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Gordey Yastrebov

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Gordey Yastrebov¹

**INTERGENERATIONAL SOCIAL MOBILITY IN
SOVIET AND POST-SOVIET RUSSIA²**

The aim of this paper is to bridge the gaps in existing accounts of the evolution of intergenerational social mobility in Soviet and post-Soviet Russia. The study makes a potentially valuable contribution to the literature by extending the spectrum of institutional and historical contexts, in which (in)equality of opportunity has been considered so far, and a chance to re-examine existing evidence by using alternative datasets and a slightly different methodology. Following the conventions in the social mobility literature in this study I approach social destinations and social origins in terms of educational and occupational attainments of children and their parents respectively. For empirical part I utilize data from four representative cross-national surveys conducted in Russia in 1994, 2002, 2006 and 2013. To study historical change in the patterns of social mobility I identify four cohorts whose educational and occupational careers unfolded during four different historical periods (two for the Soviet and two for the post-Soviet period). Being informed by several earlier studies on post-socialist countries including earlier research on Russia, I anticipated (1) a trend towards lesser (rather than greater) openness in the late years of the Soviet era, (2) a temporary discontinuity of mobility patterns during the turbulent 1990s and (3) the ‘tightening up’ of social mobility regime in the more stable years of Russia’s post-Soviet history. If any such trend existed, my findings would rather suggest that it was directed towards decreasing intergenerational transmission of educational advantage in the post-Soviet era, rather than the other way around. Also, surprisingly and quite contrary to earlier findings and theoretical considerations, the changes in the pattern of occupational mobility remained surprisingly invariant to the changes in historical and institutional context. The paper concludes with highlighting some of the remaining puzzles and possible directions for future research.

JEL Classification: Z13, J62, I24

Key words: social mobility, social inequality, social reproduction, social transformations, Russian society, Soviet society, post-Soviet society

¹ National Research University Higher School of Economics. Laboratory for Comparative Analysis of Post-Socialist Development NRU HSE. Senior research scientist. E-mail: gordey.yastrebov@gmail.com

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Introduction

Although research on (in)equality of opportunity through the prism of intergenerational social mobility has been a lively area in sociology in the past few decades (see Breen & Jonsson (2005) for extensive review), there have been only few rigorous studies of how it evolved over time in the former socialist countries. So far these studies included only Poland and Hungary (e.g. Breen (ed.), 2005), Estonia (Saar, 2010) and Russia (Gerber & Hout, 2004). Obviously this list cannot completely account for the cultural and institutional variety of the former socialist world and therefore calls for its geographical extension. However, in this study I intentionally revisit the case of Russia, albeit extending the temporal scope of analysis, and the rationale for this study is outlined below.

The first reason is the limited historical span of the study undertaken by Gerber & Hout (2004) compared to the evidence produced for the other three countries. Although Gerber and Hout had the advantage of comparing social mobility between two periods, i.e. the ones documented with surveys conducted between 1988-1992 and the later period between 1998-2000, their data did not allow reconstructing mobility patterns for earlier Soviet periods and the turbulent period of the radical institutional and structural change in the 1990s. As I will argue shortly, these settings provide an interesting case to test several theoretical arguments relating the changes in (in)equality of opportunity to the changes of historical and institutional context. Moreover, the reason of my inquiry with Russia resonates with the motivation of Marshal, Sydorenko & Roberts (1995), who, in their much earlier study, also depart from the fact that ‘it has proved difficult to construct a convincing general account of social mobility in the USSR’ (Ibid, p. 3). They made an argument that numerous studies previously conducted both by Soviet and international scholars (e.g. Rutkevich & Filippov, 1970; Yanowitch & Fisher (eds.), 1973; Lukina & Nehoroshkov, 1982; Tarasenko & Chernovolenko (eds.), 1988; Teckenberg, 1989³) did not allow a critical engagement with the issue of social mobility in Soviet Russia owing to the lack of reliable data, as well as numerous ideological and methodological constraints. Particularly, these studies did not allow distinguishing between relative and absolute social mobility, which is an important step for making correct inferences about equality of opportunity and openness of society (Erikson & Goldthorpe, 1992; Breen (ed.), 2005; Breen & Jonsson, 2005). Marshal and colleagues were, indeed, the first ones to show that once the natural difference in the social composition between ‘parents’ and ‘children’ is taken into account late

³ The list also includes references to studies not mentioned by Marshal and colleagues (1995).

Soviet Russia does not look so remarkably different from Western societies. Nevertheless, their own analysis was limited to a simple cross-sectional comparison with Britain, and therefore, strictly speaking, ‘a convincing general account of social mobility in the USSR’ remained largely an unfulfilled endeavor.

The second reason of my inquiry is more general and has to deal with the diversity of both pre-transitional and post-transitional contexts in the former socialist societies that were already featured in social mobility research. Whereas Poland, Hungary and Estonia adopted socialism only in the post-war period, Russia became a socialist country much earlier (in 1917) and was, in fact, the core constituent of the USSR thereby carrying quintessential characteristics of the Soviet socialist regime, including the footprints of the rapid industrialization in the 1930s. Furthermore, post-Soviet states followed slightly divergent paths of transition after the dismantling of socialism (e.g. Lane & Myant (eds.), 2006; Bluhm, 2010), and Russia makes a particularly interesting case for the fact of its extremely rapid immersion in the neoliberal market reform in the 1990s followed by adoption of a peculiar conservative welfare state model in the 2000s (Cook, 2007).

The aim of this paper is therefore to bridge the highlighted gaps and provide a more complete account of the evolution of (in)equality of opportunity in Soviet and post-Soviet Russia. It makes a potentially valuable contribution to the literature by extending the spectrum of institutional contexts, in which (in)equality of opportunity has been considered so far, and a chance to re-examine existing evidence by using alternative datasets and a slightly different methodology.

Social mobility in Russia: facts and theories

A reasonable strategy to engage in hypothesizing historical change in Russia’s social mobility regime is to depart from existing evidence. In a nutshell, the specific findings regarding Russia already suggest that (1) inequality of opportunity in late Soviet Russia was not so remarkably different from that of Western countries (Marshal, Sydorenko & Roberts, 1995), and that (2) it increased from the Soviet to post-Soviet period (Gerber & Hout, 2004). In addition, another remarkable study of educational stratification in Soviet Russia revealed that intergenerational transmission of social advantage, in general, tended to increase starting with the postwar period, albeit substantial differences in these trends were found with regard to different stages of education (Gerber & Hout, 1995). Below I undertake a brief discussion of

these findings in the context of other evidence and its theoretical underpinnings, and sketch out the general argument that would back my hypotheses about the reshaping of (in)equality of opportunity in Russia in the long historical perspective, including the periods, which have not been considered by my predecessors.

Although Marshal and colleagues do not explicitly equip their evidence with a theoretical argument, it is still reasonable to connect it with a seminal study by Erikson & Goldthorpe (1992). The latter made a serious contribution to the social mobility literature by having attempted to validate several competing theories (i.e. liberal theory of industrialism, Marxist theory of occupational downgrading, cultural exceptionalism, etc.) through comparison of social mobility patterns and their change across several nations. Notably, Erikson and Goldthorpe also engaged with the data from Hungary, Poland and Czechoslovakia, although they could only document the state of affairs up to mid-1970s. Nevertheless, from their analyses Erikson & Goldthorpe (1992) concluded that cross-temporal and cross-national variation in social mobility can best be characterized as ‘trendless fluctuation’, which is a famous metaphor also used by Sorokin (1959) to refer to the historical persistence of social inequalities. The characteristic of ‘trendlessness’ is consistent with the theoretical idea that intergenerational transmission of social inequalities is a universal self-perpetuating process rooted in family strategies: more resourceful families always adapt to changing contexts and find strategies to secure advantage for their children as long as nothing radically intervenes with this process (Featherman, Jones & Hauser, 1975). Its ‘fluctuation’, on the other hand, can be caused by dramatic developments, such as wars and revolutions (Sorokin, 1959: pp. 141-152, 466-472).

A possible explanation to the findings of Marshal and colleagues, according to which the late Soviet Russia did not look so remarkably different from the Western countries, could rest with the fact that they dealt only with a certain snapshot of the Soviet society, which was taken after several decades of high institutional stability that led to the natural rigidification of its social structure. At the very least, it is impossible to identify any radical institutional policy or other event that could have potentially had significant implications for change in social mobility between the presidencies of Krushchev (starting in mid-1950s) and Gorbachev’s presidencies (ending in 1991 with the collapse of the Soviet Union). A potentially consequential reform initiated by Krushchev in 1956 brought several important changes to the educational system: particularly, it abolished previously existed tuition in professional education and introduced quotas in higher education, which were assigned to people with at least some years of working experience. Nevertheless, according to Gerber & Hout (1995) and other commentators (e.g. Matthews, 1982) these reforms actually failed to achieve substantial equalization. Several other

reforms that followed the Stalin's era, e.g. Kosygin's economic reform or Gorbachev's Perestroika, were also unmatched to the scales of the radical social change brought by the rapid industrialization and collectivization in the 1930s, or the shifts in the social structure caused by the WWII and the post-war period of restoration.

In a more recent study Gerber & Hout (2004) report the declining equality of opportunity in post-Soviet Russia, which they explain by the radical differences in the institutional context before and after the transition. The dismantling of socialist institutions, which were explicitly oriented towards social and economic equalization, led to a natural increase in the wage arrears between different occupations, thereby intensifying competition among people and providing a stronger incentive to mobilize resources associated with social background. This finding is also consistent with the findings from the comparative study by Erikson & Goldthorpe (1992), who noted that inequality of opportunity tends to be lower in countries with lower income inequality (i.e. higher equality of conditions). In a later collection edited by Breen (2005) the same was shown with regard to countries with strong welfare institutions, such as social democratic states.

An increase in inequality of opportunity similar to the one observed in Russia, was also documented in post-transitional Hungary (Breen (ed.), 2005) and Estonia (Saar, 2010), although Poland appeared to deviate from this trend by exhibiting no significant change in mobility patterns for men, but an increase in social mobility among women (also in Breen (ed.), 2005). In general, this evidence fits quite well with the arguments provided above, although the literature (including the cited research) remains surprisingly silent on the puzzling case of Poland. Notably though none of those studies distinguish between the early and the late transition period, which would at least to some extent allow separating the effects of the new institutional context on the inequality of opportunity from the turbulence of the social structure caused by the transition itself. Going back to Sorokin's arguments, this transition can be taken as an example of powerful exogenous shock that reshuffles social structure thereby temporarily leading to more chaotic and unpredictable social transitions, and, if this is true, it could introduce some bias in the overall assessment of change in the (in)equality of opportunity from the socialist to the post-socialist period.

On the other hand, it is not entirely clear whether the transition from the old regime to the new one should actually be expected to dampen the effects of social background on individual social transitions. This could be the case, if the transition is accompanied by change in the relative importance of different resources that are required to attain social positions in the new social structure (Grusky, 2001). There is some indirect evidence that the human and cultural capital acquired during the Soviet regime might have been rendered irrelevant during the first

years of Russia's market transition (Shkaratan & Tihonova, 1996) thereby shattering the capacity of the former Soviet *intelligentsia* to transmit certain type of advantages to their children and becoming more vulnerable to the new conditions themselves. For people with certain entrepreneurial capacity it opened up legal opportunities to engage in business activities, which they could not fully enjoy until the collapse of the Soviet Union (Yakovlev, 2007). On the other hand, the radical social change did not fully eradicate the relevance of political and social capitals (Ledeneva, 1998; Gerber & Mayorova, 2010), which may be one reason for assuming some continuity with the previous regime. The general pattern of social mobility during the transition period would therefore reflect a complex constellation of these bilateral developments, and therefore Sorokin's overarching argument must be treated with some caution.

Finally, my brief engagement with existing evidence and theoretical considerations leads me to hypothesize the following. Given that my data (description will follow shortly) allows me trace mobility patterns for the generations, which matured as far early as in the days of Khrushchev's presidency (mid-1950s – mid-1960s), I am referring to this period as the period of reference. If any change in the patterns of social mobility is to be anticipated from that period until the last days of the Soviet regime (1991), I would expect it to conform to the arguments that anticipate the rigidification of social structure rather than the trend towards greater openness. For the dawn of the new era in Russia's history (mid-1990s), which was opened by its rapid transition from socialism to market economy, I would expect to find a temporary discontinuity between social origins and social destinations, although one should also leave the possibility that the former and the new stratification hierarchies could compete with each other in producing the overall pattern. Finally, for the more recent generations of Russians, i.e. with the taking over of the new market regime and the stabilization of new institutions and social structure (the end of 1990s – the beginning of 2000s), I anticipate the signs of decreasing equality of opportunity and a re-emerging association between social background and life chances. Since Putin's era is generally characterized by further marketization of public services (among them education) and high levels of income and wealth inequality (Cook, 2007), I also expect no positive trend in equality of opportunity further in 2000s.

Data and methodology

For my analyses I employ data from four repeated representative surveys, which were specifically designed to collect information about social stratification and its dynamics in the

post-Soviet period. The surveys represent Russian population aged 18 years old and above at the time of data collection. The first survey was conducted between January and February 1994 by the Institute of Sociology RAS with financial support from the Russian Government (details here: Shkaratan & Tihonova, 1996: pp.101-103). All other surveys were carried out by the Center for Social Forecasting and Marketing in November-December 2002, 2006 and 2013 (e.g. Shkaratan, 2003: pp.54-60; Shkaratan & Yastrebov, 2007: pp.1423) with support from Russian Humanitarian Science Foundation⁴. Eventual sample sizes after all the necessary cleaning and correction amount to 2,009, 2,414, 2,491 и 2,199 respondents correspondingly.

Following existing convention in social mobility studies (Breen & Jonsson, 2005) I define social mobility as intergenerational changes in educational status and occupational class. For education I distinguish between the following three possible states: (1) complete secondary general and/or primary vocational education and below (which corresponds to ISCED levels between 0 and 4 (ISCED 1997)); (2) secondary vocational education (ISCED 5); (3) higher education and above (ISCED 5-6). Unfortunately, I could not differentiate among the lower levels of education owing to the fact that different categorizations have been adopted in different surveys.

For occupational class I employ a simplified version of the socio-occupational classification, which was coded in survey data. The version, which I am using in this paper, is given in Table 1. With several minor disagreements this classification can be equated with the famous EGP classes (Erikson, Goldthorpe & Portocarero, 1979), which I specify in Table 1 as well.

Table 1. Occupational classes.

No.	Occupational class	EGP rough analogy
1.	Small owners, employers and self-employed ¹	IV
2.	Upper-grade managers and professionals	I
3.	Middle-grade managers and professionals	II
4.	Supervisors and lower-grade professionals	V+IIIa
5.	Semi-professionals	IIIa
6.	Routine non-manual (technical) workers	IIIb
7.	Skilled manual workers	VI
8.	Semi- and non-skilled workers	VII

Notes: ¹ – Private ownership and employment were impossible during most of the Soviet era, however, people were legally allowed to become self-employed in the 1980s.

Social origins are defined in the following way. For educational intergenerational mobility I take the highest level of educational attainment of respondent's parents (or the single

⁴ RHSF grants No.02-03-18118e, 06-03-18010e and 13-03-18021e correspondingly.

parent if this was the case). For occupational intergenerational mobility I specifically distinguish between men and women, since patterns of inheritance for many types of careers are often gender-specific and disregarding this may downplay the role of social reproduction (Payne & Abbott, 2005). In cases, where data about occupational class of one of the parents was missing or where such data was uninformative with regard to the social origin (as is the case with the unemployed and retired), I allowed for corresponding substitutions between either father's or mother's occupational class⁵.

To study historical change in the patterns of social mobility I adopt a cohort design for my analyses. I extract cohorts, which are assumed to represent certain historical generations. To study the possible effects of certain historical periods I reconstruct only a fixed part of respondents' life courses by measuring their status characteristics (destinations) at age 30, because it allows treating my cohorts as real ones and enables a fair comparison of mobility patterns between respondents. Surprisingly, this nuance was overlooked in some earlier mobility studies, although it should be obvious that social mobility is a process that is highly dependent on age. Having a measure of attainment, which is fixed in time, therefore makes redundant a control for age, which would otherwise be necessary if the destinations are modeled only with current occupation (i.e. measured at the time of the survey). This also partly resolves the problem of distinguishing age effects from period and cohort effects (although I do recognize that the observed pattern of social mobility may still be subject to both the historical context, in which an individual is being raised, and the more immediate historical context, in which he or she attains a certain educational level or occupation).

By exploiting the cross-sectional design of the four repeated surveys (each respondent is uniquely represented in any given survey) and similar sample designs I first pool the data from four surveys to obtain a larger combined dataset (N=9,113). Each case was then assigned an additional weight in order to replicate the proportions of sex and educational attainment of the true cohorts of the Russian population⁶. Apparently, the respondents aged below 30 were filtered off in my analytical samples, hence yielding a smaller total sample (N=6,917). The pooling of data was expected to pay off both in the number of cohorts (generations) to be represented in my analyses and the power of statistical tests, and the strategy itself was informed by earlier studies (Gerber & Hout, 2004).

⁵ Since the number of missing and uninformative cases in my survey data was large, particularly with regard to occupational class (almost 25% for fathers and 15% for mothers), I am convinced that this was an appropriate strategy. It allowed me to use up to 90% of the total cases.

⁶ These proportions were obtained by averaging the corresponding proportions obtained from Russian Censuses in 2002 and 2010.

In extracting the cohorts I tried to keep a reasonable balance between their equal proportionality in the pooled sample (by keeping it at no less than 20%), its historical span and correspondence with a meaningful historical period. The results of this optimization are summarized in Table 2.

Table 2. Cohorts and periods.

Cohort birth years	Approximate historical period (period at age 30)	Average birth year	Share in the pooled dataset	N
1951 and older ¹	Before the 1980s	1942.6	24.0%	1,656
1952-1959	The 1980s	1955.3	28.4%	1,958
1960-1966.	1 st half of the 1990s	1962.7	22.4%	1,545
1967 ²	Late 1990s – beginning of 2000s	1972.9	25.0%	1,744

Notes: ¹ – min. value: 1926; ² – max. value: 1983.

The first cohort – i.e. born before 1951 – is, perhaps, the most ‘eclectic’, since it actually combines a variety of historical generations spanning from pre-war generations to people, who were born in the last years of the Stalin era. However, enabling more homogeneity among these cohorts was almost impossible, since they would anyways encompass the most tenuous part of the age distribution.

The second cohort – i.e. born between 1952 and 1959 – represents people, whose young age and maturation overlapped with Brezhnev’s era and partly the years of Gorbachev’s Perestroika. It is assumed to bear the trace of the late Soviet period, at the brink of the country’s collapse and the beginning of social and economic transformations in the 1990s.

The third cohort – i.e. born between 1960 and 1966 – is assumed to represent people, who completed their education and entered labor force in the 1980s and whose 30th anniversary overlapped with the turbulent 1990s, i.e. when the social structure of the Russian society underwent radical change.

Finally, the fourth cohort – i.e. born after 1967 – includes people, who completed professional education and entered labor market overwhelmingly in the post-Soviet years, and matured during the period of social and economic stabilization (i.e. beginning with late 1990s).

One additional reservation has to be made regarding the treatment of cohorts in the analyses that follow. Existing studies show that the risk of natural and premature mortality is particularly spread among the least advantaged people (Bessudnov, McKee & Stuckler, 2012), thereby naturally decreasing their representation in the samples at hand. Therefore, due to demographic reasons, people with more advantaged social backgrounds are likely to be overrepresented in the earlier cohorts.

The analytical part of the paper proceeds in the following way. First, I describe changes in absolute social mobility among men and women using simple descriptive methods. I then proceed with the study of relative social mobility, in which I rely exclusively on the methods of log-linear modeling⁷. This part is preceded with formal tests of heterogeneity in patterns of social mobility between men and women, in order to decide on the possibility of collapsing data and enabling a more parsimonious analysis. Finally, I explicitly test different substantive hypotheses about the historical change in (in)equality of opportunity in Soviet and post-Soviet Russia.

Results and discussion

Absolute social mobility

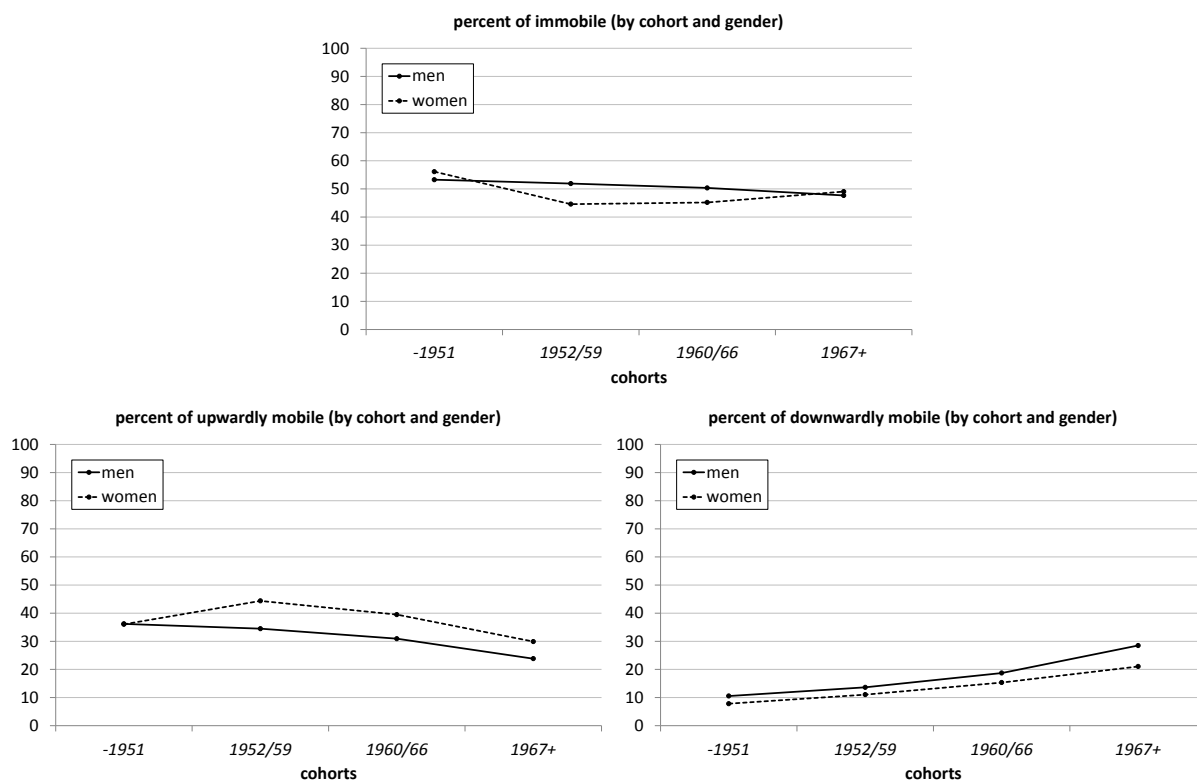
I distinguish three kinds of educational mobility by distinguishing between immobility, downward and upward moves. *Immobility* refers to the reproduction of parents' highest educational status in the next generation. *Downward* and *upward mobility* correspond to the decline and improvement of educational attainment respectively⁸. The rates of occurrence of different kinds of mobility in different cohorts are plotted in Figure 1.

Clearly the dominant pattern is that of the reproduction of educational status from generation to generation, which roughly corresponds to a half of educational transitions in each cohort. For men the reproduction of educational attainment relative to that of parents shows remarkable stability across the cohorts considered, whereas for women it was highest in the earliest Soviet cohorts, but then it slightly reduced and showed little change in the following cohorts. However, given the educational expansion (Figure 2) this stability in intergenerational reproduction of educational attainment can be taken as a sign of increasing influence of social origins on the probability of attaining the same educational level as parents (because under the assumption of constant inheritance of social advantage the rising level of education in each subsequent generation must have naturally decreased the share of people who reproduce their parents' social status).

⁷ All estimations were carried out using IEM software, which is available from its creator (*Vermunt* 1997) and can be downloaded freely from the Internet (<http://members.home.nl/jeroenvermunt/>). Also for replicability purposes all the data and routines employed in my analyses of relative social mobility can be downloaded from my personal archive (<http://tiny.cc/mobility>).

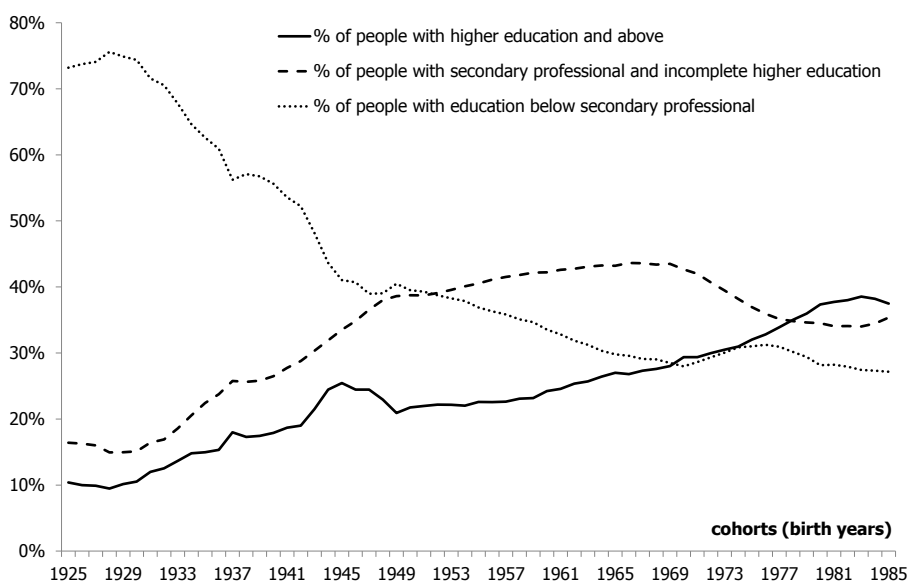
⁸ My estimates most likely downplay upward mobility, since I use the highest level of attainment for parents. However, I am mostly interested in assessment of cross-temporal change, and therefore, I believe, this should not affect my substantive results.

Figure 1. Changes in intergenerational educational mobility in absolute terms.



Source: author's calculations using survey data
 Note: the percentages are calculated from valid observations

Figure 2. Educational attainment of different cohorts (Russian population born between 1925 and 1985)

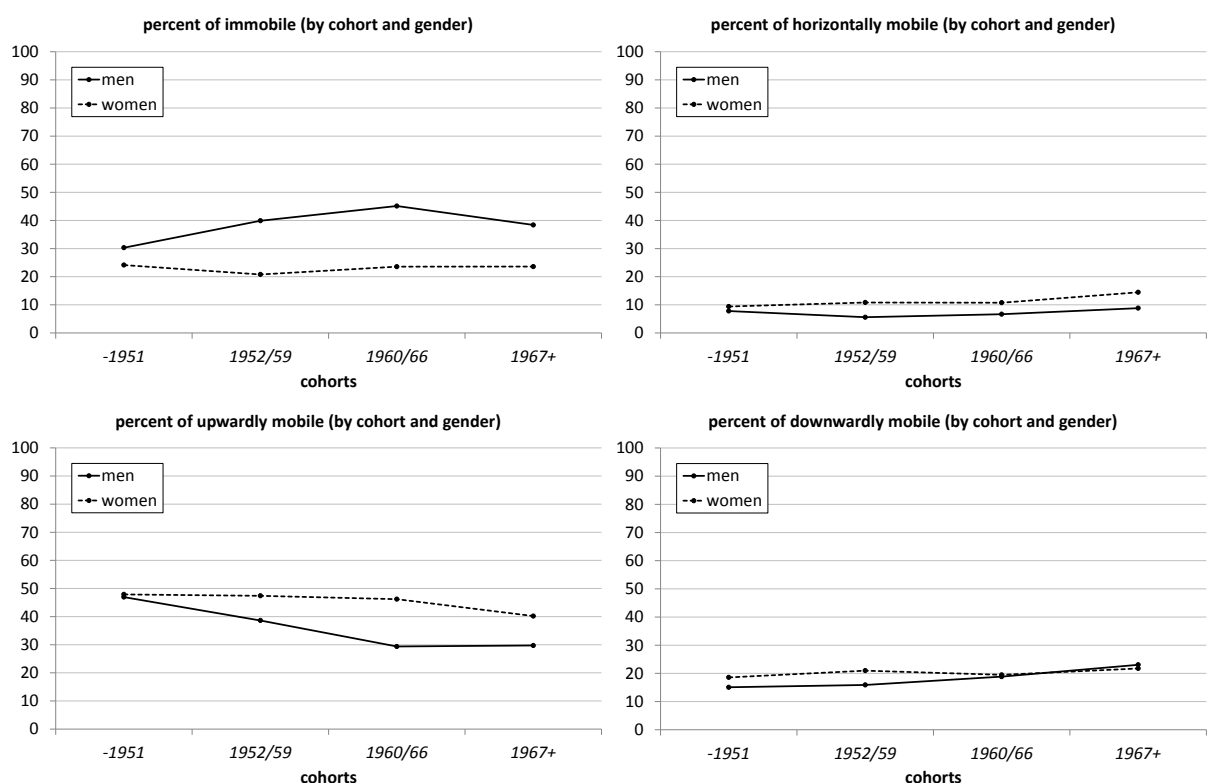


Source: author's calculations using micro-data from Russian census 2010.

On the other hand, the changes in the probabilities of upward and downward educational mobility are completely at odds with the straightforward implications of the educational expansion. The latter would imply that intergenerational upward mobility and downward mobility would be increasing and decreasing respectively following the natural growth of the average educational level from generation to generation. However, our data (Figure 1) reveal the opposite, and this latter evidence can therefore be taken as an indirect evidence of decreasing predictability of educational transitions conditional on parents' education. In any case, the evidence based on absolute mobility rates, which is presented here, does not rule out the structural effect of the educational expansion, but it will be explored below using log-linear models.

My data also reveals that upward educational mobility was more likely among women than among men beginning with cohorts born in the 1950s. This is not at all surprising given that the share of women with higher and secondary professional education was generally higher than the same share among men, thereby confirming that Soviet education system, indeed, succeeded in promoting women participation (Narodnoe hozjajstvo..., 1987: p. 419).

Figure 3. Changes in intergenerational occupational mobility in absolute terms.



Source and notes: see Figure 1.

Let us now have a look at occupational mobility. Unlike educational mobility, occupational mobility may be both vertical and horizontal. For precise definitions of different types of mobility the reader is advised to refer to Table 7, which summarizes the main logic. *Immobility* refers to the situations when children end up in exactly the same occupational class as parents (the diagonal cells of Table 7 marked with ‘3’). Univocal improvement of occupational class (i.e. *upward mobility*) implies improvement in either the level of skills and qualifications required, the level of responsibility and management or the level of autonomy, provided that it is not associated with the loss in either of these dimensions (the cells below the diagonal of Table 7 marked with ‘1’). In terms of various forms of capitals (Bourdieu, 1983; Grusky, 2001), e.g. economic, human, cultural, etc. this would correspond to a potential increase in the overall amount of capital in possession of individuals (in the case of our occupational classes it can only be a rough approximation; however, the precise estimates of these capitals using classification in Table 1 have been reported elsewhere (Shkaratan et al., 2009: Ch. 6)). Symmetrically, *downward mobility* corresponds to a potential loss in the overall amount of capital (the cells above the diagonal of Table 7 marked with ‘1’). Finally, *horizontal mobility* refers to the changes in occupational class that cannot be unambiguously classified as either downward or upward mobility for the fact that they may involve both gains in losses in different types of advantages (all cells in Table 7 marked with ‘2’). One example of such ambiguous intergenerational changes would, for instance, include a change from highly skilled labor force to a class of either small employers or self-employed.

The dynamics of different types of occupational mobility are plotted in Figure 3. As can be seen, the change of occupational class from parents to children was the usual case both in Soviet and in post-Soviet Russia. Remarkably, this would most often involve a significant change in social ranking, since horizontal mobility was a rare event.

The dominant pattern in intergenerational occupational mobility in all represented cohorts was clearly upward. However, the intensity of such upward movement among men began to decline already in the Soviet years and was particularly low for the cohorts born between 1960 and 1966, i.e. generations, which attained their occupations already in the post-Soviet years at the time of radical structural and institutional changes. Many higher-status occupations were washed away, thereby naturally leading to higher risk of downward mobility as well as lower probability of upward moves. This is additionally illustrated in Table 3, which contains the distribution of occupational classes at age 30 for different cohorts. It shows that the prospects of mobility deteriorated largely because of significant contraction among middle-grade professionals and expansion of the share of semi-professionals and non-manual routine workers.

At the same time, it should be recognized that these unfavorable transformations in the occupational structure could also partly be compensated by a steady reduction in the share of semi- and non-skilled workers and expanding share of employers and self-employed.

Table 3. Occupational class at age 30 (by cohorts).

Occupational class	Cohorts			
	-1951	1952/59	1960/66	1967+
1. Small owners, employers and self-employed ¹	6.3	7.2	11.3	10.9
2. Upper-grade managers and professionals	4.8	3.4	3.0	3.6
3. Middle-grade managers and professionals	19.7	16.4	13.8	13.4
4. Supervisors and lower-grade professionals	7.3	7.4	8.3	7.3
5. Semi-professionals	12.2	15.7	14.3	17.9
6. Routine non-manual (technical) workers	4.7	7.0	7.0	8.6
7. Skilled manual workers	26.6	28.6	30.3	28.1
8. Semi- and non-skilled workers	18.3	14.2	12.2	10.3

Notes: ¹ – see Table 1.

All of the above partly corresponds to earlier studies carried out with other data (Gerber & Hout, 2004; Kozyreva, 2013), albeit my data reveals no significant deterioration in mobility prospects among women (Gerber & Hout, 2004). Women also appear to have enjoyed better opportunities than men throughout both Soviet and post-Soviet periods, which is consistent with the evidence for educational mobility and can also be explained by the fact that better education opens access to better occupations. However, complementary to the previous studies I find that reduction in upward social mobility among men is not an exclusive feature of the post-Soviet period (Gerber & Hout, 2004) and that it began already in the Soviet years.

To summarize, Russia featured relatively high levels of absolute social mobility during both the Soviet and the post-Soviet era, and much of this mobility corresponds to the change in the structure of opportunities between generations. However, the analysis of absolute mobility does not reveal whether these changes reflect increasing or decreasing inequality of opportunity between different historical periods, particularly for the fact that it does not rule out the effect of the shifting structure of opportunities. To address this problem I now turn to the study of relative social mobility.

Relative social mobility

Gender differences in relative social mobility

In the first step I formally test for gender differences in the patterns of relative social mobility, i.e. the association between social origins and social destinations net of the structural shifts. Previous research in Russia (Gerber & Hout, 2004) and other countries (Breen (ed.), 2004;

Erikson & Goldthorpe, 1992) has shown that such differences are often negligible, thereby reflecting some universal logic, through which families influence the life chances of their children irrespectively of their gender. However, the purpose of this formal test is not purely heuristic: in case no significant differences are found in my data, I intend to pool the sample for men and women together in order to facilitate the following analysis.

Table 4. Gender heterogeneity tests.

Model specifications	L^2	df	BIC	Δ
A. Educational mobility				
		N = 6,722		
1. GPO + GPD + POD	<u>15.2</u>	<u>16</u>	<u>-125.8</u>	<u>1.4%</u>
2. [1] + GOD	12.7	12	-93.1	1.4%
3. [1] + GOD uniform difference by P	12.7	11	-84.2	1.4%
B. Occupational mobility¹				
		N = 6,730		
1. GPO + GPD + OD	<u>302.6</u>	<u>252</u>	<u>-1,937.9</u>	<u>7.0%</u>
2. [1] + GOD uniform difference by P	356.3	251	-1861.4	7.0%

Notes:

G = gender. P = cohort. O = origins. D = destinations.

Statistics for selected models are underlined.

O/D description: for type A models – education of parents/education of respondents; for type B models – occupational status of father or mother/occupational status of respondent at age 30.

¹ – Because of the technical complexities involved with the estimation procedure, occupational classification was reduced to 7 levels instead of 8 (by combining classes 2 and 3) in order to reduce the dimensionality of contingency tables. For the same reason no tests for the semi-saturated models are provided GPO+GPD+POD(+GOD).

I test for gender heterogeneity in social mobility patterns by examining the frequencies in the corresponding gender-by-period-by-origin-by-destination (GPOD) contingency tables. The frequencies are modeled using log-linear models to enable control over the effect of different marginal distributions. For the specific test applied here I examine whether the net association between origins and destination differs between men and women: this corresponds to the models, which allow for this association to vary between gender groups both irrespectively (single GOD term) and conditional on the cohort (uniform difference of the GOD term across cohorts).

The results of these formal tests are provided in Table 4. The table contains all the conventional statistics that are used for informing researchers on the goodness-of-fit of different log-linear models: the Likelihood Ratio (L^2), the Bayesian Information Criterion (BIC) and the Dissimilarity Index (Δ) (which is not a statistic, strictly speaking, and is just a complementary indicator equal to the share of cases misclassified by a given model). Following others (Raftery, 1986; Gerber & Hout 2004), I mostly rely on the BIC criterion, because, given sufficient sample size, unlike the L^2 -test, it allows optimizing between the parsimony of a model and its statistical adequacy (i.e. it penalizes more complex models).

Judging from statistics provided in Table 4 we can see that none of the models, which imply differences in the origin-destination association between men and women (A2-3, B3), lead

to a substantial improvement in explaining the data. BIC statistics are highest for the models, which imply no difference. Moreover, there is clearly no improvement according to the dissimilarity index. Therefore I conclude that the pattern of relative social mobility is, indeed, similar among men and women, and hence I can neglect this distinction in the following analysis.

Relative educational mobility

In Table 5 I test different assumptions about the pattern of relative educational mobility. To compare the change in the type of association between different periods I distinguish between models that imply no change, heterogeneous change and uniform difference (introduced in log-multiplicative form (Xie, 1992; Erikson & Goldthorpe, 1992)) in each hypothetical pattern of this association.

Table 5. Log-linear models for relative educational mobility.

Model specifications	L^2	<i>df</i>	BIC	DI
A. Conditional independence: PO + PD	919.9	16	778.9	14.2%
B. [A] + OD, full interaction				
1. No change	8.1	12	-97.7	1.2%
2. Uniform change	7.2	9	-72.2	1.2%
C. [A] + OD, quasi-perfect mobility				
1. No change	18.5	13	-96.1	1.7%
2. Heterogeneous change	12.7	4	-22.6	1.1%
3. Uniform change	17.5	10	-70.6	1.6%
D. [A] + OD, quasi-R+C (R=C)				
1. No change	18.4	11	-78.5	1.7%
2. Heterogeneous change	13.7	5	-30.3	1.3%
3. Uniform change	14.1	8	-56.4	1.4%
E. [A] + OD, quasi-R+C				
1. No change	8.0	10	-80.1	1.2%
2. Heterogeneous change	2.4	4	-32.8	0.7%
3. Uniform change	<u>2.2</u>	<u>7</u>	<u>-59.5</u>	<u>0.6%</u>

Notes:

Statistics for the preferred model are underlined. N = 6,728.

As can be seen from Table 5, the assumption implying independence between origins and destination (models A, which omit the OD association term) clearly does not hold – corresponding models have the poorest fit among all other models. The models of quasi-perfect mobility (C) – the models which allow a certain degree of inheritance in educational status, but assume independence beyond the diagonal cells of the mobility table – appears to be more adequate. They are also the closest to the semi-saturated models (B), which imply full interaction between rows (origins) and columns (destinations), and therefore most closely reproduce the observed frequencies of the underlying contingency table (the full interaction models are used

only for illustrative purposes and serve as baseline models, since they achieve higher realism at the cost of their excessive complexity).

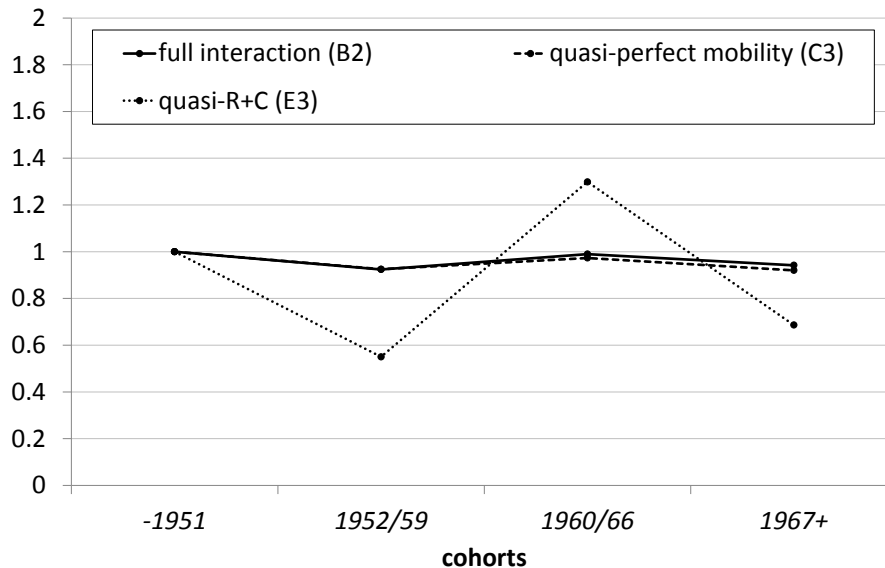
Nevertheless, the choice of the most appropriate model from Table 5 is not straightforward, since all of the goodness-of-fit criteria behave rather inconsistently. On the one hand, the parsimony of the quasi-perfect mobility model which assumes the temporal stability of the relative mobility pattern (C1) is attractive according to the BIC criterion. On the other hand, the explanatory power of the other models in Table 5 is clearly superior according to L^2 statistics and dissimilarity indices. For instance, consider models E, which assume a certain degree of inheritance as do quasi-perfect mobility models, but slightly adjust the assumptions of the latter to allow a certain degree of association between origins and destinations (rather than their pure independence). In models E this association is formalized in the form of Goodman's RC type I association (Goodman, 1979), that is: they assume a certain hierarchy between different values of educational status or, in other words, imply that higher-order intergenerational educational transitions are much less likely for the people coming from lower-educated families, than for the people coming from average-educated families. These models clearly perform better according to L^2 criterion (significantly lower values for a small reduction in the number of degrees of freedom) as well as the share of cases misclassified with the models.

The possibility of such ambiguous situations, including applications to log-linear analysis, has already been discussed in the literature (e.g. Weakliem, 1999; Breen, 2004: p.27). However, no single solution exists and the final judgment must rest on additional arguments. First, I opt for more complex models that allow for the pattern of association to vary between the cohorts considered, particularly the uniform difference models, which condense the magnitude of this change into a single simple parameter φ_k , or *unidiff* for short. Second, I find the assumption about quasi-perfect mobility to be an over-simplification, which also fits poorly with previous evidence about intergenerational educational inequality in Soviet and post-Soviet Russia (Gerber & Hout, 1995; Roshchina, 2012). Therefore my final choice of the preferred model rests with the one, which 1) implies some degree of association between origins and destinations beyond the simple reproduction of educational status and 2) allow for the magnitude of this association to change uniformly between cohorts (which is model E3 in Table 5).

Anyhow, in order to explore the change in the association between the education of parents and children across cohorts, in Figure 4 I plot the unidiff parameters from several selected models. These parameters reflect the extent to which the association (as measured by the corresponding pattern implied with a given log-linear model) uniformly increases or decreases from one cohort to another. However, it has to be noted that comparing the magnitude of these

parameters between cohorts only makes sense within the models, as each of the models implies a different pattern of association and therefore the undiff parameters across models must be treated with caution.

Figure 4. Changes in relative educational mobility (*undiff* parameters for selected models of association).



Notes: Vertical axis – scaled *undiff* parameters (first cohort set at 100%).

As Figure 4 informs the general pattern of change in relative educational mobility is the same both for all of the models: the quasi-perfect mobility model which emphasizes the inheritance pattern (C3), the Goodman’s RC type I association model which more generally implies that higher-rank educational transitions are associated with higher educational level of parents (E3), and the baseline model which allocates a unique association parameter for each cell of the underlying mobility table (B2). According to this pattern the barriers to intergenerational social mobility in terms of education have decreased among the cohorts born between 1952 and 1959 relative to the cohorts born before 1951. However, they increased already for the later cohorts (born between 1960 and 1966), which were completing their education in the last years of the Soviet era. All of this corresponds to earlier findings, which acknowledged the rise of social inequality in education (Gerber & Hout, 1995) and the general deterioration of state capacity to sustain effective equalization in the late Soviet society (Matthews, 1989). For the cohorts born after 1967 that largely represent people who completed their education in the post-Soviet era the educational status of parents appears to have become of lesser importance. To make sure that this decrease in association is attributable to partial overlapping with the late Soviet cohorts, I additionally resampled the most recent cohorts and measured the association

using Spearman's correlation coefficient for the cohorts born after 1980s and the cohorts born between 1960 and 1970: with a decrease of this correlation from 0.35 to 0.26 it corresponds to the pattern explicated in Figure 4.

However, in spite of the changes outlined above, several pieces of evidence prevent me from treating them as substantial. First, except for the Goodman's RC type I association model, the absolute magnitude of changes is quite low: if the uniform difference is to be assumed across the whole structure of the association pattern its differences across cohorts does not exceed 7% of the values estimated for the first cohort. Second, the formal statistical tests presented in Table 5 already indicate that within each kind of models the ones which imply no change provide the optimal fit. Even the more realistic models, which imply uneven change of the association pattern across cohorts (C2, D2 and E2), do not substantially improve the fit compared to the no-change models. Therefore I conclude that the general pattern of association between the education of parents and the education of children remained rather stable across both the Soviet and the post-Soviet generations.

Relative occupational mobility

Here I explore relative occupational mobility. Different assumptions about the pattern of association between parents' occupational class and children's occupation class as well as its temporal change are tested with the models listed in Table 6.

As with the educational mobility the model which implies no association between origins and destination (model A) is entirely inadequate. For instance, the model corresponding to quasi-perfect mobility (model C, reproduction of parents' occupational class with no association beyond the diagonal) is clearly more realistic.

Following some conventional approaches (Hout, 1983: pp. 37-51; Powers & Xie, 2008: pp. 111-119) I refine the model of quasi-perfect mobility to allow a more complex pattern of association with a custom topological model. The contours of the simpler version of this model are provided in Table 7, and I have already referred to this model for the definitions of different types of absolute mobility. The figures in the table correspond to three different levels of association parameters (each estimated from data), which are assumed to capture the inheritance pattern (3), the short-range mobility around the diagonal (2) and a common magnitude of association for the rest of the mobility table (1). Substantively I assume that people are more likely to reproduce their parent's occupational class or end up in proximate class locations, whereas farther transitions would be equally less likely.

Table 6. Log-linear models for relative occupational mobility.

Model specifications	L^2	df	BIC	DI
A. Conditional independence PO + PD	1,267.8	196	-436.6	18.2%
B. [A] + OD, full interaction				
1. No change	206.0	147	-1,072.3	5.6%
2. Uniform difference	203.8	144	-1,048.4	5.5%
C. [A] + OD, quasi-perfect mobility				
1. No change	522.7	188	-1,112.1	10.4%
2. Heterogeneous difference	486.8	164	-939.4	9.2%
3. Uniform difference	520.8	185	-1,088.0	10.3%
D. [A] + OD, topological core I				
1. No change	593.3	194	-1,093.7	11.4%
2. Heterogeneous difference	588.0	188	-1,046.9	11.6%
3. Uniform difference	591.6	191	-1,069.3	11.6%
E. [A] + OD, quasi-RC2 (R=C)¹				
1. No change	369.2	188	-1,265.6	7.8%
2. Heterogeneous difference	337.1	167	-1,115.1	7.4%
3. Uniform difference	365.8	185	-1,242.9	7.6%
F. [A] + OD, quasi-RC2¹				
1. No change	350.2	182	-1,232.4	7.5%
2. Heterogeneous difference	309.6	161	-1,090.4	6.9%
3. Uniform difference	345.3	179	-1,211.2	7.3%
G. [A] + OD, topological core II				
1. No change	<u>357.7</u>	<u>193</u>	<u>-1320.6</u>	<u>7.6%</u>
2. Heterogeneous difference	348.0	184	-1,252.1	7.4%
3. Uniform difference	356.7	190	-1,295.5	7.6%
H. PO + PD + OD, quasi-RC2²				
1. No change	447.3	236	-1,625.7	8.3%
2. Heterogeneous difference	397.9	209	-1,437.9	7.5%
3. Uniform difference	443.1	233	-1,603.6	8.1%
I. PO + PD + OD, topological core II				
1. No change	<u>454.3</u>	<u>249</u>	<u>-1,732.8</u>	<u>8.3%</u>
2. Heterogeneous difference	443.7	240	-1,664.4	8.0%
3. Uniform difference	453.2	246	-1,707.6	8.3%

Notes:

Models A-G were estimated using basic classification (Table 1). Models H-I were estimated using extended classification (i.e. including '9. Unemployed, retired and other miscellaneous groups' and '10. Missing').

Statistics for preferred models are underlined. N for models A-G = 5,978. N for models H-I = 6,528.

¹ – diagonal semi-blocked (diagonal association effects assumed equal).

² – pseudo-diagonal semi-blocked (pseudo-diagonal association effects assumed equal).

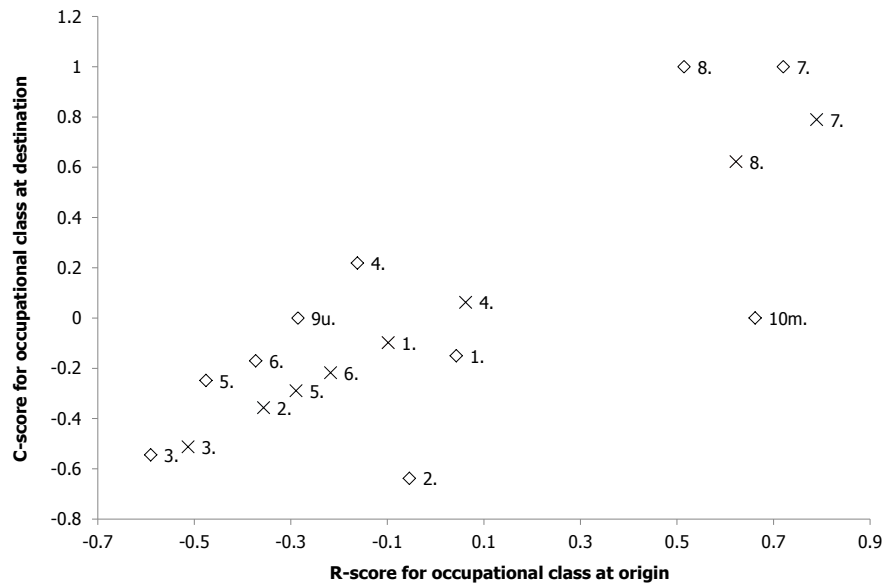
The models which reproduce the pattern of association described in Table 7 correspond to models labeled D in Table 6. The models, however, perform poorly, and do not provide an optimal fit compared with more simple quasi-perfect mobility model.

In the next step I apply Goodman's RC type II association model (Goodman, 1979), which allows revealing a latent hierarchy behind the row and column categories. More generally, the estimation procedure implied with the model assigns scores to the row and column categories and optimizes these scores so that resulting association parameters closely reproduce the observed frequencies in the contingency table. The variants of the RC2 models supplied in Table 6 contain a separate set of association terms which block the main diagonal (hence the names of the models: quasi-RC2).

Table 7. Topological core I of relative occupational mobility.

Occupational class (origin)	Occupational class (destination)							
	1	2	3	4	5	6	7	8
1. Small owners, employers and self-employed	3	2	2	2	1	1	1	1
2. Upper-grade managers and professionals	2	3	1	1	1	1	1	1
3. Middle-grade managers and professionals	2	1	3	1	1	1	1	1
4. Supervisors and lower-grade professionals	2	1	1	3	2	1	1	1
5. Semi-professionals	1	1	1	2	3	1	1	1
6. Routine non-manual (technical) workers	1	1	1	1	1	3	2	1
7. Skilled manual workers	1	1	1	1	1	2	3	1
8. Semi- and non-skilled workers	1	1	1	1	1	1	1	3

Figure 5. Rankings of occupational classes according to R- and C-scores.



Notes: Symbol ‘x’ for scores from model E3, symbol ‘◇’ for scores from model H3 (Table 6). For labels of occupational classes inquire with Table 1. 9u – Unemployed, retired and other miscellaneous groups, 10m – Missing. C-scores for 9u and 10m were artificially set at zero.

The statistics in Table 6 suggest that RC2 models perform fairly well in explaining the data. Moreover, the more parsimonious symmetric version of these models (E), which constrains the sets of row and column scores to be identical, can be preferred to the asymmetric one (F). Substantively this means that factors, which make certain occupational classes attractive to individuals, exert similar influence as do the factors, which constrain or foster outward mobility from these classes. In other words, equally distant occupations in terms of attractiveness are assumed to be equally distant in terms of permeability of occupation boundaries between them.

I visualize the distribution of row and column scores obtained from the estimation procedure in Figure 5. The absolute values of these scores have no precise meaning, but the

relative difference between any two values reflects the social distance between the occupational classes. Larger differences correspond to greater barriers between any two classes, and hence the lower likelihood of social mobility between them.

Consider the diagonal of ‘×’ which corresponds to the estimated row and column scores from the model E3 in Table 6. Clearly, the starkest differences are found between manual (classes 7 and 8) and non-manual occupations (all other classes). Accordingly, the lowest likelihood of intergenerational transitions should be expected between the working class and highly skilled professionals (classes 2 and 3). Intermediary in this respect are all other non-manual occupations, including owners, employers and self-employed. In fact, given some minor disagreements between our classification of occupations and the class schema employed in the study of Gerber and Hout (2004), the distribution of row and column scores plotted in Figure 5 has plenty of similarities with the pattern produced in their article (Ibid, p. 692).

Until now I have dealt with the models applied to the sample of observation that excluded missing information and uninformative cases. However, such cases account for approximately 10% of the original sample, which is quite substantial and may therefore bias the results. The loss of the information can partly be avoided by including such cases as separate categories. Therefore I extend the occupational classification with two additional categories based on the information that was possible to extract from the original classification contained in the datasets: i.e. ‘missing’ and ‘unemployed, retired and other miscellaneous groups’. They are applied only to parental occupational class, since the loss of information about respondents’ current occupational status was minimal in the original sample. I then estimate models similar to the models E above and additionally plot the row and column scores from this estimation on Figure 5 for comparison (in Table 6 this would correspond to the models H). The dots corresponding to the scores from this estimation are marked with symbol ‘◇’. Clearly extending the sample does not lead to substantively different results. The only clear difference is the difference in the relative position of upper-grade managers and professionals on the horizontal axis, which reflects the latent ordering of classes in the parent generation. Substantively this could mean that children of upper class parents exhibit a less predictable pattern of mobility (i.e. are likely to end up in a greater variety of other occupational classes) rather than would be suggested with the output from the models estimated with a restricted sample. However, without knowing precisely the composition of the two additional categories that reshape the distribution of the row scores, it is impossible to supply a more definitive judgment. Figure 5 tentatively suggests that respondents, who did not (or were not able to) provide information about their parents, exhibit patterns of social mobility quite similar to those as exhibited by manual workers (and may as well be similar

to them in terms of social composition). On the other hand, the unemployed, retired and other miscellaneous groups, have much more in common with non-manual occupations.

In the next step I use the results from this preliminary analysis to infer a more fine-tuned pattern of relative occupational mobility. This strategy resembles the search for the core model of social fluidity undertaken by Erikson and Goldthorpe (1992), but it more specifically applies to the Russian context and the occupational classification adopted in this study. This results in my second topological model, which is summarized in Table 8. For the sake of parsimony I allow only four possible levels of the association parameter. The general association pattern is allowed to be symmetrical following the symmetries revealed with the RC2 models. The cells filled with ‘4’ in Table 8 correspond to a specific pattern of inheritance to be found among certain occupational classes, in which the tendency to reproduce parents’ social class is expected to be the strongest. The cells filled with ‘3’ correspond to a slightly extended area of social reproduction (in Table 8 these areas are additionally highlighted with color). This implies that mobility between proximate classes is expected to be relatively high; however, any farther transition should be far less likely owing to the greater social distances that separate corresponding classes. Finally, figures ‘2’ and ‘1’ are used to distinguish even further degrees of detachment between different occupations. In sum, I would expect the estimated values of the corresponding association parameters to be aligned with their nominal ordering (i.e. the highest value for the parameter marked with ‘4’ and the lowest for the parameter marked with ‘1’).

Table 8. Topological core II for relative occupational mobility.

Occupational class (origin)	Occupational class (destination)							
	1	2	3	4	5	6	7	8
1. Small owners, employers and self-employed	3	2	2	1	2	2	1	1
2. Upper-grade managers and professionals	2	4	3	3	2	1	1	1
3. Middle-grade managers and professionals	2	3	4	3	2	2	1	1
4. Supervisors and lower-grade professionals	1	3	3	4	2	2	2	1
5. Semi-professionals	2	2	2	2	3	3	1	1
6. Routine non-manual (technical) workers	2	1	2	2	3	4	2	2
7. Skilled manual workers	1	1	1	2	1	2	4	3
8. Semi- and non-skilled workers	1	1	1	1	1	2	3	4
9. Unemployed, retired and other miscellaneous groups	2	2	2	2	2	2	1	1
10. Missing	1	1	1	1	1	1	3	3

Substantively the model of association presented in Table 8 can be commented as follows. First, a peculiar pattern of relative social mobility is expected with regard to small

owners, employers and self-employed. In particular, I expect them to be less prone to inheritance (and the class itself more permeable to other groups) and have relatively fewer and less pronounced boundaries with other occupational classes. I explain this by the absence of any social filters or organizations that sanction the acquiring of a corresponding occupational status, as well as lower relevance of human and cultural capital, which are specific to other occupational classes.

The next ‘big area’ comprises of managers and professionals of various sorts. I expect that mobility within this area would be quite intensive, because people who fill these occupations share many similarities in terms of the nature of work, skill requirements, shared social networks, lifestyles, etc. In addition, mobility within that area may be facilitated through internal labor markets, e.g. the possibility of promotions within organizations.

Managers and professionals are then separated from the group of semi-professionals and routine non-manual workers, and I expect the exchanges between this group and the one above to be less likely than within each of them, because of the starker differences in the above mentioned status characteristics.

Finally, the intensity of exchange between skilled professionals and manual workers is expected to drop even further, although I do allow that for certain occupational classes this social distance may vary (note the corresponding gradient of ‘1’s and ‘2’s in Table 8).

As I have noted earlier, there is a particularly pronounced divide between manual and non-manual workers. However, in the topological model I additionally allow for the boundaries between working class and routine non-manual workers to be blurred, because of many similarities that they share with respect to human capital requirements and the nature of labor.

Finally, I incorporate in Table 8 the two miscellaneous categories discussed earlier (9 and 10) and model their similarities with other occupational classes revealed in accordance with estimation results plotted in Figure 5.

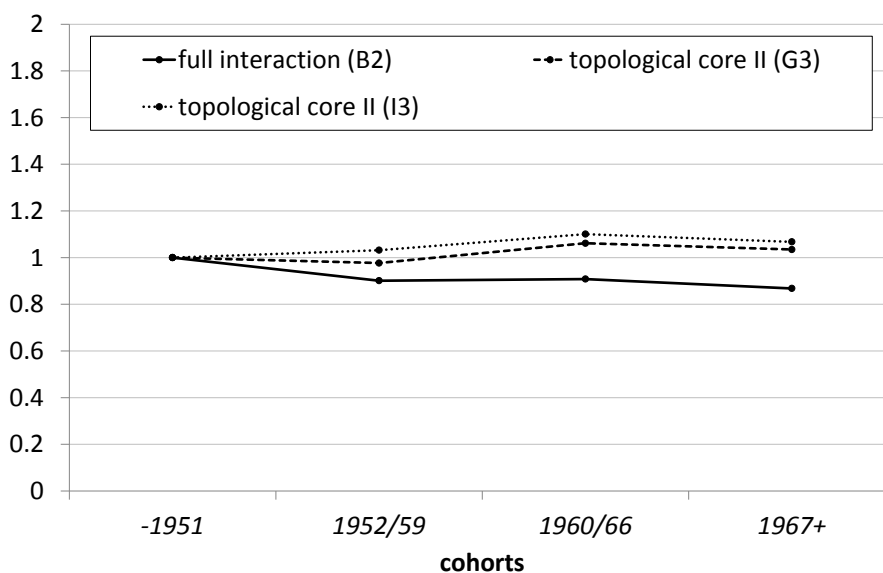
The resulting topological model, on the one hand, takes into account that the boundaries between different occupational classes may appear to be slightly more complex than suggested by some latent hierarchy, i.e. obtained with the RC2-models. On the other hand, this topological model is far more parsimonious and consumes only 3 degrees of freedom instead of 14 as is the case with the RC2-model.

According to all of the statistical criteria presented in Table 6, the models estimated based on the pattern of association presented above (G and I) are clearly superior to any other model discussed earlier. Moreover, corresponding association parameters (‘1’ through ‘4’) meet their expected values in different modifications of both models. For instance, for model G1, log-linear

OD association parameters ‘1’ through ‘4’ are equal to -0.30 , 0.00 , 0.37 and 0.97 respectively, whereas for model I1: -0.23 , 0.00 , 0.40 and 1.00 respectively (in both cases the parameter ‘2’ was artificially set to zero due to normalization constraints). Therefore I conclude that my schematic model of relative occupational mobility which is presented in Table 8 is a good approximation of reality.

Having defined the core pattern of social fluidity I now explore its cross-temporal change. The models, which assume no variance between cohorts, clearly provide an optimal fit, and therefore, statistically speaking, there is no indication of any substantial change between historical periods as was the case with educational mobility. Again I plot the unidiff parameters for several selected models in Figure 6, but they too reveal no obvious pattern of difference between cohorts. Both topological models inform that if any change in relative social mobility was there, it would most likely correspond to a subtle decrease of mobility for the post-Soviet cohorts. For instance, assuming the uniform difference of the association pattern implied with the second topological model (which provides the best fit among the plotted ones), the largest difference amounts to 10% of the association parameter values estimated for the first cohort. On the other hand, a more complex pattern of mobility implied with the saturated (full interaction) shows that the association between origins and destinations was highest in the earliest Soviet cohorts, however, there was practically no change in the following ones.

Figure 6. Changes in relative occupational mobility (*unidiff* parameters for selected models of association).



Notes: Vertical axis – scaled *unidiff* parameters (first cohort set at 100%).

In any case, this evidence contradicts the earlier evidence, according to which relative occupational mobility decreased substantially from the Soviet to post-Soviet period (Gerber & Hout, 2004). According to this evidence the association between origins and destinations has risen by almost 26% (although with a standard error of 10 percentage points: Ibid, p. 694), which is far from the magnitude of change illustrated in Figure 6. However, there are several reasons for such a strong departure from our results. First, Gerber and Hout use different data and rely on a slightly different variant of occupational classification (they use a modified EGP schema), which in turn leads to different conclusions about the general association pattern. Second, Gerber and Hout rely on a survey-to-survey rather than cohort-to-cohort comparative strategy in their analysis and measure destinations in terms of respondents' current occupational status. Although they recognize that cohort replacement makes their comparative strategy problematic and attempt to rule it out by exploring changes across cohorts, their data does not allow properly discriminating between cohort and age effects. In this study using retrospective information I measure occupational class at a fixed age in respondents' life course, which is more appropriate for inferring period change based on comparison of cohorts.

Apart from the contradiction with Gerber and Hout (2004) I must also admit that the results presented do not conform to my initial hypotheses, according to which I expected a Z-like pattern of change in relative social mobility across the four cohorts compared. It appears that even the turbulent context of the 1990s and the reshaping of Russia's social structure which followed the market transition barely undermined the regularities by which advantage is passed from one generation to another. The structure of relative occupational mobility in Soviet and post-Soviet Russia thus shows more stability than change, which echoes earlier theoretical and empirical arguments of Erikson and Goldthorpe (1992), but also limits the generalizability of Sorokin's propositions regarding the effect of revolutionary social events (Sorokin, 1959).

Conclusions

The aim of this study was to provide a more extended account of the evolution of (in)equality of opportunity in Soviet and post-Soviet Russia, than previously existed in the literature. Rather than comparing the patterns of social mobility in Russia with the patterns observed in other countries (as in Marshal, Sydorenko & Roberts, 1995) or comparing the pre-transition and the post-transition period (as in Gerber & Hout, 2004), I additionally explore the dynamics of change both within the Soviet era and the post-Soviet era. By broadening the

historical perspective I provide the opportunity to test additional theoretical arguments regarding the relationship between social mobility and the changes in historical and institutional context.

Based on several earlier studies in post-socialist countries including earlier research on Russia, I anticipated (1) a trend towards lesser (rather than greater) openness in the late years of the Soviet era, (2) a temporary discontinuity of mobility patterns during the turbulent 1990s and (3) the ‘tightening up’ of social mobility regime in the more stable years of Russia’s post-Soviet history. The trend towards increasing intergenerational transmission of social inequalities corresponds to the lasting idea in social stratification research, according to which more resourceful families always adapt to changing contexts and find strategies to secure advantage for their children (e.g. Featherman, Jones & Hauser, 1975), and as long as nothing radically intervenes with this process, it would correspond to stable or even decreasing social mobility in society. Although equalization was a strong ideological objective in Soviet Russia, little was done in its post-WWII history to promote this ideal more effectively compared to the earlier periods. This stability could have been undermined by the radical social change brought by the market transition in the 1990s: previous strategies of social reproduction might have become obsolete, thereby temporarily leading to more chaotic and unpredictable patterns of social mobility. This corresponds to the classical argument of Sorokin (1959), who maintained that the stability of social mobility can be undermined by powerful social shocks, e.g. caused by such dramatic developments as wars and revolutions. Finally, the stabilization of social structure in the late post-Soviet period and increasing competition of families in the market context should have again increased the relevance of social origins for more successful transitions.

Using retrospective survey data I compared the patterns of intergenerational educational and occupational mobility across four cohorts, which represent different historical periods both in Soviet and post-Soviet Russia and therefore provide the necessary leverage for exploring the above mentioned dynamics. I relied on the methods of log-linear analysis to rule out the change in social mobility which was naturally caused by the shifting of educational and occupational structures across generations.

Remarkably, the findings of my study come at odds with my initial hypotheses and the pattern previously documented by other scholars (Gerber & Hout, 2004). Defined either in terms of educational or occupational attainment the general pattern of association between parents’ and children’s social characteristics remained rather stable over time. This finding has proven to be robust 1) under competing assumptions about the overall pattern of relative social mobility and 2) using different sample arrangements (i.e. by incorporating missing and uninformative cases in the analysis). Differences in data and methodologies employed can possibly account for the

inconsistencies with the previous findings. However, unlike Gerber & Hout (2004) in this study I use retrospective information to measure occupational class at a fixed age in respondents' life course, which is more appropriate for inferring period change based on comparison of cohorts. Therefore I am tempted to conclude that relative chances of educational and occupational mobility from different social origins did not change so much between different generations of Russians. And although further evidence might be needed to better discriminate between existing evidence and theories, the findings of the current study should be viewed as conforming with 'stability' arguments in social mobility research (e.g. Featherman, Jones & Hauser, 1975; Erikson & Goldthorpe, 1992; Shavit & Blossfeld (eds.), 1993).

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Gordey Yastrebov

National Research University Higher School of Economics (Moscow, Russia).

Laboratory for Comparative Analysis of Post-Socialist Development.

Senior research scientist.

E-mail: gordey.yastrebov@gmail.com

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