentials. We consider 'managers' to be those who have more than five subordinates under their direct supervision. Those managers who supervise fewer than five subordinates are considered 'supervisors' and coded as a separate category among professionals. Those professionals who have no

university degree or a related equivalent are encoded as a separate category among 'semi-professions' and are filtered according to the education level required for this group (tertiary education: unfinished undergraduate or vocational education). Some of the minor occupations are directly recoded to the lower occupations, because of the specifics of their work and its value on the labour market. For more details about the recoding strategy used in this paper, see (Anikin, 2012).

[5] In other BRIC countries, by contrast, it is driven mainly by migration from villages to cities, similar to earlier historical periods in Europe.

[6] Russia has traditionally low levels of unemployment, one of lowest among OECD nations, even during crises. Some authors consider low elasticity of employment a main feature of the Russian national model of labour market (Gimpelson & Kapeliushnikov, 2013).

[7] According to this approach, we consider poor those people whose declared incomes are less than the subsistence level, adjusted to a household size and members' activity and age. Absolute monetary approach was chosen to reflect the assessments on poverty obtained by official Russian statistics. This approach has obvious drawbacks. The most important is that respondents may underreport their incomes; however, its degree depends on the structure of the population. The negative impact of underreported incomes is much more visible if a sample contains a considerable number of self-employed people and entrepreneurs, as in Greece or Italy, or if the majority of employees are working in informal sectors, like in India, or if the main source of their incomes are returns to their property (e.g. real estate or financial investments). In Russia, the relative share of entrepreneurs and self-employed people is about 7% (as compared to Italy or Greece, where this number varies from 25 to 35%, respectively (https://data.oecd.org/emp/self-employment-rate.htm. Accessed 5.04.2017)). Informal employment affects about 12% of the working population in Russia (Kapelyushnikov, 2012), whereas returns to property, rental income, or percentages on bank deposits as the main source of income are applicable only to 2,7% of Russians (Gorshkov & Tikhonova, 2016a). Additionally, these are affluent people who usually report incomes higher than the median.

[8] Although the most recent data available from 2015, it is important to present the 2014 data because it reveals Russia's HDI rank among countries with the 'high human development', compared to 'very high human development' rank as of 2015. The most recent data on trends in HDI are discussed by Anikin (2017c).

[9] In the Persian Gulf states, education is strongly affiliated with religion. This can affect the HDI ranks of the given countries, which should be taken into account in international comparisons. Moreover, Russia's investment in human development is more complex and based to a greater extent on high popularity of tertiary education among Russian youth. However, a contribution of religious education – and education in general – to HDI should not be exaggerated, as HDI includes also data on national income and health. These states reroute their rental incomes to social prosperity and development. According to the latest World Health Organization (WHO) published in 2016 the average life expectancy at birth in Russia was 70.5 (107th rank), which is remarkably lower than in Kuwait (74.7

years, 73th rank) or Saudi Arabia (74.5 years, 77th rank).

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