

10. The effects of parental social background on labour market outcomes in Russia

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10.1 INTRODUCTION

A century ago Russia was a highly stratified society with distinct groups of aristocracy, clergy, merchants, urban intelligentsia, industrial workers and peasants. Although some degree of social mobility existed (Mironov and Eklof 2000), the differences among social groups were clearly defined in terms of both economic resources and social status. One of the first decrees issued by the Bolsheviks in November 1917 abolished all estates, ranks and titles, and proclaimed all individuals in the new Soviet Republic to be equal citizens. Following the Marxist dogma, the Bolsheviks aimed to create a classless society in which all economic bases for social inequality would be removed. A system of ‘proletarian dictatorship’ was established that discriminated against members of the former privileged classes of the aristocracy, clergy and bourgeoisie. Some of them died during the Civil War, but many others left Russia. According to different estimates, the number of emigrants varied between 1 and 3 million (McKeown 2004). Some of those who stayed were prosecuted in the 1920s and 1930s.

Were the equalizing policies of the early Soviet state successful? To some extent, the answer is ‘yes’. The physical removal of the former privileged classes allowed rapid educational and social mobility for a considerable number of individuals with peasant and working-class backgrounds (Fitzpatrick 1979). The industrialization of the 1930s led to a massive migration of agricultural workers to cities and transformed Russia into an industrial society. On the other hand, social inequalities hardly disappeared. As early as 1937, Trotsky observed:

The thousand-year-old caste barriers defining the life of every man on all sides – the polished urbanite and the uncouth muzhik, the wizard of science and the day labourer – have not just been preserved from the past in a more

or less softened form, but have to a considerable degree been born anew, and are assuming a more and more defiant character. (Trotsky 1937 [1972])

Unfortunately, there are limited data available for social researchers to quantitatively assess the level of inequality present in Soviet society. Official Soviet statistical publications only provide data on the proportions of workers, peasants and white-collar workers, without giving any more detailed information on the occupational structure and degree of inequality within those groups. However, early studies based on the secondary analysis of some rudimentary statistics published in the USSR, as well as qualitative and historical evidence, undoubtedly indicate the presence of considerable stratification and inequality in the post-war Soviet society (Connor 1979; Dobson 1977; Yanowitch 1977; Lenski 1994).

The collapse of the USSR in 1991 and Russia's transition to a market economy dramatically widened existing inequalities (Gerber and Hout 1998). In contemporary Russia, income inequality is larger than in most European countries and is comparable with that in the US (Gorodnichenko et al. 2010). Status inequalities are also large, and the Soviet rhetoric on the moral value of social equality has long been abandoned. Within a century, Russia has turned full circle: from an imperial society with its traditional structures of inequality to the equalizing – at least at the rhetorical level – Soviet experience, and then to the re-emergence of substantial and visible inequality in the course of the market transformation. This historical path is different from that of most other European societies, which makes Russia an interesting case to study the effect of changing institutions on the structures and extent of social inequality. The Russian case may also shed some light on social stratification in other former communist societies.

10.2 EDUCATION, OCCUPATION AND INTERGENERATIONAL TRANSMISSION OF INEQUALITY IN RUSSIA

Little quantitative research has been done on the mechanisms of intergenerational economic and social resource inheritance in Russia. There have been only two studies of intergenerational social fluidity that use modern statistical methods. In the first attempt to quantify the degree of social fluidity in Soviet society, based on a small survey (about 2000 respondents) conducted in Russia in 1991, Marshall et al. (1995) did not find substantial differences in the strength of association between parental and own class in Russia and Britain (at least for men; for women the association in Russia was somewhat weaker). Accounting for children's

education did not explain the association between the social class of parents and their children. As the survey was conducted in 1991, the results indicated significant intergenerational transmission of social status in the USSR.

In a larger study, Gerber and Hout (2004) compared Russian social fluidity in the early and late 1990s. They found that the association between social origins and destinations strengthened in post-Soviet Russia, making the society less fluid. The mechanism that accounted for this change was downward intragenerational mobility. Socially mobile individuals with a working class background returned to manual occupations in the course of the economic and social transformation. The latest survey used in Gerber and Hout's paper was conducted in 2000. Since then, there have been no studies of social mobility in Russia using modern statistical methods and published in English. Some Russian scholars have explored the issue (Shkaratan and Yastrebov 2012; Chernysh 2005); however, the methods and occupational classifications used in those studies make them hardly compatible with the international literature.

In other studies, Gerber unpacked the intergenerational occupational class association by looking at the dynamics of association among parental background, the children's education, and the transition from education to employment. In the post-Soviet period (until 2000) the origin-based inequalities in access to secondary schools increased, while it is more ambiguous whether there was any change in the effect of parental background on access to higher education (Gerber 2000). Another study did not find much change in the strength of the association between education and first occupational class over time (Gerber 2003). Generally, these results suggest stability in the patterns of social stratification in Russia despite radical institutional change.

What were the dynamics of the educational and occupational structure in post-Soviet Russia? Table 10.1 presents descriptive statistics for education and occupational class, measured according to the European Socio-Economic Classification (ESEC), separately for men and women aged 30 to 64, at three points in time: 1989 or 1994, 2002 and 2010. The data for this descriptive analysis come from three Russian censuses conducted in 1989, 2002 and 2010, and the Russia Longitudinal Monitoring Survey – Higher School of Economics (RLMS-HSE).

Education up to ninth grade in secondary school is compulsory. Upon completing the ninth grade, pupils can remain in secondary school for two more years and receive a general secondary education or they can enter a vocational school. Some vocational schools offer lower vocational education that usually lasts for two years, training certain catego-

Table 10.1 Distributions by education and occupational class, 1989–2010

Education	Men, aged 30 to 64 (%)			Women, aged 30 to 64 (%)		
	1989	2002	2010	1989	2002	2010
Secondary incomplete or less	32	11	10	36	11	7
Lower vocational (<i>PTU, FZU, uchilische</i>)	19	19	8	9	12	5
Secondary general	16	18	21	16	16	17
Secondary specialized (<i>tekhnikum</i>)	17	30	35	24	38	40
Higher incomplete	1	2	2	1	2	2
Higher	15	20	24	14	21	29
Occupational class (ESEC)	1994	2002	2010	1994	2002	2010
1. Higher managers/professionals	11	11	11	16	15	15
2. Lower managers/professionals	7	8	8	22	22	23
3. Intermediate occupations	3	3	5	11	14	14
4/5. Self-employed	5	5	3	2	4	3
6. Lower supervisors/technicians	1	2	1	2	2	2
7. Lower sales and services	3	3	6	16	15	20
8. Lower technical	31	27	25	7	5	4
9. Routine	39	41	41	24	23	19
Ratio: higher education / classes 1 and 2	0.8	1.1	1.3	0.4	0.6	0.8

Sources: Census (education); Russia Longitudinal Monitoring Survey (RLMS-HSE). ESEC was coded with the simplified syntax based on occupation only

ries of manual workers. Others offer specialized secondary degrees (four years of education as a rule) required for such occupational categories as nurses, primary school teachers, hospitality workers, technicians, and so on. It is possible to enter higher education either after finishing eleventh grade at an academic secondary school or after completing a specialized secondary degree at a vocational school (the latter is the less frequent track).

As shown by Table 10.1, in the post-Soviet period the distribution of educational qualifications in the working-age population changed substantially. The cohorts with lower, on average, levels of education left the labour market, while in the younger cohorts the proportion of people with a higher education increased. The proportion of people with lower vocational degrees also decreased, while the share of people with secondary specialized and university education rose. To be noted are the dynamics of gender inequality in access to higher education and the changing proportions of men and women holding university degrees.

There were also differences in the types of vocational degrees among men and women, particularly in 1989 and 2002. Men were more likely to obtain a lower vocational education, which was sufficient for industrial workers. Women more often attended vocational schools offering specialized secondary education and preparing them for occupations in sales and services, or intermediate and lower professional and managerial occupations.

While the educational system continued to expand, in the 1990s and 2000s the occupational structure remained comparatively more stable (see Bian and Gerber 2007). The proportion of professionals and managers in the labour force did not change much between 1994 and 2010. There was some reduction in the share of lower technical (mainly skilled industrial) workers as a consequence of the post-Soviet industrial crisis. A simultaneous increase in the proportion of the labour force employed in sales and services and in intermediate occupations also happened due to the expansion of the service sector in the economy. While there was little change in the structure of 'big' occupational classes, within those classes there was considerable occupational mobility. Sabirianova (2002) estimated that between 1991 and 1998, 42 per cent of employed respondents changed their occupation, a substantially larger number than in the six-year period before 1991. Downward occupational mobility increased.

Two characteristics distinguish the Russian occupational structure from that of more economically developed post-industrial countries. First, there is a larger proportion of routine occupations in the labour force and a smaller salariat. The second and perhaps more interesting characteristic is the gender imbalance. A greater proportion of women are in the professional and managerial class, especially among lower managers and professionals employed in traditionally female occupations such as nursing, school teaching and accountancy. There are also more women in intermediate occupations (for instance, office secretaries) and in lower sales and services (cashiers, salespersons, and so on). On the other hand, the industrial working class (lower technical occupations in Table 10.1) is almost overwhelmingly male. The average International Socio-Economic Index of Occupational Status (ISEI) score is thus higher for women than for men. However, women's average monthly earnings are 60 to 70 per cent of male earnings, depending on the estimate (Oschepkov 2006). Some traditionally female white-collar occupations are quite poorly paid.

As already mentioned, earnings inequality widened dramatically after the collapse of the USSR (Gorodnichenko et al. 2010). Whilst before the market transition income inequality only partially reflected the inequalities in life-chances of individuals and households, because some of it assumed

non-monetary forms, in the 1990s monetary income became more important. Once the Soviet system of university graduate compulsory job allocation collapsed, and the administrative setting of salaries (favouring industrial workers) was abandoned, returns to education increased. In a meta-analysis, Lukyanova (2010) estimated that earnings returns on one year of education rose from 4–5 per cent at the beginning of the 1990s to 8 per cent in the 2000s, when they stabilized.

10.3 DATA AND METHODS

While respondents' education and occupation are available in many surveys conducted in Russia, the coding of parental occupation is less frequent. To examine the association between parental occupational class or status and respondents' education and occupational class or status, I collected data from all the Russian surveys in which parental occupation was coded. Table 10.2 shows the list of the data sets, covering the period from 1990 to 2011, and analytical sample sizes. I also replicated the analysis for people aged 28 to 45, without any remarkable difference in the results.

Occupational status was operationalized as the ISEI. Parental ISEI was coded first with the father's occupation; if this was missing, the mother's occupation was used. For education, the surveys applied different classifications, and I recoded education into a standardized variable with six levels (see the descriptive statistics in Table A.10.1 in the online appendix). Post-stratification survey weights were applied.¹

As in other chapters in this book, the dependent variables were ISEI and earnings. ISEI was coded with current occupation, as no information on first job was available in the surveys. Not every survey used had data on earnings, and the analytical sample size for this dependent variable is thus smaller ($n = 16\,752$). Instead of adjusting earnings for inflation, I took the logarithm of earnings and standardized logged earnings for each survey with the mean of zero and the standard deviation of one. Thus, standardized logged earnings show how strongly an individual's logged earnings deviate from average logged earnings in a given survey. The independent variables included education, parental ISEI, gender, age and year of the survey (or period).

Because the data were a collection of different surveys, I essentially conducted a meta-analysis. To account for the differences in estimated coefficients between surveys and across time, I used multilevel models with random intercepts and a random slope for parental ISEI. In one of the models, quantile regression was applied to estimate the effect of parental background across the distribution of earnings.

Table 10.2 Data sets used for the analysis

Survey	Year	Analytical sample size
Comparative Project in Class Analysis: United States and Russia	1991–92	1413
International Social Survey Programme: Social Inequality II	1992	761
Social Stratification in Eastern Europe After 1989: General Population Survey	1993	2557
Survey of Employment, Income and Attitudes in Russia (SEIAR)	1998	1925
International Social Survey Programme: Social Inequality III	1999	405
Generations and Gender Survey	2004	4723
Russia Longitudinal Monitoring Survey – Higher School of Economics (RLMS-HSE)	2006–07	4329
European Social Survey Round 3	2006–07	1257
European Values Study	2008	760
European Social Survey Round 4	2008–09	1269
International Social Survey Programme: Social Inequality IV	2009	825
European Social Survey Round 5	2010–11	1415
Total		21 639

Note: The analytical samples include all respondents with non-missing information on age, gender, own occupation and education and parental occupation, aged 28 to 65.

10.4 RESULTS

The first step in the analysis was to calculate bivariate correlation coefficients between parental ISEI and respondents' ISEI, parental ISEI and respondents' education, and respondents' education and ISEI, separately for each survey in the data set (see Table A.10.2 available in the online appendix). As expected, parental and respondents' ISEI are correlated, with $r = 0.28$. The coefficient varies from 0.22 to 0.36 across the surveys; however, there is no visible time trend and later surveys do not show a stronger association between parental and respondents' ISEI. The Spearman's rank correlation coefficient between respondents' education and ISEI is 0.56, and between parental ISEI and respondents' education it is 0.32. In both cases, there is no visible time trend in the strength of the coefficients.

Next, I calculated a partial correlation coefficient between respondents'

and parental ISEI, controlling for respondents' education. The average partial correlation coefficient between respondents' and parental ISEI is 0.13, ranging from 0.04 to 0.18 across surveys. This confirms that even when the level of education is taken into account, a positive association between parental background and respondents' occupational status remains.

To test these findings more rigorously and control for potential confounders, I applied the multilevel regression framework. The results for models with ISEI as the dependent variable are reported in Table 10.3. Model 1 estimates the effect of parental ISEI after controlling for the potentially non-linear effect of age. The regression coefficient for parental ISEI is 0.31. Interestingly, age does not have much effect on ISEI. Model 2 adds education, and the regression coefficient for parental ISEI drops to 0.11. Model 3 adds gender and the interaction effect between gender and parental ISEI. As expected, average ISEI for men is lower than for women, and the effect of parental ISEI is somewhat weaker for men than for women (by 0.03).

Model 4 tests the hypothesis that the effect of parental ISEI varies across the levels of education. For the lowest level of education (secondary incomplete or less) the effect of parental background seems to be somewhat stronger than for other educational levels. Note, however, that the difference across educational levels is fairly small, and that the interaction effect loses statistical significance once the sample is constrained to people aged from 28 to 45. Model 5 introduces the effect of time and the interaction between time and parental ISEI (modelling time effects as linear). The main effect for year shows that in later surveys the average ISEI becomes lower, consistent with the findings on increased downward intra-generational occupational mobility in post-Soviet Russia. However, the interaction term is not statistically significant, suggesting that there is no linear time trend in the strength of the association between parental and respondents' ISEI. To account for possible non-linearity in the effect of time, I estimated a model with a variable for period (with three levels: 1991–93, 1998–99 and 2004–11) instead of the linear time trend, and I still did not find statistically significant effects (results not shown here).

Finally, model 6 looks at the interaction between year and education, testing whether occupational returns to education changed over time (assuming a linear trend). Compared to general secondary education, returns to lower levels of education (secondary incomplete and lower vocational) increased, and returns to higher levels of education (secondary specialized and higher) decreased. This suggests a decreasing importance of education as a determinant of occupational status. Decreasing occupational returns to higher education are consistent with the increase in the share of people with higher educations and a relatively stable size

Table 10.3 Regression models for ISEI

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Fixed effects:</i>						
Intercept	30.0*** (12.6)	34.5*** (16.9)	37.3*** (18.2)	37.8*** (18.0)	40.6*** (18.6)	40.0*** (18.6)
Parental ISEI	0.31*** (22.3)	0.11*** (10.1)	0.12*** (10.3)	0.11*** (6.2)	0.11*** (5.0)	0.11*** (10.0)
Age	0.14 (1.4)	-0.05 (-0.6)	-0.11 (-1.2)	-0.11 (-1.3)	-0.11 (-1.3)	-0.08 (-1.0)
Age ² /100	-0.19* (-1.7)	0.04 (0.4)	0.09 (1.0)	0.1 (1.0)	0.1 (1.0)	0.07 (0.7)
Education (ref.: secondary general)						
Secondary incomplete or less		-5.8*** (-15.3)	-5.8*** (-15.3)	-7.8*** (-7.8)	-5.9*** (-15.4)	-7.5*** (-10.9)
Lower vocational (PTU, FZU, uchlische)		-2.6*** (-7.8)	-2.3*** (-7)	-2.2*** (-2.6)	-2.3*** (-7.0)	-3.9*** (-5.7)
Secondary specialized (tekhnikum)		6.2*** (21.9)	5.6*** (20.2)	6.3*** (8.5)	5.6*** (20.2)	7.3*** (11.4)
Higher incomplete		8.6*** (11.3)	8.6*** (11.6)	10.0*** (5.0)	8.6*** (11.5)	9.5*** (6.1)
Higher		21.1*** (75.9)	20.6*** (74.6)	20.4*** (28.5)	20.6*** (74.6)	22.0*** (33.7)
Gender: male			-2.9*** (-6.3)	-3.9*** (-20.9)	-3.9*** (-20.9)	-3.9*** (-21.1)
Year (1991 = 0)					-0.26*** (-3.1)	-0.25*** (-3.2)
Parental ISEI * Male			-0.03** (-2.3)			
Parental ISEI * Secondary incomplete or less				0.06** (2.1)		
Parental ISEI * Primary vocational				-0.003 (-0.1)		
Parental ISEI * Secondary specialized				-0.02 (-1)		
Parental ISEI * Higher incomplete				-0.03 (-0.7)		
Parental ISEI * Higher				0.006 (0.3)		
Parental ISEI * Year					0.0003 (0.2)	
Year * Secondary incomplete or less						0.21*** (3.5)
Year * Lower vocational						0.15*** (2.8)

Table 10.3 (continued)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Fixed effects:</i>						
Year * Secondary specialized						-0.13*** (-2.8)
Year * Higher incomplete						-0.07 (-0.6)
Year * Higher						-0.11** (-2.3)
<i>Random effects:</i>						
Random intercept	4.7 (2.2)	5.5 (2.3)	5.7 (2.4)	5.9 (2.4)	2.9 (1.7)	2.7 (1.7)
Random slope for parental ISEI	0.001 (0.04)	0.0007 (0.03)	0.0008 (0.03)	0.0008 (0.03)	0.001 (0.03)	0.0009 (0.03)
Residual variance (standard deviation)	263.6 (16.2)	183.2 (13.5)	179.6 (13.4)	179.6 (13.4)	179.6 (13.4)	179.1 (13.4)
n	21 639	21 639	21 639	21 639	21 639	21 639

Notes:

The dependent variable is ISEI.

t-statistics in parentheses.

For random effects variance reported, standard deviations in parentheses.

Survey weights applied.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

of the salariat: the competition for a position in the salariat among people with higher education intensified. The analysis with the variable for period instead of year shows that occupational returns to higher education decreased in the 2000s compared to the 1990s, while there is not much difference in this respect between 1991–93 and 1998–99.

The standard deviation for the random slope for the effects of parental ISEI is not very large (about 0.03), consistent with the relative stability over surveys of the correlation coefficients for respondents' and parental ISEI. The unexplained residual variance drops after including education in the model and does not change much after adding gender, year, and the interaction effects.

Table 10.4 presents the results of a similar analysis for standardized logged earnings. For convenience of interpretation, standardized logged earnings were multiplied by 100. As model 1 shows, there is a direct effect of parental occupational background on earnings, and a 40-point change in parental ISEI (about the difference between a university professor and a transport conductor) is associated with a 0.36 standard deviation change in logged earnings. Once education is controlled for (model 2), the effect becomes smaller (roughly, a two-point difference in parental

Table 10.4 Regression models for standardized logged earnings (zero earnings excluded)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Fixed effects:</i>						
Intercept	-163.7*** (-10.3)	-138.2*** (-8.8)	-183.9*** (-12.1)	-188.3*** (-12.1)	-183.1*** (-11.4)	-181.6*** (-11.8)
Parental ISEI	0.89*** (11.7)	0.52*** (6.8)	0.43*** (4.7)	0.54*** (3.9)	0.44*** (2.9)	0.48*** (6.0)
Age	6.6*** (9.4)	5.6*** (8.1)	6.2*** (9.4)	6.2*** (9.5)	6.2*** (9.5)	3.3*** (5.1)
Age ² /100	-7.9*** (-10.4)	-6.6*** (-8.8)	-7.1*** (-10.0)	-7.2*** (-10.0)	-7.2*** (-10.0)	-4.4*** (-6.1)
Education (ref.: secondary general)						
Secondary incomplete or less		-26.0*** (-9.0)	-25.2*** (-9.2)	-27.2*** (-3.8)	-25.2*** (-9.2)	-39.2*** (-7.9)
Lower vocational (PTU, FZU, uchilische)		0.7 (0.2)	-3.2 (-1.2)	-13.3* (-1.9)	-3.3 (-1.2)	-1.1 (-0.2)
Secondary specialized (tehnikum)		3.2 (1.4)	11.8*** (5.3)	17.4*** (2.9)	11.8*** (5.3)	5.4 (1.2)
Higher incomplete		24.0*** (3.9)	21.3*** (3.6)	52.4*** (3.3)	21.4*** (3.6)	14.2 (1.3)
Higher		34.9*** (15.6)	44.2*** (20.7)	49.0*** (8.9)	44.2*** (20.7)	32.4*** (6.9)
Gender: male			58.4*** (16.2)	62.0*** (41.9)	62.1*** (42.0)	62.3*** (48.1)
Year (1991 = 0)					-0.35 (-0.5)	-0.71* (-1.8)
Parental ISEI * Male			0.1 (1.1)			
Parental ISEI * Secondary incomplete or less				0.07 (0.3)		
Parental ISEI * lower vocational				0.31 (1.6)		
Parental ISEI * Secondary specialized				-0.16 (-1.0)		
Parental ISEI * Higher incomplete				-0.74** (-2.1)		
Parental ISEI * Higher				-0.13 (-0.9)		

Table 10.4 (continued)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Fixed effects:</i>						
Parental ISEI *					0.005	
Year					(0.4)	
Year * Secondary incomplete or less						1.66*** (3.4)
Year * lower vocational						-0.39 (-0.9)
Year * Secondary specialized						0.61 (1.5)
Year * Higher incomplete						0.64 (0.7)
Year * Higher						1.13*** (2.8)
<i>Random effects:</i>						
Random intercept	68.8 (8.3)	37.5 (6.1)	73.7 (8.6)	79.1 (8.9)	89.1 (9.4)	54.7 (7.4)
Random slope for parental ISEI	0.02 (0.14)	0.02 (0.14)	0.03 (0.17)	0.03 (0.17)	0.04 (0.20)	0.03 (0.16)
Residual variance (standard deviation)	9777 (98.9)	9458 (97.3)	8546 (92.4)	8542 (92.4)	8546 (92.4)	8536 (92.4)
n	16 752	16 752	16 752	16 752	16 752	16 752

Notes:

The dependent variable is logged monthly earnings, standardized for each survey with the mean of 0 and the standard deviation of 1 and multiplied by 100.
t-statistics in parentheses.

For random effects variances reported, standard deviations in parentheses.

Survey weights applied.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

ISEI corresponds to a 0.01 standard deviation difference in earnings), but remains statistically significant. Further controlling for gender and adding an interaction effect between gender and parental ISEI shows that the effect of parental ISEI is somewhat larger for men, although the difference between men and women in the effect size is not statistically significant.

Model 4 looks at the differences in the effect of parental ISEI on earnings by the level of education: for respondents with an incomplete higher education the effect of parental ISEI on earnings is small and not statistically significant. There is not much difference in the effect size between people with other levels of education. Model 5 tests for a linear time trend in the effect of parental background on logged earnings and does not find

one. Using a categorical variable for period instead of the linear time trend fails to reveal any statistically significant effects either.

Model 6 checks whether monetary returns to education changed over time. It finds that returns to higher education increased (compared to general secondary education) but, on the other hand, the difference in earnings between people with secondary general and secondary incomplete education decreased. The analysis with period effects showed that the returns on higher education increased in 1998–99 compared to 1991–93, and did not change much between 1998–99 and 2004–11, confirming Lukyanova's (2010) findings.

Finally, I ran a quantile regression on the RLMS data to test whether the effect of parental background differs across the distribution of earnings (Table 10.5). In this case, I did not take the logarithm of earnings. The analysis shows that the variance of earnings is larger for people with higher parental occupational status (and also for men and people with a higher education). We see, in fact, that the effect of parental background is stronger at higher earnings percentiles. At the 10th percentile, a 40-point difference in parental ISEI corresponds to the difference in monthly earnings of 388 rubles (about €11, applying the official exchange rate of 30 December 2006), after controlling for education, gender and age. At the median, this difference increases to 1100 rubles (about €32) and at the 90th percentile to 2056 rubles (about €59). This is not a trivial effect, given that median monthly earnings and the interquartile range in the sample equal 6000 rubles.

10.5 DISCUSSION

As expected, we find a statistically significant effect of parental occupational status on both respondents' occupational status and earnings, even after controlling for their level of education. The effect of parental ISEI on respondents' ISEI after controlling for education in Russia is 0.11 (0.12 for women and 0.09 for men). This is close to the estimates reported for other European countries in this project. The intergenerational transmission of occupational positions seems to be about as strong in Russia as in other European countries, despite very different historical trajectories and institutional legacies.

The quantile regression analysis showed that the effect of parental ISEI on earnings is stronger at higher quantiles of the distribution of earnings. In other words, the conditional distribution of earnings at higher levels of parental occupational status has a larger variance. Larger earnings inequality is found for people with more privileged parental backgrounds.

Table 10.5 Quantile regression models for earnings

Variable	tau = 0.1	tau = 0.3	tau = 0.5	tau = 0.7	tau = 0.9
Intercept	317 (0.2)	1039 (0.9)	1980 (1.1)	1841 (0.7)	-1054 (-0.2)
Parental ISEI	9.7*** (2.8)	15.7*** (4.3)	27.5*** (5.4)	27.7*** (4.1)	51.4*** (2.6)
Age	65.6 (1.1)	75.8 (1.4)	81.7 (1.0)	192.7 (1.6)	526.6* (1.9)
Age ² /100	-94.0 (-1.4)	-106.2 (-1.6)	-127.8 (-1.4)	-278.9** (-2.1)	-721.5** (-2.3)
Education (ref.: secondary general)					
Secondary incomplete or less	-397** (-2.6)	-644*** (-3.7)	-560 (-1.4)	-523 (-1.2)	-1133 (-0.9)
Lower vocational (PTU, FZU, uchilische)	110 (0.8)	7 (0.05)	-67 (-0.2)	-196 (-0.6)	-38 (-0.05)
Secondary specialized (tekhnikum)	561*** (4.0)	781*** (6.1)	818** (3.0)	1004*** (3.2)	1659** (2.1)
Higher incomplete	1032*** (4.6)	1355*** (6.0)	1104** (2.5)	1345** (2.0)	2957 (1.65)
Higher	1781*** (9.8)	2318*** (13.2)	2972*** (9.6)	4116*** (11.1)	7624*** (5.9)
Gender: male	1122*** (10.5)	2255*** (18.6)	3323*** (18.8)	4474*** (18.2)	6649*** (10.8)
n	3872				

Notes:

The dependent variable is monthly earnings in rubles.

t-statistics in parentheses.

* p < 0.1, ** p < 0.05, *** p < 0.01.

Source: Data from RLMS 2006.

On average, people with higher parental ISEI earn more than people with lower parental ISEI, but parental ISEI is particularly important if one wants to reach the top tiers of the distribution of earnings. Note that there is the same effect for gender and education: for men, and for people with a higher education, the variance of earnings is larger. Men with a higher education and a more privileged parental background are disproportionately represented among high earners.

Considering time trends, I found no changes in the strength of the intergenerational occupational status association: nor in the association

between parental occupational status and respondents' earnings (controlling for education, age and gender). This contradicts earlier findings of decreased social fluidity in post-Soviet Russia (Gerber and Hout 2004). My analysis was based on a data set much larger than that used for Gerber and Hout's study, and it included five out of six surveys that they used (data from the sixth survey were not available).

In their analysis, Gerber and Hout applied log-multiplicative models for contingency tables of parental and own social class, while my findings are based on simple correlation and regression models, in which occupational status was operationalized as ISEI. Studies based on statistical methods for categorical and interval data may give different results. The question of whether social fluidity did indeed decrease in Russia in the post-Soviet period remains open until Gerber and Hout's study is replicated with a larger data set using statistical methods for contingency tables standard in modern social mobility research.

It has been argued that the effect for people with a higher education may be weaker because the labour market for non-manual occupations is more meritocratic. Moreover, among people with a lower socioeconomic background there may be positive selection to higher education on ability (Bernardi 2012). The effect of parental occupational status on ISEI was indeed stronger in Russia for people with the lowest level of education, compared with all other educational levels. However, this difference loses statistical significance once the sample is constrained to people aged 28 to 45. Furthermore, there was no statistically significant difference in the effect of parental ISEI on earnings across educational levels.

I also looked at the change in returns to education in Russia over time. Previous research showed that wage returns to education in Russia increased in the 1990s and stabilized in the 2000s (Lukyanova 2010). The present analysis confirms this finding. Less attention has been paid to returns to education in terms of occupational status. Because the Russian occupational structure remained relatively stable in the 1990s and 2000s and the proportion of people with a higher education increased, I expected occupational returns to higher education to decrease over time. This is indeed what the data show. In the 2000s, compared to the 1990s, competition for jobs with higher occupational status among people with a higher education intensified. If the educational expansion continues in Russia, and if the economy and the corresponding occupational structure do not modernize, this may lead to a decrease in monetary returns to higher education in the near future.

The results reported in this chapter lead to several conclusions for comparative stratification research. It has been argued that the transition

from state socialism to a market economy should increase the degree of social reproduction. Because socialist states in the Soviet Union, Eastern Europe and China deliberately tried to increase social mobility and provide access to education to students from working-class and peasant backgrounds, it is only logical to assume that once these policies were abolished the association between social origin and destination (OD) would strengthen. Some evidence seemed to confirm this assumption. Gerber and Hout (2004) reported some strengthening of the OD association in Russia in the 1990s. Bukodi and Goldthorpe (2010) found similar results for Hungary. In both cases, however, the reported effect size was rather modest.

The results set out in this chapter challenge these findings. Whether we look at the simple bivariate correlation between parental and respondents' ISEI or at the regression models that control for other variables such as education, we do not find any time trend in the OD association or in the association between parental occupational status and respondents' earnings. This is a counterintuitive result, given all the changes in the Russian economy and society in the last 25 years. Moreover, once we control for respondents' education, the strength of the association between parental and respondents' occupational status is similar to that in other European countries that did not undergo the socialist experience.

While quantitative data on social mobility in the USSR are not available, it is likely that scholars used to overestimate the success of the socialist policies aimed to create the classless society. The Soviet society was probably a lot more unequal than it appeared from the outside. Social reproduction definitely existed in the USSR, and the results from the earliest surveys in my data set confirm this. Whatever the official ideological façade of the Soviet state may have been, socially privileged parents could find ways to pass on social advantage to their children. Thus, despite dramatic economic and social change in Russia in the 1990s, the break in the mechanisms of social reproduction was probably less radical than previously thought.

NOTES

- * I am grateful to Liubov Buglaeva for excellent research assistance and to Ted Gerber for providing access to some data sets.
1. The Comparative Project in Class Analysis survey did not provide weight coefficients, so all the observations were given weight 1. Due to the panel design in the RLMS some observations had the cross-sectional weight of 0. Instead of dropping these more than 2000 observations, I coded them with the weight of 1.

REFERENCES

- Bernardi, F. (2012), 'Social origins and inequality in educational returns in the labour market in Spain', SPS working paper EUI SPS; 2012/05.
- Bian, Y. and T.P. Gerber (2007), 'Class structure and class inequality in urban China and Russia: effects of institutional change or economic performance?', in J. Logan (ed.), *New Trends in Urban China*, London: Blackwell, pp.66–88.
- Bukodi, E. and J.H. Goldthorpe (2010), 'Market versus meritocracy: Hungary as a critical case', *European Sociological Review*, **26** (6), 655–674.
- Chernysh, M.F. (2005), *Social Institutions and Mobility in a Transforming Society*, Moscow: Gardariki (in Russian).
- Connor, W.D. (1979), *Socialism, Politics, and Equality: Hierarchy and Change in Eastern Europe and the USSR*, New York: Columbia University Press.
- Dobson, R.B. (1977), 'Mobility and stratification in the Soviet Union', *Annual Review of Sociology*, **3**, 297–329.
- Fitzpatrick, S. (1979), *Education and Social Mobility in the Soviet Union*, Cambridge: Cambridge University Press.
- Gerber, T.P. (2000), 'Educational stratification in contemporary Russia: stability and change in the face of economic and institutional crisis', *Sociology of Education*, **73** (3), 219–246.
- Gerber, T.P. (2003), 'Loosening links? School-to-work transitions and institutional change in Russia since 1970', *Social Forces*, **82** (1), 241–276.
- Gerber, T.P. and M. Hout (1998), 'More shock than therapy: employment and income in Russia, 1991–1995', *American Journal of Sociology*, **104**, 1–50.
- Gerber, T.P. and M. Hout (2004), 'Tightening up: declining class mobility during Russia's market transition', *American Sociological Review*, **69**, 677–703.
- Gorodnichenko, Y., K. Sabirianova Peter and D. Stolyarov (2010), 'Inequality and volatility moderation in Russia: Evidence from macro-level panel data on consumption and income', *Review of Economic Dynamics*, **13**, 209–237.
- Lenski, G. (1994), 'New light on old issues: the relevance of "really existing socialist societies" for stratification theory', in David B. Grusky (ed.), *Social Stratification: Class, Race, and Gender in Sociological Perspective*, Boulder, CO and San Francisco, CA, USA; Oxford, UK: Westview Press, pp.55–64.
- Lukyanova, A. (2010), 'Returns to education: what meta-analysis shows', *EkonomicheskijzhurnalVysheyShkolyEkonomiki* (HSE Economic Journal), **14** (3), 326–348 (in Russian).
- Marshall, G., S. Sydorenko and S. Roberts (1995), 'Intergenerational social mobility in communist Russia', *Work, Employment and Society*, **9** (1), 1–27.
- McKeown, A. (2004), 'Global migration, 1846–1940', *Journal of World History*, **15** (2), 155–189.
- Mironov, B.N. and B. Eklof (2000), *The Social History of Imperial Russia, 1700–1917*, Vol. 1, Westview Press.
- Oschepkov, A. (2006), 'Gender differences in earnings in Russia', *EkonomicheskijzhurnalVysheyShkolyEkonomiki* (HSE Economic Journal), **10** (4), 590–619 (in Russian).
- Sabirianova, K.S. (2002), 'The great human capital reallocation: a study of occupational mobility in transitional Russia', *Journal of Comparative Economics*, **30**, 191–217.

- Shkaratan, O.I. and G. Yastrebov (2012), 'A comparative analysis of the processes of social mobility in the USSR and in today's Russia', *Russian Education and Society*, **54** (5), 24–26.
- Trotsky, L. (1937 [1972]), *Revolution Betrayed: What is the Soviet Union and Where is It Going?*, 5th edn, New York: Pathfinder.
- Yanowitch, M. (1977), *Social and Economic Inequality in the Soviet Union: Six Studies*, White Plains, NY: M.E. Sharpe.